中国石化
SINOPEC

2024 SINOPEC CORP. SUSTAINABILITY REPORT

CLEANER ENERGY BETTER LIFE

Report Information

The 2024 sustainability report (hereinafter referred to "SR") is the 19th 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") undertakings and performances in 2024, and addresses the expectations and concerns of our stakeholders.

Report Perimeters

This report covers our business activities from January 1, to December 31, 2024, 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 March 21, 2025. 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/u/cms/gfyw/202502/211019456wne.pdf

References

This report is prepared in accordance with the *Guidelines No.14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)* and the *Environmental, Social* and *Governance Reporting Guide* issued by Hong Kong Stock Exchange (HKEx), and with reference to the *Guidance on Climate Disclosures* issued by HKEx, *Ten Principles of the United Nations Global Compact* (UNGC) and the criteria of the *Global Compact Communication on Progress*, 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). This report provides a quantified coverage of the management of key ESG issues of the Company, covering both environmental performance and social performance (see the "Performance Report" and other sections of this report for details). This report adheres to the principle of consistency to ensure the comparability of disclosed data historically. The statistical scope and calculation methods of key ESG performance indicators disclosed in this sustainability report remain basically consistent with the previous year, with no significant adjustment.

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 March 21, 2025 and the Company undertakes no obligation to update these forward-looking statements unless required by an appropriate regulatory authority.

CONTENTS

Letter from Chairman 001

Board's Statement on ESG Governance 003

About Us 004

Awards and Recognitions 005

KEY PERFORMANCE 133

Environmental Performance 133

Social Performance 135

INDEPENDENT ASSURANCE REPORT 139

REPORT CONTENT INDEXES 148

Guidelines No.14 of Shanghai Stock Exchange for Self-Regulatoryof Listed Companies– Sustainability Report (Trial) 148

HKEX ESG Reporting Guide Content Index 149

UNGC Ten Principles Index 152

SDGs Mapping Table 153

TCFD Index 154

UNGC Criteria Index 155

FEEDBACK 156

CORPORATE GOVERNANCE 1

1.1 Sustainability Management 009

1.2 Governance System 014

1.3 Integrity and Compliance 021

1.4 Risk Management and Internal Control 029

ADDRESSING CLIMATE CHANGE AND ENERGY TRANSITION 3

3.1 Governance 043

3.2 Strategy 045

3.3 Management of Impacts, Risks and Opportunities 051

3.4 Metrics and Targets 051

3.5 Reducing GHG Emissions 054

3.6 Promoting Energy Transition 061

SAFETY MANAGEMENT 5

5.1 Production Safety and Occupational Health 087

5.2 Contractor Safety 095

5.3 Public Security 096

5.4 Cybersecurity and Privacy Protection 097

ACTIVELY FULFILLING SOCIAL RESPONSIBILITY 7

7.1 Product Quality Management 115

7.2 Contributing to Philanthropy 121

7.3 Sustainable Supply Chain 126

7.4 Community Communications and Engagement 130

TECHNOLOGICAL INNOVATION 2

2.1 Governance 035

2.2 Strategy 037

2.3 Management of Impacts, Risks and Opportunities 038

2.4 Technological Innovation Achievements 039

2.5 Metrics and Targets 040

ENVIRONMENTAL PROTECTION 4

4.1 Environmental Protection Guidelines and Goals 069

4.2 Environmental Protection Management System 070

4.3 Environmental Risk Management 071

4.4 Environmental Impact Management 073

4.5 Pollution Treatment 075

4.6 Solid Waste Management 077

4.7 Water Resources Management 080

4.8 Prevention of Hydrocarbon Leaks 081

4.9 Land Resource Management 082

4.10 Ecosystem and Biodiversity Conservation 083

RESPECTING HUMAN RIGHTS AND CULTIVATING TALENTS 6

6.1 Respecting and Protecting Human Rights 101

6.2 Employee Development 107

Letter from Chairman

Dear Friends,

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

Sinopec Corp. fully and faithfully applies the new development philosophy on all fronts, firmly follows the path of green and low-carbon development and actively contributes to the sustainable development of society. In the past year, we comprehensively promoted high-quality development, continuously strengthened ESG governance and disclosure, and made concrete progresses in corporate governance, green and low-carbon development, technological innovation, transition and upgrading, safety management, and social responsibility, further solidifying the foundation for sustainable development of the Company.

New improvements in corporate governance capabilities

We optimised corporate governance structure, successfully completed the re-election of the Board of Directors and the Board of Supervisors, and further strengthened the roles of Board committees and independent directors to ensure sound decision-making. We enhanced our internal control and risk management systems, fostering a virtuous cycle of anti-corruption, risk prevention, and enterprise reform. We implemented the *Corporate Value and Return Enhancement Action Plan,* and the *Dividend Distribution and Return Plan for Shareholders for the Next Three Years (2024-2026)*, formulated the market value management regulation, and performed market value management by laws and regulations to safeguard corporate value and shareholder rights. We deepened research on material ESG issues and improved ESG management and disclosure.

New accomplishments along the path of green development

We actively responded to climate change and set the goal of peaking carbon emissions before 2030, limiting the increase to no more than 30% compared to 2020 levels, reducing carbon emissions by over 25% from peak levels by 2040, and striving to achieve carbon neutrality around 2050. We conducted comprehensive review of our environmental protection efforts, addressed inadequacies and shore up points of weakness. We initiated *Phase Two of the Green Enterprise Campaign*, and promoted concerted efforts to cut carbon emissions, reduce pollution, enhance efficiency, expand green development, resulting in the recovery of a total of 2.1 million tonnes of carbon dioxide and 956 million cubic metres of methane throughout the year. We accelerated the construction of the product carbon footprint management system and participated in the initiation of the Carbon Footprint Alliance for the Energy and Chemical Industrial Chain. Additionally, we continued to implement resource conservation and efficient utilisation initiatives, reducing energy consumption by 790,000 tonnes of standard coal, achieving a steady decrease in wastewater COD discharges and sulphur dioxide emissions, and attaining a solid waste proper disposal rate of 100%.

