

# **2023**Sinopec Corp. Sustainability Report

**Cleaner Energy Better Life** 

## **Report Information**

The 2023 sustainability report (hereinafter referred to "SR") is the 18th sustainability report of China Petroleum & Chemical Corporation (hereinafter referred to as "Sinopec Corp.", "the Company" or "We"). The report introduces our sustainability philosophy and policies and our environmental protection, social responsibility, and corporate governance (hereinafter referred to as "ESG") performances in 2023, and highlights on how we responded to the expectations and concerns of our stakeholders.

### **Report Perimeters**

This report covers our business activities from 1 January to 31 December 2023, with some content from beyond this time span for continuity reasons. The information herein comes from internal data and relevant public information. Unless otherwise specified, all monetary figures shown in this SR are expressed in RMB (yuan).

Unless otherwise specified, the data in this SR covers the data of Sinopec Corp. and its wholly-owned and controlled subsidiaries.

The Company's Board of Directors reviewed and approved this report on 22 March 2024. The report is available in Chinese and English versions, and the Chinese version shall prevail in case of any conflict or inconsistency. The report can be downloaded at the website: http://www.sinopec.com/listco/en/

This report is prepared in accordance with the *Guideline* for the Self-Regulatory Supervision of Listed Companies of Shanghai Stock Exchange (SSE) No. 1 - Standardised Operation, the Environmental, Social and Governance Reporting Guide issued by Hong Kong Stock Exchange (HKEx), Ten Principles of the United Nations Global Compact (UNGC), and the criteria of the Global Compact Advanced Communication on Progress, and with reference to the recommendations of the *Task Force* on Climate-related Financial Disclosures (TCFD), the 2021 GRI Universal Standards (GRI Standards) and GRI 11: Oil and Gas Sector 2021 issued by the GRI Global Sustainability Standards Board (GSSB).

### Disclaimer

This report includes certain forward-looking statements with respect to the results of our business operations and certain plans and conditions. All statements that address activities, events or developments that we expect will or may occur in the future, other than statements of historical fact, are forward-looking statements and by their nature involve risk and uncertainty. This means that actual results may differ materially from those indicated in the forward-looking statement due to a number of factors and uncertainties. The forward-looking statements are made by 22 March 2024 and the Company undertakes no obligation to update these forward-looking statements unless required by an appropriate regulatory authority.

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## **Letter from Chairman**

Dear Friends,

On behalf of the Board of Sinopec Corp., I would like to express our sincere gratitude for your continued attention and support!

In the past year, global economic growth slowed down coupled with increasing occurrence of geopolitical conflicts and global climate change became increasingly serious, and carbon neutrality vision accelerated the diversification of global energy structure and low-carbon transition. The Chinese government pursued to the new philosophy of innovative, coordinated, green, open and shared development, drove a comprehensive green and low-carbon transformation of the economy and society, implemented global development initiative, and actively contributed to the harmonious coexistence of man and nature. As an international energy and chemical company and a member of the United Nations Global Compact, Sinopec Corp. adhered to the green and low-carbon development strategy and actively contributed to energy transition and sustainable development of the society.

Over the past year, we comprehensively promoted high-quality development and achieved continuous improvement in ESG management. We made great efforts to implement the green and low-carbon development strategy, improved governance effectiveness, fostered technological innovation, accelerated the pace of green transformation and industrial upgrading and strengthened management of safety and environmental protection, promoting the collaborative development of the enterprise and society.

Improve corporate governance. We revised multiple governance policies to further strengthen the foundation of sound governance. Our directors, supervisors, and senior management diligently fulfilled their duties, and the role of independent directors has been further enhanced. We further enhanced regulatory compliance, strengthened risk control management and audit supervision, and promoted the formation of a virtuous cycle of anti-corruption, risk prevention, and enterprise reform. We strove to increase shareholders' return and enhance the market value management. Maintaining stable dividend payout ratio, we continued to implement share repurchase both domestically and overseas. We also focused on improving information disclosure quality and strengthening investor relations management to gain the wider recognition in the market.

### Move towards high-quality technological innovation.

We strove to build a modern industrial system driven by technological innovation, deepen the reform of R&D management system, and continuously improve the integrated innovation model ranging from basic research to industrial transformation. We ranked the top in domestic energy and chemical industry in terms of the number of key national laboratories, and achieved a number of key technological breakthroughs, including the operation of the world's first 3 million tonnes per year heavy oil catalytic cracking unit, the operation of China's first home-grown high-performance liquid rubber industrial facility, as well as breakthroughs in the fields of continental shale oil and gas, aviation lubricants, and hydrogen fuel cell catalysts. Besides, we continued to focus on digitalization and intelligentization, developed more than ten

national pilot demonstration projects in artificial intelligence, Industrial Internet Plus, and other areas. Throughout the year, we won a total of seven awards in Natural Resources Technology Award and five China Patent Awards, and maintained our leading position among Chinese enterprises in patent quality.

### Implement industrial upgrading and transformation.

We continued to intensify oil and gas exploration and development, and accelerated natural gas development, with our annual natural gas production increased by 7.1% year-onyear, reaching a historical high. We guaranteed the supply of clean oil products with high standards, and accelerated the industrialization of biomass fuel. We enhanced the integrated management of production-sale-research-application of highend chemical materials, further increased the proportion of high value-added products. Aiming to become China's No.1 hydrogen energy company, we have constructed and operated the largest number of hydrogen refueling stations in the world. We vigorously expanded battery charging and swapping services for EVs and implemented the *Three-year Action Plan* for the Development of Charging Networks. More than 3,900 battery charging and swapping stations and 39,600 charging terminals were added throughout the year, further enhancing our supply capacity of new energy for mobility.

Focus on carbon emission reduction, pollution control, and green development. We actively responded to climate change, implemented our carbon peaking action plan in an orderly manner and promoted the construction of carbon neutrality demonstration projects. We strengthened the management of carbon assets to reduce the carbon trading costs. We deepened the implementation of *Energy Efficiency Improvement Plan*, and reduced our comprehensive energy consumption per RMB 10,000 of production value by 2.6% year-on-year. We deepened the prevention and control of pollution, and successfully achieved the goals of the first phase of our Green Enterprise Action Plan. Our continued efforts on resource conservation and efficient utilisation yielded promising results, with the comprehensive utilisation rate of industrial solid waste increasing to over 90% and industrial fresh water intake reducing by 1%. We also intensified the ecosystem protection, strictly prevented ecological environment risks, actively participated in ecological protection and restoration, and completed the afforestation and greening tasks of the *Sinopec* Saihanba Ecological Demonstration Forest Project.

Follow the path of safe development. We continuously optimised our inherent safety management with strictly enforcing safety responsibilities and the construction and effective implementation of a robust HSE management system. We carried out the *High-quality Safety Management Action*, focusing on the identification and rectification of safety hazards. We intensified the safety management on both our own operations and the operations of contractors, and continuously enhanced employees' emergency response capabilities with well-planned emergency plans and regular emergency drills. Continuing efforts were carried out to safeguard employees'health by providing first aid equipment, and continuously improving employees' working environment

and conditions. Remarkable achievements were made in occupational health performance.

### Promote the mutual development of enterprise and society.

We insisted on the alignment of our high-quality development with the goal of meeting people's pursuit of better lives, and actively supported rural revitalisation and disaster relief efforts. Our charitable programmes, such as the *Spring Bud Service Station*, *Classes given by Academician*, and *Sinopec School Buddy* received overwhelming response from the community. We adhered to the people-oriented development concept, respected the dignity and rights of employees, and strove to achieve mutual growth of the employees and the Company. We fully respected and considered the needs of the communities where we operate, strove to build stable and harmonious community relations, and actively fulfilled our corporate citizenship responsibilities.

We dedicate to our commitment. Looking ahead to 2024, Sinopec Corp. will resolutely pursue high-quality development, comprehensively improve ESG management, and accelerate the development into a world-class enterprise. We aspire to work together with our stakeholders to drive sustainable development of the Company; and build a virtuous cycle of coordinated and mutually reinforcing economic, social, and environmental development.

We cherish your valuable suggestions for the Company's sustainable development and look forward to joining hands with you to build a better life and create a brighter future!

Ma Yongsheng Chairman March 22, 2024

# **Board's Statement** on ESG Governance

The Company's Board of Directors made the following statement in accordance with the requirements of the *Environmental, Social and Governance Reporting Guidelines* of the Stock Exchange of Hong Kong Limited (hereinafter referred to as the "Hong Kong Stock Exchange").

The Board of the Company promises that the Company and its Board of Directors strive to follow the *Requirements of the Guidelines for the Governance of Listed Companies* issued by the China Securities Regulatory Commission, the *Self-regulating Guide for Listed Companies on Shanghai Stock Exchange* issued by Shanghai Stock Exchange, and the *Environmental, Social and Governance Reporting Guidelines* issued by Hong Kong Stock Exchange, and continuously optimise its environmental, social and corporate governance(hereinafter referred to as "ESG") mechanism. We will further strengthen the Board's role in supervising and participation in ESG related issues, and vigorously integrate ESG considerations into the Company's major decision-making processes and various business practices.

### **Board's Role in ESG Governance**

The Board of Directors is the highest responsibility and decision-making agency, bearing the ultimate responsibility for Sinopec Corp.'s ESG governance. The Sustainability Committee under the Board of Directors is responsible for reporting to the Board on matters related to the Company's sustainability (including environmental, social, and governance aspects) related issues and making relevant recommendations, including overseeing and deliberating the implementation and progress of the Company's sustainability and ESG strategies and plans; overseeing the commitments and performances of the Company on key ESG issues such as climate change, environmental protection, health and safety, and compliance management; overseeing key information regarding sustainability issues related to the Company's businesses and conducting relevant researches on sustainability related topics; and approving the Company's annual sustainability reports and reporting to the Board of Directors the sustainability performances of the Company. The Sustainability Committee is composed of four directors, including one independent director, with Chairman of the Board serves as the chairperson of the committee. The Committee convenes at least once each year to inform the Board on ESG related issues. Ad hoc meetings can be convened when proposed by either the chairperson of the committee or two or more committee members.

### **ESG Management Strategy and Policy**

The Company attaches great importance to ESG management, adheres to the development concept of "innovation, coordination, green, open, and sharing", and deeply implements development strategies of "value-leading, market-oriented, innovation-driven, green and clean, open and cooperation, and talents to revitalise the enterprise". The Company analyses ESG-related risks and opportunities in the context of macro policies, socio-economic environment, and the strategy, production and operation, and stakeholder engagement of the Company. It also carries out materiality analysis by conducting stakeholder research and expert consultation, to identify key ESG issues for the Company's development, continuously optimise its ESG management and risk control, and improve the overall ESG governance of the Company.

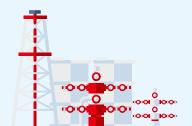
### Targets, Indicators and Review of Progresses

The Company has established an ESG target management mechanism, and set up ESG performance targets in its development plans and key tasks, such as clean energy, climate change, environmental protection, resource utilisation, safety management, occupational health and safety, and anti-corruption and compliance, etc. The Sustainability Committee regularly reviews the progress of the targets and reports it to the Board of Directors. To ensure the achievement of these targets, the Company signs annual performance commitment documents with management staff and subsidiaries to integrate part of key ESG performance indicators as the KPIs for key management staff. To ensure the reliability of our ESG performance indicators, the Company hired KPMG Hua Zhen LLP to conduct an independent assurance of the 2023 Sinopec Corp. Sustainability Report, and issued independent assurance opinions regarding 24 ESG performance indicators of the Company.

Board of Directors China Petroleum & Chemical Corporation March 22, 2024

## **About Us**

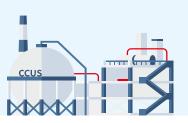
Sinopec Corp. was established on 25 February 2000, listed on the Hong Kong Stock Exchange in October 2000 and the Shanghai Stock Exchange in August 2001. Sinopec Corp. is one of the largest integrated energy and chemical companies in China, with its business scope all over the world, mainly including exploration and production segment, refining segment, marketing and distribution segment and chemicals segment. It is a large oil and gas and petrochemical product manufacturer in China and has a complete sales network of refined oil and chemical products in China.



### **Exploration and Production**

Sinopec Corp.'s main oil and gas assets are located in China. We only participate in four joint projects overseas, including UDM in Russia, Block 18 in Angola, CIR in Kazakhstan, and Mansarovar in Colombia respectively, and there is not any other oil and gas assets overseas.

In 2023, Sinopec Corp.'s crude oil production was 251.63 million barrels and natural gas production was 1,337.82 billion cubic feet.



### Refining

Sinopec Corp.'s primary refining assets are located in China.

In 2023, Sinopec Corp. processed 257.52 million tonnes of crude oil and produced 156.00 million tonnes of refined oil products.



### Marketing and Distribution

Sinopec Corp. has a well-established marketing network for refined oil products in China, with 30,958 service stations.

Sinopec Corp. sold a total of 188.17 million tonnes of refined oil products on the domestic market in 2023.



### Chemicals

Sinopec Corp.'s primary chemical assets are located in China, producing and selling various petrochemical products such as synthetic resins, synthetic fibres, synthetic rubber, basic organic chemicals, etc.

In 2023, Sinopec Corp. produced 14.31 million tonnes of ethylene.



### International Trade

Sinopec Corp. is an important trader of crude oil in China, engaging in the international trade of crude oil, refined oil products and chemical products.



### Technology R&D

Sinopec Corp. has four State Key Laboratories, five National Engineering Research Centres, a National-Provincial Joint Engineering Research Centre, a National Engineering Lab, six National Energy R&D (Experiment) Centres, a National Testing and Evaluation Platform, and eight State-Certified Enterprise Technology Centres.

As of the end of 2023, Sinopec Corp. had been granted 55,335 patents cumulatively, of which 5,483 were granted within the year.



## **Awards and Recognitions**

The State-owned Assets Supervision and Administration Commission of the State Council and CCTV

China ESG Pioneer Top 100 Listed Companies China Association for Public Companies

Best Practices in ESG Best Practices in Board of Directors ESG Pioneer Practitioner

**Securities Daily** 

CAIJING

Contribution to Sustainable Development Award by 2023 Changqing Awards China Corporate ESG Rating Industry Movers Golden Bull Most Investable Value Award

**China Securities Journal** 

Golden Bull Award for Public Companies Listed in Hong Kong

Hong Kong Ta Kung Wen Wei Media Group

China Securities Golden Bauhinia Award for "Best Listed Company" CLS.cn

S&P Global

The Sixth Annual Most Investable Value Award

Zhitong Finance

Golden H-share Companies
– Best Energy and Resource
Companies

People's Daily

Included in the China Corporate Social Responsibility Leaders Index National Development and Reform Commission

National Outstanding Cases of Rural Revitalization Through Consumption Support China Newsweek

China Low Carbon Model for the 13th consecutive year

International Seminar on Global Poverty Reduction Partnerships

Best Poverty Reduction Cases of the 4th Global Poverty Reduction Case Collection Activity



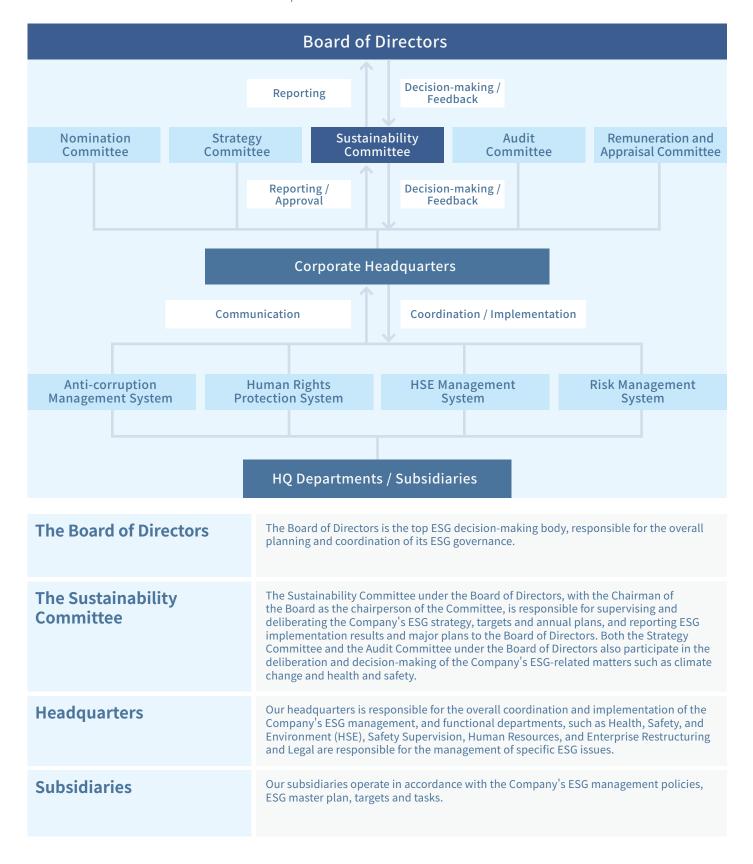
## CORPORATE GOVERNANCE



## **SUSTAINABILITY MANAGEMENT**

## ESG Governance Structure

The Company establishes the Sustainability Committee under the Board and promotes the integration of ESG issues into corporate strategic planning and key decision-making by improving ESG top-level design, providing a solid foundation for the Company's sustainable development.



## Stakeholders Engagement

Sinopec Corp. maintains active communication with shareholders and investors, government and regulatory agencies, customers, employees, partners and suppliers, communities, media, and other stakeholders, through various regular and special communication channels, to timely and comprehensively understand the demands and expectations of stakeholders, and adjust and optimise relevant management and practices of the Company accordingly.

Stakeholders	Key Communication Topics	Communication Channels
Shareholders and Investors	Business performance Addressing climate change Green-oriented transition of energy Invest in new energy Research and innovation Risk management and operation compliance	Information disclosure required by law Performance release and meeting Teleconference and online communication Capital market conference, investor hotline, and roadshows
Government and Regulations	Business ethics and anti-corruption Risk management and operation compliance Invest in new energy Addressing climate change Ensure energy supply Taxation and job creation Research and innovation	Daily communication and reporting Discussion and seminar Project approval Government supervision and regulation
Customers	Quality of products and services Invest in new energy Ensure energy supply Research and innovation Digital transformation	Daily service communication Customer visits Questionnaire survey Website, WeChat and other online media
Employees	Occupational health and safety Employee training and career development Diversity and equity Respect human rights	Collective negotiations and employee representative conference Visit and research Annual commendation Regular trainings Corporate cultural activities Website, WeChat and other online media
Communities	Community communication and engagement Taxation and job creation Responsible supply chain Support common prosperity	Corporate philanthropy On-site research Community communication activities Open Day events Complaint hotline Media communication
	Addressing climate change Green-oriented transition of energy Pollution and emissions control Biodiversity and land use Resource recycling and reuse Water resources management	Project environmental and social risk assessment Environmental information disclosure Environmental performance monitoring and disclose Respond to external investigation Science popularisation activities of environmental protection

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## **Materiality Analysis**

In 2023, the Company continued to identify and evaluate the material sustainability issues. This report discloses and responds to the Company's management and performance in addressing 22 identified issues.

Regular	Important	Core
Significance to stakeholders	18 20 21	4 3 2 9 5 5 6 11 15 16 11 13 14 13 19 14 13
	22	
		Significance to Sinopec

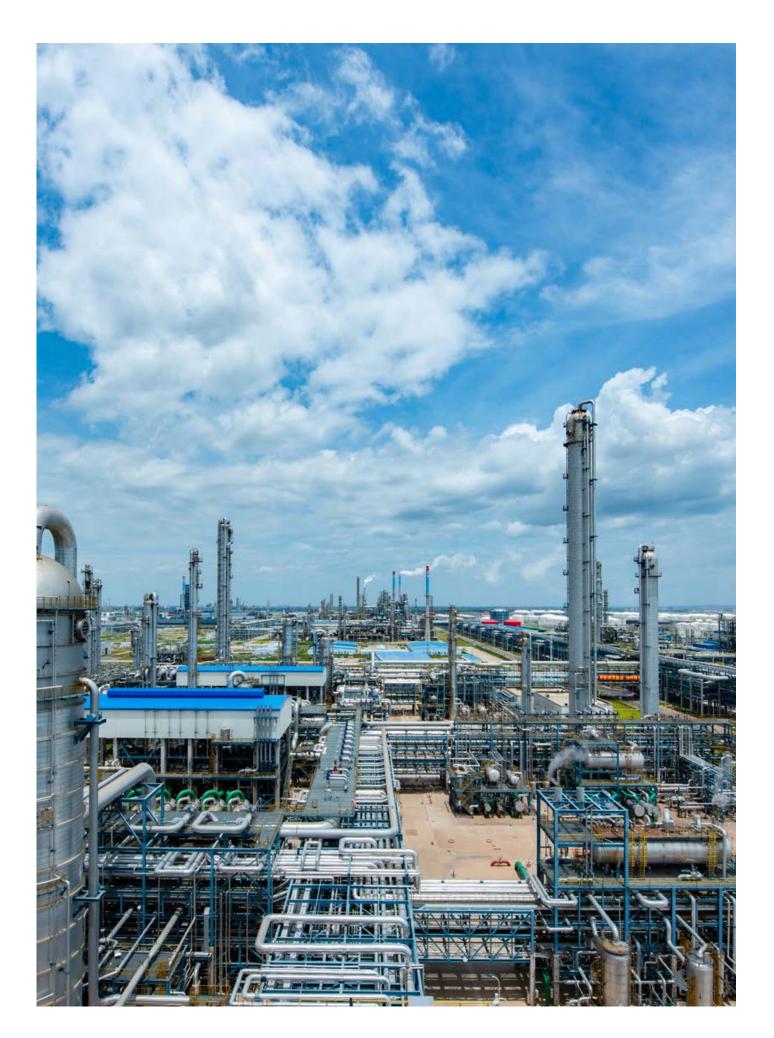
Identification	We reviewed company development plans, government policy trends, energy and chemical industry policies and regulatory requirements, and benchmarked with the sustainability performance of industry peers. We identified 22 sustainability issues of significance both to the Company and our stakeholders.
Evaluation	We invited representatives of both internal and external stakeholders to evaluate the identified issues, and took into consideration of the prioritisation of these issues sampled from our employees, to construct a two-dimensional mapping of the issues based on their significance.
Screening	After comprehensive consideration of the evaluation results of various topics, core, important, and general topics are determined according to their significance, and their rankings are used as a guide for the disclosure of relevant information in this report.

Material issue Issue hierarchy No. **Indicator aspect** A4 Climate Change Energy transition and invest in new energy Core Research and innovation 3 Addressing climate change A4 Climate Change Safety and occupational health B2 Health and Safety Corporate governance Risk management and operation compliance Business ethics and anti-corruption **B7** Anti-corruption A1 Emissions, A3 The Environment and Natural Resources, A4 Climate Change Environmental protection and green development Talent attraction and retention **B3** Development and Training Quality of products and services **B6 Product Responsibility** 水子 B1 Employment, B4 Labour Standards Respect human rights 11 **Important** B3 Development and Training 12 Employee training and career development A1 Emissions, A3 The Environment and Natural Resources Pollution and emissions control 13 Digital and intelligent development 14 Support common prosperity **B8 Community Investment** 15 A3 The Environment and Natural Resources 16 Biodiversity and land use **B5 Supply Chain Management** 17 Responsible supply chain 18 Resource recycling and reuse A2 Use of Resources 19 Water resources management A2 Use of Resources Community communication and engagement **B8 Community Investment** 20 Regular 21 Information security 22 Diversity and equity **B1** Employment

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## **GOVERNANCE SYSTEM**

In accordance with the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, and the provisions on the supervision and administration of securities at both domestic and international levels, Sinopec Corp. has formulated the Articles of Association and other governance documents, to continuously improve the corporate governance system to generate sustainable value.

## Corporate Governance Structure

The Company continuously explores the establishment of a modern corporate system, focusing on building a corporate governance structure with clear delineation and transparency of rights and responsibilities, collaborative operations, and effective checks and balances, and has established a sound, complete, scientific, and efficient corporate governance system, ensuring that the rights and responsibilities of the General Meeting of Shareholders, the Board of Directors and its special committees, the Supervisory Board, and the management team are clearly defined, coordinated and fulfilled.

## The General Meeting of **Shareholders**

The General Meeting of Shareholders is the Company's decision-making body, exercising its powers in accordance with the law. The Company treats all shareholders equally and fully safeguards their legitimate rights and interests. In 2023, the Company convened three shareholder meetings and deliberated on and passed 33 proposals.

## **Board of Directors and Board Committees**

The Company has established five committees under the Board, which are the Strategy Committee, the Audit Committee, the Nomination Committee, the Remuneration and Appraisal Committee, and the Sustainability Committee, to support its role of "setting strategy, making decisions, and preventing risks". The committees hired designated consultancies to support their work, providing consultation and advice for the decision-making of the Board of Directors. Independent directors play the role of "participating in decision-making, supervising and balancing, and providing professional advice", independently and objectively exercising their authorities. The Company has established a mechanism for independent director meetings to ensure independent directors fulfil their responsibilities. Independent directors leverage their professional expertise and advantages to promote the Company's operation management and scientific decision-making, safeguarding the legitimate rights and interests of all shareholders, especially small and medium-sized shareholders.

## **Board of Supervisors**

The Board of Supervisors is responsible for supervising the legality of the Company's finances and the performance of duties by the Company's directors and senior management. The Board of Supervisors reports to the General Meeting of Shareholders, with a term of three years for each session. The Eighth Session of the Company's Board of Supervisors currently consists of seven supervisors, including three employee representatives, accounting for 43%.

## **Senior Management**

Senior management is appointed by and reports to the Board of Directors. They execute board resolutions, organise the Company's production and operation management, and strive to promote the Company's high-quality development. The Company currently has seven senior management staff, with the CEO as the primary person in charge, who reports to the Board of Directors and is under the direction and assessment of the Board of Directors.

## Corporate Governance **Policies**

**Current Key Corporate Governance Policies of** Sinopec Corp.

In accordance with applicable laws, regulations, and listing regulatory rules, the Company has formulated 18 governance systems such as the Articles of Association to provide institutional guarantees for ensuring the robust operation of the Company. The Company follows the latest regulatory rules at home and abroad and carries out timely system revisions to ensure the Company's corporate governance system current.

Articles of Association of China Petroleum & Chemical Corporation Rules of Procedure for Sinopec's General Meeting of Shareholders Rules of Procedure of the Board of Directors of Sinopec

Rules of Procedure of the Supervisory Board of China Petroleum & Chemical Corporation Procedures for Director Nomination of Sinopec

Procedures for Information Disclosure of Sinopec

Regulations on Investor Relations Management of Sinopec

Working Rules of the Nomination Committee of the Board of Directors of Sinopec

Working Rules of the Audit Committee of the Board of Directors of Sinopec Working Rules of the Remuneration and Appraisal Committee of the Board of Directors of Sinopec

Working Rules of the Sustainability Committee of the Board of Directors of Sinopec

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## **Board of Directors**

As the decision-making body of Sinopec Corp., the Board of Directors reports to the General Meeting of Shareholders and plays a critical role in corporate governance. The Company continuously optimises the composition of the Board of Directors, strengthens the Board of Directors and board committees, emphasises the role of independent directors, laying a solid foundation for fully realising the effective governance of the Board of Directors.

1 Effectiveness of the Board

In 2023, the Company's Board of Directors operated in accordance with relevant laws and regulations and the Company's *Articles of Association*, and conscientiously implemented resolutions of the General Meetings of Shareholders. All directors were diligent and responsible, exercising their directorial powers appropriately and fully utilising their professional knowledge and skills to provide scientific decision-making for major Company matters. The annual report of the Company provides a detailed disclosure of the annual performance of the Board of Directors in the section of the *Board of Directors Report*.

## Attendance of the Board

In 2023, the Company convened six Board meetings with a 100% attendance rate of the directors, and deliberated and approved 50 motions. Relevant information about the meetings is disclosed on the websites of related stock exchanges and our corporate website in the form of announcements.

## Other Positions of Independent Directors

In accordance with the relevant requirements of China Securities Regulatory Commission, and to ensure that independent directors have enough time and energy to effectively perform their duties, the Company stipulates in the *Articles of Association* that "those who have concurrently served as an independent director in five listed companies" are not eligible to be an independent director of the Company.

### **Board Election**

Directors shall be elected or replaced by the General Meeting of Shareholders, and each Board has a three-year tenure of office. Independent non-executive directors may not be re-elected for more than 6 years. Independent director candidates are nominated by the Company's Board of Directors, Board of Supervisors, or shareholders holding more than 1% of the total voting shares, individually or collectively, of the Company; candidates for directors other than independent directors are nominated by the Board of Directors, Board of Supervisors, or shareholders holding more than 3% of the total voting shares, individually or collectively, of the Company, and the list of director candidates is submitted to the General Meetings of Shareholders for deliberation in in the form of a proposal. A cumulative voting system is adopted when electing two or more directors at the *General Meeting of Shareholders*. Please refer to the relevant chapters of the *General Meeting of Shareholders Rules* for the election procedures.

## 2 Diversity of the Board

The Company has formulated the *Board of Directors Diversity Policy*, and the nomination and appointment of board members are based on the skills and experience required for the overall sound operation of the Board of Directors, as well as the diversity requirements and goals of the Board. The Company considers the diversity of the Board from multiple dimensions, including but not limited to professional experience, skills, knowledge, tenure, region, cultural and educational background, gender, and age. The provisions on the tenure of directors in the Company's *Articles of Association* are conducive to ensuring a proper balance between sustained experience and new thinking of the Board, which enhances the diversity of the Board.

For details of the members of the Board, please refer to the "Board of Directors" section on the Company's website.



Currently, the Company's Board of Directors has achieved diversity in terms of gender, cultural and educational background, and professional expertise. The current members of the Company's Board of Directors come from different industries at home and abroad, with rich theoretical and practical experience in various professions, including operations and management of oil and petrochemical enterprises, as well as economics, accounting, finance, industrial and energy economics. They also have experience in risk management, which is conducive to strategic planning and scientific decision-making of the Company. As of the end of 2023, the Eighth Board of Directors of the Company has nine directors, including three executive directors and six non-executive directors, with non-executive directors accounting for 67% of the Board; there are four independent directors, accounting for 44% of the Board; and female directors account for 11% of the Board.

Gender of Directors	Number	Percentage (%)
Male directors	8	88.9
Female directors	1	11.1
Professional Background of Directors	Number	Percentage (%)
Petrochemical industry	5	55.6
Financial	1	11.1
Economics and finance	3	33.3

## Independence of the Board

The Company's Board of Directors consists of six non-executive directors, of whom four are independent directors. The non-executive directors account for 67% of the board. Independent directors do not hold any position in the Company other than director. The Company continuously improves the *Independent Director Working Rules* and other policies to standardise the operation of independent directors, ensuring the independence of the Board of Directors.

## Independent Directors Working Rules

The Company's *Independent Director Working Rules* stipulate that independent directors shall not be less than 1/3 of the Board, with a minimum of three. It also specifies the qualifications for independent directors, the nomination, election, and replacement of independent directors, and the duties and rights of independent directors, ensuring the independent directors can perform their duties. In 2023, the Company promptly followed the regulatory requirements for the reform of the independent director system in China, and revised relevant policies to further strengthen the guarantee for independent directors to better perform their roles.

# Procedures and Qualifications for the Election of Independent Directors

The nominator of independent director candidates shall carefully verify the qualifications, eligibility, performance capabilities, and any factors that may affect their independence of each nominee, and make a statement and commitment on the verification results; meanwhile, the nominee shall make a public statement on their compliance with independence and other conditions for serving as an independent director. The Nomination Committee of the Board of Directors reviews the qualifications of the nominees and forms specific review opinions. Independent directors also need to conduct self-assessments on their independence annually and provide written confirmation to the Company.

## Performance of Independent Directors in 2023

For details of the Company's *Articles of Association* and related policy documents, please refer to:



In 2023, the independent directors of the Company diligently fulfilled their duties, providing decision-making advice on important development matters for the Company. Three independent directors respectively serve as the chairpersons of the Remuneration and Appraisal Committee, the Audit Committee, and the Nomination Committee.

The Company's independent directors implement the requirements of the Company's *Articles of Association* and the *Working Rules for Independent Directors*, "participating in decision-making, supervising and balancing, and providing professional advice", conscientiously fulfilling their duties and participating in decision-making on major corporate matters. They also conducted research and onsite visits in Jiangsu and Hainan to better understand the industrial chain, operation and management, transformation and upgrading, and reform and development of the Company. During the reporting period, the independent directors of the Company expressed independent opinions on matters such as nominating directors and appointing senior executives, related-party transactions, profit distribution schemes, reappointing accounting firms, issuing A-shares to specific entities, share repurchases, etc., safeguarding the legitimate rights and interests of the Company and all shareholders.

The Company has established five committees under the Board, which are the Strategy Committee, the Audit Committee, the Nomination Committee, the Remuneration and Appraisal Committee, and the Sustainability Committee. The committees conduct research on professional matters, and present opinions and suggestions to the Board for decision-making. The members of the Board committees are directors of the Company.

	Responsibilities	Policies and mechanism	Composition	Key activities in 2023
Strategy Committee	Making recommendations to the Board on the long-term development strategies and significant investment decisions of the Company.	Working Rules of the Strategic Committee of the Board of Directors of Sinopec	Composed of seven directors, including Chairman of the Board, who serves as Chairperson of the Committee, and three independent non-executive directors.	Convened one meeting in total, with a 100% attendance rate, and approved the <i>Motion on the 2023 Investment Plan</i> of the Company.
Audit Committee	Responsible for proposing to hire and replace external auditing agencies, supervising the Company's internal audit system and its implementation, handling the communication between internal auditing and external auditing agencies, reviewing the Company's financial information and its disclosure policies, and reviewing the Company's internal control system, etc.	Working Rules of the Audit Committee of the Board of Directors of Sinopec	Composed of four independent non-executive directors, with an independent director who is an accounting professional as the chairperson. The other three are experts in energy, economy and finance.	Convened a total of five meetings, with a 100% attendance rate, and deliberated and approved 19 agenda items such as the <i>Internal Control Manual (2023 Edition)</i> and the <i>Explanation on the Operating Performance, Financial Condition, and Related Matters for 2022</i> .
Remuneration and Appraisal Committee	Responsible for researching and reviewing the remuneration policies and plans of directors, supervisors and senior managers, researching the evaluation criteria for directors and senior managers, conducting evaluations, and making recommendations.	Working Rules of the Remuneration and Appraisal Committee of the Board of Directors of Sinopec	Composed of three directors, including two independent non-executive directors, one of whom serves as Chairperson of the Committee.	Convened one meeting in total, with a 100% attendance rate, and deliberated and approved the Report on the Implementation of the Remuneration System for Directors, Supervisors and Senior Managers in 2022.
Nomination Committee	Responsible for making recommendations to the Board on the size and composition of the Board, as well as the selection criteria, procedures and candidates for directors and senior management personnel based on the Company's requirements.	Working Rules of the Nomination Committee of the Board of Directors of Sinopec	Composed of three directors, including two independent non-executive directors, one of whom serves as Chairperson of the Committee.	Convened two meetings in total, with a 100% attendance rate, and deliberated and approved the motions of the Nomination of Mr. Lv Lianggong as a Candidate for the Company's Executive Director and the Appointment of the Company's Senior Vice President.
Sustainability Committee	Responsible for making recommendations to the Board on major decisions related to the Company's sustainable development, supervising the implementation and progress of the Company's sustainable development strategies and plans, and supervising the Company's commitment and performance on key issues such as climate change, health and safety, and social responsibilities.	Working Rules of the Sustainability Committee of the Board of Directors of Sinopec	Composed of four directors, including Chairman of the Board, who serves as Chairperson of the Committee, and one independent non-executive director.	Convened two meetings in total, with a 100% attendance rate, deliberated and approved for reports, including the 2022 Sustainability Report, the Report on the Completion of 2022 Environmental Protection Targets and Work Plan for 2023, the Report on Anti-Corruption and Compliance in 2022 and Work Plan for 2023, and the Report on HSE Performance in the First Half of 2023 and Work Plan for the Second Half.