New achievements in technological innovation

We vigorously promoted the integrated development of sci-tech innovation with industrial innovation, deepened the reform of the R&D system and mechanisms, established state-level research institutions in the energy sector, and achieved new results. In upstream , we made significant breakthroughs in the theories and technologies related to deep and ultra-deep shale gas exploration. Profitable production were obtained by applying shale oil development technologies in Jiyang and North Jiangsu basins. In refining, the implementation of catalysts and technologies for producing light aromatic (BTX) products through light cycle oil (LCO) hydrocracking and aromatic extraction represented a substantial advancement in the development of refined oil products to chemical feedstocks. Additionally, several specialty oil products, including animal vaccine white oil and ultra-high voltage transformer oil, achieved batch production. In chemical, we put into operation the world's first cyclohexene esterification and hydrogenation unit for producing cyclohexanone, and carried forward ultra-high molecular weight polyethylene, linear alpha-olefin (LAO) and other key technologies into industrial application. The world's first intelligent ethylene factory based on digital twin technology came into operation. In 2024, we filed a total of 9,666 patent applications both in China and globally, with 5,550 patents granted.

New advancements in industrial upgrading and transformation

We accelerated the pace of industrial upgrading and transformation in pursuit of high-end, more intelligent, and green development. We consistently intensified our oil and gas exploration and development, achieved strategic breakthroughs in the exploration of ultra-deep Cambrian shale gas in the Sichuan Basin, expedited the construction of the Jiyang National Shale Oil Demonstration Area in Shengli Oilfield, and attained record profits across the entire natural gas industrial chain. Efforts were made to carry forward low-cost "refined oil products to chemical feedstocks" and high-value "refined oil products to refining specialties" strategy and high-end carbon materials and other specialty refining products achieved an increase in volumes and profits. We completed the construction of Zhenhai high-end new materials project and accelerated the development of Maoming refining upgrading and ethylene quality improvement project. Furthermore, we advanced the transition to a comprehensive energy service provider encompassing "oil, gas, hydrogen, electricity, and services," steadily rolling out green hydrogen projects, with 142 hydrogen refuelling stations completed, including the first hydrogen re-fuelling station outside Mainland China. We intensified the development of the battery recharging network, with nearly 100,000 charging terminals established, continuously enhancing the new energy supply capacity for mobility.

New developments in safety management

We continuously optimised the structure and operation of HSE management system to implement more professional approaches including implementing safety responsibility system for all employees, deepening the Year of Safety Management campaign, strengthening the management and control of major risks, intensifying the investigation and remediation of safety hazards, reinforcing safety management for contractors and construction operations, and tightening safety supervision for hazardous materials transportation as well as the prevention of seasonal natural disaster risks. As a result, our overall safety performance has remained stable. We continuously strengthened our health management capabilities, improving the working environment, enhancing the prevention and control of occupational diseases at their sources, and promoting the establishment of "Healthy Enterprises" to comprehensively safeguard the occupational, physical, and health of our employees.

New contributions towards fulfilling our social responsibilities

We are committed to closely integrating high-quality development with addressing the people's needs for a better life. We continued to support rural revitalisation following our characteristic assistance model of "empowering development with education assistance, driving industrial development with consumption assistance, and powering rural revitalisation with industrial assistance", and carried out our brand public welfare programmes, such as the "Sinopec Lifeline Express", "Warm Stations", "Driver's Home", and "Spring Bud Service Station". We facilitated the mutual growth of enterprise and employees adhering to the people-oriented development concept, and further strengthened the communication with our stakeholders to build stable and harmonious community relations.

Looking ahead to 2025, Sinopec Corp. will resolutely follow the path of high-quality development and comprehensively improve ESG management.

We aim to collaborate with our stakeholders to promote more sustainable development of the enterprise, thereby fostering a virtuous cycle of coordinated and mutually reinforcing economic, social, and environmental progress.

We greatly value your insightful suggestions for our sustainable development and eagerly anticipate collaborating with all of you to foster a better quality of life and create a brighter future!

Ma Yongsheng
Chairman
March 21, 2025

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 *Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)* 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, safety and occupational health, technological innovation, and product quality 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 serving as the chairperson of the committee. The Sustainability 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 Policies

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, industry trends, ESG related regulatory changes, corporate strategy, production and operation results, and stakeholder engagement of the Company. It also carries out materiality analysis by interviewing key departments, trainings and exchanges, thematic exchanges, expert assessment, and stakeholder engagement, to identify the impacts, risks and opportunities of the Company's key ESG issues, continuously optimise its ESG management and risk control, and improve the overall ESG governance of the Company.

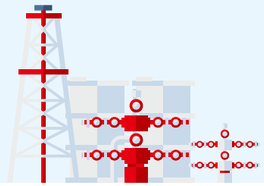
Targets, Indicators and Review of Progresses

The Company has established an ESG target management mechanism, and set up ESG performance targets in its development plans and key tasks on key issues that highly related to the development of Company, such as climate change, safety and occupational health, technological innovation, and product quality management. The Sustainability Committee regularly reviews the progress of the targets and reports to the Board of Directors accordingly. To ensure the fulfillment of these targets, the Company signs annual performance commitments with management staff and subsidiaries to integrate key ESG performance indicators into the KPIs for key management staff. To ensure the reliability of our ESG performance indicators, the Company contracted KPMG Hua Zhen LLP to conduct an independent assurance of the 2024 Sinopec Corp. Sustainability Report, and issued independent assurance opinions regarding 27 ESG performance indicators of the Company.

Board of Directors
China Petroleum & Chemical Corporation
March 21, 2025

About Us

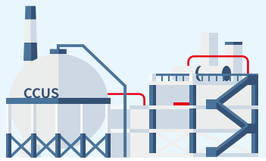
Sinopec Corp. was established on February 25, 2000, listed on the Hong Kong Stock Exchange in October 2000 and the Shanghai Stock Exchange in August 2001. Sinopec Corp. is one of the largest integrated energy and chemical companies in China, with its business scope all over the world, mainly including 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. The Company also actively explores new businesses in the fields of biofuel, hydrogen energy, new energy vehicle battery charging and swapping stations, as well as solar, wind and other new energy businesses.



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 2024, Sinopec Corp.'s crude oil production was 254.00 million barrels and natural gas production was 1,400.39 billion cubic feet.



Refining

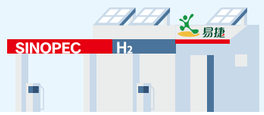
Sinopec Corp.'s primary refining assets are located in China.

In 2024, Sinopec Corp. processed 252.30 million tonnes of crude oil and produced 153.49 million tonnes of refined oil products

Marketing and Distribution

Sinopec Corp. has a well-established marketing network for refined oil products in China, with 30,987 service stations.

Sinopec Corp. sold a total of 182.82 million tonnes of refined oil products on the domestic market in 2024.