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## Board of Supervisors

The Board of Supervisors is accountable to the General Meeting of Shareholders. The Board of Supervisors is responsible for safeguarding the legitimate rights and interests of the Company and its shareholders by inspecting and supervising the legality of the performance of the directors and senior management personnel. The term of office for the Company's supervisors is three years, with re-election and consecutive terms allowed. Supervisors who are not employee representatives of the Company are elected and dismissed by the General Meeting of Shareholders, and those who are employee representatives are democratically elected and dismissed by employees of the Company via employee representative meeting, employ congress or other means. By the end of 2023, the Company's Board of Supervisors consisted of seven members, of whom three were employee representatives, accounting for 43% of the Board. In 2023, the Board of Supervisors convened four meetings in total, with a 100% attendance rate, and mainly approved 20 agenda items, including the annual report, financial report, sustainability report, internal control evaluation report, and the Board of Supervisors' work report of the Company.

## Remuneration and Appraisal of Directors and Senior Management Personnel

1 Compensation
Appraisal Mechanism

Sinopec Corp. has established and continuously improves a sound system for managing the compensation and assessment of directors and senior executives, with key assessment indicators including total profit, cost control, investment control, and safety and environmental protection targets. In terms of performance evaluation for senior management, the Company incorporates indicators such as quality benefits, service strategy, innovation drive, professional management, as well as ESG-related targets such as production safety, energy conservation and environmental protection, and compliance into the performance assessment of senior management personnel, with relevant performance-based incentives based on the evaluation results. Among these indicators, there are safety indicators such as incidents of safety penalties, contractor safety, as well as energy conservation and environmental protection indicators such as greenhouse gas emissions, pollutant discharge, energy efficiency management, and incidents of environmental penalties. The Company has formulated and implements a robust performance evaluation and compensation management mechanism for senior management, stipulating that the compensation of senior management mainly consists of basic annual salary, performance bonuses, and tenure incentives.

## 2 Renumeration Assessment

The Remuneration and Appraisal Committee of Sinopec Corp.'s Board of Directors makes recommendations to the Board of Directors on the formulation of compensation plans or schemes and assessment for directors, supervisors, and other senior management staff. For compensation determination, the committee has comprehensively considered the Company's goals and targets, compensation schemes of industry peers, the responsibilities and performance of directors and senior executives, etc. On 27 February 2023, the Remuneration and Appraisal Committee deliberated and approved the *Report on the Implementation of the 2022 Compensation System for Directors, Supervisors, and Senior Management*.

Indicator Category	Assessment Indicators	Weight
Quality and benefit indicators	Total profit, return on equity, cash flow, costs (expenses), economic value added, etc.	60%
Service strategy, innovation driven, professional management indicators	Implementation of strategic planning, intensity of R&D funding, domestic oil and gas production, etc.	30%
Key task indicators	Deepening enterprise reform tasks, value creation actions, etc.	10%
Compulsory indicators	Production safety, energy conservation and environmental protection, compliance, etc.	A maximum of 15 points can be deducted from operating performance points for poor performance in production safety, and 10 points in energy conservation and environmental protection.

3 Claw-back Mechanism of Performance Compensations

The Company has established a claw-back mechanism for performance compensations of senior management personnel. According to the policies such as the *Sinopec Senior Management Performance Appraisal and Compensation Management Measures*, senior executives who violate national laws and regulations or fail to fulfil their duties resulting in corporate asset losses will face this mechanism, under which the Company will deduct the annual performance salary of the relevant senior executives or recover part or all of the performance salary and tenure incentive income already paid based on the disciplinary results and asset losses. The claw-back mechanism also applies to senior executives who have already resigned or retired.

The Company strictly fulfils its information disclosure obligations of where it is listed in accordance with laws and regulations, and strives for greater disclosure transparency. Guided by investor demand, the Company keeps optimising its information disclosure system to develop a deeper integration with its internal control system, and optimising the format and the distribution of information disclosure, delivering concise and easy to understand formats such as digital infographics to improve the effectiveness of information disclosure. In 2023, the Company's information disclosure received an A-level evaluation from the Shanghai Stock Exchange for the 10th consecutive year.

The Company continues to strengthen investor relations management to enhance its market recognition and value realisation. The Company's directors and senior management staff actively communicate with investors and other stakeholders, listening to opinions and suggestions and responding to their inquires in a timely manner. The Company actively expands the breadth and depth of its communication with stakeholders to help them better understand the Company through various channels, such as General Meeting of Shareholders, roadshows, reverse roadshows, analyst meetings, receptions, investor hotlines, corporate website columns, and new media platforms, winning a variety of award in this regard, including the China Securities Golden Bauhinia Award for "Outstanding Investor Relations Management" and the "Best Investor Relations Team" award voted by the *Institutional Investor*.

A Reverse Roadshow Covering the Entire Industry Chain

CASE

In June 2023, the Company organised a reverse roadshow covering its entire industry chain, showcasing the advantages and development potential of Sinopec Corp.







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## INTEGRITY AND COMPLIANCE

Sinopec Corp. has established a sound integrity and compliance management system strictly adhering to compliance and integrity management requirements and principles. The Company formulates and implements a series of policies to continuously strengthen business ethics awareness at both the corporate and the employee levels, including the *Comprehensive Management Opinions on Strengthening Management in Compliance with Laws and Regulations*, the *Integrity and Compliance Management Manual*, the *Compliance Management Measures*, etc. The Company applies a "zero tolerance" attitude towards corruption and violations of business ethics, resolutely strive to eliminate all behaviours that violate business ethics, and continuously improves the integrity and compliance management and the anti-corruption capabilities of the Company.

## Compliance Management

Sinopec Corp. has established the "five in one" compliance management mechanism, including policies, risk management, internal control, compliance management, and legal affairs. With a sound and robust compliance management mechanism, processes, and relevant operational support, the mechanism fully functions to provide "three lines of defence" in compliance management, contributing to building a comprehensive, effective, and customised compliance management system.









1 Compliance Policy Guarantee The Company continuously optimises its compliance management system, and has formulated and implemented a number of relevant policies and regulations, including the *Sinopec Compliance Management Measures*, the *Sinopec Major Project Legal Compliance Review and Demonstration Management Measures*, and the *Sinopec Integrity Compliance Management Manual* 

The Sinopec Integrity Compliance Management Manual addresses ten areas, including corporate governance and operations, safety, environmental protection, employee health and security, anti-commercial bribery and anti-corruption, consumer rights protection, anti-monopoly and unfair competition, finance and taxation, assets, social responsibility and employee rights, intellectual property and data, international trade and investment, business partners. It specifies 54 operating norms that the Company shall comply with 52 codes of conduct for Sinopec Corp.'s employees, providing the basic requirements and behavioural norms for both the Company and its employees in conducting external communications, upholding professional ethics, adhering to business ethics, safeguarding legitimate rights, and fulfilling social responsibilities.

In 2023, the Company revised the *Sinopec Compliance Management Measures*, comprehensively upgrading the basic compliance management system; developed and released the compliance guidelines for bidding and tendering, as well as compliance risk lists in bidding and tendering, ecological environment protection, and finance and taxation fields, further enriching and improving the compliance management system of the Company.

Operating norms of the Company

52

54

Items

Codes of conduct for Sinopec employees

Current Key Compliance Management Policies of Sinopec Corp. Sinopec Compliance Management Measures

Sinopec Major Project Legal Compliance Review and Demonstration Management Measures Sinopec Integrity Compliance Management Manual

 $Opinions \ on \ Strengthening \ Management \ of \ Comprehensive \ Compliance \ with \ Laws \ and \ Regulations \ in \ Sinopec \ Employee \ Code \ of \ Conduct$ 

Regulations on Employee Discipline

The Company also integrates compliance requirements into employee performance management, incorporating compliance, unity and cooperation, and integrity indicators in the performance assessment of employees, using multi-dimensional evaluations to ensure the effectiveness of compliance management at the employee level. The Company has formulated the *Employee Code of Conduct*, which regulates employee compliance behaviour in terms of health, safety and environmental protection, behavioural norms, ethical standards, workplace etiquette, quality requirements, confidentiality requirements, etc. In 2023, the Company revised the *Regulations on Employee Discipline*, further strengthening the education, management, and supervision of employee compliance behaviour, covering both violations of state laws and regulations and company management policies in the fields of production safety, ecological environment protection, and integrity and business ethics.

## 2 Compliance Risk

Management

## Sinopec Compliance Risk Management "Three Lines of Defence"

## First line of defence

The Company and Its Direct Affiliates

The Company and its direct affiliates have established a comprehensive compliance risk identification, assessment, and early warning mechanism based on the comprehensive risk management framework, and established and regularly updated the compliance risk database, highlighting and strengthening the prevention, process control, and classified management of compliance risks.

## Second line of defence

Business Units and Functional Departments

Business units and functional departments regularly review and analyse the mandatory compliance requirements and voluntary compliance commitments within the scope of their business responsibilities, focusing on identifying relevant risks in business activities, clarifying risk issues, determining risk levels, formulating preventive measures, establishing risk lists, and timely reporting compliance risks to the compliance management department.

## Third line of defence

The Compliance
Management Department

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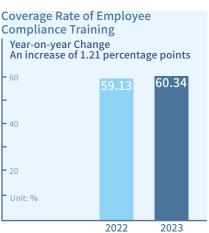
The compliance management department summarises and analyses the compliance risk situation, identifies and evaluates major and important compliance risks; pays attention to changes in the external regulatory environment, prompts and urges relevant departments and units to timely identify and evaluate compliance risks and take corresponding measures; focuses on key business areas and links, key personnel positions, refines management, and strengthens dynamic monitoring and early warning of major and important compliance risks.

## 3 Enhance Compliance Training

The Company formulated the 2023 compliance management training plan and organised a series of compliance management training programmes, such as the compliance management training series for legal compliance management staff and compliance personnel of refining, sales and research subsidiaries. The Company organised a training programme for Chief Compliance Officers of subsidiaries to help them improve their legal thinking, compliance awareness, and legal compliance capabilities.

The Company also issued the *Sinopec 2023 Legal Awareness and Education Key Points*, and produced twelve monthly video lectures on legal awareness education lectures targeting all employees. The video lecture series were studied 69,593 views.





4 Enhance Audit Supervision

The Company has included operational compliance as a key focus area of audit, and strictly carried out audits in accordance with the audit scope and frequency requirements of laws and regulations. The Company's audit requirements clearly specify the requirements for operating in compliance with the laws and regulations. The Company has formulated audit key points and audit plans, both emphasising the need to focus on operating in compliance with the law, major risk prevention and control, the authenticity and legality of financial accounting information, as well as the compliance of procurement and sales management, investments, overseas business operations, etc.

## Business Ethics and Anti-Corruption Management

The Company strictly abides by the relevant laws and regulations, such as the *Criminal Law* of the People's Republic of China, the Company Law of the People's Republic of China, the Supervision Law of the People's Republic of China, the Civil Servants Disciplinary Law of the People's Republic of China, the Regulations on the Integrity of Leading Cadres in Stateowned Enterprises, and the Measures for the Implementation of Accountability for Violations of Operating and Investment by Central Enterprises (Trial), as well as anti-corruption and anti-bribery laws applicable in the markets where we operate, international conventions such as the United Nations Convention against Corruption, complies with the provisions and commitments of the Company and its business partners on integrity and anti-corruption, and conducts operations in accordance with regulations.

## Anti-Corruption Statement of Sinopec Corp.

Sinopec Corp. strictly abides by China's anti-corruption laws and regulations, the *United Nations Convention against Corruption* and the anti-corruption and anti-bribery laws applicable to the countries and regions where it operates. The Company complies with the business integrity and anti-corruption regulations and commitments of its business partners and always advocates for an integrity culture. The Company strictly forbids its subsidiaries and employees, including labourers and temporary workers, from giving or accepting bribes, or engaging in corruption, fraud, or monopoly behaviour for any reason, in any form and any location. The Company also requires suppliers, contractors, and service providers to follow these requirements. When conducting business overseas, the Company strictly abides by the principles and regulations of anti-corruption, anti-commercial bribery, anti-fraud, and anti-monopoly.



1 Anti-Corruption Organisational Framework The Company has established a comprehensive anti-corruption governance structure covering the "Board of Directors-Supervision Department-Subsidiaries". The Board of Directors is responsible for promoting the Company's anti-corruption management at the decision-making level; the Supervision Department organises and coordinates the implementation of anti-corruption policies according to its responsibilities; each subsidiary has a supervisory body or position, equipped with full-time or part-time staff, to carry out anti-corruption work in accordance with laws and regulations and company disciplines.

The Company continues to improve its internal supervision system, ensuring that directors, supervisors, senior management personnel, and all institutions and personnel are properly supervised while exercising their management power. The Company also regularly conducts research and deploys key supervision tasks.

In March 2023, the Company's anti-corruption and compliance management and its performance in 2022 was reviewed by the Sustainability Committee of the Board.

The Supervision Department of the Company operates under the oversight of the Board of Directors, the Board of Supervisors, and staff to ensure standardised behaviour and prevent abuse of power. The Supervision Department implements internal power checks and balances and work processes to prevent the abuse of power; strengthens supervision and inspection and regulates the supervision behaviour of lower-level supervisory bodies. Whistleblowing reports on supervisory institutions and personnel are handled separately and independently investigated by specialised units. Fraudulent behaviours of supervisory personnel will be strictly investigated and punished in accordance with relevant laws and regulations and company regulations.

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## 2 Anti-Corruption Policy and System

Sinopec Corp. has established and continuously optimises the anti-corruption policy and system, which fully cover the Company and all affiliated institutions, businesses and personnel, providing a solid guarantee for the Company's long-term and stable development. The Company has established and implements a series of internal management policies, such as the *Sinopec Employee Disciplinary Regulations* and the *Sinopec Management Regulations on Leaders' Relatives Engaging in Business Activities*, to further normalise internal management. We have made continuous efforts to strengthen the construction of internal control, risk control, and compliance management systems, focusing on the restriction and supervision of power operations.

In 2023, the Company further strengthened its anti-corruption and compliance policies and optimised its anti-corruption system, and formulating and revising a number of policies, such as the *Sinopec Compliance Management Measures* and the *Sinopec Employee Disciplinary Regulations*.

The revised version of the *Sinopec Employee Disciplinary Regulations* specifies 13 specific behaviours that violate the requirements of integrity in employment, involving receiving and giving gifts, using public funds for personal expenses, irregular provision of allowances, subsidies, bonuses, and company-funded trips, etc. Any employee that is found to have violated the requirements shall be disciplined in accordance with the *Sinopec Employee Disciplinary Regulations*. After preliminary verification, if an employee is suspected of violating regulations, discipline, or laws and needs to be held accountable, the Company shall initiate a case to further investigate, and make corresponding decisions and disciplinary actions based on the nature and severity of the incident.

## Current Key Anti-corruption Policies of Sinopec Corp.

Sinopec Compliance Management Measures Sinopec Employee Disciplinary Regulations

Supervision and Discipline Measures of Discipline Inspection and Supervision Team (Trial)

Opinions on Strengthening Daily Supervision of Discipline Inspection and Supervision Institutions (Trial)

Implementation Measures on Accountability for Non-compliance in Investment Management

Regulations on Working Procedures for Accountability Investigation (Trial)

Measures of Disciplinary Inspection and Supervision Agency for Handling Reports and Accusations Regulations on Management Personnel's Relatives Engaging in Business Activities

Methods for Daily Supervisory Conversations

Methods for Reporting and Recording of Management Personnel's Illegitimate Involvement in Major Matters

## 3 Anti-Corruption Risk Management

Ensuring integrity and preventing corruption risks has always been a key component of the Company's risk management. The Company conducts regular comprehensive risk identification and risk level classification, with a focus on anti-corruption and compliance risks. The Supervision Department regularly reports the overall state of anti-corruption and important matters to the Sustainability Committee and the Board as an effective reporting mechanism for major matters.

In 2023, the Company carried focused improvement measures regarding the integrity risks in three key areas, including material procurement, engineering construction, and product sales, formulating preventive measures, and contracting third-party organisations to evaluate the compliance and integrity of suppliers.

### Material Procurement



Strictly implemented the requirements of the *Ten Prohibitions for Material Procurement of Sinopec* and the *Eight Prohibitions for Bidding and Tendering Personnel*, continuously optimised supervision indicators around key processes such as bidding, quotation comparison, and contract signing, and improved the mechanism of pre-warning, inprocess monitoring, and post-evaluation.

## **Engineering Construction**



Developed and issued implementation plans, organised affiliated enterprises to conduct self-inspection and self-rectification, supervising and ensuring the rectification of relevant risks. Revised and improved the *Regulations on the Management of Construction Project Bidding and Tendering*, optimised and enhanced bidding standard documents and contract texts, developed a three-phase system for construction project bidding and tendering, and achieved full-process supervision of bidding, tendering, and contract execution.

## **Product Sales**



Thoroughly reviewed the integrity risk activities related to sales of refined oil products, and effectively prevented and eliminated integrity risks by revising and improving operation guidelines, holding warning education conferences, and investigating and disciplining violation incidents.

## 4 Key Anti-Corruption Activities in 2023



Coordinated and provided integrated integrity education in business training for employees at all levels, achieving full coverage of integrity education through centralised warning education, reminders communications, and case briefings. Included anti-corruption education content in new employee orientation training to strengthen anti-corruption and integrity education for young management staff.

In 2023, the Company headquarters and its subsidiaries jointly offered 2,623 anticorruption and integrity training courses, with a total training time of 17,650 hours.

# Supervision and Special Governance

Clarified responsibilities at all levels, and carried out regular daily supervision to promptly identify and resolve business integrity risks.

Organised special governance campaigns to address the specific risks identified in supervision inspections, and urged relevant departments or units to conscientiously complete rectification through means such as supervision recommendations.



Adhered to the "zero tolerance" attitude towards corruption.

Thoroughly analysed the causes of corruption cases, organised relevant units to deeply reflect on existing problems and draw lessons; strengthened the anti-corruption education, management, and supervision of employees by further optimising relevant policies and management procedures.

In 2023, the Company took anti-corruption actions against 19 individuals. Neither the Company nor any of its employees was involved in corruption lawsuits that have been adjudicated by the court.

Indicators	2022	2023
Total number of public entries in the Business Disclosure Information System (ten thousand)	489.37	536.35
Number of individuals disciplined for violating the Company's anti-corruption policies	27	19
Number of corruption litigation cases adjudicated by the court	3	0
Indicators	2022	2023
Participation of anti-corruption and integrity training (10,000 person-times)	119.5	119.7
Coverage rate of anti-corruption trainings (%)	100	100
Number of disciplinary legal education training sessions (10,000 times)	1.4	1.5
Number of employees participated in disciplinary legal education (10,000 person-times)	88.2	89.1
Coverage of disciplinary legal education and training (%)	100	100

## 5 Protection of the Whistle-blower

Sinopec Corp. has established a whistleblowing mechanism to accepts opinions from various parties in accordance to the integrity management principle of "listening to different opinions". As of the end of 2023, the Company's whistleblowing channels include: mailing, in-person reporting, phone line to the supervisory authority, and suggestion columns on corporate website, etc.

The Company regards the protection of whistleblowers' privacy as a significant responsibility, and continuously enhances the internal confidentiality mechanism and formulates the Company's approaches to accusations. The Company strictly keeps confidential the name, affiliation, and address of the whistleblowers. If anonymous whistleblowing reports are received, identification verification through handwriting or IP address is prohibited. If the situation makes it necessary to identify the anonymous whistleblowers' identities, such action has to go through a due process of approval first. Those who intentionally disclose the whistleblowers' privacy or retaliate against the whistleblowers will face serious consequences once verified.

## Petition and Whistleblowing Handling Procedures

## Information review



Review the allegations received to understand the key information and nature of the reported incidents.

## Summary — registration



Summarise and input the key information of the reported incidents into the petition and whistleblowing management system in accordance with preset procedures.

## Handling and processing



The handling personnel shall put forward suggestions for handling the reported incidents, and report the handling suggestions to relevant supervisory personnel in charge for approval and implementation.

## Statistical analysis

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The Complaint
Management Department
regularly conducts
comprehensive statistical
analysis of incidents
handled.

# Anti-Corruption and Compliance of Supply Chain

The Company attaches great importance to anti-corruption and compliance management in the supply chain, and has formulated regulations such as the *Ten Prohibitions for Material Procurement of Sinopec*, the *Eight Prohibitions for Bidding Practitioners*, the *Performance Evaluation Measures for Material Supply Management of Sinopec*, and clearly stipulated the anti-corruption and compliance requirements and disciplinary provisions in the *Sinopec Employee Disciplinary Regulations* for procurement operations.

The Company signs a *Business Integrity Commitment* with contractors and suppliers, which attached to the procurement contract (agreement) and has the same legal effect, to regulate trading behaviours.

In 2023, the Company revised the *Ten Prohibitions for Material Procurement of Sinopec* to further strengthen anti-corruption and compliance management in the supply chain, strictly enforcing procurement integrity requirements and striving to build a legitimate, compliant, transparent, fair, and just material procurement ecosystem.

The Company conducts audit supervision on supplier management, focusing on the compliance issues related to supplier qualifications, procurement methods, and procurement procedures. Issues identified in the audit shall be rectified with measures such as assessment of suppliers, policy revision, and disciplinary actions against relevant parties.

By the end of 2023, a total of 11,109 suppliers passed legal entity credit certification. In 2023, the Company disqualified 6 suppliers involved in corruption issues from transactions.

11,109

Number of suppliers passing legal entity credit certification

Indicators	2022	2023
Number of suppliers punished for business integrity violations	6	6

## Tax Management

The Company has formulated the *Tax Management Measures* and other relevant policies to ensure tax compliance, and conscientiously fulfils its tax obligation in compliance with the relevant tax policies and regulations of the market where it operates, as well as the Company's management policies and operation procedures. With a strong focus on accurate and timely tax payments, the Company maintains authentic and complete tax-related data and records to meet regulatory requirements and disclose tax information in accordance with applicable regulations. The Company supports and complies with the Base Erosion and Profit Shifting (BEPS) programme, and is committed to paying taxes legitimately in where it operates and creates value, and contributing to local social and economic development.

In 2023, the Company regularly studied state tax policies and organised relevant trainings for tax-related personnel in order to help them improve their understanding and application capabilities of the policy updates. The Company also continuously strengthened its tax management information system and intensified its tax management efforts.

The Company enhanced tax risk management by improving internal control policies and workflows, utilising information technology and digital means, and establishing a tax risk quantification assessment model to provide regularly assess tax risk warnings, aiming at preventing tax-related risk from the source. In 2023, the Company established a regional tax risk supervision mechanism. The Regional Finance and Tax Coordination Team conducts joint inspections and cross inspections of tax risks of enterprises within each region, and strengthens source compliance control, process compliance management, and result compliance monitoring, promotes normalised, institutionalised, and precise risk prevention and control, so as to enhance the tax risk prevention and control capabilities of the Company. In 2023, the Company had no incident of major tax-related litigation or arbitration.

## Intellectual **Property** Protection

The Company continuously highlights the key role of intellectual property in corporate competitiveness, and has formulated its intellectual property strategy focusing on key business development, building a unique and effective intellectual property management system regarding the creation, application, protection, and management of intellectual property.

The Company strictly abides by the Civil Code of the People's Republic of China, the Patent Law of the People's Republic of China, and the Copyright Law of the People's Republic of China, and other relevant laws and regulations related to intellectual property protection, fully undertaking intellectual property protection efforts. The Company has formulated and implements a series of regulations and policies to provide clear implementation norms for promoting patent management and intellectual property protection, including the Sinopec *Intellectual Property Protection Regulations*, the *Sinopec Patent Management Measures*, the Sinopec Proprietary Technology Management Measures, the Sinopec Technology Trade Management Measures, the Sinopec Technology Achievement Transformation Promotion and Incentive Management Measures, and the Sinopec Chemical Commercial Holding Co., Ltd. Intellectual Property Protection Management Regulations, allowing intellectual property to play a more important role in supporting and leading the Company's innovation and development with better managed creation, application, protection, and management of intellectual property.



## RISK **MANAGEMENT** AND INTERNAL CONTROL

Sinopec Corp. has established a robust risk management and internal control system, and regularly conducts risk identification, assessment, and control efforts. Each year, the Company, and its subsidiaries organised corporate risk assessment with the assistance of internal and external experts to ensure the effectiveness and applicability of risk assessment results. In terms of internal control management, the Company continuously strengthens its internal control supervision and management, and has established a sound management mechanism of systems, policies, and supervisory functions. In 2023, the Company had no significant risk incident, and had no incident of litigation such as anti-unfair competition and anti-monopoly.

## **Risk Management**

1 Risk Management System

The Company has established a networked risk management system with various management levels as the main body and various business lines as the main report line, ensuring effective risk management in accordance with each participant's management responsibilities from the headquarters level to the subsidiary level. The Company has formulated the Comprehensive Risk Management Measures to specify risk management responsibilities, key procedures, information system construction, risk management culture, and assessment and supervision.

## Risk Management System of Sinopec Corp.

Board of Directors	Sinopec Corp.'s Board of Directors is the top authority and decision-making body for risk management, with the Chairman of the Board acting as the highest-level person in charge of risk management.
Audit Committee of the Board	Fully participate in risk management and internal control management, and report to the Board of Directors.
Headquarters Departments	The Company has clearly defined the risk management responsibilities of relevant headquarters departments in the areas of environmental protection, addressing climate change, production safety, finance, legal affairs, anti-corruption, and overseas security.
Subsidiaries	In accordance with the requirements of comprehensive risk management, Sinopec subsidiaries have set up their own comprehensive risk management leading teams to ensure the effective implementation of risk management efforts.

The Company has established and continuously implements and optimises its risk management indicator system, which includes 28 primary indicators and 64 secondary indicators of major operational risk management in five dimensions. It continues to promote the construction and application of the index system, continuously optimising the threshold calculation model and risk indicator database of the system. In 2023, the Company generated quarterly risk alerts based on calculation of the indicators, achieving the initial effects of risk monitoring and early warning.

The Company includes risk management as a mandatory performance indicator for the compensation appraisal system for senior management staff, with deductions of performance points for major decision-making errors or legal disputes.

The Company has fully integrated risk control concepts into various trainings of its business units. In 2023, the Company organised three sessions of fundamental training on risk management and internal control, covering more than 300 leaders and key personnel from relevant departments. The Company also organised risk management and internal control position training and business competitions, with a total participation of 572 thousand person-times.

572

**Thousand person-times** 

Participants of risk management and internal control position training and business competitions

## Risk Identification and Assessment **Procedures**

The Company regularly conducts risk identification and assessment, collects relevant internal and external information, identifies risks, analyses the causes of risks, formulates risks list, uses a combination of qualitative and quantitative methods to assess the risk level, and clarifies the focus of risk management in conjunction with development strategies and operational objectives.

In 2023, the Company conducted its annual major risk identification assessment with multidimensional approach, drawing reference from its major risk prevention and mitigation plan, the analysis of future trends, and annual risk assessment list recommendations from internal and external consulting agencies, and formulated and implemented relevant measures based on the assessment results.

### Risk Identification and Assessment by Category

### **Annual Risk Assessment**

The Company carries out comprehensive identification annually to identify the focus of annual risk management, and prepares its comprehensive risk management report based on risk evaluation results.

## **Special Risk Assessment**

The Company conducts special risk assessment for major investment projects during the feasibility study phase, and develops a special risk assessment report accordingly.

## Daily (Dynamic) Risk Assessment

Each unit conducts dynamic risk assessment of relevant risks based on the annual risk assessment results and in conjunction with daily operational management.

## Process of Annual Major Risk Identification and Assessment

### 1. Questionnaire Survey Assessment

Developed a 2023 annual risk assessment survey questionnaire in accordance with risk assessment standards, and surveyed 2,576 personnel from headquarters and subsidiaries using the questionnaire on two dimensions, the likelihood of occurrence and the degree of impact.

### 2. Specialised Analysis and **Evaluation**

Entrusted the internal and external advisory agencies to evaluate key risks for Sinopec Corp. in 2023, and compiled a risk assessment report accordingly.

## 3. Major Risk Report and Response

Compiled the *Annual Major Risk* Management Report with a total of 24 major risks identified and analysed and corresponding mitigation and control measures proposed.



## 3 ESG Risk Management

The Company continues to optimise ESG governance and risk control, and strives to enhance its overall ESG management by including risk management assessment in the annual performance appraisal of various departments and subsidiaries. The Company has also incorporated ESG risk management into its comprehensive risk management system, including but not limited to HSE risks, information network security risks, quality risks, and other ESG factors, all of which are included in the identified 24 major risks.

## **Internal Control** Management

The Company has established a robust internal control management system of organisational framework, policies, and evaluation mechanism, covering different levels at headquarters and subsidiaries. In 2023, the Company conducted internal control audit evaluations on 31 subsidiaries, and required the rectification of identified risks through methods such as improving risk lists, revising internal control implementation rules or relevant policies.

## Internal Control Management System of Sinopec Corp.

**Headquarters Level** 

## **Management Module**

## Organisational **Framework**

As the top decision-making body for internal control and management within the Company, the Board of Directors determines the internal control system, and is in charge of the overall supervision and evaluation of internal control policies and their effective implementation.

The Audit Committee of the Board is responsible for overseeing the Company's internal control system.

The Company has assigned a Comprehensive Risk Management Executive Team to lead the formulation and operation of its internal control system. The Enterprise Reform and Legal Department jointly formed the Comprehensive Risk Management Office to oversee the implementation of decisions of the Executive Team to ensure the effectiveness of the internal control system.

The Audit Department independently exercises the inspection and evaluation functions of internal control management.

Headquarters functional departments and business units are responsible for the formulation and effective implementation of internal controls related to their respective functions and business units.

## **Subsidiary Level**

Responsible for the formulation and implementation of the internal control system of each unit following the direction of headquarters, and bearing the responsibility for internal control management of the unit.





Responsible for formulating the headquarters internal control manual and corporate internal control manual framework.

Fulfil its own internal control system design responsibilities in accordance with the framework of the headquarters, including detailed internal control implementation measures based on actual conditions.





The Audit Department carries out various audits and continuously supervises the Company's internal control independently.

The Enterprise Reform and Legal Department is responsible for the daily supervision and special supervision of the Company's internal control.

Follows the management requirements of headquarters, and supervises and evaluates the internal controls through of each unit through comprehensive regular testing, self-inspection and audit.

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## TECHNOLOGICAL INNOVATION

Sinopec Corp. is committed to building itself into a technology-leading enterprise, and remains dedicated to the implementation of its innovation-driven development strategy. The Company strives to achieve breakthroughs in core technologies, accelerate the commercialisation of technological achievements, strengthen key fundamental researches, push forward the reform of the technological system and mechanism, continuously improve the effectiveness of technological innovation, and continuously engage in global collaborative partnerships, making greater contribution to support and lead the high-quality development of the Company.

## Technological Innovation Management

The Company strives to improve the efficiency of innovation resource allocation focusing on its business development needs, and builds and leverages its competitive advantages in technological innovation mechanism to actively accelerate technological innovation.

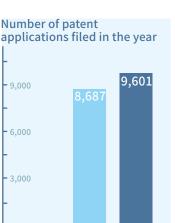
By 2023, the Company intensified its efforts in technological innovation and optimised the overall coordination of research resources, resulting in an increase of its technological innovation capabilities.

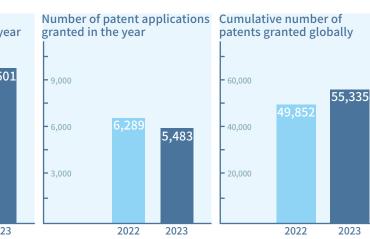
Built a strategic innovation platform, all four State Key Laboratories Sinopec plays a leading role passed optimisation and restructuring, and participated in the construction of two new State Key Laboratories. Collaborated with universities, enterprises, and other parties to build a R&D platform of industry-academia-researchapplication collaboration.

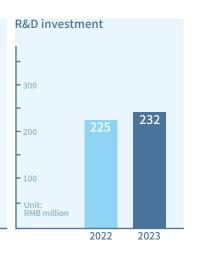


Continuously strengthened fundamental research, and optimised top-level design, medium and long-term planning, and assessment and incentive mechanism, laying a solid ground of a management mechanism for fundamental research to ensure the effectiveness of research activities.

Deepened technological reforms, and actively participated in external communications and exchanges. Adopted various organisational models, such as "Being the First to Accept Challenges" and "Horse Racing", to encourage the implementation of research projects, and piloted the 'Seed Plan" to collect potential research project candidates in original and forward-looking ideas and solutions in the fields of chemical industry and material science, aiming at exploring new areas,







# Technological Innovation Achievements

In 2023, the Company focused its research efforts on key core technologies with a series of fundamental, cutting-edge, and disruptive technological research projects, and had made considerable achievements in many areas.

## Oil and Gas Exploration and Development

Innovated the theory of continental shale oil enrichment and reservoir formation, and developed the key technologies for deep oil and gas exploration and development.

## Refining

Continued to promote technological research in the fields of "oil-to-chemical" and "oil-to-specialty materials" technologies, and the 3 million tonnes/year heavy oil higherficiency catalytic cracking (RTC) unit successfully started operation on the first trial run.

### **Biomass Fuel**

Our kitchen waste grease to bio-aviation fuel plant successfully completed commercial scale pilot production, the first in China, with the full range of products, including bio-aviation fuel, biodiesel, and bio-naphtha, successfully passed the certifications of the Roundtable on Sustainable Biomaterials (RSB). Sinopec Corp. has become the first Asian company that has full range of bio-aviation fuel products passed RSB certifications.