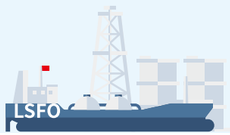


As of the end of 2024, Sinopec Corp. has built 142 hydrogen refuelling stations and over 10,000 battery charging and swapping stations cumulatively.

Chemicals

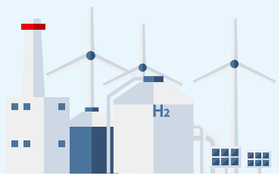
Sinopec's primary chemical assets are located in China, producing and selling various petrochemical products such as synthetic resins, synthetic fibres, synthetic rubber, basic organic chemicals, etc.

In 2024, Sinopec Corp. produced 13.47 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 eight directly affiliated research institutes and over 50 enterprise-level research institutes. In addition, the Company has established more than 20 national-level R&D centres.

As of the end of 2024, Sinopec Corp. had been granted 60,885 patents cumulatively, of which 5,550 were granted within the year.

Awards and Recognitions

China Securities Golden Bauhinia Award for

Outstanding Contribution Award for Enterprises on the 75th Anniversary of the Founding of New China

Outstanding Investor Relations Management Listed Company

The State-owned Assets Supervision and Administration Commission of Central Broadcasting Station

Central Enterprises Listed Companies ESG Pioneer 100 Index (2024)

Institutional Investors

Most Admired Companies in Asia

Best Investor Relations Company

Best Investor Relations Team

Best ESG Team

China Association for Public Companies

Best Practices in ESG

Best Practices in Board of Directors

Shanghai Securities Journal

Shanghai Stock Exchange Gold Quality - Corporate Governance Award

Securities Market Weekly

ESG Golden Dawn Award

Cailian Press

ESG Pioneer Award

S&P Global

Selected for S&P Global's *Sustainability Yearbook (China Edition) 2024*

Sino-European Corporate ESG Best Practice in Frankfurt

Environmental Protection Best Case

China News Service

2024 Annual Low Carbon Case

National Business Daily

Best Shareholder Return in 20-Year Award for Listed Companies

Wind

Top 100 ESG Best Practices of Chinese Listed Companies

Zhitong Finance

Best Energy and Resources Company Award

New Fortune Magazine

Best Listed Company Award

CORPORATE GOVERNANCE

1

1.1 Sustainability Management 009

1.2 Governance System 014

1.3 Integrity and Compliance 021

1.4 Risk Management and Internal Control 029

1.1 Sustainability Management

ESG Governance Structure

The Sustainability Committee under the Board ensures the integration of ESG issues into corporate strategic planning and key decision-making of the Company through improving ESG top-level design, providing a solid foundation for the continuous optimisation of the Company's ESG governance. In 2024, the Board was re-elected. The newly appointed directors have rich professional expertise in areas such as petroleum and petrochemicals, finance and investments, green investment, auditing and risk management, energy and environmental economics, and climate response, which further helps enhance the decision-making, coordination, and management capabilities on key ESG issues of the Board.

The Board of Directors	The Board of Directors is the top ESG decision-making body, responsible for the overall planning and coordination of its ESG governance.
The Sustainability Committee	The Sustainability Committee under the Board of Directors, with the Chairman of the Board as the chairperson of the Committee, is responsible for supervising and deliberating the Company's ESG strategy, targets and annual plans, and reporting ESG implementation results and major plans to the Board of Directors. The Strategy Committee under the Board of Directors participates in the deliberation and decision-making of the Company's ESG-related matters such as climate response, health and safety management and technological innovation.
Headquarters	Our headquarters is responsible for the overall coordination and implementation of the Company's ESG management, and functional departments, such as Health, Safety, and Environment (HSE), Human Resources, and Enterprise Restructuring and Legal, are responsible for managing specific ESG issues and tracking the progresses of achieving relevant ESG indicators and targets.
Subsidiaries	Our subsidiaries operate in accordance with the Company's ESG management policies, ESG master plan, targets and tasks.

Stakeholders Engagement

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

The Company has established and strictly implements policies such as the *Investor Relations Management Policy*, and maintains frequent communication with investors and other stakeholders each month. To enhance the stakeholders' understanding of Sinopec Corp., the Company continuously expands the breadth and depth of stakeholder communication through various channels, including shareholder meetings, roadshows, reverse roadshows, analyst meetings, hosting visitors, hotlines, dedicated corporate website columns, and new media platforms. Members of the Board and senior management of the Company also actively communicate with stakeholders including investors, solicit feedback and suggestions, and respond to questions and inquiries in a timely manner.

The Company strictly fulfils its information disclosure obligations in accordance with laws and regulations in each listing location. Guided by the needs of investors, the Company continuously optimises disclosure content and methods, such as producing digital materials such as infographics, to improve the effectiveness of information disclosure. In 2024, the Sinopec Corp. received an A-level evaluation from the Shanghai Stock Exchange in recognition of its outstanding information disclosure for the 11th consecutive year.