## New Chemical Materials

The first independently developed epichlorohydrin production unit using the CHP (cumene hydroperoxide) method successfully started operation.

Completed the construction of the 5,000 tonnes per year high-performance liquid rubber plant, which could produce liquid rubber material used in 5G communication high-frequency copper-clad laminate and flexible resin board, marking the commercial production and large-scale application of high-performance liquid rubber.

Developed a number of products using polyolefin elastomer (POE), including photovoltaic film, resin modification, and foaming materials, all of which can be produced in mass scale.

Developed the continuous pyrolysis technology of waste plastics (RPCC), which is a key technology in the plastic recycling of waste plastics with the advantages of large-scale, continuous operation, and high impurity removal rate, providing an effective solution to address the "white pollution".

Developed new high molecular materials for medical and health protection under multiple brand names, which are widely used in the production of masks, protective suits, isolation cabins, and surgical gowns.

## CCUS Technologies

Sinopec Corp. has developed the full range of CCUS technologies, and built the first milliontonne CCUS demonstration project in China (Qilu Petrochemical - Shengli Oilfield), with the first hundred-kilometre  $CO_2$  long-distance pipeline constructed and in operation in China.

The Company also jointly conducted research on the first open million-tonne CCUS project in East China with both domestic and global partners.

## Hydrogen Energy

Hydrogen production: Achieved milestone results in the development of Proton Exchange Membrane (PEM) electrolysis and Solid Oxide Electrolysis Cell (SOEC) hydrogen production technologies.

Hydrogen purification: Developed high-efficiency active adsorbents and modular purification processes that can be used to treat hydrogen from different sources, with the complete set of technologies successfully applied in a number of subsidiaries.

Hydrogen storage, transportation, and fuel cells: Achieved milestone results in the development of hydrogen storage materials, membrane electrodes, and catalysts, etc. Successfully developed commercial scale membrane electrodes using independently developed catalysts as the active component, and self-assembled stacks passed third-party testing. Developed the complete set of continuous production technologies for membrane electrodes, and successfully carried out pilot production of the products with satisfactory performance of the products manufactured.

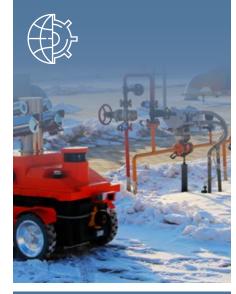


# DIGITAL AND INTELLIGENT DEVELOPMENT

Sinopec Corp. vigorously implements digital transformation, and continuously enhances the digital and intelligent capabilities as new engine for high-quality development.

In 2023, the Company achieved a series of results in digital transformation and intelligent development. Sinopec Corp. became the first enterprise in the petrochemical industry to be rated the top class (Level 5) enterprise in data management capability, and its data application case won the first prize in the Industrial Internet Big Data Innovation Application track of the 2nd China Big Data Competition. Furthermore, the Company and its subsidiaries have received numerous honours and recognitions in areas such as cyber security, digital scenario innovation, intelligent manufacturing, and 5G factory construction, etc.

## Progresses of Key Demonstration Projects



The "Petrochemical Industry Intelligent Manufacturing Public Service Platform" project passed the acceptance inspection by the Ministry of Industry and Information Technology, and the Company also officially released the *Guidelines for the Construction of Petrochemical Industry Intelligent Manufacturing Standard System*.

Completed all pilot tasks of the "Industrial Internet + Production Safety" project, and the pilot applications, such as intelligent inspection, dynamic leak detection, and unmanned tank cleaning robot, of the "5G infrastructure construction and application" project had been successfully deployed to help eliminate safety risks.

The "Industrial Internet + Equipment" project has completed the "5G+" new generation inspection, key unit status monitoring pilot applications, which increased the accuracy of pump group failure diagnosis to 97%, providing effective support for preventing pump failures and eliminating safety accidents.

Played a leading role in the development of petrochemical industrial software, and developed the real-time production optimisation software for domestically designed ethylene unit.

Breakthroughs the Digital Transformation of Various Fields





Intensified the in-depth application of the investment management platform, and optimised the digitalised risk and inspection platform applications, and completed the construction of 87 analysis decision models in five major categories including risk management, supporting the construction of a digital financial management system to promote digitalisation.

Intelligent and green transformation and upgrading of production and operation. Three oilfield subsidiaries achieved intelligent oil and gas field operation management, with a single well early warning accuracy rate of over 85%, improving the capabilities to top the potentials of oil and gas reserves. The Company actively implemented digital and intelligent upgrading in safety, environmental protection, energy and other areas, completing the construction of a total of 15 intelligent factories, among which six were upgraded in 2023, piloted "unmanned" testing and measurement operations, and applied the alarm information push application online in 42 refining and chemical subsidiaries which increased the timely alarm handling rate by more than 10%. 59 subsidiaries of the Companies launched online carbon accounting applications. Eleven subsidiaries adopted the integrated logistics platform, comprehensively improving production and operation efficiency and contributing to the green development of the Company.

Digital trade and services helped tap new business potentials. The Company upgraded its customer service system to achieve intelligent operation, with an intelligent robot question answering accuracy rate of 86%. The Company also enhanced the digital and intelligent capabilities of its trade platforms, resulting in further optimisation of the digital management practices of its etrade platforms, such as EPEC commodity trading platform, Sinopec Chememall, and EasyJoy Service.



## ADDRESSING CLIMATE CHANGE

Climate Governance

Climate Action Strategies

Climate Risk Management

Metrics and Targets

Reducing GHG Emissions

Promoting Energy Transition



## **CLIMATE GOVERNANCE**

The Company is committed to fully integrating climate change into its strategic planning, corporate governance system, comprehensive risk management system, as well as its daily operation and management. The Company has established a three-level climate governance structure of "Board of Directors - Management Level - Executive Body", with a clear division of responsibilities. The Company attaches great importance to climate risks, and has fully incorporated climate risks in the formulation process of its overall development strategies. The Company also closely follows national carbon peaking and carbon neutrality policy trends and makes timely adjusts of its development strategies and action plans. Carbon related targets, such as energy conservation and environmental protection performance, have been integrated into the annual performance assessment for both the senior management and the subsidiaries as binding indicators that linked to annual performance bonuses. Each year, the Company selects units, managers, and individuals with outstanding performance in energy conservation and environmental protection for recognition every year. Units and individuals making exceptional contributions to energy conservation, emission reduction, and carbon reduction are recognised with special awards for energy conservation and environmental protection.

## **Board of Directors**

### **Strategy Committee**

Responsible for reviewing development plans, policies, and systems related to climate change, and providing the Board with suggestions on the strategic positioning and industrial layout of the Company.

Responsible for reviewing and supervising the development plan and business performance in natural gas, hydrogen energy, renewable energy, energy conservation and emission reduction.

### **Audit Committee**

Responsible for identifying, assessing, and managing the risks and impacts related to climate change and ecological environment protection, and reviewing the list of major risks and annual evaluation reports.

### **Sustainability Committee**

Responsible for conducting research on policies, strategies, and action plans related to sustainability issues, including climate change.

Responsible for supervising the commitment and performance of the Company on key issues such as climate change, and providing suggestions to the Board.

Responsible for reviewing the Company's annual sustainability report and supervising climate-related information disclosure of the Company.

### Management Level

### Comprehensive Risk Management Implementation Leading Group

Responsible for identifying, evaluating, and researching on risks and opportunities related to climate change and relevant countermeasures under the comprehensive risk management system, and reporting to the Board, the Audit Committee, and the Sustainability Committee.

### **Executive Body**

### Department of Health, Safety, and **Environmental Management**

Submit the quarterly report on major risk management, organise monthly environmental compliance inspections, conduct special inspections for key environmental protection tasks, such as the ecological environment protection inspection and the compliance inspection of pollution permits.

Manage carbon assets, implement carbon mapping and carbon audits, establish a dedicated carbon trading team, and ensure the timely fulfilment of the carbon quota of the Company.

### Department of Enterprise Reform and Legal Affairs

Prepare the quarterly report on major risk management based on the risk management situations of each departments, and submit the report to the Board of Directors.

Formulate management plans and verification and reporting scheme for carbon emission, which has been fully incorporated in the internal control management system.

Implement the Company's carbon peaking and carbon neutrality strategies, and formulate relevant action plans at the subsidiary level.

Implement the Energy Efficiency Improvement Plan and the Green Enterprise Campaign, and closely manage GHG emissions and energy efficiency targets.

## CLIMATE ACTION STRATEGIES

Vigorously implementing the "Green and Clean" development strategy focusing on ecological priority, green transformation, and clean development, Sinopec Corp. is committed to following the path of green and low-carbon development with comprehensive efforts in promoting the transitioning from fossil energy to clean energy, scaling up clean energy development, and realising low-carbon production processes. The Company has integrated considerations for climate change into its development strategy and production operation, and accelerated the pace to build up green and low-carbon competitiveness, striving to become a new champion of green, clean, and low-carbon development in the industry and making our shares of contribution to help the world better cope with global climate change challenges.

When formulating its overall development strategies and making major decisions, the Company attaches great importance to international conventions, such as the targets of Paris Agreement and the 2030 Agenda for Sustainable Development, as well as government policies related to climate change, such as the Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy, and the Notice on Issuing the Action Plan for Carbon Peaking by 2030 by the State Council, conducting research and analysis, or initiating major research project when necessary, of the impacts and implications, sometimes in the form of key research topics, of the impacts and implications of these policies, so as to help the Company better grasp development opportunities and avoid potential risks. The Company has issued the Management Measures for Carbon Emission Evaluation of Fixed Asset Investment Projects of Sinopec, requiring all investment projects to undergo economic evaluation of carbon emissions, with the evaluation results also incorporated into the decision-making process of the projects.

The Company has formulated policies such as the *Guiding Opinions on Sinopec's Carbon Peaking and Carbon Neutrality Action* and the *Action Plan for Carbon Peaking by 2030 of Sinopec*, and initiated the "Eight Major Actions for Carbon Peaking", including enhancing clean and low-carbon energy supply capacity, transformation and upgrading of refining and chemical industry structure, and promoting energy conservation and carbon and pollution, etc., vigorously and steadily marking on towards the realisation of carbon peaking and carbon neutrality targets.

# Cooperation and Exchanges on Climate Change

Major Actions

for Carbon Peaking

Sinopec Corp. actively engages in external cooperation and exchanges to explore successful practices that may facilitate transformation of the petroleum and chemical industry towards achieving carbon neutrality goals.

In 2023, the Company co-hosted the "Carbon Neutrality Economy" Forum with Tsinghua University, organising in-depth discussions on topics such as energy transition, technological innovation, and mutually beneficial cooperation and exploring the path of transformation towards carbon peaking and carbon neutrality.

The Company launched the "Carbon Neutrality Economy Ecological Partners Programme", reaching out to new energy, new materials, new economy businesses to explore collaboration opportunities on policy analysis, industry research, and innovation practices.

The Company also participated in a series of research projects, such as the *Research on Major Issues of Carbon Peaking and Carbon Neutrality of Key Industries* initiated by Chinese Academy of Engineering and the *Carbon Capture Technology Specification for Petrochemical Industry - Solvent and Process Category* project initiated by Ministry of Industry and Information Technology, providing support for the formulation of relevant policies and standard systems.

## Participating in COP28 Discussions CASE





Delegates from Sinopec Corp. participated in the 28th United Nations Climate Change Conference (COP28). During the series of side events at the China Pavilion, the Company made keynote speeches featuring on "New Progress in CCUS in China", "Wind and Solar Hydrogen Storage", and "Powering Urban Sustainable Development with Carbon Markets: the Shanghai Experience", etc., showcasing the wisdom and contribution of Sinopec in addressing climate change challenges with the introductions of the achievements and technologies of its CCUS full-industrial chain demonstration project, experience in high-quality development of hydrogen energy, coordinated pollution reduction and carbon reduction methodology, and the green and low-carbon actions alongside its projects in the "Belt and Road" markets.

## Sinopec's Carbon Peaking and Carbon Neutrality Strategic Road Map

Accelerate the construction of a clean and low-carbon energy supply system

- Vigorously promote the development of integrated hydrogen energy business focusing on hydrogen energy transportation and green hydrogen refining, aiming to build a large-scale hydrogen energy company with both advanced technology and top-notch management.
- Promote large-scale development of bio-diesel and bio-jet fuel, and stand at the forefront of clean and low-carbon fuel industry.
- Roll out new infrastructure and services such as battery charging and swapping stations and hydrogen refuelling stations to support the development of green transportation and hydrogen energy transportation.
- Actively develop photovoltaic and wind power businesses, promote the in-depth integration between wind and solar "green electricity" and traditional businesses, and continue to increase the utilisation of "green electricity".

Lead the green and low-carbon circular development of the industry

- Accelerate industrial structure adjustments, retire production capacity with high energy consumption and low-energy efficiency, and promote industrial upgrading and efficiency improvement.
- Actively develop molecular oil refining and green hydrogen refining, and continue to increase the utilisation of low-carbon raw materials.
- Accelerate the pace of replacing traditional fossil energy with natural gas and electricity and promote a low-carbon energy structure.



- Accelerate the recycling of waste oil and grease, waste plastics, and waste rubber products to realise the circular utilisation of resources.
- Adhere to the principle of prioritising conservation, continue to implement the Energy Efficiency Improvement Plan, and comprehensively implement the Energy Efficiency Leadership initiative to achieve global leadership in the energy efficiency of key products.

Promote breakthroughs in green and low-carbon technologies



- Increase investment in R&D, develop complete sets of low-carbon processes and technologies, and promote the green and low-carbon transition of the petrochemical industry.
- Promote technological R&D and industrial applications for using carbon dioxide as raw material to produce methanol, lithium battery electrolyte, degradable plastics, and other chemical products and high-end materials.
- Play a leading role of the million-tonne whole industrial chain CCUS demonstration project, relying on the advantages of the integrated opertaion, and continue to carry out the research and development and popularise the application of carbon dioxide capture, oil displacement and storage technology.

Actively participate in the global response to climate change

- Carry out methane emission reduction actions, promote the detection and repair of methane leakage, increase the recovery and utilisation of venting gas, and enhance the transformation towards closed process, and reduce methane emission intensity by 50% by 2025.
- Actively carry out exchanges and cooperation with international petroleum corporations on green and low-carbon technologies, standards, and services to contribute the corporate practices to China's participation in global climate governance.





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## CLIMATE RISK MANAGEMENT

Sinopec Corp. has incorporated climate change risks into its comprehensive risk management framework. The Company's Comprehensive Risk Management Executive Leadership Team is also responsible for identifying and evaluating climate change-related risks and opportunities, researching on relevant response measures, and reporting to the Board of Directors, the Audit Committee, and the Sustainability Committee. Risk management departments at the Company headquarters prepare quarterly report on the management of major risk, which is submitted to the Board of Directors.

Risk Factors	Risk Descriptions	
— Physical Risks ▲ Acute Risks	Increasingly frequent occurrence of extreme weather events such as typhoons, rainstorms, and floods cause risks such as damage to manufacturing facilities and transportation and supply chain disruptions leading to decreased operating capacity, increased operating costs, and reduced profitability.	
riedite mana	Extreme weather events may cause secondary disasters and production accidents, posing threats to both personal safety and ecological environment and causing economic losses, which increase the operational expenses of the Company.	
— Physical Risks ▲ Chronic Risks	Extreme fluctuations in climate patterns, long-term average temperature rise, and changes in rainfall may increase construction costs (such as due to extended construction period, early damage of equipment, etc.) as well as the insurance costs for equipment and personnel.	
Chrome Risks	An increase in average temperature may increase operating costs, such as increased demand for equipment cooling water, and increased demand for cooling and heating of operating facilities.	
— Transition Risks ▲ Policy and Legal Risks	Under the background of the carbon peaking and carbon neutrality goals, the government is shifting the focus of the "dual control" mechanism from energy consumption to both the total amount and the intensity of carbon emissions. More stringent laws and regulations are expected to be imposed to limit or reduce carbon emissions, creating compliance risks to high emission and high energy consumption industries. Compliance with these policies may have a substantial impact on the capital expenditures, profits, and strategic growth of the Company.	
	The national carbon emission trading market was launched in 2021, with some company-owned power plants included in the emission control scope. Subsequently, most subsidiaries will be included in the emission control list, which may increase the Company's carbon emission compliance costs accordingly.	
	Government continues to intensify the efforts to control methane emissions. Accordingly, the Company may need to invest in improving its methane emission monitoring, reporting and verification (MRV) technical system, increase investment in additional facilities and technologies, and take more effective measures to minimise methane leakage, all leading to an increase in the Company's operating costs.	
	In April 2023, the European Council adopted the Carbon Border Adjustment Mechanism (CBAM). According to the CBAM Act, products with high carbon emissions may be levied certain amounts of expenses. CBAM may affect steel, cement, aluminium, fertilisers, electricity, and hydrogen industries, as well as indirect carbon emissions under specific conditions and some downstream products. If petrochemical industry or related products are added to the list of affected industries, the Company may face greater exporting costs.	
— Transition Risks A Market Risks	The concept of sustainable consumption is getting momentum. Customers and consumers may increasingly prioritise products and services with green and low-carbon attributes. If the Company fails to launch green products and services that meet market trends, it may face the risk of declining income.	
— Transition Risks △ Technology Risks	To keep up with the rapid development and updates in technology driven by the low-carbon economy transformation, the Company will need to continuously increase efforts and investment in R&D in energy conservation and emission reduction technologies and renewable energy to ensure the realisation of its carbon peaking and carbon neutrality goals. During the process, the Company will see higher operating costs with intensified investment in R&D and infrastructure.	
— Transition Risks ▲ Reputation Risks	Stakeholders, such as regulatory agencies, investors, ESG rating agencies, the general public, are showing increased concerns for the petrochemical industry's approach to climate change. Lack of concrete actions may lead to criticism from stakeholders and reputation risks for the Company.	

ADDRESSING CLIMATE CHANGE 2023 Sinopec Corp. Sustainability Report - SINOPEC 042

In 2023, the Company closely followed the latest trends home and abroad and formulated the *Sinopec's 14th Five-Year Plan Midterm Evaluation and 2023-2025 Rolling Plan* based on a thorough study of sustainable development risks and opportunities such as climate change, including risks such as the possible constraints caused by the carbon peaking and carbon neutrality targets, and the development of new energy vehicles, as well as opportunities such as policy guidance from the "Belt and Road" initiative and the regional coordinated development initiatives, and energy transformation and industrial upgrading. All these risks and opportunities have been incorporated into the Plan, ensuring the systematically coordination of various actions to address climate change challenges.

### Countermeasures

- 1 Carry out meteorological monitoring and strengthen extreme weather warnings, formulate scientific and effective disaster emergency plans, and intensify emergency drills.
- 2 Regularly inspect production and operation facilities, timely upgrade and renovate facilities and equipment.
- 3 Ensure disaster preparedness with reserves of disaster prevention and relief supplies.
- 1 Encourage its subsidiaries to identify climate risks and vulnerabilities in where they operate and consider climate risks in infrastructure construction.
- Continuously strengthen energy conservation and emission reduction efforts, improve energy, water and other resources efficiency, and reduce the dependence on natural resources.
- 3 Conduct extensive climate change-related education and awareness raising for stakeholders and promote the implementation of low-carbon and environmental protection concepts.
- 1 Implement the Green and Clean strategy, steadily realise the targets and goals formulated in the carbon peaking and carbon neutrality road map of the Company, strictly control energy consumption and intensity, promote the application of CCUS and other cutting-edge technologies, and continue to promote the clean utilisation of fossil energy and the scaling-up of clean energy.
- 2 Urge all subsidiaries to conduct carbon emission audit so as to lay a solid foundation for the further deepening of energy conservation and carbon reduction measures; utilise the national carbon trading market mechanism to encourage subsidiaries to fully explore their carbon reduction potentials, and explore profit opportunities while meeting their carbon quota obligations.
- 3 Conduct regular methane emission monitoring and analysis, and continuously reduce methane emission intensity through measures such as optimising recovery processes and strengthening the comprehensive utilisation of flare gas.
- 4 Closely monitor EU's carbon tariffs policy trends, timely assess its impact on the Company's businesses, and actively implement carbon reduction measures to enhance carbon emission management capabilities.

- 1 Expand the supply of clean energy products and services, build a comprehensive hydrogen energy industrial chain with faster rolling out of hydrogen refuelling centres, hydrogen refuelling stations, and charging and replacement power stations, and accelerate the transformation towards a comprehensive energy provider of oil, gas, hydrogen, electricity, and non-fuel businesses.
- 2 Intensify the development of environmentally friendly, green and low-carbon, high-performance products, and promote the production and sales of green and low-carbon products such as degradable plastics.
- 1 Continuously advance key technologies such as low-carbon, zero-carbon, and carbon-negative technologies, push for new breakthroughs in CCUS project construction, putting into operation the first 100-kilometer long-distance CO<sub>2</sub> pipeline in China, making promising explorations for achieving greater carbon emission reduction in the future with full-industrial-chain, large-scale, and integrated construction of the project.
- 2 Build a team of high-level technology talents, focus on the cultivation of young technology talents, enhance the innovation capabilities and creativity of the Company, and encourage the achievement of key technological breakthroughs.
- 1 Actively implement the concept of green and low-carbon development in strategic development and operational management, and respond to stakeholders' concerns with concrete energy-saving and carbon-reduction actions.
- 2 Team up with external partners to explore carbon peaking and carbon neutrality road maps for the petrochemical industry with cooperation and exchanges, contributing wisdom and strength to the low-carbon transformation of the petrochemical industry as well as other related industries.

## METRICS AND TARGETS

## Emission Reduction Targets

Sinopec Corp. initiated the Green Enterprise Campaign in 2018, setting the carbon reduction targets for 2023, including the cumulative reduction of carbon dioxide emissions of 12.6 million tonnes, capturing 500,000 tonnes of carbon dioxide per year, storage of 300,000 tonnes of carbon dioxide per year, and the recovering and utilisation of 200 million cubic metres of methane per year.

As of the end of 2023, the Company had successfully achieved these targets, with 1.749 million tonnes and 847,000 tonnes of carbon dioxide captured and storaged respectively, as well as 874 million cubic metres of methane recovered for reuse.

From 2018 to 2023, the Company has successfully achieved its emission targets and cumulatively reduced its carbon dioxide emissions by 23.67 million tonnes.

The second phase of the Green Enterprise Campaign will be officially launched in 2024, with specific actions, indicators, and targets scheduled to be publicised after the launch.

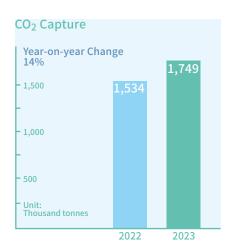
### **Total Emissions**

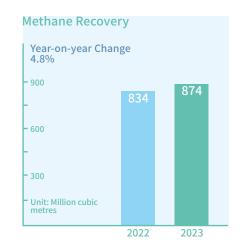
Indicators	2022	2023
GHGs emissions (million tonnes CO <sub>2</sub> -equivalent) Note	161.79	168.64
Of which: Direct GHGs emissions	137.72	142.28
Indirect GHGs emissions	24.07	26.36
Of which: Exploration and production segment	20.36	20.33
Refining and chemicals segment	139.82	146.70
Marketing and distribution segment	1.61	1.61
GHGs emissions intensity (tonnes CO <sub>2</sub> -equivalent/RMB million) Note 2	48.76	52.50
Methane emissions (million cubic metres)	253.79	250.21
Of which: Exploration and production segment	222.32	216.55
Refining and chemicals segment	11.06	14.78
Marketing and distribution segment	20.41	18.88

Note 1 The Company conducts GHGs emission (direct and indirect) accounting and verification according to ISO14064-1:2006 standards, covering six gases including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydro fluoro carbons (HFCs), per fluorinated compounds (PFCs) and sulphur hexafluoride (SF<sub>6</sub>). GHGs emissions increased slightly in 2023 due to production growth and asset acquisitions.

Note2 GHGs emissions intensity (tonnes CO<sub>2</sub>-equivalent/RMB million) = Greenhouse gas emissions / revenue (RMB million)

## **Emission Reduction Performance**





## REDUCING GHG EMISSIONS

Sinopec Corp. places a strong emphasis on monitoring and controlling GHG emissions, and regularly assesses the carbon emissions of each subsidiary and establishes a scientific carbon asset management system. The Company has reduced GHG emissions by implementing Energy Efficiency Improvement Projects, new energy application, research and application of CCUS technology, reduction of methane emissions, etc., and continues to strengthen the "dual control" management of both total carbon emissions and carbon intensity.



## Carbon Emission Reduction Policies and Systems

## Carbon-related laws and regulations

Measures for the Administration of Carbon Emissions Trading (for Trial Implementation)

Measures for the Management of Lawfully Disclosing Enterprise Environmental

Management Measures for Voluntary Emission Reduction Trading of Greenhouse Gases (for Trial Implementation)

## Carbon-related policies of Sinopec Corp.

Sinopec Carbon Emissions Management Measures

Sinopec Carbon Trading Management Measures

Management Measures for Carbon Emission Assessment of Fixed Asset Investment Projects of Sinopec

Guiding Opinions on Sinopec's Carbon Peaking and Carbon Neutrality Actions 2030 Carbon Peaking Action Plan of Sinopec

## Carbon Emission Monitoring and Management

The Company actively carries out carbon audit, leveraging both internal audit and external verifications to ensure the accuracy of both the carbon emission data by subsidiaries and the carbon footprint data by products. The Company has incorporated carbon audit into internal control management, requiring each subsidiary to develop a carbon emission work plan and implement the MVR system. Each subsidiary is required to prepare a greenhouse gas emissions report for the previous year in accordance with the GHG audit and reporting technical specifications formulated by the Ministry of Ecology and Environment, and submit the report to provincial ecological environment authorities where they operate.

In accordance with the *Specification and Guidelines for the Reporting and Verification of Greenhouse Gas Emissions* (ISO14064-3:2019), the Company reviewed the 2023 carbon emissions reports submitted by its subsidiaries, and carried out on-site verification of some of the subsidiaries. Some subsidiaries, in accordance with national and local government requirements, received third-party verification to verify and confirm carbon emissions data.

## Product Carbon Footprint

In 2015, the Company took the lead in China and started researching on the calculation of product carbon footprint data, conducting research on the methodology for calculating the footprint data of jet fuel, asphalt, lubricant base oil, and caprolactam. The initial work had generated a general methodology for the calculation of carbon footprints of petrochemical products. Subsequently, the Company applied this methodology and conducted carbon footprint accounting for four products, including lubricant base oil, xylene, aviation fuel, and polypropylene. In 2023, the Company initiated the design work of the IT module for product carbon footprint accounting, and selected six subsidiaries as pilots. As of the end of 2023, the Company had completed the research and auditing of the carbon footprints of 26 products from 40 subsidiaries.

## Energy Conservation

In accordance with the laws and regulations such as the Energy Conservation Law of the People's Republic of China, the Measures for the Management of Energy Conservation in Key Energy-Consuming Units, the Measures for the Energy Conservation Examination of Fixed Asset Investment Projects, and the Measures for the Management of Industrial Energy Conservation, the Company has formulated a series of management systems such as the Energy Conservation Management Measures of Sinopec and the Energy Conservation Examination and Management Measures of Fixed Asset Investment Projects of Sinopec, strengthened energy management responsibilities, vigorously implemented the Energy Efficiency Improvement Plan, conducted energy efficiency benchmarking activities, and continuously improved energy conservation and consumption reduction levels. In 2023, Sinopec Corp. implemented 497 Energy Efficiency Improvement Projects, saving 860 thousand tonnes of standard coal. The comprehensive energy consumption per RMB 10,000 of production output of the Company (calculated with the comparable price in 2020) decreased by 2.64%.

Strengthening management of total energy consumption and intensity

Formulated the "dual control" target for energy consumption, required the signing of annual energy and environmental responsibility commitment, strengthened process inspections and early warnings throughout the year, and conducted year end assessment to ensure the completion of annual targets.

Formulated the Sinopec Construction Project Energy and Environmental Source Control Regulations (Refining Segment), specifying energy efficiency targets and design requirements for new construction projects during the design phase and aiming at improving the intrinsic energy conservation capabilities of construction projects.

Deepening the implementation of the Energy Efficiency Improvement Plan Promoted high energy efficiency integrated extraction-transportation operations, energy system optimisation, waste heat and cold energy utilisation, and equipment energy efficiency improvement projects for production subsidiaries.

Accelerated the construction of photovoltaic power generation projects in marketing and distribution

Conducted energy efficiency benchmarking

Formulated benchmarking indicators for each segment, organised employee learning and competition activities, and strengthened energy efficiency performance assessment, with the energy efficiency and water efficiency performance of the Company toped the industry.

Qingdao Refining & Chemical Co., Ltd. **Pursuing "Ultimate Energy Efficiency**"

Qingdao Refining & Chemical Co., Ltd. continuously enhances the energy-saving awareness of all employees and innovates energy management models. The company optimised energy management, carried out energy-saving technology transformation and process optimisation, and continuously invest in energy conservation transformation projects. In 2023, a total of over RMB110 million was invested in energy conservation operations, which were expected to realise an annual energy saving equivalent to 21 thousand tonnes of standard coal.

As a frequent record breaker of the energy efficiency records of the crude oil processing industry, the company also has topped the list of Energy Efficiency "Front-runner" Enterprises in China's crude oil processing industry selected by the China Petroleum and Chemical Industry Federation for eleven consecutive years. In 2023, the unit energy factor consumption for refinery of the Company was further brought down to an unprecedented 6.31 kgoe/(t·Eff).

RMB million

Investments in energy conservation operations



**Number of Energy** 

**Projects** 

**Energy saved by Energy Efficiency Improvement Efficiency Improvement Projects** 

-2.64%

Thousand tonnes of standard coal Year-on-year change

Comprehensive energy consumption per RMB 10,000 of production output

Improving energy measuring and monitoring capabilities

Carried out special improvement actions in energy measurement instrument and operation management, energy data collection and utilisation, and energy measurement management.

Following the "one enterprise, one policy" principle, the Company required all subsidiaries to compile their own Three-year Action Plan for Improving Energy Measurement and Monitoring Capabilities, and conduct self-inspections on energy measurement activities, and promoted the sharing of best practices among subsidiaries.

**Carrying out** annual energy conservation inspections and technical services

Carried out energy conservation inspections to continuously optimise energy management systems, energy measurement statistical management, energy efficiency benchmarking and upgrading of devices, energy efficiency optimisation of electromechanical equipment, and water resource management.

Carried out post-evaluation of energy conservation among construction projects, verified the implementation of energy conservation inspection opinions and energy efficiency performance, and established an energy efficiency assurance mechanism for construction projects.

**Energy Efficiency** "Front-runner" Enterprises of key oil and chemical products

Qingdao Refining & Chemical Co., Ltd. Zhenhai Refining & Chemical Co., Ltd. Guangzhou Petrochemical Co., Ltd. Hainan Refining & Chemical Co., Ltd. ZTHC Energy

**Zhenhai Refining &** Chemical Co., Ltd. **Steadily Promoted Energy Conservation** and Carbon Reduction Zhenhai Refining & Chemical Co., Ltd. focused on optimising steam, air separation, nitrogen, oxygen, gas, hydrogen, and water systems of Zhenhai Petrochemical Base. The company also further reduced energy consumption to achieving shared material supplies across enterprises or device and the tiered utilisation of energy through system integration, resource sharing, and technological applications. Since 2021, the company has invested a total of RMB2.94 billion, and completed and put into operation 20 energy-saving projects, saving 83 thousand tonnes of standard coal per year, which is the equivalent of 200 thousand tonnes of carbon reduction.

In addition, the company managed to establish an energy management information system (SMES) focusing on becoming an energy efficient smart factory. With functions including energy operation, energy statistics, energy optimisation, energy monitoring, and evaluation and analysis, the system was able to achieve the goal of realising "understandable, manageable, and reducible" management of energy consumption.

83 Thousand tonnes of standard coal Energy saved per year

**Thousand tonnes** 

Carbon emission reduction

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### ADDRESSING CLIMATE CHANGE

### RESSING CLIMATE CHANGE — 2023 Sinopec Corp. Sustainability Report - SINOPEC 048

## New Energy Utilisation

The Company actively promotes the utilisation of clean energy in production process, and continuously improved the energy efficiency with strictly manage the coal consumption for power generation. In 2023, the Company's solar photovoltaic power generation was approximately 132 million kWh, a year-on-year increase of 200%, and an equivalent to the consumption of about 40,000 tonnes of standard coal.

132

Million kWh

Solar photovoltaic power generated in 2023

200%1

Year-on-year change

Solar photovoltaic power generation



## Oilfield Subsidiaries

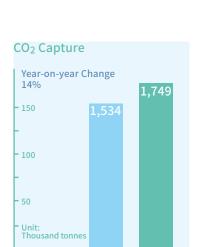
Utilised wind and solar energy in facilities following the two goals of "low-carbon energy for production and increase consumption of clean energy", and continued to enhance low-carbon development capabilities of the subsidiaries.







## Carbon Capture, Utilisation and Storage (CCUS)



The Qilu Petrochemical-Shengli Oilfield Milliontonne CCUS Project Started Operating

109

Kilometres

Length of the carbon dioxide transportation pipeline

667

Thousand tonnes

Carbon dioxide captured by Qilu Petrochemical

472

Thousand tonnes

Carbon dioxide injected for oil displacement by Shengli Oilfield

The Company attaches great importance to the research and industrial application of CCUS technologies, and has intensified R&D investment, accelerated the construction of key project, and actively promoted the full-industrial chain application of CCUS technologies. In 2023, the Company continued the research on the recovery and utilisation of high-concentration carbon dioxide from hydrogen production and synthetic ammonia production, capturing 1.749 million tonnes of carbon dioxide, an increase of 14% year-on-year.

To date, the Company has developed the full industrial chain, including technology development, engineering design, equipment manufacturing, and engineering construction, capabilities for CCUS, and has successfully built the first million-tonne CCUS demonstration project and the first hundred-kilometre long-distance carbon dioxide pipeline in China, demonstrating its capabilities regarding the construction of full industrial chain, large-scale, and vertically integrated CCUS projects. In 2023, the Company initiated the research on China's first ten-million-tonne open-mode CCS/CCUS project in Eastern China in collaboration with a number of peer companies.

In June 2023, the million-tonne CCUS demonstration project received CSLF certification at the Global Carbon Capture and Storage Leaders Forum in Warsaw, Poland, marking that Sinopec's CCUS technology has reached international standards, which gives the Company the endorsement to undertake CCUS projects globally.



On 11 July 2023, China's first high-pressure ambient temperature dense-phase carbon dioxide transportation pipeline project started operation. The pipeline, million-tonne in throughput scale, hundred-kilometre in length, and with hundred-kilogram of air pressure, was part of the Qilu Petrochemical-Shengli Oilfield Million-tonne CCUS project. This 109-kilometre pipeline proudly demonstrate Sinopec's successful achievement in building this million-tonne demonstration base, which has filled China's gap in full industrial chain, large-scale CCUS technologies. The new pipeline could reduce carbon dioxide emissions by about 5% compared to the previous transportation method, which is a milestone achievement in promoting the develop of full industrial chain, large-scale CCUS technologies in China, as well as an inspiring example for similar projects in the future.

In 2023, Qilu Petrochemical captured 667 thousand tonnes of carbon dioxide, and Shengli Oilfield injected 472 thousand tonnes of carbon dioxide for oil displacement with increasingly effective oil displacement effect.

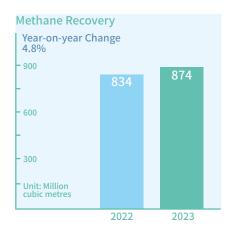


## Methane **Emission Control**

Sinopec Corp. attaches great importance to the control and management of methane emissions, and specifies relevant requirements in a number of company policies, including the Sinopec Carbon Emission Management, the Sinopec Carbon Emission Evaluation Management Measures for Fixed Asset Investment Projects, and the 2030 Carbon Peaking Action Plan of Sinopec.

### Sinopec's methane emission reduction target -By 2025, reduce methane emission intensity by 50% compared to 2020.

The Company actively conducts methane leakage monitoring and data analysis, and vigorously implements methane emission reduction measures. The Company has achieved significant results in reducing methane emissions with a variety of measures, including improving the closed-loop mixed transportation process, vigorously implementing casing gas recovery, promoting the comprehensive utilisation of flare gas, improving recovery measures of remote and scattered wells, and the recovery of vented natural gas. In 2023, approximately 874 million cubic metres of methane gas was recovered, an increase of 4.8% year-on-year, which was the equivalent to a GHG emission reduction of approximately 13 million tonnes of carbon dioxide.



## Shengli Oilfield **Intensifying Methane Emissions Control**

545

Number of emission points treated in 2023

Million cubic metres Methane emissions reduced in 2023

Year-on-year reduction



Shengli Oilfield implements a methane emission management system that placing charges on emission. The system has a "white list" of methane emission control points, including wellheads, individual well storage tanks, and oil unloading points, as well as the relevant operational requirements. For emission control points not on the "white list", such as oilfield extraction, storage, and treatment processes, a fee will be charged monthly and settled quarterly. This measure has provided an effective driver for ensuring stronger management and control of methane emissions. It strengthens the recycling and utilisation of resources in oil and gas extraction, transformation, storage, and other processes.

All oil and gas subsidiaries are required to file a monthly management plan and progress monthly regarding control points not included in the "white list". Shengli Oilfield then conducts on-site monitoring and verification based on the reported information. Control points meeting operational and emission requirements will be delisted from the whitelist, while those failed will face rectification. Control pints already on the "white list" are subject to random testing, and those fail to meet emission requirements will be treated as a non-white list control point, incurring a cost on due to the charges.

In 2023, the oil and gas field subsidiaries treated a total of 545 emission points, reducing a total of 4.3 million cubic metres of methane emissions, a year-on-year reduction of over 15%.



## Strengthening **Carbon Assets** Management

Sinopec Corp. continues to strengthen carbon assets management, as well as the management capabilities of the Company. In 2023, the Company carried out a special action to improve the quality of carbon data and the quality of enterprise carbon data.

Sinopec Corp. actively participated in the national carbon emission trading market, formulated and implemented the Sinopec Carbon Trading Administration Measures, established a dedicated carbon trading team, and standardised the fulfilment of carbon quotas. The Company developed well-designed carbon trading plans, and made comprehensive arrangement based on carbon quota surpluses and shortages of its subsidiaries, and ensured that all its subsidiaries fulfilled their carbon quotas on schedule with centralised carbon trading management.

The Company carefully studied and analysed the policy requirements of the *Management Measures* for Voluntary Greenhouse Gas Emission Reduction Trading (for Trial Implementation), systematically conducted compliance analysis of existing projects, and focused on the development of reserve projects for voluntary greenhouse gas emission reduction projects. During the carbon trading process, the Company actively used methods such as CCER offsetting to better fulfil carbon obligations and effectively reduce the cost of carbon compliance.

In 2023, the Company actively participated in pilot projects and national carbon trading, and all of its subsidiaries fulfilled their required quota, with an annual carbon trading volume of 8.185 million tonnes.

## **Forest Carbon** Sink

The Company has formulated the Greening Management Regulations of Sinopec, and implemented a variety of green actions, making continuous efforts to promote enterprise greening management, so as to increase forest carbon sequestration and enhance ecosystem carbon sinks. In 2023, the green coverage rate of existing facilities reached 32.93%, and a total of 2.019 million trees were planted by employee volunteers, an increase of 9.9% year-on-year, which is equivalent to the reduction of carbon dioxide emissions by 242,300 tonnes.

The Company continued to carry out the "Internet + National Tree Planting" campaign. As of the end of 2023, a total of 450,200 person-time had participated in campaign activities and raised a total of RMB18.257 million.

**Participating in** Afforestation **And Greening** Activities, and **Ecological Protection in the** Yangtze River and Yellow River Sinopec subsidiaries located in the Yangtze River basins have been carrying out activities such as "Creating the Most Beautiful Yangtze River Bank" and "Protecting the Mother River" for consecutive years, greening a total of 428,700 square metres of river banks cumulatively.

Actively participated in greening and vegetation restoration programmes in northwest, northeast and northern China, cumulatively laying a total of about 4,100 hectares of sand control grass grids, growing a stretch of 58 kilometres of desert roadside protective forest belt, and greening a total of 4,780 hectares of reclaimed desert land.

Restored 8,715 hectares of vegetation in decommissioned oil field, with over 4 million droughtresistant plants planted.

428.700 Square metres

Area of river bank greened

4.780 Hectare

Area of desert land reclaimed

Million

Number of droughtresistant plants planted



Sinopec Corp. and China Greening Foundation jointly launched the Sinopec Saihanba Ecological Demonstration Forest project. In 2023, the project was successfully completed, with a total of 1,905 mu afforested, 264,000 trees planted, 17.3 kilometres of forest roads built, and 20.1 kilometres of fences erected.

On the Arbor Day of 2023, the Company initiated the "Planting A Tree on the Snowy Plateau" project online, providing support to the greening project of the North and South Mountains in Lhasa, Xizang Autonomous Region. As of the end of 2023, the project had helped raise more than RMB7.6 million from 172,000 donors, and supported the construction of 402 mu of public welfare forest land.

1,905

Area of afforestation

**Kilometres** 

Length of forest roads built

RMB million

Amount of money raised

# PROMOTING ENERGY TRANSITION

The Green and Clean Energy Strategy

## **Natural Gas**

281.7
Billion cubic metres
Natural gas geological reserves increased

8.83
Billion cubic metres
Natural gas
capacity increased

37.8

Billion cubic metres

Domestic natural gas
production in 2023

Adhering to the "green and clean" development strategy, Sinopec Corp. actively promotes energy transition and development, and is committed to constructing a clean and low-carbon modern energy supply system, and a safe and efficient system that integrating production, supply, storage, and marketing, so as to continuously provides society with clean, diverse, and safe energy supply. The Company has formulated a series of policy documents, such as the Sinopec's 14th Five-Year Development Plan - New Energy Sub-report, the Sinopec's 14th Five-Year Hydrogen Energy Development Plan, the Sinopec's Oil and Gas Exploration and Development and New Energy Integration Development Implementation Plan (2023-2025), the Sinopec's Upstream Enterprises New Energy Business 14th Five-Year and Medium- to Long-Term Development Plan Outline, and the Sinopec Marketing Enterprises Photovoltaic Power Generation High-Quality Development Three-Year Action Plan, to ensure clear directions, specific goals for the Company's systematic and efficient development in renewable energy, promoting the orderly and efficient development of business in the field of new energy.



As a fossil energy with low carbon emission intensity, natural gas plays a key role in the process of energy transition towards green and low-carbon development. The Company actively promotes the large-scale development of natural gas, making continuous efforts to expand exploration and production of natural gas, accelerate the construction of the natural gas production-supply-storage-sales system, aiming at further enhancing the natural gas supply capacity of the Company. In 2023, the Company has seen its proven natural gas geological reserves increased by 281.7 billion cubic metres as the result of its intensified surveys and explorations in near areas and new businesses and the integrated assessment of oil and gas rich areas. Regarding natural gas production, the Company maintained stable production of natural gas in major gas fields in Puguang, Yuanba, and Danud. Production in Shunbei II area and Chuanxihai fields underwent a period of scaling up. In 2023, the Company increased its natural gas capacity by a total of 8.83 billion cubic metres, an increase of 1.31 billion cubic metres year-on-year. And its annual natural gas production reached 37.8 billion cubic metres, an increase of 2.5 billion cubic meters year-on-year.

Indicators	2022	2023	Year-on-year change
Domestic natural gas production (100 million cubic metres)	353	378	7.1%
Proportion of natural gas in domestic oil and gas equivalent (%)	44	46	Increase of 2 percentage points



## **Hydrogen Energy**

The development of hydrogen energy is one of the essential paths to achieve the transformation of global energy structure to cleaner and low-carbon models. With its extensive industry experience and competitive advantages in the hydrogen energy sector, Sinopec Corp. is strategically positioned to capitalise on the major opportunities for the development of hydrogen energy. The Company is accelerating the development of hydrogen energy as a core business of its new energy portfolio, with a particular focus on the utilisation of clean transportation energy and green refining hydrogen energy, and strives to build China's No.1 hydrogen energy company with leading technologies and first-class management.

## Sinopec's 2050 Hydrogen Energy Vision

Hydrogen Energy Mobility Maintain the largest number of hydrogens refuelling stations and the largest hydrogen refuelling capacity in the country; 100% of hydrogen produced with non-fossil energy; develop a fully functional and nationwide low-carbon transportation energy supply network to help the national road transportation system achieve carbon neutrality.

Green Hydrogen Refining 100% of the hydrogen used by refineries is blue hydrogen or produced with non-fossil energy, and help Sinopec Corp. achieve its carbon neutrality target with high quality through green hydrogen refining.

## Progress and Achievements of Hydrogen Energy Business in 2023

Hydrogen Energy Supply The Company focused on the development of hydrogen energy supply centre for full cell in accordance with needs of hydrogen refuelling stations in the "3+2" hydrogen fuel cell demonstration city cluster.

As of the end of 2023, there were eleven hydrogen supply centres for fuel cells been built cumulatively, with a capacity of 29 thousand normal cubic metres/hour. Annual production of high-purity hydrogen for vehicle use reached 2.112 thousand tonnes, an increase of 25% year-on-year.

29

Thousand normal cubic metres/hour

Cumulative hydrogen supply capacity

2.112

Thousand tonnes

Production of high-purity hydrogen for vehicle use in 2023

Hydrogen Refuelling Station Development Relying on Sinopec's existing nationwide sales network of over 30,000 gas stations, and following the principles of "national layout, market demand, profitability, and strategic synergy", the Company has virtually completed the development of three hydrogen energy mobility corridors: the Chengdu-Chongqing-Wanzhou corridor, the Beijing-Tianjin-Tangshan corridor, and the Shanghai-Jiaxing-Ningbo corridor.

The Company steadily rolled out the construction of hydrogen refuelling stations, with a total of 128 hydrogen refuelling stations built cumulatively that serving 40% of the hydrogen refuelling market in China, making Sinopec Corp. the largest hydrogen refuelling stations operator with single-ownership in the world. In 2023, the Company had provided 34,710 thousand tonnes of hydrogen to refuelling customers, an increase of 100% year-on-year.

128

34, / 10 Thousand tonnes

Number of hydrogen refuelling stations in total

Hydrogen to refuelling customers in 2023

Hydrogen Energy Industry Standards Developed three enterprise standards, such as the *Technical Specifications for Hydrogen Pipeline Engineering*, and participated in the formulation of nine group standards.

## **New Energy** Vehicle-Related Businesses

The Company actively explores new energy vehicle related businesses relying on its own advantages, rolling out a variety of service facilities and businesses such as hydrogen refuelling stations, battery charging and swapping stations, distributed photovoltaics, and lightweight new energy vehicles.

## Accelerating the layout of charging and swapping business

The Company is fully committed to promoting the development of the EV charging business, and has developed a rich and diverse range of charging application scenarios according to local

**Accelerating the Construction of** 



Cooperate closely with industry leaders to accelerate the offering of charging services, adding fast charging, super charging and other equipment at facilities at existing refuelling stations, to help EV owners with more charging options.

Play an active role in leading the industrial development and technological progress of the battery swapping industry, cooperate with relevant companies to build battery swapping stations for both consumer and business users, and actively promote the development of the battery bank business.

Build integrated "solar and charging" and "solar and swapping" facilities with distributed photovoltaic power generation, aiming to become a clean energy power supplier with industry characteristics.

In 2023, the Company formulated the *Three-Year Action Plan for High-quality* Development of Sinopec Marketing Enterprise Charging Business. As of the end 2023, the Company had built a total of 6,504 charging and swapping stations (including 163 battery swapping stations) and 51,000 EV charging terminals, achieving full coverage in 370 major cities nationwide. Among them, 3,909 charging and swapping stations were built in 2023 (including 35 battery swapping stations).

6,504

Number of charging and swapping stations built in total 3,909

Number of charging and swapping stations built in 2023

**Exploring Charging Application** Scenarios



In Jiangsu, accelerated the development of charging stations at the township level, conecting the "last mile" of logistics and distribution of agricultural products and the green mobility of urban and rural residents.

In Guangdong, Guangxi, Jiangxi, and Sichuan, built charging grids crossing regional borderlines to better serve the charging needs of long-distance drivers, such as homebound drivers around the Chinese New Year, or self-driving travellers.

The Company has explored the solutions for a variety of different types of charging scenarios, including public fast charging scenario, destination charging scenario, public transportation scenario, logistics scenario, county-level scenario, etc., and actively exploring scenarios for commercial vehicles, such as the short-distance scenarios for ports, docks, mines, steel plants, and power plants, and long-distance transportation scenario.

Sinopec's First Super EV **Charging and Swapping Station Officially Started Operating** CASE

In November 2023, Sinopec's first super EV charging and swapping station - Anhui Sinopec Hefei Volkswagen Station was officially launched.

In the charging and swapping area, the station is equipped with 142 charging terminals with a total charging power of 8,505 kilowatts, including 125 fast charging terminals, 2 liquid-cooled ultra-fast charging terminals, 15 slow charging terminals, and 1 swapping station.

In the photovoltaic area, the photovoltaic roof can generate about 220,000 kWh each year, with an annual carbon reduction impact of 219 tonnes of carbon dioxide emissions equivalent. In the energy storage area, the station is equipped with 645 kWh energy storage device, which not only stabilise the green power generated by photovoltaics, but also can used to store offpeak and flat electricity.



Research and **Development of New Energy Vehicle Materials** 

Sinopec Corp. actively initiated "industry-academia-research" collaborations on innovative lightweight materials for automobile manufacturing. The Company established a joint research centre for lightweight non-metallic materials for automobiles, and conducted focused research on lightweight processing technologies for synthetic resins, synthetic rubbers, synthetic fibres, other non-metallic materials, and composite materials. Efforts were also made to deepen the research on the application of high-performance polymer materials for automotive parts with attributes such as scratch resistance, low emissions, and long service life, bearing with them a new direction of safety, health, and environmental protection throughout the entire service and life cycle of automotive materials. In addition, the Company also continued to participate in standard setting and revision, application promotion, industrial demonstration, and long-term planning, etc.

Lightweight **Materials** for Automobiles The Company fully leverages its R&D advantages in the field of synthetic resins and rubber to develop a variety of lightweight products for new energy vehicles.

Synthetic resin:

Continuously optimised the performance of foamed polypropylene material and promoted its application in auto parts, with an annual output of 36,000 tonnes, an increase of 5,000 tonnes year-on-year.

Developed four modified POE materials using the newly developed POE elastomer pilot device in in 2023. The new materials can be used in auto parts to reduce weight as well as create more comfortable driving experience.

Synthetic rubber:

Continued the development of industrial technologies regarding the automotive lightweight thermoplastic elastomer (TPV) products, and completed the trial production of three products with the key attribute "compression set performance" reaching international leading levels. And the original TPV product has already been trial used by downstream manufacturers.

**Special Materials** for Power Battery Separators

The Company actively conducts research and promotion of various polyolefin materials for power battery separators, and had already developed a lithium battery separator material with outstanding performance, which was produced 30.5 thousand tonnes in 2023, an increase of 23% year-on-year.

30.5

**Thousand tonnes** 

Production of the lithium battery separator material

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## **Biomass Energy**

Sinopec Corp. actively coordinates factors such as raw materials, market, technology, and profitability, and steadily promotes the integrated development of new energy and traditional refining business.

To timely develop biomass production capacity, such as bio-jet fuel and biodiesel, based on national industrial policies and plans, as well as conditions and market needs of biomass fuel and raw material resources.



## **Bio-jet Fuel**

Sinopec Corp. actively promotes the development of green aviation logistics, and has independently developed sustainable bio-jet fuel product, and strove to promote the commercial-scale production of the product leveraging its industry impact as the owner of China's first bio-jet fuel industrial device. The Company has been steadily scaling up commercialised application of bio-jet fuel. Several airlines have already conducted piloted commercial flights using the product, achieving a major breakthrough in the commercialisation of bio-jet fuel. The Company actively promotes the establishment of a bio-jet fuel industrial chain, and has engaged in a series of communication and discussions with potential customers of the product to explore possibilities in developing relevant airport refuelling facilities and setting up of flight routes accordingly.



The Asian Games Flight powered by Sinopec's bio-jet fuel made its maiden flight successfully

## Bio-Jet Fuel Device Received Global RSB Certifications



Development of Bio-based Oil Products In 2020, Zhenhai Refining & Chemical Company completed the construction of China's first biojet fuel production facility with a production capacity of 100,000 tonnes/year.

In May 2022, the facility started trial scaled production using kitchen waste grease. The trial production lasted for one month and successfully processed 1,623.08 tonnes of waste grease into 605.56 tonnes of bio-jet fuel, reaching three milestones for the project: from manufacturing base to commercial flights, from passenger planes to cargo planes, and from domestic routes to international routes. On 14 December 2023, the production device started its second trial production, which was scheduled to produce 2,400 tonnes of bio-jet fuel in 40 days.

In 2023, Zhenhai Refining & Chemical Company applied for and passed third-party certification of the sustainable bio-based materials roundtable conference (RSB) GLOBAL, EU, CORSIA certification for the full range of its biomass fuel products, including bio-jet fuel, biodiesel, and bio-naphtha. Sinopec Corp. thus became the first Asian company to have its full range of biojet fuel products certified by the global RSB series.



In 2023, Sinopec Corp. made new progress in the development of two specialty oil products, bio-based transformer oil and biodiesel. The bio-based transformer oil passed third-party testing in compliance with the requirements of GB/T 2536-2011 I-40°C standards for transformer oil, and the biodiesel product met the requirements of EU's second-generation biodiesel standard EN15940:2019 A.



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# ENVIRONMENTAL PROTECTION GUIDELINES AND GOALS

Sinopec Corp. vigorously implements the strategy of green and clean development, integrating the requirements of ecological environment protection into various aspects of corporate production and operation. The Company strictly complies with relevant environmental protection laws and regulations, establishes and continuously improves the environmental protection policies and systems, actively carries out environmental impact and risk management, applies high standards of environmental pollution prevention and ecological environment protection, and continuously improves the quality of green development.

The Company strictly complies with the national and local laws, regulations, and government requirements on environmental protection, including the *Environmental Protection Law of the People's Republic of China*, the *Atmospheric Pollution Prevention and Control Law of the People's Republic of China*, the *Water Pollution Prevention and Control Law of the People's Republic of China*, the *Soil Pollution Prevention and Control Law of the People's Republic of China*, etc., and continuously tracks their updates, which will be timely incorporated into corporate management systems and policies. The Company also conducts awareness raising, training, supervision, inspection and other means to promote the subsidiaries to fully implement the requirements accordingly.

The Company has formulated and continuously improves environmental management policies, covering the entire process management of production and operation from design, construction, operation, decommission, the qualification management of suppliers, service providers, and contractors, as well as due diligence for joint ventures, cooperation, and mergers and acquisitions, striving to fully integrate the requirements of ecological environment protection into various aspects of production and operation of the Company.

The Board of Directors is the highest authority and decision-making body for ESG related issues, bearing ultimate responsibility for all ESG related issues including environmental management. The Sinopec HSE (Health, Safety, and Environment) Committee is the decision-making body for the Company's ecological environment protection policies, with the Health, Safety, and Environment Management Department, under the HSE Committee, responsible for centralised supervision and management of the Company's ecological and environmental protection.

Environmental Protection Goals of Sinopec



Continuous reduction of pollutant emissions



# ENVIRONMENTAL MANAGEMENT SYSTEM



1 System Guarantee



Sinopec Corp. carries out environmental management work under the guidance of the HSE management system. In 2023, the Company continued to promote the effective implementation of the HSE management system, and formulated and released the *Sinopec HSE Management System Manual* based on petrochemical industry norms, as well as recent updates in government laws and regulations and company policies. All subsidiaries also formulated their own version of the HSE management system manuals based on their own production and operation characteristics to better regulate their environmental protection efforts. In addition, an HSE management system audit team has also been established to conduct regular reviews of the system documents of subsidiaries.

In 2023, all subsidiaries carried out internal audits of the HSE management system with identified problem rectified, and independently carried out third-party certification in accordance with the requirements of local and upstream and downstream partners. A total of 28 subsidiaries of the Company have obtained the certification of the ISO14000 environmental management system.

In 2023, the Company organised a series of environmental protection training sessions, such as a training session for environmental manager focusing on national ecological civilisation construction policies and requirements, as well as themed trainings for environmental management personnel on key tasks such as environmental management of construction projects and pollution discharge permit management.

2 Policy Guarantee

The Company continues to improve the formulation of a robust environmental management policy, and has established a total of 16 environmental management policies covering pollution prevention and control, ecological protection, construction project environmental management, environmental statistics and monitoring, environmental risks and emergencies, etc. The Company also systematically carries out the revision of environmental management policies and standards, continuously optimising the HSE management system. Two policies were revised in 2023, the *Sinopec Environmental Monitoring Management Measures*, and the *Sinopec Radiation Management Measures*.

3 Action Guarantee

In 2018, Sinopec Corp. launched the Green Enterprise Campaign and the five-year plan for the first phase of the programme, which ended in 2023. The Company further optimised the green enterprise evaluation system and revised and issued the *Green Enterprise Review Evaluation Guidelines (2023 Edition)* focusing on the goal of increasing the value of green enterprises and the bottom line of ensuring full-process compliance. The Company conducted on-site services for key subsidiaries, and guided and urged all subsidiaries to intensify the green management at the grassroots level with online spot checks and other measures. A total of 113 subsidiaries were audited for green enterprise performance and required to rectify the gaps found and make continuously improvements. The second phase of the Green Enterprise Campaign will fully start in 2024, with specific implementation plans still in formulation.

Achievements of the first phase of the Green Enterprise Campaign

All oilfield, refining, marketing, and research subsidiaries have completed the construction of green enterprises, and the goals set around clean energy, green products, resource and energy utilisation, pollutant emissions, greenhouse gas emissions, etc. have all been met beyond expectation.

Measures proposed in the six aspects of green development, green energy, green production, green services, green technology, and green culture have been implemented out as planned.

In 2023, four subsidiaries including Sinopec Lubricant Oil Beijing Company were awarded the title of Green Factory by the Ministry of Industry and Information Technology, and five subsidiaries including North China Oil and Gas were awarded the title of Green Factory by the China Petroleum and Chemical Industry Federation.

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## ENVIRONMENTAL RISK MANAGEMENT

Sinopec Corp. has incorporated environmental risk management into a comprehensive risk management system, and its subsidiaries organise grassroots units to conduct risk identification and assessment annually in accordance with the *Technical Guidelines for Risk Assessment of Sudden Environmental Incidents*, comprehensively preventing and controlling various risks of sudden environmental incidents, and resolutely preventing major risk hazards. For identified environmental risk sources at all levels, the Company has established an evaluation mechanism that "subsidiaries submit, business units review and approve, and headquarters confirm". For identified significant-level and above environmental risk sources and major environmental risk hazards, the Company establishes relevant annual environmental risk control targets, indicators, and work tasks, and implements a hierarchical control mechanism at company, subsidiary, and grassroots levels respectively, with the headquarters regularly supervising and inspecting subsidiaries regarding their environmental risks and emergency management.

The Company has established a comprehensive environmental risk management system with the HSE management system *Environmental Factors and Environmental Risks* as the management framework, a series management policies as its policy foundation, including the *Sinopec Ecological Environment Incident Management Measures*, the *Sinopec Environmental Factors Identification*, the *Evaluation and Control Management Measures*, the *Sinopec Ecological Environment Incident Accountability Management Measures*, the *Sinopec Emergency Management Measures for Sudden Environmental Incidents*, and the *Sinopec Overall Emergency Plan for Sudden Incidents*, supported by standards such as the *Technical Guidelines for Evaluation of Sudden Environmental Incident Risk Index*, the *Environmental Risk Level Assessment Guidelines*, and the *Technical Requirements for Risk Prevention and Control of Petrochemical Enterprises Water Environment*.

In 2023, the Company identified three main ecological and environmental protection risks: substandard emissions, the occurrence of major and above sudden environmental incidents, and environmental violations in construction projects. The goals for each subsidiary in 2023 was the consistent compliance with wastewater and air emissions standards, including a 100% compliance rate for wastewater discharge, over 99.5% compliance rate for air emissions, 100% compliance rate for environmental regulations in new construction projects, as well as no occurrence of major and above sudden environmental incidents.



## Environmental Risk Response Measures



Environmental Risk (1)
Prevention and
Control Awareness of
All Employees

Organised a company-wide ecological environment protection conference to specify annual key work tasks and target indicators for environmental risk prevention and control, and required all subsidiaries to sign energy and environmental responsibility agreements.

Refined the risk control supervision mechanism, specifying the items for risk supervision, including enhancing risk identification and control capabilities, improving water risk prevention and control performance, and strengthening environmental emergency response capabilities.

Environmental Risk ②
Control and Hazard
Governance

Organised subsidiaries in various segments to carry out environmental risk quantification assessment, conduct professional training on environmental risk control, implement graded control of environmental risk sources, and promote the robust and in-depth implementation of environmental risk control.

Conducted on-site verification of environmental risk assessments, organised experts to systematically diagnose enterprise environmental risk assessment reports, environmental risk source identification results. etc.

Implemented the latest requirements of relevant national departments, organising subsidiaries to conduct inspections on the operation status and safety hazards of environmental protection facilities.

Implemented routine monitoring and inspections, strictly supervised third-party testing institutions, online monitoring facility maintenance units, and subsidiaries' self-monitoring efforts, and promoted all subsidiaries to implement rectification of major ecological and environmental problems.

Comprehensive Full-Process Supervision of Water Pollution Risks



Comprehensively analysed and summarised the implementation of the Company's relevant policies on pollution prevention and control by subsidiaries along the Yangtze River, specified the key tasks for the implementation of the *Action Plan for the Long-Term Protection and Restoration of the Yangtze River*, to strengthen the ecological civilisation construction and environmental risk prevention and control work of key enterprises in the Yangtze River basin.

Continuously carried out special inspections on water risk prevention and control, promoted the formulation of an environmental risk standard system, and completed the compilation and review of the *Design Standards for Rainwater Monitoring and Accident Drainage Storage in Petrochemical Industry*.

Environmental Emergency Response Capabilities



Accelerated the construction of Sinopec Regional Environmental Emergency Centre, and strengthened regional emergency joint prevention and control capabilities.

Organised Shengli Oilfield and the Sinopec Natural Gas Company to participate in Shandong Province's offshore rescue emergency drill and national offshore oil spill emergency special drill.

Organised the post-evaluation of the emergency plan for sudden environmental incidents, and proposed optimisation suggestions for environmental emergency plans and emergency resource investigation reports.

Optimised environmental emergency disposal measures based on company conditions, and revised the *Guidelines for the Preparation of Emergency Plans for Sudden Environmental Incidents in Enterprise*.

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# ENVIRONMENTAL IMPACT MANAGEMENT



# Environmental impact management policies and systems

The Company issued policies such as the *Sinopec Ecological Protection Management Measures* and the *Sinopec Construction Project Environmental Protection Management Measures*, requiring all subsidiaries to strengthen environmental and natural resource protection in the process of project construction and production operation, strictly implement national and local government environmental protection and natural resource protection laws, regulations, and standards, and take active measures to protect the environment and natural resource.

The Sinopec Ecological Protection Management Measures explicitly prohibits the construction of projects included in the national "negative list" in ecological sensitive areas such as drinking water source protection areas, nature reserves, and marine special protection areas, and requires existing projects to be shut down as required.



Environmental Impact Management Processes and Mechanisms

Sinopec Corp. attaches great importance to environmental impact management, and regularly organises ecological environment inspection expert teams to conduct special ecological environmental inspections on key subsidiaries. Key subsidiaries have established a safety and environmental protection inspection mechanism, setting up a full-time and part-time safety and environmental protection inspection team to conduct safety and environmental protection inspections on grassroots units throughout the year. In 2023, the ecological environment inspection expert team completed special inspections on the ecological environment of 24 oil fields and refining and chemical subsidiaries. The identified ecological environment protection issues were reported through the Company's information system for attention and rectification.

The Company has established relevant element monitoring metrics covering 12 indicators including hazardous waste compliance disposal, online data exceeding standards, and ecological environment administrative penalties. An analysis report on the monitoring results of these HSE management system element indicators is prepared monthly, and abnormal indicators will be traced, analysed, and rectified. In 2023, the overall trend of 12 environmental protection monitoring indicators is positive, demonstrating that the ecological environment protection of the Company is steadily making progress.

In 2023, the Company prioritises environmental protection in audit supervision, organising its subsidiaries to conduct special audits on environmental investment management, focusing on the compliance, necessity, adequacy, and effectiveness of environmental investment, aiming to further enhance the effectiveness of environmental risk management.



## Environmental Impact Assessment and Response

Sinopec Corp. carries out environmental impact assessment of construction projects in accordance with relevant laws and regulations, evaluating the impact of construction projects on the ecological environment. Construction can only start on the premise that the ecological environment impact assessment results are acceptable and the environmental impact assessment approval is obtained.

The Company conducts environmental impact assessment for construction projects in accordance with relevant procedures and strictly implements the recommendations issued by the environmental impact assessment.

Environmental impact assessment is carried out simultaneously during the feasibility

## Feasibility Study Stage

study stage.

5 1 11 1

During the basic design stage, the requirements of the environmental impact assessment report and approval opinions are strictly implemented, and the project environmental impact assessment approval is regarded as a prerequisite for project basic design approval and commencement report.

Project Implementation Process

**Basic Design Stage** 

During the project implementation process, the Company timely conducts a review and analysis of significant environmental changes in construction projects. If the project is determined to have significant environmental changes after analysis, it is necessary to reapply for environmental impact assessment approval.

Project Completion

Continuously strengthen environmental protection management throughout the entire process of construction, commissioning, etc. of construction projects, strictly control the environmental protection acceptance of completed construction projects, and conduct post-evaluation of environmental impacts for some projects as required, to promote the effective implementation of the requirements proposed in the environmental impact assessment reports and approvals.

In 2023, a number of key projects of the Company, such as the Ethylene Quality Improvement Project of Maoming Branch Company and the supporting refining project for the Integrated 1-million-tonne/year Ethylene Refining and Petrochemical Project in Yueyang area, obtained environmental impact assessment approvals.

Construction and Operation of Environmental Protection Facilities

Environmental
Technology
Development and
Environmental
Investment

The Company builds supporting pollution control facilities for waste gas, wastewater, solid waste, noise, etc. as required, conducts regular environmental hazard inspections according to the production facilities and their pollution discharge situations, promptly rectifies any problems found, and ensures reliable operation of pollution control facilities through daily operation and maintenance management, to ensure that pollutant emissions and disposal meet the requirements of the national and local governments.

Sinopec Corp. vigorously promotes the development of environmental protection technology, and is committed to continuously improving the Company's environmental management and ecological environment protection capabilities through technological innovation and research on core technologies. The Company has developed a technology system that integrates source control, process interruption, and in-situ remediation for soil pollution prevention and control in the Yangtze River Economic Belt. The engineering demonstration covers nearly 50,000 square metres, with a utilisation rate of 100%. It was the first time to achieve large-scale production and control on-site in a petrochemical plant in operation, providing technical support for the sustainable development of petrochemical enterprises along the Yangtze River. In 2023, the Company's total environmental protection investment reached RMB22.61 billion, including RMB3.45 billion in environmental protection capital investment and RMB19.16 billion in environmental protection expenditure, achieving cost savings of RMB3.47 billion.

## 24

Number of oil fields and refining and chemical subsidiaries completing special inspections on the ecological environment

## **CONTROL OF ATMOSPHERIC POLLUTANTS**

4,661
Tonnes

Amount of sulphur dioxide in the exhaust gas emissions

19,984 Tonnes

Amount of nitrogen oxides in the exhaust gas emissions Sinopec Corp. strictly implements the Atmospheric Pollution Prevention and Control Law of the People's Republic of China, the Action Plan for Continuous Improvement of Air Quality and other national and local regulations for air pollution prevention and control and has formulated the Sinopec Regulations for Pollution Prevention and Control, to comprehensively improve air pollution prevention and control. The Company has issued the energy and environmental responsibility commitment to all subsidiaries, which outlines emission reduction goals and control tasks and includes them in the annual evaluation process. The main air pollutants generated in the production and operation process of the Company include sulphur dioxide, nitrogen oxides, particulate matter, volatile organic compounds (VOCs), etc. The emission quantity, concentration, and destination are all specified in the pollution discharge permit execution reports and environmental information disclosure of each subsidiary.

The Company continues to strengthen the management of air pollution prevention and control facilities, enhance ozone pollution control, and establish monitoring, tracing, and rectification management system for organic pollutants, ensuring stable emission of exhaust gases meeting the standards. In addition, the Company has conducted research on the operation of gas vapour recovery systems at refuelling stations, conducted systematic analysis from process flow, equipment selection, daily maintenance, etc., proposed key technical indicators for refuelling equipment procurement, formulated operation and maintenance management measures for gas vapour recovery, and guided subsidiaries to strengthen the management of refuelling equipment procurement and gas vapour recovery operation and maintenance.

In 2023, the amount of sulphur dioxide in the Company's exhaust gas emissions was 4,661 tonnes, a decrease of 5% year-on-year; the amount of nitrogen oxides in the exhaust gas emissions was 19,984 tonnes, an increase of 4% year-on-year, mainly due to the commissioning of new projects such as Hainan Ethylene and Anqing Petrochemical. Excluding the main new projects, there would be a 0.6% decrease year-on-year.