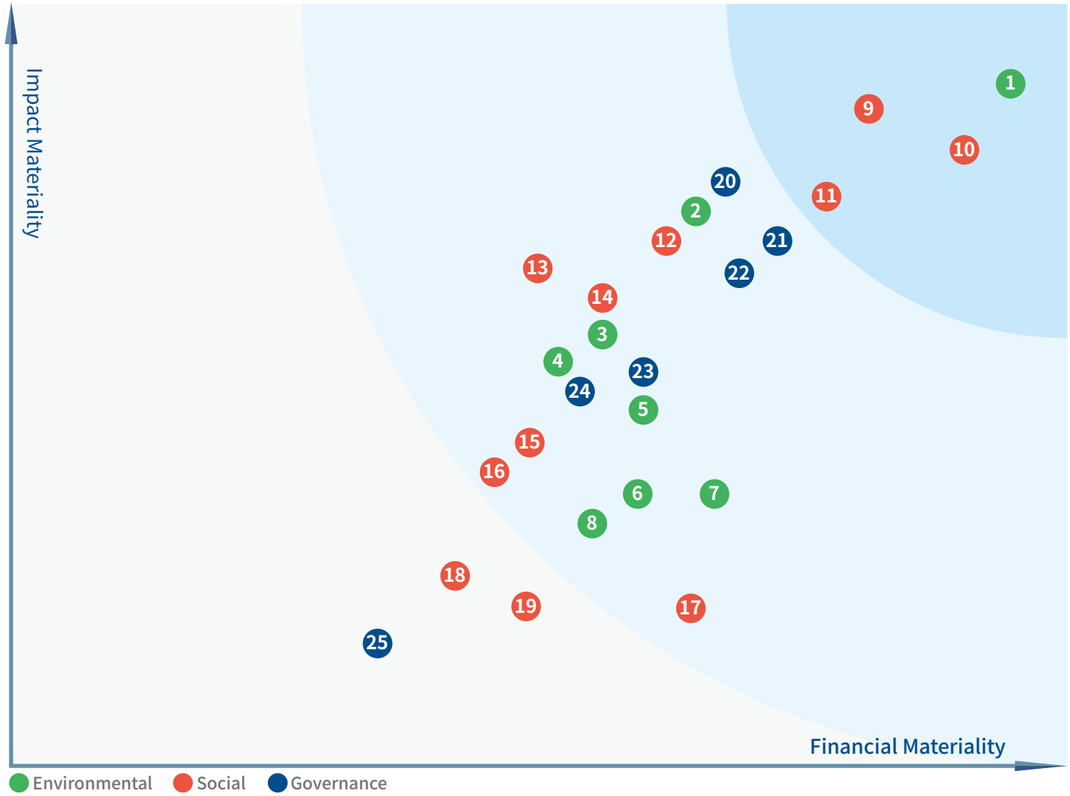
Stakeholders	Key Communication Topics	Communication Channels
Shareholders and Investors	Business performance Addressing climate change Green-oriented transition of energy Investing in new energy Technological innovation Risk management and operation compliance	Compliance with information disclosure requirements Performance release and meeting Teleconference and online communication Capital market conference, investor hotline, and roadshows
Government and Regulations	Technological innovation Business ethics and anti-corruption Risk management and operation compliance Investing in new energy Addressing climate change Ensuring energy supply Safety and occupational health	Daily communication and reporting Discussion and seminar Project approval Government supervision and regulation
Customers	Product quality management Investing in new energy Ensuring energy supply Technological innovation Digital transformation	Daily service communication Customer visit and meeting Satisfaction survey Website, WeChat and other online media
Employees	Safety and occupational health Employee training and career development Respecting human rights	Collective negotiations and employee representative conference Visit and research | Annual commendation Regular trainings | Corporate cultural activities Website, WeChat and other online media
Partners and Suppliers	Supply chain stability Product quality management Business ethics and anti-corruption Supply chain sustainability	R&D cooperation Supplier negotiation and communication Supplier due diligence Supplier training
Communities	Community communication and engagement Taxation and job creation Responsible supply chain Supporting rural revitalisation	Corporate philanthropy | On-site research Community communication activities Open Day events Complaint whistleblowing hotline Media communication
	Addressing climate change Green-oriented transition of energy Pollution and emissions control Protecting biosystem and biodiversity Water resources management Solid waste management	Project environmental and social risk assessment Environmental information disclosure Community communication Environmental performance monitoring and disclose Respond to external investigation Pop science and environmental protection activities

Materiality Analysis

In 2024, the Company conducted both financial and impact materiality analysis on sustainability topics, identifying four issues with financial materiality: addressing climate change, safety and occupational health, technological innovation, and product quality management. In addition, there were also four new topics added to the list of material issues: fair treatment of small and medium-sized enterprises, due diligence, stakeholder communication, and anti-unfair competition.

The Double Materiality Assessment Process of Sustainability Issues

1 Issue Identification	Based a comprehensive review of global sustainability trends, relevant laws and regulations, macro-economic trends, energy and chemical industry trends, and the strategic planning and operation of the Company, we identified 25 sustainability issues of significance both to the Company and its stakeholders.
2 Impact Materiality Analysis	We assessed the impact of each issue, including both positive and negative, and both actual and potential, to evaluate the degree of impact of each issue in combination with communication results with our stakeholders.
3 Financial Materiality Analysis	The Company develops specific annual work plans and five-year development plans focusing on its long-term vision and business ambitions. Potential financial impact of the risks and the opportunities associated with sustainability issues were developed for different timeframes: the short-term (0-1 year), the mid-term (1-5 years), and long-term (more than 5 years). Then we organised a seminar to conduct comprehensively assess and evaluation of the financial materiality of each issue identified.
4 Prioritization of Issues	The management of the Company reviewed and deliberated on the impact materiality and financial materiality analysis results, and reported the list of prioritised issues to the Board for approval.



No.	Sustainability Issues
1	Addressing climate change
2	Environmental compliance management
3	Biosystem and biodiversity protection
4	Circular economy
5	Energy utilisation
6	Water resource utilisation
7	Pollution control
8	Waste disposal

No.	Sustainability Issues
9	Safety and occupational health
10	Technological innovation
11	Product quality management
12	Employee development
13	Rural revitalisation
14	Respect human rights
15	Community communication and engagement
16	Contributing to society
17	Sustainable supply chain
18	Cybersecurity and privacy protection
19	Fair treatment of small- and medium-enterprises

No.	Sustainability Issues
20	Corporate governance
21	Risk management and operation compliance
22	Business ethics and anti-corruption
23	Due diligence
24	Stakeholder engagement
25	Anti-unfair competition

1.2 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 abroad, Sinopec Corp. has formulated and amended its governance policies and systems, such as the *Articles of Association*, to continuously optimise its governance system and mechanism, allowing the Company 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 Committee, and the senior management 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 2024, the Company convened four general meetings, and considered and approved 19 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 Remuneration and Appraisal Committee, the Nomination 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. When the Board of Directors decides on major issues such as the direction of the Company's reform and development, main objectives and tasks, and the arrangement of key work, it listens to the opinions of the Party organization in advance.
Supervisory Committee	The Supervisory Committee 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 Supervisory Committee reports to the General Meeting of Shareholders, with a term of three years for each session. The Ninth Session of Supervisory Committee currently consists of eight supervisors, including three employee representatives, accounting for 38%.
Senior Management	Senior management is appointed by and reports to the Board of Directors. It executes resolutions of the Board, organise the Company's production and operation management, and strive to promote the Company's high-quality development. The Company currently has 13 members of senior management, with the president as the primary person in charge, who reports to the Board of Directors and is under the direction and assessment of the Board.

Corporate Governance Policies

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 sound operation of the Company. The Company follows the latest regulatory rules at home and abroad and carries out timely revisions of relevant policies to ensure its corporate governance system robust and current.