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### PROTECTING THE ENVIRONMENT

## SOLID WASTE MANAGEMENT

Sinopec Corp. strictly implements national and local laws and regulations related to solid waste pollution prevention and control, the *National List of Hazardous Waste*, the *Pollution Control Standards for Hazardous Waste Storage*, and other relevant standards and requirements for solid waste management and control. The Company has successively formulated the *Sinopec Hazardous Waste Environmental Management Guidelines (Trial)*, the *General Industrial Solid Waste and Garbage Environmental Protection Management Guidelines (Trial)*, and the *Sinopec Hazardous Waste List (2021 Edition)*, specifying the requirements for solid waste pollution prevention and control management, and incorporating "strictly prohibit the illegal disposal of hazardous waste" into the Company's five major ecological and environmental protection prohibitions.

The Company has formulated the *General Industrial Solid Waste Classification Reference List for Inspection, Maintenance, and Major Modification of Refining and Chemical Enterprises* and the *Construction Waste Classification Reference List for Inspection, Maintenance, and Major Modification of Refining and Chemical Enterprises*, further optimising the identification and classification storage management level of solid waste such as hazardous waste at the source. The Company has also formulated the *Sinopec Special Action Plan for Resource Conservation and Efficient Utilisation*, actively promoting total resource management, scientific allocation, comprehensive conservation, and recycling, so as to accelerate the fundamental transformation of resource utilisation methods, and continuously improve the conservation and efficient utilisation of resource.

In 2023, the Company further optimised and refined the *Evaluation Indicators for "Zero-Waste Enterprises"* in accordance with the actual situation. The subsidiaries strengthened the reduction of various solid wastes by implementing clean production audits, green procurement, green packaging systems, enhancing process green transformation, and implementing measures such as sludge drying technology. Shengli Oilfield optimised the internal market-oriented operation mechanism, promoted secondary units to "control waste and reduce costs", and reported a reduction of over 20,000 tonnes of oil sludge within the year, saving approximately RMB50 million in transportation and disposal expenses.



## Completion of Sinopec's solid waste management targets in 2023:

The comprehensive utilisation rate of industrial solid waste reached 90.2%, exceeding the annual target by 1.7 percentage points.

90.2%

The revenue generated per unit of hazardous waste decreased by 6.5% year-on-year, achieving the emission reduction target.

-6.5%

The proper disposal rate of all types of solid waste is 100%, with no incident of illegal disposal, as well as fire or explosion accidents.

100%

The Company has incorporated the compliance management of solid waste into audits, environmental protection inspections, and HSE major inspections, implementing comprehensive environmental supervision throughout the life cycle of hazardous waste, and full process environmental supervision for general solid waste. The Company has developed an information platform, which has been launched and tested in 12 subsidiaries, to achieve full process online management and risk warning of hazardous waste.

### Initial results of the trial launch of information platform:

Hazardous waste identification accuracy

100%

Unknown solid waste identification rate

Safety risk assessment rate of environmental facilities related to hazardous waste

Full life cycle environmental supervision and compliance rate for hazardous waste

Compliance rate of environmental facilities related to hazardous waste

The Company actively promotes the utilisation of bulk industrial solid waste, focusing on solid waste with low utilisation rates such as gasification slag, waste insulation cotton, and miscellaneous salts. The Company also sets clear goals and key tasks and continuously conducts research on ways to make hazardous waste harmless, and intensifies the research on the recycling of precious metals in waste catalysts and non-ferrous metals.

Waste Classification	Disposal Method
Hazardous Waste	Utilise or dispose of with own facilities, or entrust to qualified third-parties for utilisation or disposal.
General Industrial Solid Waste	Entrust to third-parties with appropriate technology and capacity for comprehensive utilisation or landfilled safely.
Construction Waste	Reuse in accordance with government sanctioned disposal plans or ship to designated landfills.
Domestic Waste	Entrust to qualified third-parties approved by local government for collection and disposal.

New Progress in FFS
Heavy Film Packaging
Bag Thinning
CASE

In 2023, Sinopec Corp. continued to push forward the thinning of FFS heavy-duty film packaging bags. After reducing the thickness from an average of 0.18mm to 0.14mm, subsidiaries such as Jiujiang Petrochemical and Sino-Korean (Wuhan) Petrochemical kept on conducting pilot projects to further reduce the thickness of the packaging bags by 0.02mm, reducing the weight of a single bag from 135g to 103g. It is estimated that Jiujiang Petrochemical can reduce its packaging waste by 147.2 tonnes from the source each year and create a cost saving of RMB1.56 million a year.

## **Key Performance**

Indicators	2023
NON-HAZARDOUS WASTE	
Solid waste (thousand tonnes) Note 1	1,796.4
Solid waste intensity (tonne/RMB million) Note 2	0.56
Solid waste recycled/reused (thousand tonnes)	13,967.3
Solid waste disposed (thousand tonnes)	1,912.2
Amount disposed by third-parties (thousand tonnes)	1,796.4
HAZARDOUS WASTE	
Hazardous waste (thousand tonnes) Note 3	464.8
Hazardous waste intensity (tonne/RMB million) Note 4	0.14
Hazardous waste recycled/reused (thousand tonnes)	1,009
Hazardous waste disposed (thousand tonnes)	675.0
Amount disposed by third-parties (thousand tonnes)	464.8

Note1: The total amount of general industrial solid waste entrusted by the Company to a third party for disposal.

Note2: Solid waste intensity (tonne/RMB million) = amount of solid waste/revenue (RMB million)

Note3: The total amount of hazardous waste entrusted by the Company to third-party qualified institutions for disposal.

Note4: Hazardous waste intensity (tonne/RMB million) = amount of hazardous waste/revenue (RMB million)

# WATER **RESOURCES MANAGEMENT**

# Efficient Use of **Water Resources**

Million cubic metres

Amount of water saving in 2023



Sinopec Corp. has formulated policies such as the Sinopec Water Conservation Management Measures, the Sinopec's Guidance on Water Conservation Work in the 14th Five-Year Plan, and the Sinopec's Detailed Rules for Energy and Environmental Source Control of Construction Projects (Refining and Chemicals Segment) in accordance with the requirements of relevant national laws and regulations such as the Water Law of the People's Republic of China, the Regulations on Groundwater Management, the Regulations on Water Withdrawal Permits and Water Resource Fee Collection, the Management Measures for Water Resource Demonstration of Construction Projects, and the Management Measures for Water Withdrawal Permits, aiming to continuously conserve water resource and use water resource more efficiently with the goal of reducing industrial water intake by no less than 1% annually. In 2023, the Company's industrial water intake was 622.8 million cubic metres, a decrease of 1% year-on-year, saving 6.3 million cubic metres of water.

- Strengthened the control of water intake at the source, made reasonably plans based on development layout and scale, withdrew water legitimately, strictly limited groundwater extraction, further optimised water use structure, using unconventional water resources instead of fresh water to reduce the amount of fresh water used.
- Strengthened the full process management of water, optimised water supply and drainage pipework, strictly managed production water use, improved the measuring system for water supply and consumption, and enhanced the information system for water use management.
- Vigorously promoted water conservation, conducted water conservation upgrading, researched and applied new water-saving technologies, intensified benchmarking on water efficiency, and promoted the application for water-saving enterprise titles.

Vigorously implemented rain and sewage diversion transformation, promoted the visualisation of sewage pipework, constructed information modules for sewage and rainwater pipework, and increased the reuse of sewage, effectively reducing the amount of sewage generated.

## Water Efficiency "Front-runners" of Sinopec Subsidiaries

**Petroleum Refining Enterprises** 

Water Efficiency "Front-runner"

Oingdao Refining & Chemical Co., Ltd. | Oingdao Petrochemical Co., Ltd. Zhenhai Refining & Chemical Company | Shijiazhuang Refining & Chemical Co, Ltd.



Water Efficiency "Front-runner"

Zhenhai Refining & Chemical Company | Maoming Petrochemical Company Sino-Korea (Wuhan) Petrochemical Co., Ltd. | Yanshan Petrochemical Company

Water Efficiency "Front-runner"

**ZTHC Energy** 

Coal-to-methanol **Enterprises** 

Coal-to-olefin

Enterprises

Water Efficiency "Front-runner"

Sinopec Great Wall Energy & Chemical (Ningxia) Co., Ltd.

**Zhenhai Refining & Chemical Saved Water** with Multiple Measures CASE

Jiujiang Petrochemical **Water Treatment Plant** Achieved "Zero Discharge"

# Wastewater **Treatment**

were proposed and implemented, and 27 rationalisation proposals were put forward. Jiujiang Petrochemical has successfully achieved "zero discharge" in its water treatment plant by applying the new water-saving technology of "sludge removal and backwash water recycling". In 2023, the wastewater recycling equipment in the water treatment plant operated stably, reducing the intake of water from the Yangtze River by 660,000 cubic metres annually,

In 2023, Zhenhai Refining & Chemical Company organised its 13 operating departments to

carry out water-saving labour competitions, promoting departments to actively participate

in water-saving operation optimisation, water pipeline leakage treatment, and water-saving

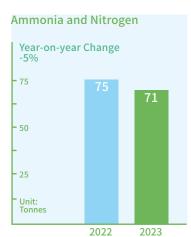
technical improvement projects. A total of 38 water-saving technical improvement projects

effectively saving water resources from the Yangtze River and making a positive contribution to promoting ecological protection and green sustainable development in the Yangtze River Economic Belt.

Sinopec Corp. has formulated and issued a series of management policies and action plans, such as the Sinopec Pollution Prevention and Control Management Regulations, the 2023 Green Low-carbon "Gaps and Weakness" Improvement Special Action Plan, the River Water Pollution Risk Prevention Action Plan and other management regulations and action plans in accordance with the requirements of national laws and regulations such as the Water Pollution Prevention and Control Law, the Yangtze River Protection Law, the Yellow River Protection Law, the Action Plan for Deepening the Yangtze River Protection and Restoration Campaign, as well as industry-related water pollution discharge standards, aiming at comprehensively strengthening water pollution prevention and control of the Company and vigorously promoting the implementation of discharge reduction projects. All subsidiaries have signed the *Energy and Environment Responsibility Agreements*, specifying their water pollution reduction targets and management tasks, and incorporating the implementation into their annual assessment. The pollutants in the wastewater discharged during the production and operation of the Company mainly include chemical oxygen demand, ammonia nitrogen, total nitrogen, total phosphorus, etc. The information on the amount, concentration, and destination of the discharge is specified in the pollution discharge permit execution report and environmental information disclosure of each subsidiary.

In the process of implementing the Green Enterprise Campaign, Sinopec Corp. comprehensively promotes clean production, strengthens the management of water pollution prevention and control facilities, and ensures stable and compliant discharge of wastewater. The Company fully implements the requirements of the Guidelines for the Management of Rain and Sewage Systems in Refining and Chemical Enterprises, improves the rain and sewage diversion system of its subsidiaries, strengthens on-site management and monitoring of polluted rainwater. The Company also carries out the transformation of highsalt water treatment facilities and miscellaneous salt separation in coal chemical enterprises, accelerating the treatment of historically stored high-salt water to meet standards, point-topoint miscellaneous salt treatment, and comprehensive utilisation of gasification waste. Jinan Refining & Chemical adopted the mechanical compression MVR evaporation crystallisation treatment process to desalinate the desulphurisation wastewater from two catalytic units, achieving zero discharge of catalytic flue gas wastewater, and the separated sodium sulphate was sold as a product externally.





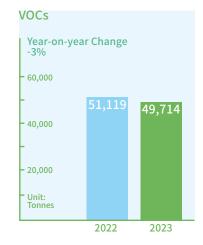


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# PREVENTION OF HYDROCARBON LEAKS

Key measures to prevent hydrocarbon

leaks in 2023



Strengthening VOCs Monitoring and Control of Subsidiaries

CASE

The Company formulates management regulations such as the *Manual for the HSE Management System*, the *Sinopec Environmental Management and Protection Regulations*, and the *Sinopec Pollution Prevention and Control Management Regulations* to guide subsidiaries to carry out hydrocarbon leakage prevention and control. The Company has formulated the *Guiding Opinions on the Construction of Odourless Factories of Sinopec* to promote odour control in factory areas.

In accordance with the overall target of reducing atmospheric pollutants, the Company has signed energy and environmental responsibility agreements with key subsidiaries, specifying the reduction targets for volatile organic compounds (VOCs) and the key tasks for governance. In 2023, the Company's subsidiaries have significantly reduced the leakage of hydrocarbons with a series of control measures.

Implemented the *Volatile Organic Compounds Leak Detection Specification*, comprehensively carried out VOC pollution prevention and control enhancement work, and vigorously promoted emission reduction projects.

2 Conducted inspections on nearly 30 subsidiaries for VOCs, using aerial monitoring vehicles, infrared imagers, leak detection and repair (LDAR) detectors, etc., to conduct on-site inspections on refining and marketing subsidiaries, and provided guidance to subsidiaries to standardise VOC governance and odour control in factory areas.

Planned and carried out on-site supervision and inspection of LDAR for key subsidiaries, organised expert teams to provide assistance, and carried out on-site retesting and spot checks to continuously supervise and improve the quality of LDAR work for subsidiaries.

Compiled technical specification documents such as the *Technical Guidelines for Grid Monitoring and Tracing System of Atmospheric Pollutants in Petrochemical Enterprises* and the *Leak Detection Norm for Volatile Organic Compounds (VOCs)*, as well as the plans of VOCs grid tracing monitoring and LDAR intelligent enhancement information construction, and promoted the grid management of VOCs with the deployment of VOCs aerial monitoring, infrared imaging devices, FID equipment, and other dynamic monitoring equipment in subsidiaries.

Anqing Petrochemical has established a VOCs monitoring and control system, combining VOCs grid monitoring with on-site atmospheric monitoring, flammable alarm monitoring, mobile aerial VOCs monitoring, etc. The facility is divided into 16 monitoring grids. A total of 41 VOCs monitoring points and a micro air monitoring station enable early warning based on monitoring results and pollution source tracing, contributing to the reduction of odours in production area.

Maoming Petrochemical has carried out in-depth VOCs control, addressing the challenges of multiple, dispersed, and small volume sewage tanks at the production site by using IPAS combined membrane catalytic oxidation technology. Over ten IPAS reactors were installed on the sewage tanks, effectively solving the VOCs emission problem.



# LAND RESOURCE MANAGEMENT

Sinopec Corp. complies with national laws and regulations and industry protocols related to land management, such as the Land Administration Law of the People's Republic of China, the Urban Real Estate Administration Law of the People's Republic of China, the Black Soil Protection Law of the People's Republic of China, the Soil Pollution Prevention and Control Law of the People's Republic of China, the Measures for the Implementation of Land Reclamation Regulations, and the Land Use Control Indicators for Oil and Gas Engineering Projects, etc., integrating the concept of "green and efficient" throughout the entire process of land management. In 2023, the Company revised the Sinopec Land Management Measures for the fifth time, and formulated the Sinopec Land Management Operation Guidance Opinions, continuously deepening full-process land management and promoting efficient allocation of land resources.

The Company regards saving land, ensuring intensive use of land, strict protection of arable land, and green land use as important aspects of high-quality development. With the core concept of "strictly controlling increment, reusing existing resources, reasonably reducing quantity, and improving quality", the Company has established a "1+N" land management mechanism. At the Company level, Sinopec Corp. implements closed-loop management of the full life cycle of land, including ten key processes, such as land planning, acquisition of construction land, land saving and intensive use, land ownership and value management, land operation, land disposal, land evaluation, etc. At the subsidiary level, detailed implementation rules for land management are formulated in accordance with the specific requirement of the business sectors, allowing the subsidiaries to implement more standardised and refined management regarding land standards, land use behaviours, etc.

The Company timely follows up on policy trends related to land use and planning from state and local governments, and adjusts the direction of land management policies accordingly, to prevent illegitimate land use behaviours. The Company regularly communicates with government land management authorities to report problems encountered in the land management process, ensuring the legality and compliance of the Company's land use behaviours. The Company has also developed a land management information system to strengthen online control of the entire land management process. In addition, the Company also focuses on daily supervision measures such as quarterly inspections and annual inspections, as well as deploying special work, to strengthen risk prevention and control for major land use processes such as temporary land procedures for subsidiaries, new land saving and intensive use, and registration of existing land property rights.

# Management Measures for Production Land Use of Sinopec

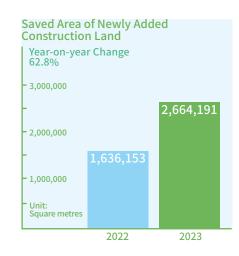
Strengthen Control at the Source of Land Use and Strictly Implement Farmland Protection Strictly control the entry of new land use from the temporary land use process.

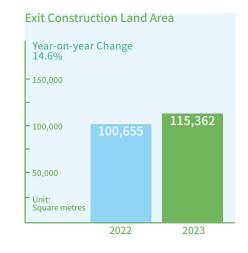
Scientifically optimise land use plans and reasonably arrange construction layouts.

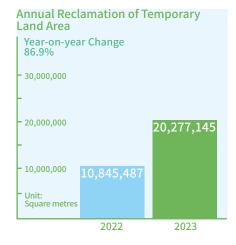
Innovatively implement wellfield construction, formulate pilot standardised layouts for wellfield, and establish standardised land use standards for different types of wellfields that are higher than national standards.

# Enhance the Reuse of Non-Operational Land

Comprehensively reuse land no longer used for major operations with measures such as land reclamation and land quota adjustment, promoting the efficient reuse of land.







# BIODIVERSITY CONSERVATION

Sinopec Corp. strictly complies with various laws, regulations, and requirements related to biodiversity conservation at the national and local levels, such as the Environmental Protection Law of the People's Republic of China, the Wetland Protection Law of the People's Republic of China, the Forest Law of the People's Republic of China, the Regulations on Nature Reserves of the People's Republic of China, the Measures for the Administration of Marine Special Protection Areas, the Regulations on the Prevention and Control of Pollution in Drinking Water Source Protection Areas, the Interim Measures for the Administration of Aquatic Germplasm Resources Protection Areas, the Measures for the Administration of National Key Parks, the Measures for the Administration of National Wetland Parks, the Regulations on Scenic Spots, etc. Biodiversity conservation has been integrated into the Company's policy system, such as the Sinopec Environmental Protection Management Regulations, the Sinopec Environmental Protection Management Measures for Construction Projects, and the Sinopec Ecological Protection Management Measures, clearly stipulating requirements for ecological protection such as no deforestation and avoidance of ecologically protected red line areas. All subsidiaries are required to strictly implement biodiversity conservation measures during project design, construction, and operation stages, in order to reduce disturbance to the ecological environment caused by production and operation.

Sinopec Environmental Protection Management Regulations

Sinopec Ecological Protection Management Regulations

Sinopec Greening Management Regulations "To avoid ecologically protected red line areas and take effective measures to reduce the impact on the ecological environment."

"Strictly abide by the special management regulations for ecological sensitive areas of state and local governments. For new projects, priority should be given to avoiding ecological sensitive areas. If it is really unavoidable, a special demonstration should be carried out according to the requirements of the competent authority of the ecological sensitive area, and permission for crossing should be obtained. If the permission for crossing is not obtained as required, the project shall not be allowed to start construction."

"During the construction and operation of the project, efforts should be made to minimise ecological damage. Losses caused by ecological damage should be restored as required... If the entity does not have the ability to restore the ecology, it can entrust a third party to carry out the restoration."

"No enterprise or individual may occupy greening space without authorisation, damage or transplant greening trees, or destroy greening facilities. If it is necessary to occupy or temporarily occupy greening space, transplant or cut down trees, it must be approved by the enterprise greening management department, go through the relevant approval procedures with the local greening administrative department, and then implement it, and replant trees or take other remedial measures according to relevant regulations."

"When trees tilt due to force majeure and endanger the safety of production facilities, they can be straightened or cut down first, and the relevant procedures should be completed in a timely manner, while reporting to the Company's greening management department and the local greening administrative authority."

The Company requires its subsidiaries to comply with national and local laws, regulations, policies, standards, and normative requirements. The site selection, layout, and scale of construction projects must comply with the "Three Lines and One List" (ecological protection red line, environmental quality bottom line, resource utilisation top line, and ecological environment access list) compulsory constraints and the overall requirements of relevant planning and environmental impact assessments. In the process of extending or changing mining rights in important wetlands, nature reserves, forest parks and other environmentally sensitive areas within the mining rights area, avoidance measures shall be taken to implement the avoidance of various sensitive areas during the mining rights change process.

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### Risk Management Measures for Biodiversity and Ecological Protection In Project Construction

### **Project Design**

Before the project construction, environmental impact assessments should be carried out in accordance with regulations, evaluating the impact of the construction project on biodiversity. Construction can only start with the premise of an acceptable assessment and obtaining environmental approval. Biodiversity impact assessments focus on elements that require key protection in national ecological red line areas and ecologically sensitive areas, including endangered species, wildlife, and wild plants.

# **Project Construction**

Strictly implement various environmental protection measures proposed in the environmental impact assessment and approval, effectively controlling the impact on biodiversity.

Strictly implement the cost of soil and water conservation, effectively control soil and water loss during the construction process, and continuously improve the ecological environment around the project.

Actively carry out the withdrawal and reclamation of idle land, conduct demonstration and evaluation of the safety and environmental risks of idle industrial and mining land such as abandoned well sites, screen out idle land without safety and environmental risks, and classify the land for withdrawal based on the distribution of land. Any land near farmland and meeting the reclamation conditions will be returned to the local government after reclamation.

## **Project Exit**

Carry out the orderly removal of oil and gas production facilities within the ecological red line area, follow the integrated operation mode of shutdown, well sealing, facility dismantling, and ecological restoration, timely organise the dismantling of surface facilities, thoroughly clean up the well sites, loosen the soil, and carry out ecological restoration based on the principle of "natural restoration as the main method, artificial restoration as the auxiliary", and organise ecological restoration according to the basic situation of the well sites and station areas.

112

Number of ecological monitoring points

33.6
Thousand sets

Number of ecological monitoring data

In 2023, the Company continued to improve its ecological monitoring and evaluation system and the environmental monitoring network, and carried out ecological monitoring in all operation sites, monitoring the air, surface water, soil, vegetation, and other elements of the surrounding environment of production and operation areas, with 112 ecological monitoring points and 33,600 sets of ecological monitoring data collected in 2023. The ecological tracking monitoring results show no impact from the Company's production and operation.

The Company actively participates in the governance of the Yangtze River shoreline, and fully supports the ecological environment protection and restoration in the Yangtze River region. Jiujiang Petrochemical has built a garden port, and the greening of the area has achieved 100% coverage, levelling 12,000 square metres of land, planting over 500 trees, and laying 36,000 square metres of turf, contributing to the construction of the "most beautiful shoreline" of the Yangtze River. The Company fully implements the national industrial development plan for the Yangtze River Economic Belt, organises inspections of oil and gas facilities within natural reserves and drinking water sources, resolutely implements the requirements of "shutdown and transformation", and comprehensively completes ecological restoration. In 2023, some subsidiaries actively cooperated with the government in the rectification of drinking water sources, implementing related activities such as shutting down oil terminals, sealing wells, and dismantling stations and yards.

The overseas subsidiaries of the Company also attach great importance to biodiversity conservation and actively carry out biodiversity conservation plans. In 2023, UDM in Russia released a total of 252,000 fish fingerlings including carp, crucian carp, and loach into the waters of the Kama River and Cheptsa River.

Participation in the Protection of the Yellow River Delta Wetlands

CASE

Artificial nest placed in nature reserves



Sinopec Corp. actively promotes the protection of the precious wetland resources in the Yellow River Delta. Adhering to the principle of "developing in protection and protecting in development", the Company has improved management standards in terms of ecological protection, risk prevention and control, pollution prevention, and ecological monitoring, and invested RMB250 million in the implementation of wetland enhancement projects in nature reserves following the requirements of "long life, maintenance-free, and zero emissions".

Shengli Oilfield invested RMB4.95 million in the Yellow River Wetland Park for breeding and release, and implemented measures such as artificial nest and installation of insulated sheaths to promote the deep integration of facility appearance with the natural environment, continuously improving the living environment for fishery resources and bird reproduction. After years of efforts, the number of bird species in the natural reserve has significantly increased, from 283 species in 2000 to 373 species in 2023. Major economic biological resources such as mandarin fish, loach, and Chinese prawns, are also keeping recovering, and the ecosystem is becoming increasingly complete.

In addition, in order to cooperate with the application for listing the Yellow River Delta as a World Heritage for bird habitat and wetlands, Shengli Oilfield has set up 18 monitoring points to conduct ecological monitoring of vegetation, birds, aquatic organisms, etc., promoting the establishment of the Yellow River Mouth National Park. The company actively cooperated with the Ministry of Ecology and Environment to carry out the Waste Clearing Action in the Yellow River Basin, clearing more than ten thousand tonnes of historical landfill solid waste by 2023.



# SAFETY MANAGEMENT SYSTEM AND OBJECTIVES

Sinopec Corp. attaches great importance to safety management, and continuously strives to realise systematic, standardised, and scientific HSE management.

The Company strengthened the top-level design of HSE management, and has established an HSE management system that conforms to international practices with Sinopec Corp. characteristics in accordance with state standards and requirements, such as the *Environmental Management Systems—Requirements with Guidance for Use (GB/T 24001)*, the *Occupational Health and Safety Management Systems—Requirements with Guidance for Use (GB/T 45001)*, and the *Guideline of China Occupational Safety and Health Management System (GB/T 33000)*, covering six aspects including management commitment and responsibility, planning, support, operational process control, performance evaluation, and improvement. The HSE management system and related policies cover all workers of Sinopec Corp., including its employees, suppliers, as well as contractors.



### Safety Management Objectives of Sinopec Corp.

HSE management system rated as an industry leader in third-party evaluations.

100%

100% rectification rate of key safety hazard management projects.

100% detection rate of occupational hazard factors, with an effective prevention rate of 100%; 100% coverage of occupational health examinations; 100% intervention rate for high health risk individuals.

The HSE Committee of the Company, the Chairman of the Board serving as the chairperson, consists of five professional sub-committees. The HSE Committee is responsible for researching, planning, guiding, and coordinating HSE-related issues, analysing HSE performance, and studying and making decisions on major HSE-related issues of the Company. The Committee has a Safety Director in charge, and also has a dedicated safety management personnel with relevant expertise in charge of safety inspections. The Company regularly convenes HSE Committee meetings, annual meetings on HSE, as well as video conferences on HSE and production operations, to brief and discuss key HSE issues and make relevant work plans accordingly.

### **HSE Management Structure of Sinopec Corp.**

### **HSE Committee**

Coordinate the organisation and operation management of the HSE management system, and set clear responsibilities and department in charge regarding key system components. Sub-committees take lead of the HSE management in their respective fields of expertise, providing expertise guidance for the operation of the HSE management system.

Responsible Department for Each System Component

Lead the integration of HSE system management requirements into business management systems and oversee the implementation.

**HSE Committee Office** 

Monitor the operation of the HSE management system, and develop audit plans for the system.

Business Units/
Professional Companies

Organise and ensure the implementation of the system, and provide guidance to ensure the effective operation of the system.

**Subsidiaries** 

As the responsible party of the HSE management system, subsidiaries are responsible for carrying out the allocated HSE tasks, and establishing a robust mechanism for monitoring, reporting, analysing, and continuously improving HSE performance to ensure the effective operation of the system.



Sinopec Corp. continues to optimise its HSE management system, and has formulated relevant HSE management manuals, HSE management policies, specific management policies and standards for business units, and operation procedures, etc. In 2023, the Company conducted a safety management system compliance assessment in order to further optimise the system. The Sinopec Production Safety Accident and Incident Management Regulations was revised to add the leakage, fire, and explosion accidents during the transportation of hazardous chemicals by contractors into the management scope with more strict accountability requirements. A number of other management policies were also revised, including the Sinopec Oil and Gas Pipeline Safety Management Regulations, the Sinopec Safety Training and Safety Capability Enhancement Management Regulations (Trial), the Management Regulations on the Dual Prevention Mechanism of Hierarchical Management and Control of Production Safety Risks Investigation and Treatment of Hidden Dangers of Sinopec, the Sinopec Safety *Instrument System Safety Integrity Level Evaluation Management Measures (Trial)*, the Sinopec Contractor Safety Supervision Management Measures, the Sinopec Hazardous Chemical Transportation Safety Management Regulations (Trial), and the Sinopec Public Utility Pipe Gallery Operation Safety Management Regulations, etc.

The Company has also established the mechanism for collecting and briefing the latest trends in state and industry HSE-related laws, regulations, and requirements to ensure its management systems up-to-date. With reference to relevant laws and regulations, such as the Safety Production Law of the People's Republic of China, the Fire Protection Law of the People's Republic of China, the Emergency Response Law of the People's Republic of China, and the Special Equipment Safety Law of the People's Republic of China, the Company summarised 942 applicable clauses according to business categories and formulated the Sinopec Production Safety Compliance Risk List, using it as the foundation of a defence line against safety compliance risks.

2 System Audit and Certification

The Company supervises and reviews the strategy, objectives, and implementation of health and safety related issues with system audit and management review to ensure the timely identification and rectification of possible problems. The HSE Committee conducts an annual review of the adequacy, sufficiency, and effectiveness of the system, researches and formulates relevant improvement measures and targets, and prepares a summary report based on the review results.

The Company actively encourages its subsidiaries to apply for HSE management system certification or third-party safety management evaluations. As of the end of 2023, there were 47 subsidiaries of the Company completing ISO45001 Occupational Health and Safety Management System certification. A number of subsidiaries actively carried out or contracted for safety management evaluations. For example, Zhenhai Refining & Chemical, Yanshan Petrochemical, and Guangzhou Petrochemical conducted safety management assessments in accordance with the DNV international safety and sustainability valuation system, while Fujian Refining & Petrochemical contracted external OIMS audits.

3 Safety Performance Assessment Mechanism The Company has developed an information platform for evaluating safety management process performance of subsidiaries based on over 30 dynamic indicators, with assessment results publicised monthly. In addition, to strengthen its safety management accountability, the Company has also formulated and implemented detailed rules for the assessment of management staff targets and annual business performance, with specific articles linking the deduction of assessment points to poor safety performance.



Sinopec Corp. continuously optimises the mechanism for identifying safety risks, utilising the risk assessment and management platform to achieve systematic, standardised, normalised, and information-based identification of risks, so as to eliminate safety risks by formulating a dual preventive mechanism of tiered safety risk control and safety hazard screening and rectification.

The Management Regulations on the Dual Prevention Mechanism of Hierarchical Management and Control of Production Safety Risks Investigation and Treatment of Hidden Dangers of Sinopec specifies the daily procedures for identifying and assessing safety risks, requiring its subsidiaries to conduct a comprehensive risk identification at least once a year and take immediate action on various abnormalities monitored. In 2023, the Company carried out comprehensive risk identifications and assessments, identifying a total of 812 risk items and formulating relevant engineering technical measures, management measures, personnel protective measures, and emergency response measures accordingly.

The Company is committed to strengthening the emergency response knowledge and skills training for all employees with regular emergency drills. Its subsidiaries regularly carried out joint emergency drills with local government agencies to effectively enhancing their emergency response capabilities regarding major accidents.



Safety Risk Identification Process of Sinopec Corp.

Company Headquarters

812

identified

Number of risk items

Review the risks reported by subsidiaries, and organise technical experts to conduct risk identification and assessment.

Organise production, technology, equipment, engineering and other management personnel to review the risk assessment results of respective department and formulate a company risk list.

Review the risk list of subsidiaries to develop a key control risk list of the Company.

**Subsidiaries** 

Direct grassroots units to carry out risk identification.

Review the risks reported by grassroots units, conduct professional reviews, and organise relevant management personnel to carry out risk identification within their respective expertise to formulate a risk list for secondary units.

Grassroots units

Identify risks at area, equipment, operation, and post levels following management responsibilities, and formulate a risk list for grassroots units, achieving full coverage of all hazards, operations, and equipment and facilities.



21

Number of safety training programmes

Sinopec Corp. designated 2023 as the Year of Safety Management for the Company, and established a leadership group with Chairman of the Board in charge, as well as five working groups with the directors of respective business units in charge. The Company also initiated relevant mechanisms such as weekly inspections, monthly supervision, and quarterly summaries. Each month, a joint HSE Committee Office - the Year of Safety Management Working Group Office meeting was convened to coordinate the resolution of tough challenges and ensure the effective implementation of various safety management improvement measures. In 2023, the Company carried out a total of 128 safety improvement actions and 53 key improvement tasks, with no incident of major production safety accidents.

In 2023, the Company organised systematic safety training at all levels with greater resources and formats, completing a total of 21 safety training programmes covering key HSE personnel at all levels.



Safety Management Capacity Building at the Grassroots Level

CASE

In 2023, the Company organised a demonstration training on safety management for grassroots unit leaders, safety officers, and team leaders, and continued to carry out certified training for key HSE personnel. Meanwhile, the best practice of "Ace Operation" skills competition initiated at Zhenhai Refining & Chemical was actively promoted across the Company, with a number of competitions organised for grassroots safety personnel in oilfield, sales, and refining subsidiaries. Focused on the daily operations of grassroots safety personnel, these competitions used "random sampling" in competitor selection, changing the traditional "best in class" competition to "everyone included" competition. The new format effectively tested the operation capabilities and skills of grassroots safety personnel and encouraged them to further enhance their safety management skills.

# CONTRACTOR SAFETY

1,486

Number of suppliers receiving on-site inspections

-50% Year-on-year change

Number of contractor accidents in 2023

The Company attaches great importance to enhancing the safety awareness and management of contractors, and has formulated policies such as the *Measures for Safety Supervision and Management of Contractors* and the *Measures for Safety Supervision and Management of Key Materials Supply* to specify the detailed safety supervision and management requirements for various operation procedures, such as contractor safety qualification review, bidding, contract signing, subcontracting, commencement, on-site construction, and special operations.

The Company implements robust supplier qualification review and continuously strengthens the prevention and control of supplier safety risks. In 2023, the Company conducted on-site inspections of 1,486 suppliers and a number of special inspections for suppliers of hazardous chemicals, and suspended 3,759 suppliers who failed to provide valid qualifications.

The Company also vigorously carries out contractor safety inspection. The inspection team conducted 133 special safety inspections of 93 enterprises throughout the year, "follow-up" inspections of 36 enterprises, with 3,196 issues identified in total. All subsidiaries were required to carry out self-inspections regarding these identified issues. The Company also encouraged contractors to establish a "two-way" safety assessment mechanism and selected a number of contractors for pilot programmes. Contractors of key construction projects were also required to have their QHSE system compliance performance and attendance and performance of key personnel inspected. Contractor safety quantitative assessment rules were also optimised during the year. In 2023, the number of contractor accidents decreased by about 50% compared to 2022, making the lowest records on both the accident and work-related death for contractors in history.

# **CYBERSECURITY INFORMATION SECURITY**

Sinopec Corp. attaches great importance to cybersecurity, strictly abides by laws and regulations such as the Cybersecurity Law of the People's Republic of China, the Data Security Law of the People's Republic of China, the Personal Information Protection Law of the People's Republic of China, and the Regulations on Security Protection of Critical Information *Infrastructure*, and has taken a series of security measures from both management and technical perspectives to continuously improve cybersecurity capabilities and the relevant technological capabilities. In 2023, the Company revised and issued the Sinopec Cybersecurity Management Measures and revised a number of relevant technical documents. There were no major information security and cybersecurity incidents this year, and no customers or employees were affected by cybersecurity incidents.



# Cybersecurity and **Information Security** Management Framework

The Company has established a Cybersecurity and Information Committee, with Chairman of the Board serving as the chairperson, to oversee the Company's medium and long-term planning, annual plan, and key tasks regarding cybersecurity and ensure the implementation of cybersecurity tasks and responsibilities of each subsidiary with guidance, coordination, and inspections. The Company's cybersecurity technical support unit, PCITC Limited, has passed the ISO27001 certification.

Focusing on "Graded **Protection of** Cybersecurity" Security

Assigning a threat level during the feasibility study stage of information systems and formulating security design scheme accordingly, strictly implementing the protection scheme, and requiring all information systems to pass cybersecurity inspection before project acceptance; organising regular technical inspections and threat classification for existing systems in operation to ensure effective protection against cybersecurity threats.

**Building a** Comprehensive **Cybersecurity Defence** System

Cybersecurity incidents are managed by their assigned classes and by relevant departments in accordance with the Sinopec Cybersecurity Incident Emergency Plan, following the procedure of warning response, emergency handling, investigation and assessment, prevention, and support. Each year, the Company organises a cybersecurity attack and defence drill to eliminate cybersecurity risks. In 2023, the Sinopec Security Response Centre (SSRC) has taken the lead in handling daily cybersecurity threats, proactively detecting vulnerabilities, conducting real-time behaviour analysis of cyberattacks, and promptly dealing with threats and irregularities, so as to prevent and mitigate the risks of business interruptions and possible production, operation, management losses and negative impacts on society caused by cybersecurity incidents.

**Establishing a** Cybersecurity Information Mechanism

SSRC regularly issues security warnings and cybersecurity rectification requirements in a timely manner in accordance with regulatory requirements as well as the monitoring results on Sinopec Corp.'s subsidiaries, and closely follow-up on the rectification process to ensure the timely elimination of risks. Employees are required to report suspicious information security and cybersecurity activities to SSRC for investigating, analysis, and handling. In 2023, the Company issued a total of 34 warnings against threats such as phishing emails and high-risk vulnerabilities, as well as briefings on hacker attack patterns, and a total of 198 vulnerability rectification requirements, all of which have been implemented as required.

Performance **Evaluation** 

In accordance with the Sinopec Regulations on the Evaluation and Assessment of Cybersecurity and Informatisation, the Company has included cybersecurity protection capabilities and security incidents into annual assessment of subsidiaries to ensure better implementation of the cybersecurity management measures. The assessment results are directly linked to the performance evaluation results of the management of the subsidiaries.

# Cybersecurity **Training and** Awareness Raising

A ROBUST SAFETY DEFENCE LINE

90

10,000 person-times

Participants of 7th Cybersecurity Awareness Week event

# **SECURITY**

In 2023, the Company organised a series of cybersecurity-related trainings, such as the evaluation standards training for cybersecurity and informatisation, and urged its subsidiaries to strengthen cybersecurity with experience sharing and briefing of cybersecurity incidents. Sinopec Corp.'s cybersecurity team participated the "WangDing Cup" cybersecurity technology competition, which is known for "Cybersecurity Olympics", and won the second prize in team competition.

The Company co-hosted 7th Cybersecurity Awareness Week event with the local government of Fangshan District, Beijing. During the week, there were over 900,000 people participating in the variety of themed activities, including cybersecurity awareness lectures in companies, communities, science museums, national key laboratories, and online activities, such as online pop-quiz, and cybersecurity mock attack. Through these activities, the Company propagated the concept of network security, popularised cybersecurity knowledge, and promoted cybersecurity skills.

Facing the complex and ever-changing global security challenges, Sinopec Corp. continues to optimise its management system and operational procedures for overseas security management and risk prevention and control efforts, maintaining a zero-death overseas security performance for 16 consecutive years.

The Company strictly complies with the security-related laws, regulations, policies, and standards of the countries where it operates, and has established a sound security management system and operational procedures, and developed relevant emergency plans regarding potential security emergencies. In 2023, the Company further strengthened its security management with activities such as security emergency drills and security measure upgrades, engaged in regional security coordination, consultation, and assistance programmes, and had achieved cross-border and cross-enterprise information sharing and mutual assistance regarding security matters.

The Company attaches great importance to protecting the security of overseas employees, continuously enhancing its capabilities to prevent, control, and deal with security risks. Employees are required to participate in security training and briefings of overseas security updates to help them improve their security awareness. The Company also increased the investment in security management and security personnel to better ensure the security of employees. In addition, the Company also attaches importance to the physical and mental health of overseas employees, and regularly carries out Chinese medical teams to offer overseas employees with on-site medical services.

Comprehensive **Prevention and** Mitigation of **Overseas Risks** 

Sinopec Corp. applies a systematic way to manage its overseas risks. In 2023, the Company further strengthened the closed-loop, full-cycle risk prevention and management regarding overseas projects, firmly implementing the "Five in One" measures including source control, risk investigation, monitoring and early warning, consultation and evaluation, supervision and guidance. The Company formulated and issued the Sinopec Overseas Project Full-cycle Risk Management Measures (Trial), and conducted annual risk investigations for overseas projects. During the year, the Company also issued two issues of the Sinopec Overseas Security Risk Assessment Reports, compiled the Country Risk Information Compilation (2018-2022), and released five Country Risk Information Alerts briefings, and 31 analysis reports regarding risk situations and trends.







**Monitoring** and Early Warning

Consultation

Supervision





# **OCCUPATIONAL HEALTH**

Sinopec Corp. continuously strengthens its management of employee occupational health in accordance with national and relevant laws and regulations, such as the Law of the People's Republic of China on Prevention and Control of Occupational Diseases, the Regulations of the People's Republic of China on the Prevention and Control of Pneumoconiosis, the Regulations on Labour Protection in Workplaces Using Toxic Substances, the Special Provisions on Labour Protection for Female Workers, and the Regulations on Occupational Health Management in Workplaces.

The HSE Committee is the top decision-making body for occupational health management in Sinopec Corp. The relevant departments at the Company headquarters formulate and ensure the implementation of various occupational health management policies, and report on the employee health conditions at monthly, quarterly, and annual HSE work meetings. Each subsidiary implements specific measures for occupational health management and reports on the employee health conditions to the General Meeting of Employee Representatives annually.

The Company has formulated several performance evaluation indicators for occupational health management, including "timely reporting of non-production incidents and closedloop management issues, compliance status of occupational disease prevention facilities, and rectification plans and completion status of occupational disease hazard irregularities", and added the "decrease in new cases of occupational diseases" as an annul new occupational health management goal in 2023. There were four new incidents of occupational diseases this year, which fell within the annual target realising a decrease of six cases compared to 2022.

In 2023, the Company formulated the Occupational Health Management Measures that comprehensively incorporated the latest requirements of relevant laws and regulations to ensure the compliance of occupational health management in accordance with the laws. During the year, the Company implemented its HSE management system in accordance with the Employee Health Management Regulations, conducted a thorough research on occupational health hazards in workplace and their impacts on employees with a survey of 116 companies regarding 7 categories of occupational health conditions, and carried out regular occupational disease hazard inspections of 39 thousand workplaces and 233 thousand inspection points. The rectification efforts of workplaces with excessive noise continued during the year with one-site verification and technical support provided for certain subsidiaries, reaching a 65% completion rate as of the end of year.

With continuous efforts in occupational health management, there were 26 direct subsidiaries and 47 secondary subsidiaries of Sinopec Corp. recognised with the titles of provincial and municipal level health enterprises. A total of 300 exceptional health enterprises and 33 exceptional "Occupational Health Experts" were recognised nationwide, among which, Sinopec Corp. has 20 subsidiaries and two employees selected. Sinopec Corp. was also granted the "Typical Case of Health Enterprise Construction" award at the annual national Patriotic Health Campaign main event.

Number of companies accepted survey regarding occupational health conditions

Number of direct subsidiaries recognised with the titles of provincial and municipal level health enterprises

Number of secondary subsidiaries recognised with the titles of provincial and municipal level health enterprises

### Key measures for employee occupational health management in 2023

Strengthening the Foundation of **Occupational Health** Management

Organised occupational health check-ups for employees, and researched on the 735 cases

Developed the enterprise standard *Technical Specification for Monitoring Occupational* Hazards, to guide the identification of occupational disease hazards, the determination of main hazard factors, and the monitoring control points regarding different types of

Formulated the Norms for the Setting Production and Living Rooms to further improve the working conditions of employees.

Strengthening the **Management of Protective Facilities**  Strengthened the standard compliance review regarding the occupational disease prevention content in the feasibility study report of construction projects, and promoted the implementation of the industry standard *Design Specification for Occupational Safety* and Health in Petrochemical Enterprises (SH/T 3047) to systematically improve the system design regarding occupational disease hazard prevention and control.

Implemented full-process supervision and management by classification and grade, organised technical review of pre-evaluation reports on occupational disease hazards for 99 class one construction projects, and provided timely briefing of common problems found.

**Improving Management Efficiency with Information Technology**  Initiated information system construction focusing on the processes of occupational disease hazard control, occupational health examinations, and reporting of special personnel.

Established a mechanism for remote video inspection of violations to better ensure identification and rectification of labour protection violations.

**Training and Awareness** Raising on Occupational **Disease Prevention** 

Carried out the Law of the People's Republic of China on Prevention and Control of Occupational Diseases Publicity Week event with various activities through multiple channels to propogate the knowledge on occupational disease prevention.

Organised four themed skill trainings, including online and offline training, for dedicated personnel, and a 12-session health knowledge video lecture series reaching over 50,000 employees.

**Improving Group Health Services** 

Optimised medical facilities and staffing for production bases, living quarters, refining and chemical parks, and large construction project sites, and provided support for subsidiaries on customised group physical examinations.

Carried out mental health surveys, improved the regular inspection, health consultation, and Employee Assistance Program (EAP) support at designated medical stations.

Optimised the deployment of emergency treatment stations with relevant medical suppliers in remote areas and grassroots units far from regular medical resources, building a green line for medical treatment channel.

Improved **Management of Individuals with High Health Risks** 

Developed customised health intervention procedures based on the support of company medical resources such as medical stations, and strengthened monitoring and regular care to reduce occurrence of major diseases for high-risk employees.

Deployed more than 4,000 automated external defibrillators (AEDs) in workplaces with high personnel density, which had been used in four incidents of medical emergencies.

Provided CPR training to 386 thousand employees and AED training to 293 thousand employees to improve the survival rate of emergency treatment.



# RESPECTING AND PROTECTING HUMAN RIGHTS

Adhering to the "people-oriented" development concept, Sinopec Corp. strictly abides by the International Covenant on Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights, the Discrimination (Employment and Occupational) Convention, and the International Convention on the Elimination of All Forms of Racial Discrimination, and other international covenants and Human Rights Action Plan approved or signed by the Chinese government. The Company strictly implements relevant domestic laws such as the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China, the Civil Procedure Law of the People's Republic of China, the Civil Code of the People's Republic of China, the Law of the People's Republic of China on the Protection of Minors, the Law of the People's Republic of China on the Protection of Women's Rights and Interests, the Law of the People's Republic of China on the Protection of Persons with Disabilities, and other relevant laws, regulations, and systems of other countries where it operates, as well as the *Universal Declaration of Human Rights*, the Ten Principles of the United Nations Global Compact, and the National Human Rights Action Plan (2021-2025). The Company fully respects and safeguards the rights of employees to participate and supervise corporate matters, strictly forbids any behaviour that ignores or tramples on human rights, treats all employees fairly and equally regardless of their gender, geographic origin, race, and religious beliefs, and is committed to building a workforce with diversity and equity. In addition, the Company strives to ensure the safety and health of employees, and is committed to creating a safe and healthy working environment for employees.

### Sinopec's Commitment and Goals on Human Rights Protection

Always regard employee safety and health as top priority, and strive to create a safe and healthy working environment for employees.

Adhere to the "people-oriented" development concept, respect the dignity and rights of employees, and make continuous efforts to optimise employee compensation and benefits mechanism and provide employees with better living conditions and work environment.

Strictly abide by relevant laws and regulations, and ensure that all business activities comply with international labour standards and UNGC requirements.

Actively fulfil social responsibilities, and contribute to social harmony and stability by supporting social welfare undertakings and actively participating in poverty alleviation, education aid, and other philanthropic activities.



# Managing Human Rights Risks

Sinopec Corp. strictly adheres to the requirements and standards on protecting human rights, always respects and protects human rights; fully guarantees the rights of employees, including the right to work, privacy rights and others, and forbids any form of discrimination or harassment. The Company adopts a diversified recruitment policy and offers smooth career development channels to allow employees from different backgrounds and cultures to have equal opportunities to grow. The Company complies with national laws and regulations and international conventions such as the *Prohibition of the Use of Child Labour Regulations* and the *Convention on the Rights of the Child*, prohibits the employment of child labour, and resists all forms of forced and compulsory labour, and there was none occurrence of such incidents happened in 2023. The Company includes respecting stakeholders' human rights and protecting employee rights in various audit projects carried out in 2023, such as economic responsibility audit, internal control audit evaluation, fixed asset investment audit, etc., all of which found no incidents of such violations of human rights.

Regarding its overseas operations, the Company resolutely implements the relevant human rights legislation of the host country and the requirements of international human rights conventions, strictly complies with local laws and regulations, and strengthens cooperation with local labour organisations to emphasise, respect, and protect human rights. The Company regulates its overseas employment behaviours through the formulation of relevant systems and polices, and actively safeguards the legitimate rights and interests of overseas employees. The Company also attaches importance to the professional growth and development of overseas employees, strengthens employee care, strives to foster harmonious and stable labour relations and promotes the balanced development of economic and social benefits.

Human Rights
Risk Management
Procedures

Sinopec Corp. has established a comprehensive human rights risk management mechanism with risk identification, assessment, response, improvement, and communication at its core to ensure that the Company's business operations and human rights policies comply with internationally recognised standards and principles.

### **Risk Identification**

By conducting a comprehensive review of business operations, assessing the supply chain, employee feedback and participation, stakeholder engagement, etc., to fully understand potential risk factors that may impact human rights, such as forced labour issue in the supply chain, and environmental issues, etc.

### **Risk Assessment**

Based on international and domestic human rights standards and principles, conduct qualitative and quantitative analysis of relevant risks to assess the likelihood and impact of risk occurrence, so as to identify the priority of risks.

### **Risk Response**

Based on risk assessment results, risk response measures are formulated, such as improving supply chain management, enhancing employee training, optimising internal management systems, etc., to promptly rectify human rights violations; regularly review and update management measures to ensure their effectiveness.

## Continuous Improvement

By collecting employee feedback and communicating with stakeholders, continuously monitor and evaluate the actual effects of human rights policies and measures, and make necessary adjustments and optimisations in a timely manner.

## Communication

Maintain transparent communication and cooperation with stakeholders, establish mutual trust with them, and work together to promote human rights protection.

2 Trainings on Human Rights Protection The Company strictly implements the requirements and standards for protecting human rights, regularly conducts human rights training and education for employees, enhances employees' awareness of human rights protection and sense of responsibility, promotes the formation of effective supervision mechanisms, and improves the implementation effectiveness of human rights policies. The Company has incorporated human rights training into the training program for new employees to encourage them to strengthen the awareness of labour rights protection, and deeply instil the concept of equal opportunities and equity for all to help them better protect their rights in work and life.

# Protecting Labour Rights

Sinopec Corp. actively implements the *Labour Contract Law of the People's Republic of China*, adheres to the basic values of decent work, ensures that all workers are protected in labour relations, creates a lawful, fair, and friendly workplace environment, and continuously enhances employees' sense of obtaining human rights protection, happiness, and security.

The Company opposes any act that ignores or tramples human rights, and forbids any forms of discrimination with regard to recruitment, promotion, training, and remuneration, etc. based on nationality, gender, age, race, religion, pregnancy, disability, treating all employees with equity.

# Employee Management

Adhering to the principles of "equal, voluntary, and consensus through consultation", the Company signs written labour contracts with employees, covering the contract period, job responsibilities and location, working hours, rest and leave clauses, labour remuneration clauses, labour protection and occupational hazard prevention clauses, etc. The labour contract's articles are approved or supervised by the local labour department.

Support the establishment of employee labour management systems to ensure the effective protection of various employee rights stipulated in the labour contracts.

## Rest and Vacation Arrangement

Strictly follow the relevant national regulations to ensure the rights of employees to work and rest.

For personnel implementing flexible working hours and comprehensive calculation of working hours, all units shall follow the latest policy requirements of the state on special working hour systems, fully listen to the opinions of the labour union, take appropriate work and rest methods, and ensure the physical health of employees.

# Working Environment

Allow employees to freely choose their work. When an employee resigns, do not restrict their choice of new job for any reason or by any means.

Do not restrict the personal freedom of employees in any way.

Eliminate any form of forced labour for any reason, and never allow forced labour through methods such as withholding documents and money, surveillance, threats, etc.



# Diversity and Equity

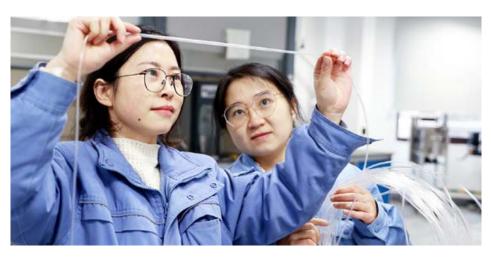
Sinopec Corp. is committed to building a diverse workforce. The Company adopts flexible employment models according to actual needs, expands recruitment channels, attracts individuals with diverse backgrounds, skills, and experiences to join, and provides employees with fair and just opportunities for career development and compensation. The Company leverages its industrial advantages to continuously strengthen the support for labour needed in minority areas, and through establishing a fair and just selection mechanism, ensures that all employees have equal opportunities for career development. The proportion of minority employees in the Company continues to grow.

Percentage of female employees:

30.73%

0

Percentage of ethnic minority employees: 4.36%



Regarding preventing discrimination and harassment in workplace, the Company advocates for corporate culture of respect, equality, and fairness, emphasising the value and dignity of employees; conducts training and education on anti-discrimination and anti-harassment for employees, ensuring that employees understand what are discriminatory and harassing behaviours, as well as methods to avoid and respond to these behaviours, enhancing employees' self-protection awareness. A complaint and grievance mechanism has been established to allow employees to report incidents of discrimination and harassment timely. The Company strictly protects the privacy and legitimate rights of whistleblowers. All discriminatory and harassing behaviours, once confirmed, will be handled seriously in accordance with relevant laws and regulations, with the handling results disclosed to the affected employees and the public.



Established a dedicated committee under the trade union that in charge of special protection and care for female employees.

Ensure that all labour contracts shall include provisions regarding the protection of the rights and benefits for female employees to be deemed legitimate and effective, so as to protect the rights and special needs of female employees from the source.

Implement maternity and prenatal leave policies, as well as the regular health examination system, to safeguard the physical and mental well-being of female employees.

Pay attention to and strengthen the protection of female workers in operations, carry out supervision and inspection of labour safety and health for female workers, and make continuous efforts to improve the working environment and conditions for female workers.



Carry out special recruitment activities for people with disabilities, encourage the identification of people with disabilities with certain abilities, and offer job posts suitable for them.

Continue to implement the placement and assistance programme for employees with disabilities, including timely issuance of living subsidies for severely disabled persons, nursing care subsidies for disabled persons in need; effectively fulfil the responsibilities of organising, coordinating, and assisting disabled persons, and ensure the stability of job positions for disabled persons.

# **Employee** Communication and Participation

1 Collective Bargaining Mechanism

Diversified

Channels

Communication

3 Strengthening **Employee Care**  Sinopec Corp. has been continuously optimising a democratic management system and corporate affairs transparency mechanism with the formulation of policies such as the Implementation Measures for Corporate Affairs Transparency of Units Directly under Sinopec Corp. and the Implementation Measures for the Staff Representative Congress of Units Directly under Sinopec Corp. The Company fully guarantees the employees' rights to information, participation, expression, and supervision when formulating policies and regulations, or making decisions on major reform matters related to employees' vital interests, cultivating employees' sense of ownership, mobilising and protecting the enthusiasm of the majority of employees to participate in corporate governance.

In order to give full play to the democratic participation of employees, the Company actively implements collective bargaining, extensively solicits the opinions of employee representatives, strengthens communication between the trade union and the administrative department, and jointly discusses and formulates the relevant clauses of collective contracts and special contracts, especially for the collective contracts with the requirements on special protection for female employees. After the contract is passed by the employee representatives' congress, it is signed by representatives of the trade union and representatives of management, truly realising the protection of employees' rights and interests.

The Company regularly organises employee representatives to propose suggestions on production safety, environmental protection, enterprise management, production and operation, salary distribution, employee education and welfare, etc. The responsible departments collect the suggestions and provide feedback accordingly, establishing a robust closed-loop proposal handling and feedback mechanism. Suggestions not formally recognised as proposals will have written feedback for explanation. In 2023, the Company received a total of 4,759 proposals from employee representatives, among which 2,927 were recognised as formal proposals and handled accordingly, including 2,873 cases handled already.

The Company has established various channels for employee participation, such as online forums, the "Voice Mobile" App, staff symposiums, etc., to extensively solicit employee opinions and suggestions, and promote in-depth employee involvement in major corporate reform initiatives. When evaluating leaders at all levels, the weight given to employee representatives is increased to continuously enhance employee participation. In addition, the Company has developed an employee self-service information system for all employees, providing various services such as information inquiry, policy consultation, and learning and development, establishing a self-sevice brand for employees with Sinopec characteristics.

The Company's trade union combines the various grassroots employee engagement activities, such as the "thousands of grass-root family visits", with the campaign of "doing practical things for the masses", mobilising management staff at all levels to comprehensively carry out visits to grassroots teams and employee families, listen to employees' demands, and strive to solve the most concerning and practical problems for employees. In addition, the trade union continued to organise a variety of employee activities and events under the theme of "Sinopec Read, Sinopec Health, and Sinopec Care" to encourage employees to take better care of their physical and mental health.

### Sinopec Read — Sinopec Health — Sinopec Care

Vigorously implemented the "Employee Reading Room" programme, and equipped 36 intelligent bookcase exchange stations at the headquarters and 34 subsidiaries in Beijing.

Organised sports events, chronic disease management lectures and other activities to encourage employees to actively participate in physical exercises and enhance knowledge and awareness of health management.

Trade unions at all levels regularly carried out increased the support for million in financial mechanism, and conducted condolences visits to the families of distressed overseas employee.

Continued to carry out assistance and relief employee caring activities, work, providing RMB14.7 consumption assistance, the employee condolence support to 35 subsidiary organised by trade units with difficulties and unions at all levels gaps in assistance and relief funds.

Mobilised employees to actively participate in consumption assistance totalled over RMB50 million in 2023.

Indicators	2022	2023
Number of employee representative congress meetings convened	183	159
Number of employee representative congress resolutions filed	2,902	2,927

# **HUMAN CAPITAL MANAGEMENT**

Sinopec Corp. has established a comprehensive, scientific and standardised human resources management system, which covers recruitment and optimisation management, daily personnel management, compensation and benefits management, training management and other business processes. The Company conducts evaluations of the implementation of various human resources management systems each year, and promptly formulates revision plans. In 2023, revisions were made to systems related to the supervision and accountability of leadership selection and appointment, leadership tenure system and contractual management, overall performance assessment management, headquarters leadership performance assessment and compensation management, in order to better align the relevant systems with the actual needs of the Company's human resources development.

Human Resources **Risk Management**  Sinopec Corp. attaches great importance to the identification of human resources management risks and has established corresponding evaluation mechanisms. In the 2023 risk assessment results, talent turnover risk remains a key focus for the Company. In this regard, the Company systematically monitors the situation of talent turnover, strengthens attention to companies with prominent talent turnover issues, and takes measures such as expanding talent development space, implementing precise and effective incentives, creating a high-quality ecosystem that respects and treasures talents, and overall management of talent turnover issues based on the characteristics and reasons of the loss. In recent years, the employee turnover rate of Sinopec Corp. has been continuously decreasing.

## Job Value Assessment Tool

Developed a unified job value assessment tool, established a strategic job positioning model with the job tool as the core, compiled and revised job descriptions, job catalogue compilation norms, job competition norms, and other series of documents, and promoted implementation in more than 30 subsidiary units with good results.

## **Talent Inventory**

Regularly took stock and analysed the overall situation of the talent team, focusing on the needs of industrial planning and business development, identifying the gaps in high-level talents and talents for emerging businesses, so as to enhance the precision of talent related efforts.

Focused on building a new industrial pattern and medium- to long-term development planning, revised and improved the existing professional and technical classification catalogue, providing important reference for talent statistics analysis, selection and search, optimisation of allocation, and position setting.

## **Evaluation Tool for Market-Oriented Employment Mechanisms**

Organised and guided all directly subsidiaries to carry out self-assessment on the construction of market-oriented employment mechanism focusing on 19 indicators under five factors such as management system, open recruitment, contractual management, etc., to provide data support for enterprises to identify gaps and implement improvement measures.

## Salary **Benchmarking**

Established a scientific benchmarking model with reasonable selection of benchmarking companies, and conducted in-depth analysis of the benchmarking of performance and compensation market with an industry benchmarking perspective and a regional benchmarking perspective, focusing on the matching of compensation and performance, competitiveness of compensation packages, rationality of compensation structure, and fairness of compensation distribution.

Formulated differentiated compensation control strategies based on the benchmarking results, and made reasonable adjustment to internal income distribution relationships.

2 Focusing on Talent Introduction

Based on the Company's business development strategy and short-, medium-, and longterm goals, as well as the demand for business development and key core technologies, the Company vigorously attracts high-level talents from domestic and abroad focusing on job-person compatibility and targeted talent introduction.

In addition, the Company implements a differentiated talent attraction strategy, explores the implementation of an independent registration system of talent introduction based while adhering to the concept of "playing chess was a whole", encouraging talent optimisation and flow arrangements that are conducive to the overall business development of the Company. The Company actively guides and encourages talents to work in units with vacancies, new projects, grassroots frontlines, and in difficult and dangerous positions, and strives to break down barriers to talent flow between segments, regions, and departments.

# **SALARY AND BENEFITS**

Sinopec Corp. continues to deepen the reform of its renumeration system, optimises its market-oriented renumeration mechanism, implements a renumeration policy that combines salary incentives with non-salary incentives, and has built a multi-dimensional salary and benefits system covering basic salary, performance bonuses, and medium- to long-term incentives based on factors such as job value, capability level, and performance and contribution. In addition, the Company provides employees with multi-level and personalised benefits to better protect the well-being of employees. The Company actively benchmarks its salary performance against the market, and integrates these findings to enhance our salary competitiveness to key, core talent and create a fair salary distribution structure.

The Company has established a comprehensive performance appraisal management system for all employees, established a target management mechanism, and implemented annual performance appraisals focusing on work performance differentiated according to the characteristics of the three different talent tracks of management, professional technology, and skill operations. By implementing a tenure system and contractual management for management personnel, and contractual management for other personnel, the Company determines the assessment content by having all employees sign performance contracts, covering both work performance and competency assessments.

Regarding the annual and tenure performance assessment for senior management staff, the Company has established a goal management mechanism and included sustainability indicators as mandatory criteria in the assessment criteria. Should any significant or more serious safety, environmental protection, quality accidents or incidents arise, the assessment outcomes shall immediately be deemed as unsatisfactory.

## Goal Management Mechanism

At the beginning of each assessment period, formulate assessment targets based on the overall business performance goals, investment plans, production and operation plans, and financial budgets of the Company, with considerations also given to the business unit's development plan, historical performance, and industry benchmarking results.

During the assessment period, the completion of assessment targets is tracked, checked, and warned.

At the end of the assessment period, the completion of assessment target is assessed into a comprehensive score based on financial settlement data, vertical comparisons, and horizontal benchmarking results.

## **Sustainability Indicators**

Safety, including but not limited to safety incidents penalised, anti-corruption and compliance management;

Energy conservation and environmental protection, including but not limited to carbon peaking and carbon neutrality goals, GHG emissions, pollutant discharges, energy efficiency management, and environmental penalties;

Quality management;

Compliance management, etc.

The Company has formulated a policy system including the Guiding Opinions on the Medium- and Longterm Incentives of Sinopec, implementing diversified employee incentive measures. As of the end of 2023, the long-term incentive methods implemented by the Company include equity and dividend incentives for technology companies, excess profit-sharing mechanisms, and follow-up investments, covering 12 subsidiaries, including four subsidiaries just recently started implement these policies in 2023. These measures effectively motivate the innovation and efficiency of management and key employees.

Performance indicators linked to long-term incentives

Performance evaluation indicator for excess profit-sharing: annual net profit

Performance evaluation indicators for project revenue bonus: project revenue growth rate, amount of patents and intellectual property rights of project, growth rate of new project contracts

Performance evaluation indicators for follow-up investment: cumulative operating income, amount of Chinese invention patent applications

As of the end of 2023, Sinopec Corp. had 3,247 employees covered under its long-term incentive programmes.

3,247

Number of employees covered under long-term incentive programmes





# **EMPLOYEE CULTIVATION AND DEVELOPMENT**

1 Strengthening the **Training for Key Talents** 

Sinopec Corp. is committed to integrating the national priority of job creation with its own talent development strategy, continuously deepening talent training programmes, and building smooth career development paths for talents. This allows employees to grow together with the Company, gaining knowledge, skills, and valuable professional experience along their career growth, and providing strong support for the Company's high-quality development.

The Company continuously improves the top-level design of education and training, revised the Sinopec Employee Education and Training Management Regulations and the Sinopec Online Training Management Measures, and formulated the Sinopec Education and Training System Outline. The Company provides employees with diversified training and development opportunities, including various internal and external training courses, professional seminars, and participation in further education courses, etc., aiming to help employees improve their professional skills and stimulate their potential and creativity.

In 2023, the Company carried out various targeted training programmes for key talent groups, organising a total of 54 training programmes for key talents during the year, covering 5,139 participants.

## **Management Talent**

Continuously improved the progressive and systematic training system, implemented Corporate Reform and Innovation Leadership Training Camps, youth and middle-aged management staff trainings, and key training courses such as the "Sunrise Project" for young talents, aiming at systematically enhancing the comprehensive quality and performance capabilities of management personnel.

# **Expert Talent**

Carried out advanced talent training, organised themed seminars on new energy system development and integrated refining and chemical industrial chain development, held expert talent training courses in oil and gas exploration, equipment and instrumentation, and "three new" fields, continuously enhancing the professional capabilities of various experts.

### **Skilled Talent**

Organised top-notch skills training courses, carried out demonstration training for skilled talents in different positions, and continuously strengthened basic skills training.

### **International Talent**

Focused on systematic training for overseas project teams, including training for professional talents such as overseas project managers, as well as international business, finance, and HSE experts, organised thematic trainings on international market integration, overseas refining integration, as well as business training for key overseas employees, and continuously organised training camps for international business strategic reserve teams.

The Company continued to promote the reforms of academic qualification assessment and vocational skill level certification and implement talent evaluation tasks in accordance with the Sinopec Management Measures of Academic Qualification Assessment and the Sinopec Management Measures of Vocational Skill Level Assessment. In 2023, a total of 341 senior (professor-level) employees, 91 chief technicians, 1,428 senior technicians, and 116 special-grade technicians passed the assessment and received the relevant titles and accreditations.

technical competitions and achievement exhibitions, such as holding events for the promotion of innovative achievements of Sinopec Corp.'s skilled talents and workers' innovation achievement exhibitions, convening meetings to encourage the rolling out of employee innovation studios, etc. In 2023, a total of 76 Sinopec Corp.'s Skilled Talents Innovation Studios were established and approved. The Company organised nine class-1 competitions and four class-2 competitions groupwide, and awarded 42 individuals the title of Sinopec Technical Expert.

In addition, to strengthen the training of skilled talents, the Company actively organises various



2 Building a Team of Technology Talents

carried out comprehensive research on the reform of the system and mechanism for the development of technology talents. Meanwhile, the Company further implemented the "Future Scientists" training programme, and launched the "Hundreds of Boats, Thousands of Sails" Youth Talent Practical Training Programme. In 2023, a group of outstanding talents from the Company were recognised with over a dozen national-level honorary titles, such as the National Engineer Award, the National Innovation Competition Award, the National Technical Expert, and the Chinese Female Scientist Award Team Award.

Sinopec Corp. regards the construction of a team of technology talents as a priority, and has

"Future Scientists" **Training Programme** 

In 2023, Sinopec Corp. organised the third Sinopec Youth Technology Elite Competition with an optimised comprehensive evaluation mode based on talents and projects. A total of 155 participants, with the projects, from 78 subsidiaries jointed the competition. In the end, ten winners were awarded the title of "Sinopec Outstanding Youth Technology Innovation Talents", and were accepted into the new round of talent that to be supported by this programme.

The programme implements a dual-track mentor system, including a research track and a production track. Participants are funded to carry out independent research topics of their choice. Such a programme can play a positive role in helping employees to clarify their career development directions, optimise their growth paths, and accelerate their growth.

"Hundreds of Boats, Thousands of Sails'

The "Hundreds of Boats, Thousands of Sails" Youth Talent Practical Training Programme plans to take five years to exchange and cultivate 400 young elite talents as the "Hundreds of Boats", and 1,000 young backbone talents as the "Thousands of Sails". The programme also aims to build a normalised mechanism for talent exchange and training across segments, subsidiaries, and professional fields. In 2023, the programme selected 123 young elite talents and 239 young backbone talents, as well as 50 candidates for overseas practical training.

As of the end of 2023, Sinopec Corp. had 22 academicians, 21 candidates of "National Hundred, Thousand, and Ten Thousand Talents Project" for distinguished talents, 13 high-level experts from overseas, one outstanding talent under the Ten Thousand Talents Programme, six Leading Talents in Science and Technology Innovation under the Ten Thousand Talents Programme, 342 personnel enjoying government special allowances, eight winners of the China Skills Award, and 108 National Technical Experts.