Key Corporate Governance Policies of Sinopec Corp.	*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 Committee 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 Sustainability 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*

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 has established a comprehensive governance system and working mechanism for the Board of Directors, with specific requirements on the authority, composition, and procedural rules, selection process, rights and obligations, and performance evaluation of directors, providing a solid institutional and organisational guarantee for the Board to fulfil its duties. The Company continuously optimises and diversifies the composition of the Board of Directors, strengthens the Board of Directors and its committees, emphasises the role of independent directors, laying a solid foundation for fully realising the effective governance of the Board of Directors.

01 Effectiveness of the Board

In 2024, the Company's Board of Directors acted diligently and responsibly in compliance with regulations, made scientific decisions, and completed a series of tasks, including: the Board's re-election and the appointment of senior management, amendment of the Company's *Articles of Association*, optimisation of internal control system to ensure more effectiveness implementation, increased company value and shareholder equity with generous cash dividends and share buybacks for the third consecutive year, and further optimised corporate governance in terms of information disclosure, investor relations, and ESG governance. In 2024, the Company convened seven Board meetings with a 100% attendance rate of the directors, and considered and approved 52 proposals. The annual report of the Company provides a detailed disclosure of the annual performance of the Board of Directors in the section of the *Report of the Board of Directors*.

Attendance of the Board

All members of the Board acted diligently and fulfilled their duties and authorities in compliance with relevant laws and regulations, the Company's *Articles of Association*, implemented the resolutions of the General Meeting of Shareholders, and actively made key corporate decisions exercising their professional expertise and skills. In 2024, the Company convened seven Board meetings with a 100% attendance rate of the directors, and deliberated and approved 52 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

All non-executive directors on the Company's ninth board serve no more than four listed companies, ensuring that they can dedicate sufficient time and focus to effectively fulfil their responsibilities.

Board Election

Directors shall be elected by the General Meeting of Shareholders, and each session of Board has a three-year tenure. Independent non-executive directors may not be re-elected for more than six years. Independent director candidates are nominated by the Company's Board of Directors, Supervisory Committee, 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, Supervisory Committee, 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 consideration 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.

In 2024, the Company's Board of Directors were re-elected. The Ninth Board of Directors of the Company consists of twelve directors, including six executive directors and six non-executive directors, with non-executive directors accounting for 50% of the Board. The Board has four independent directors, accounting for 33% of the Board.

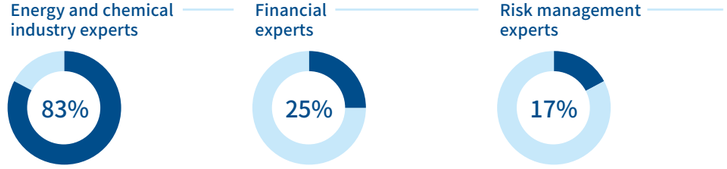
02 Diversity of the Board

The Company has formulated the *Board of Directors Diversity Policy*, stipulating that board members are nominated and appointed based on the skills and experience required for fulfilling their duties. During the process, board diversity is also considered with relevant requirements and goals. 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.

In 2024, the Company's Board of Directors was re-elected. The new session of board members maintain 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 finance, energy and environmental economics, climate governance, and green investment. The Board also has members with experience in auditing and risk management, which is conducive to strategic planning and scientific decision-making of the Company. As of the end of 2024, female directors account for 8% of the Board.

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

Professional Background of Directors



03 Independence of the Board

Independent Director Working Rules

The Company's *Independent Director Working Rules* specifies the qualification requirements, and the nomination, election, and replacement procedures, and the duties and rights of independent directors, ensuring the independent directors can perform their duties. The Company closely followed the reform of the independent director system in China, making timely policy revisions in accordance with revised requirements to further strengthen the guarantee for independent directors to better perform their roles. Company policy stipulates that independent directors shall consist of no less than 1/3 of the Board, with a minimum of three.

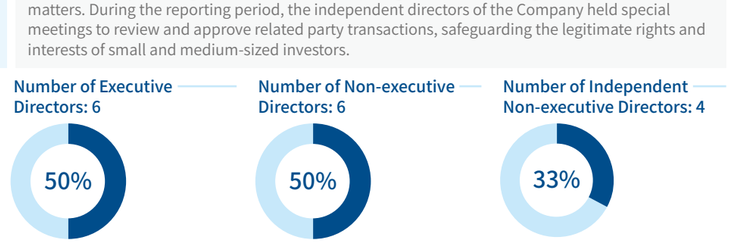
Procedures and Qualifications for the Election of Independent Directors

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 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.

Board Independence and Performance of Independent Directors in 2024

As of the end of 2024, the Board of Directors of the Company consists of four independent directors, accounting for 33% of the Board. 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. During the reporting period, the independent directors of the Company held special meetings to review and approve related party transactions, safeguarding the legitimate rights and interests of small and medium-sized investors.

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



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. 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 2024
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 five directors, including Chairman of the Board, who serves as Chairman of the Committee, and two independent directors.	Convened one meeting in total, with a 100% attendance rate, and considered and approved the *2024 Investment Plan* 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 directors, with an independent director who is an accounting professional as the Chairman. Other members include experts in the energy and chemical industry.	Convened a total of six meetings, with a 100% attendance rate, and deliberated and approved 20 proposals such as the *Internal Control Manual (2024 Edition)* and the *Explanation on the Operating Performance, Financial Condition, and Related Matters for 2023*.
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 directors, one of whom serves as Chairman of the Committee.	Convened two meetings in total, with a 100% attendance rate, and considered and approved the Report on the Implementation of the *Remuneration System for Directors, Supervisors and Senior Managers in 2023*, and the *Explanation of Remuneration for Directors and Auditors of the Ninth Board of Directors*.
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 directors, one of whom serves as Chairman of the Committee.	Convened four meetings in total, with a 100% attendance rate, and considered and approved six proposals, including the *Appointment of Chief Geologist of the Company*, and the *Appointment of the President of the Company*.
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 Chairman of the Committee, and one independent director.	Convened two meetings in total, with a 100% attendance rate, deliberated and approved four proposals, including the *2023 Sustainability Report*, the *Report on 2023 HSE Performance and 2024 HSE Work Plan*, and the *Report on 2023 Compliance and Anti-Corruption Performance and 2024 Work Plan*.

Supervisory Committee

The Supervisory Committee is accountable to the General Meeting of Shareholders. The Supervisory Committee is responsible for safeguarding the legitimate rights and interests of the Company and its shareholders by inspecting and supervising the eligibility of directors and senior management personnel in fulfilling their responsibilities. In June 2024, the Company amended the *Rules of Procedure of the Supervisory Committee of China Petroleum & Chemical Corporation* with the authorisation of the General Meeting of Shareholders, The supervisory committee holds regular meetings at least four times a year, including meetings for reviewing annual, semi-annual and quarterly reports of the Company.