3 Cooperation in Talent Cultivation

The Company actively opens up channels for cooperation in talent cultivation, participating as one of the first pilot units in the special pilot programme of reforming the training of engineering doctoral students, and selected several rounds of outstanding technical backbone employees to pursue doctoral degrees in engineering. In 2023, the Company worked together with Tsinghua University, Shanghai Jiao Tong University, Zhejiang University, and China University of Petroleum (Beijing) in the training of 10 part-time engineering doctoral students from key professional fields, aiming to accelerate the training of outstanding engineering talent reserves.

4 Building Smooth Career Development Paths

The Company continues to improve the talent growth channel, clarifying the descriptions and responsibilities of positions at various levels in the professional technical sequence, adjusting the talent growth channel position system of the skill operation sequence, and deepening the construction of a professional, differentiated, and hierarchical talent growth channel system.

Broaden the talent growth path

Set up positions and titles such as Chief Scientist and Chief Engineering Technology Master, and organised relevant selection and appointment procedures.

Promote position-based management for experts Explored the establishment of the Sinopec Consulting Centre, building a platform to coordinate and leverage the role of experts, and fully promoting the effectiveness of high-level experts.

Number of employees covered by training programmes for key talents



# CONTRIBUTING TO PHILANTHROPY

# Supporting Rural Revitalisation

# Continuously Deepening "Industry + Consumption' Assistance

**Industrial Development and Cooperation** 

Strengthening Demonstration Projects

# Extending the Industrial Chain

The Company focuses on consumption support and education support to provide continuous support for rural revitalisation and common prosperity, and is committed to share its development achievements with society with the continuous implementation of a variety of philanthropic programmes to enhance people's well-being with its hallmark Sinopec-style support.

In 2023, the Company continued to implement its action plans for rural revitalisation, including the *Sinopec's 14th Five-Year Plan for Rural Revitalisation*, the *Sinopec Implementation Plan for Education Support*, and the *Sinopec Implementation Plan for Rural Revitalisation through Product Consumption*, scaling up education assistance, and deepening the "one county, one chain" industrial chains. As results, continuous consumption assistance helped generate income for farmers in the assisted areas, accelerating the formulation of a "three-driving" assistance model of "driving industry development with consumption assistance, driving revitalisation with industry growth, and driving development with education assistance" and making greater contribution to rural revitalisation.

The Company further deepened the "industry + consumption" assistance model, extending industrial assistance from farming and animal husbandry operations to producing processing. The "one county, one chain" demonstration projects have achieved significant results.

Signed industrial development cooperation agreements with eight counties such as Dongxiang County, Fenghuang County, and Yuexi County, etc.

Continued to improve the quality, efficiency, and branding of the "one county, one chain" demonstration projects, such as the Dongxiang quinoa industry and the Yuexi orchid industry, with support in management concepts, resources, and channels. To date, the quinoa industry in Dongxiang County has become a local pilar industry, and the orchid industry of Yuexi County was recognised as an "outstanding case of Chinese branding assistance in rural revitalisation".

In Fenghuang County: Completed the construction of production lines for canned fruits, fruit juice, and health products.

In Luxi County: Developed an integrated industrial chain covering the animal husbandry, processing, and sales the specialty pig breed in the local areas.

In Yuexi County: Completed the construction of production lines for functional drinks and tea beverages, and invested another RMB100 million to build photovoltaic power generation in tea gardens.

In Yingshang County: Invested resources to help the local roosted duck egg industry scale up and become a local demonstration project, growing from village-level operations to more centralised business at the county level.

In Zeku County: The yak beef cold chain distribution centre had been put into operation and sales of processed yak beef products started.

In Yuepuhu County: Cooperated with local government and developed the date industrial chain in local agricultural industrial parks under the brand of "Sunshine Bazaar".

Fostering Integrated Development of Industries

Promoted the integrated development in support of rural revitalisation, such as the boutique tourism projects in Yuexi County, Fenghuang County, and Dongxiang County.

Signed a cultural and tourism cooperation agreement with Fenghuang County, and forged cooperation with Alibaba to accelerate the implementation of the "Smart One-Click Travel" project. The "Bamboo Mountain Village Cabin" project that supported by the Company was rated as a national A-class tourist homestay.

The "Tangfan Yunshe" in Dongxiang County, which was also supported by the Company, was named the "village-level centre for sharing rural poverty alleviation experiences".



# A "Neighbourhood School" for the People

Upholding its commitment to supporting rural revitalisation and development aid through educational assistance, the Company continued to implement the series of its hallmark programmes, such as the "Sinopec Rural Classroom for Retired Principals", "Academician Classroom", "Sinopec School Buddy", "Micro-Light Plan", and "Spring Bud Power Station", effectively supporting the development of grassroots level education with a "centralised, three-dimensional, and paired" model of educational assistance.

# "Centralised" Experience Sharing

Organised experience sharing meetings regarding education assistance for rural revitalisation and initiated education assistance projects.

Organised a group-level symposium on education assistance to summarise and promote successful experience and explore paths and methods to further optimise the effectiveness of education assistance initiatives.

## "Three-Dimensional" Assistance

Organised a training programme for rural principals, provided support to 59 schools, and sponsored retired principals to act as principals of rural schools, so as to help improve local education capabilities of rural schools with advanced pedagogy and management experience.

Launched "Academician Classroom" lecture series in Luxi County, Hunan Province, motivating students to have greater incentive for learning.

Cooperated with China Children and Teenagers' Fund and built 37 "Spring Bud Power Stations" to help children better grow.

In Zeku County, Hungnam Tibetan Autonomous Prefecture, Qinghai Province, the "Spring Bud Class for Girls" had over 60% of graduates passed the college entrance score for two consecutive years.

Initiated the "Micro Light Plan" to support physical education in rural schools.

# "Paired" Training

Organised paired training for rural teachers, pairing them with experienced teachers from prestigious schools for "one-on-one" training to strengthen the teaching skills of rural teachers. A total of 442 pairs of teachers were connected to allow the rural teachers to learn from the practical experience of experience teachers.

Developed the "Sinopec School Buddy" information platform with standardised procedures and processes for educational support, ensuring better education quality and learning support.

# **Philanthropic Programmes**

Over the years, Sinopec Corp. has initiated a series of philanthropic programmes, such as "Warm Stations Programme", "Driver's Home Programme for Truck Drivers", and "Sinopec Lifeline Express Programme", to give back to society and practice its volunteer service spirit of "dedication, fraternity, mutual-assistance, and progress".



For eleven consecutive years, Sinopec Corp. has been launching the "Warm Stations" public welfare programme to provide support to homebound migrant workers around the Chinese New Year holidays. In 2023, a total of 166 "Warm Stations" were set up at Sinopec service stations in Guangdong, Guangxi, Jiangxi and other places, offering free refuelling and the "1+10+X" services, including emergency medicine, hot water, vehicle repairing, etc., for homebound migrant worker motorcyclists. A total of 9,480 Sinopec volunteers provided services to 10.3 million holiday travallers and 132 thousand person-times of homebound motorcyclists.

As of the end of 2023, the "Warm Stations" Programme had cumulatively provided services to over 57.8 million holiday travellers, including over 4.58 million homebound motorcyclists. Over 53,000 volunteers participated and offered free refuelling for 94 thousand motorcycles, distributed 110 thousand gift bags and 230 thousand pieces of amenity items, such as raincoats, knee warmers, neck warmers, and safety vests, etc., shipped over 940,000 kilograms of luggage and New Year Goodies free of charge, provided over 1.02 million litres of ginger tea, and offered free medicine and medical services to 257 thousand people.



The "Drivers' Home Programme" provides long-haul truck drivers with a place to rest at Sinopec service stations, with dining options, hot water, as well as amenity services such as hot shower, laundry, parking, and cell-phone charging, etc. In 2023, the "Drivers' Home Programme" offered a Chinese New Year refuelling gift package to 1,000 long-haul truck driver couples, with which they can enjoy free rest, showing, laundry and other amenity services at over 800 Sinopec service stations in Guangdong throughout the year.

In 2023, the "Spring Bud Power Station" Programme jointed hands with the "Warm Stations Programme", offering 3,000 gift packages to the children of long-haul truck drivers and homebound motorcyclists.

As of the end of 2023, Sinopec Corp. had cumulatively operated 6,033 Love Stations, including 1,602 stations in 2023, and 4,098 Drivers' Home stations, including 512 stations in 2023.



In 2023, "Sinopec Lifeline Express" travelled to three locations, Bayingol Mongolian Autonomous Prefecture in Xinjiang, Jincheng in Shanxi, and Shaoguan in Guangdong, providing free cataract surgery for a total of 3,483 patients, bringing light and hope to impoverished cataract patients.

Meanwhile, the programme extended its impact to eye care awareness education in campuses in Xinjiang and Shanxi with activities such as eye care knowledge lectures, pop quizzes, and painting experiences to propogate the knowledge on eye care.

In 2023, the Company donated a total of RMB344.71 million to support philanthropic programmes, including RMB230.66 million in poverty alleviation support, RMB80.60 million in disaster relief support, and RMB33.45 million for other philanthropic undertakings.

Indicators	2022	2023
Total employee volunteer service times (10,000 person-times)	96.5	97.2
Total employee volunteer service hours (10,000 hours)	160.1	165.5

# **SUSTAINABLE SUPPLY CHAIN**

Sinopec Corp. attaches great importance to supply chain management, and strives to adhere to the concepts of sunshine procurement and green procurement and actively integrate ESG concepts and requirements into the management system of suppliers and contractors. The Company is committed to continuously optimising supply chain management, aiming at building a transparent, healthy, and honest ecosystem with supply chain partners through open and strategic cooperation.

# Supplier Management

The Company is constantly optimising supply chain management, making efforts to strengthen supply chain management system and capabilities. Adhering to the principles of "safety, timeliness, green, and economical", the Company strives to build a centralised supply management system, operation mechanism, management policies, business processes, supply resource platform, bidding platform, and electronic trading platform with ESG concept fully integrated. The Company has formulated the Sinopec Material Procurement Supply Resource Management Measures to further strengthen supply chain management, putting forward specific requirements for suppliers in occupational health and safety, environmental protection, anti-corruption, and anti-unfair competition.

The Company also actively implements the strategy of green and clean development. In order to build a long-term mechanism for green procurement management with the characteristics of "green, low-carbon, circular, and efficient", the Company has formulated the Sinopec Material Green Procurement Management Measures to standardise the green procurement of materials required for production and construction, putting forward specific requirements for green supply resource management, green procurement implementation, green logistics management, and green management of waste materials.

The Company conducts supplier risk identification and assessment annually in accordance

of risks. ESG-related risks have been fully incorporated into the supplier risk identification

with risk assessment standards, evaluating supplier risks based on the likelihood and impact

# **Supplier Risk** Management

**Supply Chain ESG Risk Categories** 

## process. In 2023, a number of key supplier ESG risks were identified, such as business ethics and integrity, operational mode, supply chain security and stability, and HSE. The Company also conducted risk level assessment, analysed risk factors, and formulated response strategies accordingly to further optimise its risk control mechanism and ensure its overall exposures to supply chain ESG risks are within a safe range.

### and Response Measures Risk Category **Response Measures Business Ethics and** Utilise the supervision platform, and vigorously implement intelligent supervision to enhance risk prevention toolkits. **Integrity Risks** Strengthen daily supervision and accountability mechanisms, ensuring management effectiveness with strong supervision. Carry out targeted improvement actions focusing on the rectification of high-frequency problems found in internal and external audits. Enhance market research and analysis, explore the application of new technologies, and **Operational Mode** continuously optimise, adjust, and innovate on operational modes. Risks Strengthen risk rating, due diligence, and operational supervision of partners, and urge partners to operate in compliance to realise intrinsic safety. Promote the application and utilisation of domestic technologies, and improve the quality of **Supply Chain** domestic research. **Security Risk** Optimise the material supply management system and performance evaluation indicator system, filling gaps and deficiencies in system and optimising indicators on supply chain Carry out HSE risk awareness raising activities among employees and suppliers, and ensure the **HSE Risks** effective implementation of safety responsibilities. Enhance the standardisation and normalisation of HSE management processes to strengthen the foundation of production safety management. Strengthen emergency plans and drills to enhance the emergency response capabilities of front-line workers. Allocate weight to HSE assessment indicators to motivate subsidiaries to ensure stringent management of supply chain safety risks.

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## Green Procurement

The Company strives to fully integrate green and low-carbon concept across all processes, including product design, procurement, production, and packaging with measures such as green procurement awareness raising, supplier qualification reviews and quality evaluations, and application of green evaluation results. Suppliers are encouraged to develop green technologies and products, and make joint efforts to promote the low-carbon transformation in the supply chain. During supplier qualification review, credit certification, quality evaluation, etc., the Company emphasises on the green certification and corporate social responsibility performance of suppliers, encouraging suppliers to provide qualifications, standards, and related certification materials related to green procurement in their profile information, and urging suppliers to improve their relevant management performance.

# Sunshine Procurement

The Company has established a regular monitoring mechanism regarding suppliers' anti-corruption behaviour and credit risks, entrusting third-party evaluation agencies to conduct background credit certification of suppliers, and regularly update the credit profile of suppliers. As of the of 2023, the Company's monitoring of supplier anti-corruption behaviour has covered more than 26,000 qualified suppliers. In 2023, there were six suppliers disciplined for violating the "Business Integrity Commitment".

### **Supplier Management Procedures**

# Supplier Registration

When suppliers register on the EPEC platform, they are required to sign the *Business Integrity Commitment* and the *Compliance Commitment Letter*, committing to refraining from any corruption and commercial bribery, tax violations, unfair competition, environmental pollution, dishonesty, or other violations, and to complying with the anti-corruption regulations of both parties.

## Supplier Qualification Assessment

Qualification Review: Suppliers are reviewed regarding their production and operation qualifications, HSE system certification, quality management system certification, etc., with a focus on environmental protection requirements such as HSE management system certification, pollution discharge permit, energy management system certification, green product certification, and low-carbon product certification, etc.

On-site Inspection: A comprehensive assessment of suppliers' production capacity, quality management, after-sales service, etc., with emphasis on the implementation of ISO14000 and ISO18000 management systems, production safety and emergency management systems, clean production, emission, discharge and waste management, and green warehousing, packaging and logistics, etc. In 2023, the Company carried out on-site inspections upon 1,486 suppliers in total.

In 2023, the Company revised its supplier qualification audit standards, further standardising the requirements for suppliers' HSE management, and requiring a comprehensive review of the safety, environmental, and occupational health management of suppliers.

## Supplier Evaluation

The Company has established a quantitative evaluation system for objectively assessing the overall capabilities of suppliers, covering corporate credit certification, product quality appraisal, performance metrics for contract compliance, and market performance indicators. As of end of 2023, a total of 11,109 suppliers have completed the legal entity credit certification.

Stipulated quantitative evaluation indicators on green production, environmental protection, safety management, and administrative compliance of suppliers to encourage suppliers to develop green technologies and products and pursue the transformation towards green manufacturing.

# Supplier Due Diligence

4

Entrust third-party evaluation agencies to conduct due diligence studies, including both on-site inspections and interviews, on suppliers' legal entity credit, product quality, etc. In 2023, the Company conducted due diligent surveys of 2,450 suppliers, and a total of 11,173 suppliers have received due diligence surveys cumulatively,

## Supplier Violation Disciplining

Supplier with incidents such as failing to comply with commitments or violating integrity commitment, or suppliers with compliance risks, will be disciplined with measures such as termination or temporary suspension of trading qualifications, which will be publicly disclosed on the EPEC platform. Their supplier accounts at the EPEC platform shall be frozen, closed, or deleted accordingly.

# Supplier Training



Supplier training covers the Company's material supply management concept, summary of bidding-related policies, EPEC platform introduction, as well as the relevant business processes and operations. Suppliers are required to further improve their management of green procurement, safety management, operational compliance, and risk prevention and control, etc. In 2023, the Company carried out 14 supplier training sessions in total, covering 2,317 participants.



# Contractor Management

To continuously encourage contractors into enhancing their responsibility performance, the Company has incorporated ESG-related requirements such as openness and transparency, integrity, anti-corruption, HSE qualification and management, in its management system and policies, such as the *Sinopec Management Measures for Market Integrity System of Construction Projects*, the *Regulations on Sinopec Quality Accident Management*, the *Management Regulations on Sinopec Production Safety Accident*, the *Management Measures on Sinopec's Scoring and Quantitative Assessment of Project Contractors*, and the *Management Regulations on Sinopec Engineering Construction and Maintenance Contractors*.

All contractors are required to sign the *Business Integrity Commitment* and the *Business Integrity Agreement*, and contractors who violated the provisions will be included in the blacklist of Sinopec's engineering construction. The Company also entrusted third-party credit rating agencies to conduct compliance and integrity evaluations of contractors and give them a comprehensive credit rating, reducing business risks with motivations for compliance and disciplinary actions for incidents of non-compliance.

Indicators	2023
Total number of suppliers assessed via desk assessments/on-site assessments	26,186
Percentage of significant suppliers assessed (%)	72.8
Number of suppliers assessed with substantial actual/potential negative impacts	1,794
Percentage of suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plan (%)	31.0
Number of suppliers with substantial actual/potential negative impacts that were terminated	220

# COMMUNITY RELATIONS

Community Relations Management Policies and Systems Sinopec Corp. actively identifies, assesses, and mitigates the potential impacts of its operations on neighbouring communities during business operations, continuously improves community communication, respects local cultural backgrounds and customs, and strives to jointly contribute to the common development and prosperity of both the enterprise and the communities.

The Company strictly abides by relevant laws and regulations where it operates, and has formulated and complies with community relations management policies and systems, as well as relevant social responsivities norms, following the principles of "integrity and compliance, win-win cooperation, paying pack to communities, and contributing to local prosperity", so as to continuously foster friendly relations with local communities.

The Company actively understands and responds to the needs of various stakeholders, formulates social responsibility policies that are in line with the interests of both the Company and the communities, and is committed to protecting the interests of the communities. The Company regularly carries out community townhalls, face-to-face visits, and phone and email communications to help local communities and the public better understand how Sinopec Corp. fulfils its social responsibilities and forster a strong understanding of what the Company does and trust in the Company.

Sinopec's overseas subsidiaries attach great important to the communication and engagement with indigenous peoples. They thoroughly identify and mitigate the impact on indigenous communities, respect indigenous cultures and customs, strictly follow the FPIC (Free, Prior, and Informed Consent) principles, and commit to protecting cultural heritage from the impact of operations.

Our overseas subsidiaries strictly abide by relevant laws, regulations, public policies, and standards where they operate. They have established security management procedures, system, and checklist, formulated emergency plans for security emergencies, and regularly carried out emergency drills, so as to properly respond to possible violence and conflict incidents.

# Community Impact Assessment and Management

The Company has established a robust pre-production social impact assessment procedure, covering project proposal development, construction plan formulation, and environmental protection acceptance. Our overseas subsidiaries have established a community affairs consultation mechanism. Before any major designs, plans, and environmental permits are approved, they will organise public hearings and consultations to ensure that the impact of the construction and production activities on the environment complies with local environmental regulations as well as public expectations.

Project Proposal Development Both project proposals and feasibility study reports contain a section on environmental protection, with environmentally sensitive targets identified. Formulate pollution prevention and ecological protection measures in accordance with national and local environmental protection policies and relevant corporate management policies.

Fully consider factors such as project site selection, land use, and environmental capacity during preliminary stages of new projects, such as project proposal research and feasibility study.

Incorporate occupational safety and health, energy conservation and environmental protection, technical equipment factors in feasibility studies of new projects, ensuring that the proposed technologies are advanced and reliable, and meet relevant national, local, and industry standards and requirements.

Formulation of Construction Plans

Conduct environmental impact assessments, commission third-party evaluation agencies to prepare environmental impact assessment reports, solicit opinions and suggestions from community residents during the public consultation stage of environmental impact assessment, and incorporate the requirements of environmental impact assessment approval into the environmental protection section of the construction plan.

All new projects shall apply for and obtain all applicable national and local administrative approval procedures, such as project approval, registration, safety assessment, environmental impact assessment, energy assessment, stability assessment, etc., and ensure that project construction complies with relevant requirements.

Environmental Protection Acceptance Carry out regular inspections during the construction stage of projects to ensure the proper implementation of environmental protection measures in accordance with the requirements of the environmental impact assessment report, and timely organise the environmental protection acceptance upon completion of construction to ensure that the project can start operation in compliance with laws and regulations.

# Community Communication

Sinopec Corp. establishes an environmental information disclosure system that ensures timely and lawful disclosure of environmental information. The Company sets up pollutant discharge signs outside the stations where pollutants are discharged, which display information such as the main processes, types of pollutants produced, and amount of pollutants discharged. Complaint hotlines are also provided for the public to report any environmental issues, as part of the communication mechanism with local communities regarding ecological and environmental issues. Overseas subsidiaries often hold public hearings in the communities where they operate before engaging in important construction and production activities. This allows locals to voice their opinions and ensures that community and resident interests are properly protected. In 2023, all Sinopec subsidiaries conducted environmental information disclosure in accordance with laws and regulations, and there was no incident of penalties due to inadequate information disclosure.

Adhering to the commitment of "Opening the Door to Run Enterprises", the Company has been organising the "Sinopec Public Open Day" event for eleven consecutive years. Stakeholder representatives, including community residents, students, government workers, and media reporters, were invited to visit Sinopec subsidiaries in nearly a hundred cities across China, building a bridge for communication between the Company and the general public. As of the end of 2023, more than 230,000 people have visited Sinopec facilities cumulatively through the "Public Open Day" events, and its online live broadcasts attracted over 80 million views cumulatively, making the event the largest "Public Open Day" event in scale among all industrial enterprises in China.

# In 2023, 78 Sinopec subsidiaries organised a total of 376 "Public Open Day" events with 24,342 visitors offline and a total participation of 6,314,921 people.

Our overseas subsidiaries attach great importance to the compliance with behaviour norms of security personnel in respecting human rights, and have been gradually improving relevant management approaches, including but not limited to sharing values in security training, correcting specific behaviours in the process of security personnel performing their duties, and incorporating relevant responsibility considerations in security audits and evaluations. In addition, our overseas projects have established a complaint and grievance mechanism respectively for local communities and the public. There are dedicated department responsible for the handling, investigation, and solution of complaints related to security and human rights incidents.

# **Community Engagement**

The Company attaches great importance to the engagement with local communities, and is dedicated to contributing to local community development and economic prosperity and achieving win-win development. Our overseas subsidiaries strictly comply with local tax laws and regulations, abide by international safety, health, and environmental protection standards, give priority to the employment of local employees, and cultivate local talents, aiming at improving the well-being of residents in local communities. In addition, overseas projects of the Company strictly adhere to the relevant laws and regulations of the operating location, prioritise the use of local suppliers, and encourage and support the development of local industries and manufacturers.

Indicators	CIR in Kazakhstan	Mansarovar in Colombia	UDM in Russia
Staff localisation ratio	96.9%	97%	99%
Percentage of localised procurement	68.7%	98.6%	100%

In 2023, the overseas projects of the Company, such as Mansarovar in Colombia, CIR in Kazakhstan, and Block 18 in Angola, implemented a variety of community services and investment activities, including water purification device installation, church renovation, assistance to students in need, donations to orphanages, etc., extending our support and help to support local development.

CASE

CIR in Kazakhstan: Cultivating Local Talents

CASI

Angola Company: Actively Supporting Philanthropy CIR in Kazakhstant focuses on cultivating local talents, strives to continuously increase the proportion of local employees, effectively safeguard employee rights, and provide employees with competitive salary and benefits. The various subsidiaries of CIR continued to optimise their training and career development support systems, allocating 1% of production expenses for local employee training, helping employees continuously improve their professional skills and actively empowering them to pursue career development. In 2023, CIR provided 1,438 job positions for the local community.

Angola Company actively practises sustainability concepts of the Company and supports the development of local communities. In 2023, the Angola Company donated food, stationaries, clothing, and baby products to the Lar de Kuzola Orphanage in Luanda, and made donations to the Arotech training programme to support local youth improve their job skills.

Indicators	2022	2023
Number of overseas employees	4,045	4,120
Of which: Percentage of female employees (%)	28.5	29.4
Of which: Percentage of female employees among management staff (%)	11.3	11.2
Employee localisation rate (%)	97.9	97.8

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### FULFILLING SOCIAL RESPONSIBILITY

# PRODUCT AND SERVICE MANAGEMENT Quality Management

Sinopec Corp. always puts customer needs and satisfaction first and is committed to constantly improving product quality and services. The Company provides customers with high-quality products and services by strictly controlling quality checkpoints and improving service management processes, effectively protecting customer rights, and continuously improving customer satisfaction.

In strict accordance with the laws and regulations such as the *Product Metrology Law of the People's Republic of China*, the *Metrology Law of the People's Republic of China*, and the *Standardisation Law of the People's Republic of China*, the Company has revised five management documents, such as the *Measures for the Quality Management of Refined Oil and Natural Gas*, the *Refined Oil Products and Natural Gas Quality Accident Liability Regulations*, and the *Regulations on the Quality Risk Management of Refined Oil and Natural Gas*, etc., to effectively strengthen the identification and control of quality risks, stick to our high-quality commitment that "every drop of oil is a promise", and take concrete actions to protect the "premium quality and honesty measuring" reputation of Sinopec Corp.

## Optimisation of the Quality Management System

In 2023, the Company carried out a round of large-scale quality competitions and inspections, with zero incident of reportable quality accidents. A total of 570 thousand batches of oil products were sampled for testing, with a 100% passing rate, including 23 thousand batches examined externally by national and provincial level inspection organisations. In addition, 46 marketing subsidiaries, 97.9% of all sales subsidiaries, had completed the third-party certification of ISO9001 quality management system.

Internal Control
Indicator System for
Externally Sourced Oil
Products

In response to the quality issues of adulterated oil products in the market, the Company proposed the concept of "intrinsic quality safety" for refined oil products, took the lead to conduct research on unauthorised components adulterated in refined oil products and the harms they might cause, and innovatively established the internal control indicator system of refined oil products, which was the first in China and could effectively reduce the risks associated with externally sourced oil products.

## Supplier Management System

Implemented a centralised procurement strategy to increase the percentage of directly sourced procurement.

Established robust systems regarding supplier evaluation, supplier interview, and red and yellow warnings, formulating a closed-loop supplier management model of supplier evaluation, shortlisting, assessment, and adjustment.

In 2023, the Company revised three system policies, including the *Sinopec Material Supply Quality Management Measures*, the *Sinopec Material Quality Acceptance Inspection Management Measures*, and the *Sinopec Equipment Material Supervision and Manufacturing Management Measures*, completed the quantitative evaluation of material supply quality management for 23 subsidiaries, and conducted evaluation and inspection on 73 suppliers and authorised manufacturers.

# Quality Inspection System

Established dedicated quality management departments at headquarters, and provincial and municipal subsidiaries, as well as a complete laboratory network.

Built a professional management and inspection team, and formulated a robust quality inspection system.

Implemented three-level sampling quality inspections to prevent unqualified oil products from entering the market.

# **Quality Control System**

Established a standardised process quality control system focusing on "system + technology + standard", putting the whole process of refined oil sales, including warehousing-in, storage, transportation, and sales under control.

# **Quality Information System**

Established a laboratory information management system consisting of over 340 quality inspection labs, built the quality control platform for refined oil products, and developed the largest quality database for refined oil and gas products in China.

Developed a new management mode of intelligent analysis and management of the quality of refined oil products with big data analysis technologies.

## Life Cycle Management of Oil Products

Established a key account customer communication mechanism to further understand customer needs.

Cooperated with research institutions to carry out research on the fuel adaptabilities of vehicles and the environmental requirement on vehicle emissions.

Developed brochures such as the *Gasoline Application Technology Q&A* and the *Diesel User Manual* to guide customers to select oil produced in more informed ways.

## **Quality Culture**

Carried out company-wide awareness raising activities on quality, shaping a group culture on quality.

Established internal and external communication mechanisms, and regularly carried out "Public Open Day" activities, assisted government agencies in quality supervision, cooperated with the media to disseminate quality knowledge, called for market regulation, and forged a quality culture within the Company.

# Service Management

Adhering to the "customer-centred" service concept, Sinopec Corp. is committed to providing customers with high-quality and convenient services, and continuously improving customer satisfaction. The Company attaches great importance to the protection of customer privacy, and fully implements the requirements of relevant laws and regulations such as the *Personal Information Protection Law*, following the principles and requirements including lawfulness and integrity, clearance and reasonability, necessity based, openness and transparency, accuracy, completeness, and security protection, etc. The Company takes the protection of customer privacy as an important component of the operational safety of the enterprise, and the Board of Directors is the highest governance body for the protection of customer privacy.

The Company strictly abides by the relevant laws and regulations such as the *Advertising Law of the People's Republic of China*, forbidding false or exaggerated marketing communications and requiring all advertising to be truthful, accurate, and fair. In addition, the Company further strengthened its product branding, product packaging, and the management of promotional material to improve its overall brand image.

### Sales of Oil Products

## Customer Service Management

Adopted a centralised operation model, with the national customer service centre answering 350,000 customer calls on average each month, and continuously improved response rate and handling rate of customer calls.

Integrated new business segments such as new energy and Sinopec Power to achieve standardised operation for better quality and efficiency of customer service.

Optimised the intelligent customer service system to improve response speed and create better service experience.

In 2023, the Company received a total of 13,522 customer complaints related to the sales of oil products, with a 100% complaint resolution rate and a 99.9% customer satisfaction rate.

# Refuelling Service

Optimised refuelling service and "pay-inside" procedures, and organised retail skill competitions to promote the full-scale application of new service procedures.

Established an evaluation system to collect customer feedback and identify management issues, and improved on-site service performance to ensure timely response to customer needs.

### **Sales of Chemicals**

# **Customer Service Standardisation**

Enhanced the standardisation of customer service system, and required the comprehensive improvement in capabilities of customer service managers, achieving stronger soft power of serving customers.

Improved product service quality and prevented major quality risks. In 2023, the Company received a total of 11 quality-related customer complaints related to the sales of chemical products, all of which had been resolved by the end of February 2024, with a customer satisfaction rate of 94.1%.

### **Product Database**

Built an online product database for a product portfolio of over 4,000 products, containing product characteristics, packaging specifications, processing methods, application areas, and product certification information, allowing the customers to conveniently check product quality information.

## Product Knowledge Base

Consolidated premium industry resources such as manufacturing subsidiaries of Sinopec Corp, research institutes, and external equipment and technical partners, and built a product knowledge base consisting of modules such as new product offerings, star product promotions, industry expert lectures, etc., allowing customers to learn about new products and specialty materials efficiently and precisely.

# Expert Service System

Developed an expert service and service case system by aggregating internal and external technical expert resources. Information is categorised by level, by product line, and by application area, allowing customers to enjoy professional and timely technical support with more timely, convenient, professional, and accurate technical services.

Indicators	Sales of Oil Products 2023	Sales of Chemicals 2023
Pass rate of third-party quality system certifications (%)	100	85.7
Number of subsidiaries and affiliated units passing the ISO9001 Quality Management System certification	40	6
Customer satisfaction rate (%)	99.9	94.1
Number of customer complaint cases	13,522	11
Customer complaint resolution rate (%)	100	100
Percentage of products recalled for safety and health reasons (%)	0	0

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# **KEY PERFORMANCE**

# **Environmental Performance**

## **GHGs Emissions and Management**

Indicators	2021	2022	2023
GHGs emissions (million tonnes CO <sub>2</sub> -equivalent) Note	172.56	161.79	168.64
Of which: Direct GHGs emissions	148.38	137.72	142.28
Indirect GHGs emissions	24.18	24.07	26.36
Of which: Exploration and production segment	22.47	20.36	20.33
Refining and chemicals segment	148.34	139.82	146.70
Marketing and distribution segment	1.75	1.61	1.61
GHGs emissions intensity (tonnes CO <sub>2</sub> -equivalent/RMB million) Note2	62.96	48.76	52.50
CO <sub>2</sub> capture (thousand tonnes)	1,520	1,534	1,749
Methane recovery (million cubic metres)	717	834	874
Methane emissions (million cubic metres)	299.90	253.79	250.21
Of which: Exploration and production segment	269.88	222.32	216.55
Refining and chemicals segment	10.01	11.06	14.78
Marketing and distribution segment	20.01	20.41	18.88

Note 1 The Company conducts GHGs emission (direct and indirect) accounting and verification according to ISO14064-1:2006 standards, covering six gases including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydro fluoro carbons (HFCs), per fluorinated compounds (PFCs) and sulphur hexafluoride (SF<sub>6</sub>). GHGs emissions increased slightly in 2023 due to production growth and asset acquisitions.

Note 2 GHGs emissions intensity (tonnes CO<sub>2</sub>-equivalent/RMB million) = Greenhouse gas emissions / revenue (RMB million)

# Energy and Resources Note®

Indicators	2021	2022	2023
Consumption of crude oil (million tonnes)	1.07	1.06	1.07
Consumption of natural gas (billion cubic metres)	4.06	4.40	4.70
Consumption of purchased electricity (billion kWh)	33.80	33.88	36.53
Consumption of coal (million tonnes)	35.00	38.19	37.84
Fresh water withdrawal for industrial use (million cubic metres)	636.16	629.10	622.8
Fresh water withdrawal for industrial use intensity (cubic metre/RMB million) Note	232.10	189.59	193.88
Total water savings (million cubic metres)	_	_	6.3

Note 1 The consumption of certain energies increased in 2023 due to production growth and asset acquisitions.

Note2 Fresh water withdrawal for industrial use intensity (cubic metre/RMB million) = Fresh water withdrawal for industrial use/ revenue (RMB million)

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## Emissions, Effluents and Wastes Note®

Indicators	2021	2022	2023
COD (tonnes)	5,185	4,755	4,550
Ammonia and nitrogen (tonnes)	107	75	71
Sulphur dioxide (tonnes)	5,117	4,910	4,661
Nitrogen oxides (tonnes)	20,774	19,247	19,984
VOCs (tonnes)	_	51,119	49,714
Solid waste (thousand tonnes) Note2	1,931.6	2,036.9	1,796.4
Solid waste intensity (tonne/RMB million) Note	0.70	0.61	0.56
Solid waste recycled/reused (thousand tonnes)	_	12,821.7	13,967.3
Solid waste disposed (thousand tonnes)	_	2,158.8	1,912.2
Amount disposed by third-parties (thousand tonnes)	_	2,036.9	1,796.4
Hazardous waste (thousand tonnes) Note 4	461.0	515.0	464.8
Hazardous waste intensity (tonne/RMB million) Note 5	0.17	0.16	0.14
Hazardous waste recycled/reused (thousand tonnes)	_	1,069	1,009
Hazardous waste disposed (thousand tonnes)	_	1,253.1	675.0
Amount disposed by third-parties (thousand tonnes)	_	515.0	464.8

Note1: This report discloses the emissions of oilfield, refinery, and professional subsidiaries included in the Company's list of key pollution discharge permit management units, with data calculated based on self-monitoring data. The ultimate emissions data are subject to data published by local environmental authorities.

Note2: The total amount of general industrial solid waste entrusted by the Company to a third party for disposal.

Note3: Solid waste intensity (tonne/RMB million) = amount of solid waste/revenue (RMB million)

Note(4): The total amount of hazardous waste entrusted by the Company to third-party qualified institutions for disposal.

Note5: Hazardous waste intensity (tonne/RMB million) = amount of hazardous waste/revenue (RMB million)

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# **Social Performance**

# **Employment**

Indicators     2021       Total number of employees     385,751       Of which: Employees aged 30 years and below     41,029       Employees aged 51 years and over     101,016       Of which: Male employees     262,108       Female employees     123,643       Percentage of female employees (%)     32.1       Percentage of female employees in management (%)     12.91       Percentage of female employees in technological staff (%)     —       Percentage of female employees in operational staff (%)     —       Of which: Master degree or above     21,839       Bachelor or below     363,852       Of which: Full time employees     —       Percentage of ethnic minority employees (%)     4.0       Number of employees newly hired during reporting period     21,062       Of which: Male employees     —       Female employees     —       Of which: Employees 30 years of age and below     —       Employees between 31 and 50 years of age     —       Employees 51 years of age and over     —       Number of employees turnover during reporting period     11,797       Turnover rate (%)     0.64       Of which: Turnover rate of male employees (%)     0.56	374,791 43,826 224,068 106,897 258,762 116,029 31.0 13.45 36.53 31.13 23,780 351,011 349,964 4.2	2023 368,009 48,819 209,558 109,632 254,938 113,071 30.73 13.63 36.46 30.64 31,199 336,810 345,025 4.36 28,941 15,069
Of which: Employees aged 30 years and below  Employees aged between 31 and 50 years  Employees aged 51 years and over  Of which: Male employees  Female employees  123,643  Percentage of female employees (%)  Percentage of female employees in management (%)  Percentage of female employees in technological staff (%)  Percentage of female employees in operational staff (%)  Percentage of female employees in operational staff (%)  Of which: Master degree or above  21,839  Bachelor or below  363,852  Of which: Full time employees  Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  Female employees  Dof which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  Of which: Turnover rate of male employees (%)  0.56	43,826 224,068 106,897 258,762 116,029 31.0 13.45 36.53 31.13 23,780 351,011 349,964 4.2 20,891	48,819 209,558 109,632 254,938 113,071 30.73 13.63 36.46 30.64 31,199 336,810 345,025 4.36 28,941
Employees aged between 31 and 50 years 243,706  Employees aged 51 years and over 101,016  Of which: Male employees 262,108  Female employees 123,643  Percentage of female employees (%) 32.1  Percentage of female employees in management (%) 12.91  Percentage of female employees in technological staff (%) —  Percentage of female employees in operational staff (%) —  Of which: Master degree or above 21,839  Bachelor or below 363,852  Of which: Full time employees —  Percentage of ethnic minority employees (%) 4.0  Number of employees newly hired during reporting period 21,062  Of which: Male employees —  Female employees —  Female employees 30 years of age and below —  Employees between 31 and 50 years of age  Employees 51 years of age and over —  Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	224,068 106,897 258,762 116,029 31.0 13.45 36.53 31.13 23,780 351,011 349,964 4.2 20,891	209,558 109,632 254,938 113,071 30.73 13.63 36.46 30.64 31,199 336,810 345,025 4.36 28,941
Employees aged 51 years and over  Of which: Male employees  Female employees  123,643  Percentage of female employees (%)  Percentage of female employees in management (%)  Percentage of female employees in technological staff (%)  Percentage of female employees in operational staff (%)  Of which: Master degree or above  21,839  Bachelor or below  363,852  Of which: Full time employees  Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  —  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  O .64  Of which: Turnover rate of male employees (%)  0.56	106,897 258,762 116,029 31.0 13.45 36.53 31.13 23,780 351,011 349,964 4.2 20,891	109,632 254,938 113,071 30.73 13.63 36.46 30.64 31,199 336,810 345,025 4.36 28,941
Of which: Male employees  Female employees  123,643  Percentage of female employees (%)  Percentage of female employees in management (%)  Percentage of female employees in technological staff (%)  Percentage of female employees in operational staff (%)  Of which: Master degree or above  21,839  Bachelor or below  363,852  Of which: Full time employees  Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  —  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  0.64  Of which: Turnover rate of male employees (%)  0.56	258,762 116,029 31.0 13.45 36.53 31.13 23,780 351,011 349,964 4.2 20,891	254,938 113,071 30.73 13.63 36.46 30.64 31,199 336,810 345,025 4.36 28,941
Female employees 123,643  Percentage of female employees (%) 32.1  Percentage of female employees in management (%) 12.91  Percentage of female employees in technological staff (%) —  Percentage of female employees in operational staff (%) —  Of which: Master degree or above 21,839  Bachelor or below 363,852  Of which: Full time employees —  Percentage of ethnic minority employees (%) 4.0  Number of employees newly hired during reporting period 21,062  Of which: Male employees —  Female employees —  Of which: Employees 30 years of age and below —  Employees between 31 and 50 years of age —  Employees 51 years of age and over —  Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	116,029 31.0 13.45 36.53 31.13 23,780 351,011 349,964 4.2 20,891	113,071 30.73 13.63 36.46 30.64 31,199 336,810 345,025 4.36 28,941
Percentage of female employees (%)  Percentage of female employees in management (%)  Percentage of female employees in technological staff (%)  Percentage of female employees in operational staff (%)  Of which: Master degree or above  Bachelor or below  363,852  Of which: Full time employees  Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  Female employees  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  Of which: Turnover rate of male employees (%)  0.56	31.0 13.45 36.53 31.13 23,780 351,011 349,964 4.2 20,891	30.73 13.63 36.46 30.64 31,199 336,810 345,025 4.36 28,941
Percentage of female employees in management (%)  Percentage of female employees in technological staff (%)  Percentage of female employees in operational staff (%)  Of which: Master degree or above  Bachelor or below  363,852  Of which: Full time employees  Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  0.64  Of which: Turnover rate of male employees (%)	13.45 36.53 31.13 23,780 351,011 349,964 4.2 20,891	13.63 36.46 30.64 31,199 336,810 345,025 4.36 28,941
Percentage of female employees in technological staff (%)  Percentage of female employees in operational staff (%)  Of which: Master degree or above  Bachelor or below  363,852  Of which: Full time employees  Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  Of which: Turnover rate of male employees (%)  0.56	36.53 31.13 23,780 351,011 349,964 4.2 20,891	36.46 30.64 31,199 336,810 345,025 4.36 28,941
Percentage of female employees in operational staff (%)  Of which: Master degree or above  Bachelor or below  363,852  Of which: Full time employees  Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  Of which: Turnover rate of male employees (%)  0.56	31.13 23,780 351,011 349,964 4.2 20,891	30.64 31,199 336,810 345,025 4.36 28,941
Of which: Master degree or above 21,839  Bachelor or below 363,852  Of which: Full time employees —  Percentage of ethnic minority employees (%) 4.0  Number of employees newly hired during reporting period 21,062  Of which: Male employees —  Female employees —  Of which: Employees 30 years of age and below —  Employees between 31 and 50 years of age —  Employees 51 years of age and over —  Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	23,780 351,011 349,964 4.2 20,891	31,199 336,810 345,025 4.36 28,941
Bachelor or below  363,852  Of which: Full time employees  Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  Of which: Turnover rate of male employees (%)  0.56	351,011 349,964 4.2 20,891	336,810 345,025 4.36 28,941
Of which: Full time employees — Percentage of ethnic minority employees (%) 4.0  Number of employees newly hired during reporting period 21,062  Of which: Male employees — Female employees —  Of which: Employees 30 years of age and below — Employees between 31 and 50 years of age — Employees 51 years of age and over —  Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	349,964 4.2 20,891	345,025 4.36 28,941
Percentage of ethnic minority employees (%)  Number of employees newly hired during reporting period  21,062  Of which: Male employees  Female employees  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  Of which: Turnover rate of male employees (%)  0.56	4.2 20,891	4.36 28,941
Number of employees newly hired during reporting period  Of which: Male employees  Female employees  Of which: Employees 30 years of age and below  Employees between 31 and 50 years of age  Employees 51 years of age and over  Number of employees turnover during reporting period  11,797  Turnover rate (%)  Of which: Turnover rate of male employees (%)  0.56	20,891	28,941
Of which: Male employees — Female employees — Of which: Employees 30 years of age and below — Employees between 31 and 50 years of age — Employees 51 years of age and over — Number of employees turnover during reporting period 11,797 Turnover rate (%) 0.64 Of which: Turnover rate of male employees (%) 0.56		
Female employees —  Of which: Employees 30 years of age and below —  Employees between 31 and 50 years of age —  Employees 51 years of age and over —  Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	12,082	15,069
Of which: Employees 30 years of age and below —  Employees between 31 and 50 years of age —  Employees 51 years of age and over —  Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56		
Employees between 31 and 50 years of age —  Employees 51 years of age and over —  Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	8,809	13,872
Employees 51 years of age and over —  Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	14,088	15,740
Number of employees turnover during reporting period 11,797  Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	6,722	12,788
Turnover rate (%) 0.64  Of which: Turnover rate of male employees (%) 0.56	81	413
Of which: Turnover rate of male employees (%) 0.56	15,046	18,425
	0.69	0.50
	0.60	0.45
Turnover rate of female employees (%) 0.87	0.97	0.62
Of which: Turnover rate of employees aged 30 years and below (%) 3.10	2.65	1.73
Turnover rate of employees aged between 31 and 50 years (%) 0.56	0.59	0.39
Turnover rate of employees aged 51 years and over (%) 0.16	0.30	0.17
Of which: Turnover rate of senior management staff (%)	0.60	0.25
Turnover rate of mid-level management staff (%)	0.23	0.22
Turnover rate of grassroots employees (%)	0.71	0.54
Social insurance coverage (%)	100	100
Enterprise annuity coverage (%) 81.48	80	87
Percentage of employees with labour union membership (%) 100		100

KEY PERFORMANCE — 2023 Sinopec Corp. Sustainability Report - SINOPEC 112

# **Training**

Indicators	2021	2022	2023
Vocational training participation (person-time)	1,725,129	1,442,848	1,979,853
Of which: Training participation of male employees	<u>—</u>	_	1,390,561
Training participation of female employees	_	_	589,292
Of which: Training participation of senior management staff	_	<del>_</del>	2,610
Training participation of mid-level management staff	<del>_</del>	<del>_</del>	28,757
Training participation of grassroots employees	<del>_</del>	_	1,111,807
Online training participation (person-time)	6,152,170	6,375,520	5,895,570
Total amount of online training (hours)	51,432,900	60,847,600	50,855,000
Vocational training coverage (%)	87.3	99.3	99.4
Of which: Vocational training coverage of senior management staff (%)	<u> </u>	<del>_</del>	100
Vocational training coverage of mid-level management staff (%)	_	_	100
Vocational training coverage of grassroots employees (%)	<u>—</u>	<del>_</del>	99.3
Total amount of vocational training (hours)	14,637,601	14,815,488	20,675,680
Average training hours of employees (hours)	35.71	39.53	56.18
Of which: Average training hours of male employees (hours)	55.28	58.31	57.15
Average training hours of female employees (hours)	55.64	58.68	54.06
Of which: Average training hours of senior management staff (hours)	59.15	61.35	70.52
Average training hours of mid-level management staff (hours)	55.37	58.56	60.23
Average training hours of grassroots employees (hours)	52.81	54.21	55.78
Of which: Training participation rate of male employees (%)	39.26	42.74	43.67
Training participation rate of female employees (%)	38.27	41.63	43.35
Of which: Training participation rate of senior management staff (%)	95.77	96.28	98.53
Training participation rate of mid-level management staff (%)	93.63	94.75	97.61
Training participation rate of grassroots employees (%)	87.38	89.63	92.35

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# Workplace health and safety

Indicators	2021	2022	2023
Number of accidents reported	2	1	1
Number of deaths due to production safety accidents	2	2	1
Total recorded accident (Incident) rate (per 200,000 working-hours)	0.1147	0.07046	0.05052
Fatal accident rate (per 200,000 working-hours)	0.00071	0.00045	0.00023
Lost workdays due to work-related injuries (days)	_	_	5,586
Number of production safety emergency drills (10,000 times)	58	59	59
Participation of production safety emergency drills (10,000 person-times)	331	332	333
Employee occupational health examination coverage (%)	99.9	99.9	99.9
Number of newly diagnosed cases of occupational diseases	12	10	4

KEY PERFORMANCE 2023 Sinopec Corp. Sustainability Report - SINOPEC 114

# Supply Chain

Indicators	2021	2022	2023
Number of suppliers passed qualification assessment	25,072	26,768	26,186
Of which: Number of suppliers from mainland China	23,294	24,917	24,446
Number of oversea suppliers	1,778	1,851	1,740
Percentage of suppliers qualified by QHSE management system (%)	30.6	29.8	30.5
Number of suppliers qualified by the quality management system (ISO9000)	11,952	11,634	10,815
Percentage of suppliers qualified by the quality management system (ISO9000) (%)	47.7	43.5	41.3
Number of suppliers qualified by the environmental management system (ISO14000)	8,511	9,271	9,208
Percentage of suppliers qualified by the environmental management system (ISO14000) (%)	34.0	34.6	35.2
Number of suppliers qualified by the occupational health and safety management system (ISO18000)	7,999	8,273	7,869
Percentage of suppliers qualified by the occupational health and safety management system (ISO18000) (%)	31.9	30.9	30.0
Percentage of procurement from the top 5 suppliers (%)	5.1	5.8	5.6
Percentage of procurement through tender (%)	86.0	86.0	86.7
Percentage of procurement by open tender (%)	96.7	96.9	97.0
Total number of suppliers assessed via desk assessments/on-site assessments	_	_	26,186
Percentage of significant suppliers assessed (%)	_	<del>_</del>	72.8
Number of suppliers assessed with substantial actual/potential negative impacts	_	_	1,794
Percentage of suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plan (%)	<del>_</del>	_	31.0
Number of suppliers with substantial actual/potential negative impacts that were terminated	_	<u> </u>	220

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# INDEPENDENT ASSURANCE REPORT

English Translation for Reference Only

### Independent Limited Assurance Report

毕马威华振通字第 2400044 号

To the Board of Directors of China Petroleum and Chemical Corporation:

We were engaged by the Board of Directors of China Petroleum and Chemical Corporation (the "Company") to provide limited assurance on selected 2023 key data in the Company's 2023 Sustainability Report for the year ended 31 December 2023.

### I. Key Data

In this report, limited assurance procedures were performed on the following selected key data of the Company's 2023 Sustainability Report:

- GHGs emission (million tonnes CO<sub>2</sub>-equivalent)
- Direct GHGs emission (million tonnes CO<sub>2</sub>-equivalent)
- Indirect GHGs emission (million tonnes CO<sub>2</sub>-equivalent)
- CO<sub>2</sub> capture (thousand tonnes)
- Consumption of purchased electricity (billion kWh)
- Chemical Oxygen Demand (COD) (tonnes)
- Nitrogen oxides (tonnes)
- Weight of disposed hazardous waste (thousand tonnes)
- · Number of accidents reported
- · Number of deaths due to production safety accidents
- Total recorded accident (Incident) rate (per 200,000 working-hours)
- Fatal accident rate (per 200,000 working-hours)
- Total number of employees
- Employees with master's degree or above
- · Employees with bachelor's degree or below
- Employee turnover rate (%)
- . Turnover rate of male employees (%)
- Turnover rate of female employees (%)

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INDEPENDENT ASSURANCE REPORT 2023 Sinopec Corp. Sustainability Report - SINOPEC 116

### Independent Limited Assurance (Continue)

毕马威华振通字第 2400044 号

### I. Key Data (Continue)

- · Percentage of female employees (%)
- · Percentage of female employees in management (%)
- Percentage of minority employees (%)
- · Number of patients cured under the Lifeline Express Programme
- · Number of patents applied for this year
- Number of authorised patents this year

Within the scope of our work, we only performed procedures in selected 2023 key data in the Head Office, Sinopec Beijing Oil Products Company and Sinopec Zhenhai Refining & Chemical Branch we have not conducted work in other subsidiaries. We have not performed any procedures with respect to 2022 and other earlier periods or any other information included in the 2023 Sustainability Report.

### II. Responsibilities of the Board of Directors

The Company's Board of Directors is solely responsible for the preparation of the key data of the 2023 Sustainability Report in accordance with basis of reporting of the key data ("basis of reporting") after this assurance report.

The Board of Directors is also responsible for designing, implementing and maintaining the internal controls that enable the preparation and presentation of 2023 Sustainability report that is free from material misstatement, whether due to fraud or error.

### III. Responsibilities of KPMG

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed. We conducted our work in accordance with the International Standard on Assurance Engagements 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information.

We have complied with our independence requirement and other relevant ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and we have complied with the applicable requirements of the International Standard on Quality Control 1 with respect to maintaining a comprehensive quality control system.

Our independent limited assurance report has been prepared solely to the Company in accordance with the terms of our engagement. Our work has been undertaken so that we might report to the Board of Directors those matters we have been engaged to report in this independent limited assurance report and for no other purpose. We do not accept or assume responsibility to any party other than the Company for our work, for this independent limited assurance report, or for the conclusion we have reached.

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### Independent Limited Assurance (Continue)

毕马威华振通字第 2400044 号

### IV. Summary of work performed

A limited assurance engagement on the 2023 Sustainability Report consists of making inquiries, primarily of persons responsible for the preparation of information presented in the Sustainability Report, and applying analytical and other procedures, as appropriate. Our procedures include:

- Assess the risk of material misstatement of selected 2023 key data relating to Sustainability Report, whether through fraud or error;
- Conduct interviews with relevant staff at the Company who are responsible for providing the information in the Sustainability Report;
- Performing analytical review procedures on the selected 2023 key data relating to Sustainability Report;
- · Sampling of selected key data relating to Sustainability Report;
- Recalculating of 2023 selected key data relating to Sustainability Report;
- Reading the information presented in the Sustainability Report to determine whether it is in line with our overall knowledge of, and experience with, the sustainability performance of the Company; and
- Perform other procedures deem necessary.

The extent of the evidence gathering procedures performed in a limited assurance engagement is less than that for a reasonable assurance engagement, and therefore, a lower level of assurance is provided. In addition, our work was not undertaken for the purpose of expressing an opinion on the effectiveness of the Company's systems and procedures.

### V. Inherent Limitation

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities.

### VI. Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the selected 2023 key data contained in the Company's Sustainability Report for the year ended 31 December 2023 is not prepared, in all material respects, in accordance with the basis of reporting.

KPMG Huazhen LLP

Beijing March 22, 2024

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### NDEPENDENT ASSURANCE REPORT 2023 Sinopec Corp. Sustainability Report - SINOPEC 118

### Compilation and Reporting Basis of Key Data

### GHGs emission (million tonnes CO2-equivalent):

GHGs emission disclosed herein refers to the sum of direct GHGs emission and indirect GHGs emission produced by the production operation subsidiaries of China Petroleum & Chemical Corporation.

### Direct GHGs emission (million tonnes CO<sub>2</sub>-equivalent):

Direct GHGs emission disclosed herein refers to direct GHGs emission from fixed emission source, mobile emission source, process emission source and escape emission source produced by the production operation subsidiaries of China Petroleum & Chemical Corporation.

### Indirect GHGs emission (million tonnes CO<sub>2</sub>-equivalent):

Indirect GHGs emission herein refers to indirect greenhouse gas emissions resulting from the consumption of purchased electricity, purchased heat (steam), etc by the production operation subsidiaries of China Petroleum & Chemical Corporation.

### CO<sub>2</sub> capture (thousand tonnes):

CO<sub>2</sub> capture herein refers to the total amount of carbon dioxide captured by refinery enterprises of China Petroleum & Chemical Corporation in carbon dioxide recovery work.

### Consumption of purchased electricity (billion kWh):

Consumption of purchased electricity herein refers to the difference between total consumption of electricity of industrial subsidiaries of China Petroleum & Chemical Corporation and their self-generated electricity.

### Chemical Oxygen Demand (COD) (tonnes):

Chemical Oxygen Demand (COD) herein refers to the COD of discharged wastewater of the companies included in the key management of emission permits as counted in the environmental protection information system of China Petroleum & Chemical Corporation.

### Nitrogen oxides (tonnes):

Nitrogen oxides herein refers to the amount of nitrogen oxides in the external exhaust gas of the companies included in the key management of emission permits as counted in the environmental protection information system of China Petroleum & Chemical Corporation.

### Weight of disposed hazardous waste (thousand tonnes):

Weight of disposed hazardous waste herein refers to the total weight of hazardous waste entrusted for process and disposal, which is collected in the Environmental Protection Information System of China Petrochemical Corporation.

### Number of accidents reported:

Number of accidents reported herein refers to the number of General Grade A and higher accidents that occurred of China Petroleum & Chemical Corporation. A General Grade A accident means an accident in which some person died.

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### Compilation and Reporting Basis of Key Data (Continue)

### Number of deaths due to production safety accidents:

Number of deaths due to production safety accidents herein refers to the number of permanent employees that are eventually confirmed dead in General Grade A accidents of China Petroleum & Chemical Corporation.

### Total recorded accident (Incident) rate (per 200,000 working-hours):

Total recorded accident (Incident) rate (per 200,000 working-hours) herein refers to the number of accidents (Incident) that occurred of China Petroleum & Chemical Corporation, per 200,000 working-hours.

### Fatal accident rate (per 200,000 working-hours):

Fatal accident rate (per 200,000 working-hours) herein refers to the number of fatal accidents that occurred in General Grade A accidents of China Petroleum & Chemical Corporation, per 200,000 working-hours.

### Total number of employees:

Total number of employees herein refers to the total number of employees who has signed fulltime employment contracts with China Petroleum & Chemical Corporation, excluding dispatched employees.

### Employees with master's degree or above

Employees with master's degree or above herein refers to the total number of employees with a master's degree or above who has signed full-time employment contracts with China Petroleum & Chemical Corporation, excluding dispatched employees.

### Employees with bachelor's degree or below

Employees with bachelor's degree or below herein refers to the total number of employees with a bachelor's degree or below who has signed full-time employment contracts with China Petroleum & Chemical Corporation, excluding dispatched employees.

### Employee turnover rate (%):

Employee turnover rate herein refers to the proportion of the number of employees whose labor contracts were terminated by China Petroleum & Chemical Corporation for personal reasons (excluding ordinary employees such as gas station operators).

## Turnover rate of male employees (%)

Employee turnover rate of male employees herein refers to the proportion of the number of male employees whose labor contracts were terminated by China Petroleum & Chemical Corporation for personal reasons (excluding ordinary employees such as gas station operators).

### Turnover rate of female employees (%)

Employee turnover rate of male employees herein refers to the proportion of the number of female employees whose labor contracts were terminated by China Petroleum & Chemical Corporation for personal reasons (excluding ordinary employees such as gas station operators).

### Compilation and Reporting Basis of Key Data (Continue)

### Percentage of female employees (%):

Percentage of female employees herein refers to the proportion of the number of female employees who has signed full-time employment contracts with China Petroleum & Chemical Corporation, excluding dispatched employees, to total number of the employees.

### Percentage of female employees in operational management:

Percentage of female employees in operational management herein refers to the proportion of the number of female employees in the operational management function who have signed full-time employment contracts with China Petroleum & Chemical Corporation, excluding dispatched employees, to total number of the employees in the operational management function who have signed full-time employment contracts.

### Percentage of minority employees:

Percentage of minority employees herein refers to the proportion of the number of ethnic minority employees who have signed full-time employment contracts with China Petroleum & Chemical Corporation, excluding dispatched employees, to total number of the employees who have signed full-time employment contracts.

### Number of patients cured under the Lifeline Express Programme:

Number of patients cured under the Lifeline Express Programme herein refers to the number of patients who have undergone rehabilitation surgery in the Lifeline Express Programme, which was launched by China Healthy Express Foundation in reporting year and supported by China Petroleum & Chemical Corporation.

### Number of patents applied for this year:

Number of patents applied for this year herein refers to the number of patent application documents submitted by China Petroleum & Chemical Corporation to the China Intellectual Property Office and overseas national or regional intellectual property institutions in this year.

### Number of authorized patents this year:

Number of authorised patents in this year herein refers to the number of patent authorisation certificates issued by China Intellectual Property Office and overseas national or regional intellectual property institutions obtained by China Petroleum & Chemical Corporation in this year.

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# **REPORT CONTENT INDEXES**

# **HKEX ESG Reporting Guide Content Index**

Subject Areas, A	spects, Gene	eral Disclosures and KPIs	Pages
<b>A</b> Environn	nental		
Aspect A1 Emissions	General Disclosure Information on (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.		
	KPI A1.1	The types of emissions and respective emissions data.	109-110
	KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g., per unit of production volume, per facility).	43; 109
	KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g., per unit of production volume, per facility).	68; 110
	KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g., per unit of production volume, per facility).	68; 110
	KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	39-56; 59-71
	KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	67-68
Aspect A2 Use of	General Disc Policies on	closure the efficient use of resources, including energy, water and other raw materials.	45; 67 69; 72
Resources	KPI A2.1	Direct and/or indirect energy consumption by type (e.g., electricity, gas or oil) in total (kWh in'000s) and intensity (e.g., per unit of production volume, per facility).	109
	KPI A2.2	Water consumption in total and intensity (e.g., per unit of production volume, per facility).	109
	KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	45-56
	KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	69-70
	KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	N/A <sup>Note</sup>
Aspect A3 The	General Dise Policies on	closure minimizing the issuer's significant impacts on the environment and natural resources.	39; 49 59-60
Environment and Natural Resources	KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	41-56 59-64
Aspect A4 Climate Change		closure identification and mitigation of significant climate-related issues which have and those which may impact, the issuer.	38-42
	KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	38-56

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Б	pects, Gener	al Disclosures and KPIs	Pages
<b>B</b> Social			
Employment a	nd Labou	r Practices	
Aspect B1  Employment  (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equity opportunity, diversity, anti-discrimination, and other benefits and welfare.		87-90; 9.	
	KPI B1.1	Total workforce by gender, employment type (for example, full- or part- time), age group and geographical region.	11
	KPI B1.2	Employee turnover rate by gender, age group and geographical region.	11
Aspect B2 Health and Safety	(a) the polic	closure Information on ies; and (b) compliance with relevant laws and regulations that have a significant ne issuer relating to providing a safe working environment and protecting employees ational hazards.	77-80
	KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	113
	KPI B2.2	Lost days due to work injury.	N/A <sup>Note</sup>
	KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	77-80; 83-84
Aspect B3 Development and Training	elopment Policies on improving employees' knowledge and skills for discharging duties at work.		95-9
	KPI B3.1	The percentage of employees trained by gender and employee category (e.g., senior management, middle management).	112
	KPI B3.2	The average training hours completed per employee by gender and employee category.	112
Aspect B4 Labour Standards	abour (a) the policies; and (b) compliance with relevant laws and regulations that have a significant		87-8
	KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	88
	KPI B4.2	Description of steps taken to eliminate such practices when discovered.	88
Note: The indicator	is not annlicable	e since the main products sold by the Company are energy and chemical products.	

Note2: The indicator is not applicable, because the Company has calculated and disclosed the total recorded accident (incident) rate per 200,000 working-hours and the fatal accident rate per 200,000 working-hours in accordance with the OSHA standards instead.

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<b>D</b>	pects, Gener	ral Disclosures and KPIs	Pages	
<b>B</b> Social				
Operating Prac	ctices			
Aspect B5 Supply Chain	General Disclosure Policies on managing environmental and social risks of the supply chain.			
Management	KPI B5.1	Number of suppliers by geographical region.	114	
	KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	102-104	
	KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	102	
	KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	103	
Aspect B6 Product Responsibility	(a) the polic impact on tl	closure Information on ies; and (b) compliance with relevant laws and regulations that have a significant he issuer relating to health and safety, advertising, labelling and privacy matters products and services provided and methods of redress.	107-108	
	KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	108	
	KPI B6.2	Number of products and service related complaints received and how they are dealt with.	108	
	KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	27	
	KPI B6.4	Description of quality assurance process and recall procedures.	107	
	KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	108	
Anti- (a) the polic		closure Information on ies; and (b) compliance with relevant laws and regulations that have a significant he issuer relating to bribery, extortion, fraud and money laundering.	23	
	KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	25	
	KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	24; 26	
	KPI B7.3	Description of anti-corruption training provided to directors and staff.	25	
Community				
Aspect B8 Community Investment		closure community engagement to understand the needs of the communities where the ates and to ensure its activities take into consideration the communities' interests.	99-101 105-106	
	KPI B8.1	Focus areas of contribution (e.g., education, environmental concerns, labour needs, health, culture, sport).	99-101	
	KPI B8.2	Resources contributed (e.g., money or time) to the focus area.	105-106	

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# UNGC Ten Principles Index

Scope	UNGC's Ten Principles	Pages
Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights.	87-89
	2. Make sure that they are not complicit in human rights abuses.	87-89
Labour	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	91
	4. The elimination of all forms of forced and compulsory labour.	88-89
	5. The effective abolition of child labour.	88
	6. The elimination of discrimination in respect of employment and occupation.	87-90
Environment	7. Businesses should support a precautionary approach to environmental challenges.	38-56; 59-64
	8. Undertake initiatives to promote greater environmental responsibility.	45-56; 65-74
	9. Encourage the development and diffusion of environmentally friendly technologies.	45-56; 65-74
Anti- Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	23-26

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# SDGs Mapping Table

52-54

SDUS Ma	philig lable		
SDGs	Sinopec Corp. Actions Disclosure Index in 2023 (Pages)	SDGs	Sinopec Corp. Actions Disclosure Index in 2023 (Pages)
1 NO POVERTY	99-101	10 REDUCED INEQUALITIES	87-90
2 ZERO HUNGER	99	11 SUSTAINABLE CITIES AND COMMUNITIES	53-54
3 GOOD HEALTH AND WELL-BEING	77-80; 83-84	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	77-80; 83-84 102-104; 107-108
4 QUALITY EDUCATION	95-96; 100	13 CLIMATE ACTION	38-56
5 GENDER EQUALITY	87-90	14 LIFE BELOW WATER	73-74
6 CLEAN WATER AND SANITATION	69	15 LIFE ON LAND	73-74
7 AFFORDABLE AND CLEAN ENERGY	51-56	16 PEACE JUSTICE AND STRONG INSTITUTIONS	23-26
8 DECENT WORK AND ECONOMIC GROWTH	90; 92-93; 95-96	17 PARTNERSHIPS FOR THE GOALS	31-34; 39

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# TCFD Index

TCFD recommend	ded disclosures	Pages
Governance	Disclose the organisation's governance around climate-related issues and opportunities.	
	a) Describe the board's oversight of climate-related risks and opportunities.	38
	b) Describe the management's role in assessing and managing climate-related risks and opportunities.	38
Strategy	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy and financial planning where such information is material.	
	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	41-42
	b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.	41-42
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2° C or lower scenario.	39-42
Risk	Disclose how the organisation identifies, assesses and manages climate-related risks.	
Management	a) Describe the organisation's processes for identifying and assessing climate-related risks.	38; 41-42
	b) Describe the organisation's processes for managing climate-related risks.	38; 41-42
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.	39-42
Metrics and Targets	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	
	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	39-43; 109
	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions, and the related risks.	43; 109
	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	39-56

# **UNGC Advanced Level Criteria Index**

Scope	Criteria for UNGC Advanced Level	Pages
Strategy Governance and Engagement	Criterion 1: Key aspects of the Company's advanced level sustainability strategy in line with Global Compact principles	3
zugagement	Criterion 2: Effective decision-making processes and systems of governance for corporate sustainability	3; 9
	Criterion 3: Engagement with all important stakeholders	10
UN Goals and Issues	Criterion 4: Actions taken in support of broader UN goals and issue	121
Human Rights Implementation	Criterion 5: Robust commitments, strategies or policies in the area of human rights	87-88
Implementation	Criterion 6: Effective management systems to integrate the human rights principle	88
	Criterion 7: Effective monitoring and evaluation mechanisms of human rights integration	88
	Criterion 8: Key outcomes of the human rights integration	87-96
Labour Principles	Criterion 9: Robust commitments, strategies or policies in the area of Labour	87; 89
Implementation	Criterion 10: Effective management systems to integrate the Labour principle	87-96
	Criterion 11: Effective monitoring and evaluation mechanisms of the labour principle integration	87-96
	Criterion 12: Key outcomes of the Labour principle integration	87-96
Environmental Stewardship Implementation	Criterion 13: Robust commitments, strategies or policies in the area of environmental stewardship	38-40; 44-45; 49 51; 60-74
Implementation	Criterion 14: Effective management systems to integrate the environmental principle	60-74
	Criterion 15: Effective monitoring and evaluation mechanisms for environmental stewardship	59-64
	Criterion 16: Key outcomes of the environmental principle integration	45-56; 65-74
Anti-Corruption Implementation	Criterion 17: Robust commitments, strategies or policies in the area of anti-corruption	23
Implementation	Criterion 18: Effective management systems to integrate the anti-corruption principle	23-24
	Criterion 19: Effective monitoring and evaluation mechanisms for the integration of anti- corruption	24-26
	Criterion 20: Key outcomes of the anti-corruption principle integration	25
Value Chain Implementation	Criterion 21: Implementation of the Global Compact principles in the value chain	102-104; 107-108
Transparency and Verification	Criterion 22: The COP provides information on the Company's profile and context of operation	Report Information
	Criterion 23: The COP incorporates high standards of transparency and disclosure	Report Information
	Criterion 24: The COP is independently verified by a credible third-party	115-120

EEDBACK — 2023 Sinopec Corp. Sustainability Report - SINOPEC 128

# **FEEDBACK**

Dear Readers,

Thank you for reading this report. Your opinions and suggestions are important to us and can help us improve the preparation of future reports. Please help us by completing the following Feedback Form and sending it to the following address:

Office of the Board

Your Information

China Petroleum & Chemical Corporation

No.22 Chaoyangmen North Street, Chaoyang District, Beijing 100728, PRC

Nar	ne:						
Org	anisation:			Title:			
Tel:		Fax:		E-ma	il:		
Mu	ltiple choice questions (please pla	ce a check mark √ in the ansv	wer box)				
Cor	tent		Very goo	d / Good	l/ Fair/	Poor / \	ery poor
1	This report provides a complete and accueconomic, social and environmental imp						
2	This report responds to and discloses info	formation about the concerns of					
3	The information, indicators and data disc accurate and complete.	closed in this report are clear,					
4	This report is easy to read, i.e., its struc						
On							
Οþ	en-ended questions						
1	What do you like the most of this report	t?					
2	What other information do you think th	at should be included in this repor	t?				
3	What are your suggestions that how we	can better prepare our sustainable	e developmer	t progress	report in	the futur	e?





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