Election Procedures

The term 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.

Election Process

The Company's current session of Supervisory Committee was elected by the General Meeting of Shareholders in June 2024, with eight supervisors in. Among them, there are three employee representative supervisors, accounting for 38% of the Board.

Attendance Requirements

The Supervisory Committee has a minimum attendance requirement for meetings of at least two-thirds of the total for meetings. Supervisors must attend the meeting in person. If a supervisor is unable to attend a meeting for any reason, he or she shall appoint another supervisor in writing to attend on their behalf and exercise their powers.

In 2024, the Supervisory Committee convened five meetings in total, with a 100% attendance rate, and approved a number of proposals, including the *2023 Financial Report*, the *2023 Sustainability Report*, and the *Work Report of the Supervisory Committee of Sinopec Corp. for 2023*. During the reporting period, all supervisors of the new Board of Supervisors attended the training organized by the Beijing Association of Listed Companies, and some supervisors attended the relevant training organized by the Shanghai Stock Exchange.

Remuneration and Appraisal of Directors and Senior Management

01 Compensation Appraisal Mechanism

Sinopec Corp. has established and continuously improves a sound system for managing the compensation and assessment of directors and senior management, with performance indicators on quality and profit, service strategy, innovation, and management optimisation, as well as ESG-related targets such as production safety, energy conservation and environmental protection, and compliance into the performance assessment of management. In 2024, in addition to existing indicators on greenhouse gas emissions, pollutant emissions and discharges, energy efficiency management, and environmental penalties, the Company changed production safety from a compulsory indicator to a weighted assessment indicator, which will be comprehensively assessed on both the processes and the results.

Indicator Category	Assessment Indicators	Weight
Quality and profit indicators	Total profit, costs (expenses), economic value added, return on equity, cash flow	Generally 55%
Service strategy, innovation, and management optimisation indicators	Implementation of strategic planning, total R&D spending, oil and gas production, etc.	Generally 25%
Key task indicators	Implementation results of key task, Implementation results of deepening enterprise reform tasks, etc.	10%
Production safety indicators	Processes and results of production safety management	10% or 8%
Compulsory indicators	Energy conservation and environmental protection, compliance, etc.	A maximum of 10 points can be deducted from operating performance points for poor performance in energy conservation and environmental protection

02 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. For compensation determination, the committee has comprehensively considered the Company's goals and targets, the compensation schemes of industry peers, and the responsibilities and performance of directors and senior management. In March 2024, the Remuneration and Appraisal Committee deliberated and approved the *Report on the Implementation of the 2023 Compensation System for Directors, Supervisors, and Senior Management*.

03 Executive Compensation Management

The Company has formulated and implements a robust performance evaluation and compensation management mechanism for senior management. The compensation for senior management mainly consists of basic annual salary, performance bonuses, and tenure incentives. The Company has also established a claw-back mechanism for performance compensations of senior executives. According to the policies such as the *Sinopec Senior Management Performance Appraisal and Compensation Management Measures*, senior management 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 management 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 management who have already resigned or retired.

1.3 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* and the *Integrity and Compliance Management Manual*. The Company applies a "zero tolerance" attitude towards corruption and violations of business ethics, resolutely strives 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. strives to build a robust legal compliance system. With sound compliance management mechanism, processes, and relevant operational support, the Company fully leverages the "three lines of defence" of compliance management to build a comprehensive, effective, and customised compliance management system. In 2024, the Company further optimised its compliance management focusing on optimisation of leadership responsibility system, legal governance system, policy system, compliance management system, and organization system, and strengthened capacity building in legal support, risk management, and digital management, providing a strong guarantee for the Company's high-quality development.

01 Compliance Policies Guarantee

The Company continuously optimises its compliance management system, and has formulated and implemented a number of relevant policies and regulations, forming a "1+2+N" compliance management policy system. The system is rooted in the *Comprehensive Management Opinions on Strengthening Management in Compliance with Laws and Regulations*, with the *Sinopec Corp. Integrity and Compliance Management Manual* and the *Sinopec Compliance Management Measures* as the main body. Covering extensive areas, such as corporate governance and operations, anti-commercial bribery and anti-corruption, anti-monopoly and unfair competition, and social responsibility and employee rights, this compliance management policy system specifies 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. The Company also integrates compliance and business integrity requirements into the performance assessment of employees with a multi-dimensional evaluation mechanism.

In 2024, the Company revised the *Employee Code of Conduct*, which regulates employee compliance behaviours in terms of health, safety and environmental protection, quality requirements, behavioural norms, business ethics standards, and confidentiality requirements, etc. In addition, the Company also released the Compliance Guidelines for Labor Employment, the Compliance Risk Checklist, and an ESG Compliance Knowledge Reader, and updated the list of laws, regulations, administrative licenses and permits related to production and operation, ensuring the comprehensive implementation of various compliance management requirements in everyday business operations.

Key Compliance Management Policies of Sinopec Corp.

Comprehensive Management Opinions on Strengthening Management in Compliance with Laws and Regulations
Sinopec Integrity and Compliance Management Manual
Sinopec Compliance Management Measures
Sinopec Major Project Legal Compliance Review and Demonstration Management Measures

02 Compliance Risk Management

In 2024, the Company carried out dedicated risk identification regarding labour employment and ESG related risks, and developed the Compliance Guidelines for Labor Employment, the Compliance Risk Checklist, and an ESG Compliance Knowledge Reader based on identification results. The Company also referenced relevant national laws, regulations and regulatory provisions and carried out a comprehensive review of headquarters level management policies related to ecological and environmental management focusing on alignment with compliance requirements, applicability, and degree of standardisation, further optimising the Company's policy systems and management capabilities.

Sinopec Compliance Risk Management "Three Lines of Defence"

First line of defence

The Company and its Direct Affiliates

Establish a comprehensive compliance risk identification, assessment, and early warning mechanism based on the comprehensive risk management framework, and establish 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

Regularly review and analyse the mandatory compliance requirements and voluntary compliance commitments within the scope of their business responsibilities focusing on identifying and rectifying operations that may cause admirative penalties, criminal penalties or significant economic damages, clarifying risk issues, determining risk levels, formulating preventive measures, establishing risk lists, and timely reporting compliance risks to the compliance management department.

Continuously monitor typical, common compliance risks within specific business fields that may cause severe damages and issue timely warnings accordingly.

Third line of defence

The Compliance Management Department

Summarise and analyse the overall compliance risk focusing on factors such as risk likelihoods, impact and severity, and identify and evaluate major and significant compliance risks.

Follow regulatory trends, prompts and urges relevant departments and units to timely identify and evaluate compliance risks and take corresponding measures with measures such as issuing interpretations of new laws and regulations.

Refine responsibility management focusing on key business areas and segments, key personnel and key positions, and issue dynamic monitoring and early warning of major and significant compliance risks.

03 Enhance Audit Supervision

The Company conducts audit supervision over all business segments in strict accordance with the regulatory requirements on audit content and audit frequency. In 2024, the Company carried out its annual audit at all levels, mainly focusing on legal and operational compliance, risk control and prevention, financial derivatives, and overseas investments. The rectification completion rate for projects audited in 2024 reached 100%.

Operational Compliance Audit Process of Sinopec Corp.

Develop Audit Plan	Develop an audit plan based on the principles of compliance, thoroughness, risk aversion, and value enhancement, and develop targeted audit projects regarding new business areas and units with high risk exposures.
Pre-audit Preparation	Select audit teams composed of auditors with appropriate professional backgrounds and technical capabilities, organise pre-audit training, collect relevant materials, and formulate an audit implementation plan.
Audit and Verification	The audit team verifies issues of concerns, collects audit evidence, analyses causes, clarities responsibilities, and proposes specific rectification suggestions.
Draft Audit Reports	The audit team drafts the audit report, and solicits opinions and feedback from the audited unit in written, then the audit agency reviews and issues the final audit report and supporting documents.
Supervise Issue Rectification	The audit agency establishes a rectification list and follow-up.

04 Enhance Compliance Training

In 2024, the Company organised a series of training programmes on compliance. The trainings and skill competitions for legal and personnel reached a total participation of over 310,000 person-times; newly appointed chief legal advisors (chief compliance officers) from 47 directly affiliated units participated in a dedicated training session; and the monthly legal education online lecture series were viewed 70,000 times.

Indicators	2023	2024
Participation in Compliance Training (10,000 person-times)	35	38
Coverage Rate of Employee Compliance Training (%)	60.3	65.5

Business Ethics and Anti-Corruption Management

The Company strictly abides by and operates in accordance with 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 *Management Staff Discipline Provisions for State-Owned Enterprises*, the *Provisions on Integrity and Conduct of State-owned Enterprise Executives*, the *Sinopec Corp. Employee Disciplinary Provisions*, and the *Sinopec Corp. Regulations on Management Personnel's Relatives Engaging in Business Activities*, as well as anti-corruption and anti-bribery laws applicable in the markets where it operates, international conventions such as the *United Nations Convention against Corruption.*

Anti-Corruption Statement of Sinopec Corp.

Sinopec Corp. strictly abides by China's anti-corruption laws and regulations, the *Anti-Money Laundering Law of the People's Republic of China*, the *United Nations Convention against Corruption*, and the relevant anti-corruption and anti-bribery laws applicable to the jurisdictions 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 employees, including labourers and temporary workers, from giving or accepting bribes, or engaging in fraud, blackmail, or monopoly behaviours for any reason, in any form and any jurisdiction. The Company also requires suppliers, contractors, and service providers to follow these requirements. When conducting business and investing overseas, the Company strictly abides by the principles and regulations of anti-corruption, anti-commercial bribery, anti-fraud, anti-money laundering, anti-blackmail, and anti-monopoly.

01 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 in charge of the Company's overall anti-corruption management. The Supervision Department organises and coordinates the implementation of anti-corruption policies accordingly, and reports to the Sustainability Committee of the Board and the Board of Directors the anti-corruption performance of the Company regularly. 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 continuously optimises its internal supervision system, ensuring that directors, supervisors, senior management, and all institutions and personnel with management power are properly supervised. The Company also regularly conducts research and deploys key supervision tasks.

In March 2024, the Company's anti-corruption and compliance management and its performance in 2023 was reviewed by the Sustainability Committee of the Board. The Supervision Department of the Company operates under the oversight of the Board of Directors, Supervisory Committee, and all employees. The Supervision Department also continuously optimises its internal supervision mechanisms and processes to ensure proper check and balance and prevent abuse of power, and regulates the supervision behaviours of lower-level supervisory bodies with regular supervision and inspection. Whistleblowing reports on supervisory bodies and personnel are handled separately and independently investigated by dedicated units. Fraudulent behaviours of supervisory personnel will be thoroughly investigated and strictly disciplined in accordance with relevant laws and regulations as well as Company policies.

02 Anti-Corruption Risk Management

The Company continuously optimises anti-corruption and compliance policies and systems, formulating and revising a number of policies, such as the *Sinopec Compliance Management Measures* and the *Sinopec Employee Disciplinary Regulations*, to lay a solid foundation to ensure the stable development of the Company. In 2024, the Company optimised and implemented the monthly inspection mechanism and the joint investigation and rectification mechanism regarding overseas legal compliance risks, addressing compliance risks faced by overseas subsidiaries in areas such as finance and taxation, labour, anti-corruption and anti-commercial bribery, intellectual property protection, as well as compliance risks related to key business decisions, important contracts, and management of large amount of cash.

Key Anti-corruption Policies of Sinopec Corp.

Sinopec Compliance Management Measures | Sinopec Employee Disciplinary Regulations
Opinions on Strengthening Daily Supervision (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

In 2024, the Company carried targeted integrity risk management measures focusing on material procurement, engineering construction, and product sales, requiring relevant departments to formulate relevant preventive measures, and contracting third-party organisations to evaluate the compliance and integrity of suppliers.

Material Procurement

Strictly implemented laws and regulations governing bidding operations, as well as Company policies such as the *Ten Prohibitions for Material Procurement of Sinopec* and the *Eight Prohibitions for Bidding and Tendering Personnel*, continuously optimised the mechanism of pre-warning, in-process monitoring, and post-evaluation.

Engineering Construction

Optimised the bidding system to ensure centralised, open, competitive and orderly management of engineering bidding projects.

Utilised technologies such as big data and artificial intelligence to strengthen pre-warning, in-process monitoring, and post-evaluation of bidding process.

Carried out targeted improvement projects regarding engineering bidding projects.

Product Sales

Thoroughly reviewed the business integrity risk hazards related to sales of refined oil products, and effectively prevented corruption risks by revising and optimising operation guidelines and organising anti-corruption training and warning education programmes for employees.

03 Key Anti-Corruption Activities in 2024

The Company continuously optimised its anti-corruption and compliance system and carried out targeted anti-corruption campaigns regularly to ensure the effective check and balance and supervision of power. Employee satisfaction regarding the Company's anti-corruption performance has been increasing steadily over the recent years.

Anti-Corruption Education

Promoted an integrity culture with the formulation of the *Measures on Strengthening the Construction of An Integrity Culture in the New Era.*

Included dedicated anti-corruption education in the orientation training for new employees, especially for young managerial personnel; organised the Anti-corruption Education Month campaign focusing on warning education with internal cases; carried integrity and anti-corruption trainings and business practice trainings for employees (including part-time employees) at all levels, covering 100% of employees with a variety of training programmes, such as warning education, individual discussions, and case studies.

In 2024, the Company offered a total of 2,719 anti-corruption and integrity training courses, with a total training participation of 18,886 hours.

Supervision and Targeted Improvement

Revised internal control policies, promoting standardised use of power with more specific guidelines and less room for discretion.

Optimised organisational structure, adding full-time supervisors with specified responsibilities at all levels in support of more collaborative and standardised daily supervision.

Applied digital solutions for supervision, embedding supervision system into key production operations to achieve better early warning capabilities for abnormal business activities. During the reporting period, the intelligent supervision system identified a total of 297 suspected issues, among which 121 were confirmed, leading to the optimisation of two policies.

Carried out targeted optimisation campaigns at home and abroad to ensure sound and standardised management policies and systems in relevant business areas.

Clarified regulations regarding the prohibition of entry for personnel responsible for violating investment business regulations, and strengthened accountability for investments violating the requirements.

Investigation and Disciplinary Actions

Adhered to the "zero tolerance" attitude towards corruption, and conducted in-depth analyses of the causes of corruption cases to prevent future violations.

Strengthened the management and supervision of employees with optimised policy framework and management procedures. Employees who violate business ethics and anti-corruption regulations shall have their cases properly filed and investigated, and handled with the deliberation and approval of the management of the Company in accordance with the *Sinopec Employee Disciplinary Regulations*. In 2024, the Company took anti-corruption disciplinary actions against 8 individuals. Neither the Company nor any of its employee was involved in corruption lawsuits that have been adjudicated by court.

Indicators	2023	2024
Total number of public entries in the Business Disclosure Information System (ten thousand)	536.35	589.26
Number of individuals disciplined for violating the Company's anti-corruption policies	19	8
Number of corruption litigation cases adjudicated by court	0	0

Indicators	2023	2024
Participation of anti-corruption and integrity training (10,000 person-times)	119.7	119.9
Coverage rate of anti-corruption trainings (%)	100	100
Number of disciplinary legal education training sessions (10,000 times)	1.5	1.6
Number of employees participated in disciplinary legal education (10,000 person-times)	89.1	89.6
Coverage of disciplinary legal education and training (%)	100	100
Participation of anti-corruption and integrity training for directors (persons)	9	12
Coverage rate of anti-corruption and integrity trainings for directors (%)	100	100
Participation of anti-corruption and integrity training for senior management (excl. directors) (persons)	4	7
Coverage rate of anti-corruption and integrity trainings for senior management (excl. directors) (%)	100	100

04 Whistleblowing Mechanism and Protection of Whistleblowers

Sinopec Corp. has established a whistleblowing mechanism that open to various parties. As of the end of 2024, the Company's whistleblowing channels include: mailing, in-person interviews, a whistleblowing hotline, a whistleblowing webpage, etc.

The Company fully complies with applicable national laws and regulations on whistleblower protection, and ensures the protection of whistleblowers with a robust internal confidentiality mechanism and standardized procedures for handling whistleblowing complaints. The Company strictly keeps confidential the name, affiliation, and address of the whistleblowers, as well as the content of their complaints. Anonymous whistleblowing complaints are allowed. It is prohibited to identify anonymous whistleblowers through handwriting recognition or IP address analysis. If certain situation makes it necessary to identify an anonymous whistleblowers' identity through such means, such as with suspected false accusation, framing or other disciplinary violations, the investigation activities have to obtain appropriate approval first following due process. Those who intentionally disclose the whistleblowers' identities or retaliate against them will face serious consequences once verified.

Petition and Whistleblowing Handling Procedures

Information review

Review the complaints 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 an initial handling suggestion, and send it to relevant supervisory personnel in charge for approval and implementation.

Statistical analysis

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

05 Business Ethics and Anti-Corruption Audits

The Company conducts annual audits on business ethics standards and their implementation to strengthen the management of business ethics. Across all business segments of the Company, any practices related to integrity, ethics, anti-corruption, and anti-bribery are subject to regular supervision, evaluation, and audits.

Ethics, Anti-Corruption and Compliance Management 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 has specifically included business ethics requirements as compulsory performance indicators, and those who violate business ethics requirements in procurement activities will have their annual supply management performance assessment score deducted.

In 2024, the Company revised the *Sinopec Material Procurement and Resource Supply Management Measures*, further strengthening the management of material procurement and resource supply by putting forward specific requirements for suppliers in terms of occupational health and safety, environmental protection, anti-corruption, and anti-unfair competition. This policy covers all processes of supplier management, from qualification assessment, quantitative evaluation, risk management, and handling of breaches or violations.

Key Supply Chain Anti-Corruption Initiatives in 2024

Comprehensively Implemented Integrity Commitment

Signed an Integrity Commitment with all employees working in the material supply function, further enhancing their self-discipline and awareness of bottom-line and red-line issues.

Signed an *Business Integrity Commitment*, which is attached to the procurement contract or agreement and has the same legal effect, with all contractors and suppliers, specifying relevant integrity and anti-corruption requirements for their personnel.

Formulated the *Compliance Commitment* for suppliers, which requires suppliers to commit that they shall not engage in corruption and commercial bribery, infringement of intellectual property or commercial secrets, unfair competition and monopoly, environmental pollution, and improper disposal of data in personal privacy.

Strengthened External Exchanges

Carried out targeted exchanges with selected suppliers to learn from their anti-corruption management experiences and innovative practices, and discussed ideas and measures to strengthen integrity management in deepening strategic cooperation.

Enhanced Supervision of Business Processes

Identified key integrity risk points in procurement based on common issues and high-priority problems found during internal and external audits, and established an online monitoring system, promoting the standardised management of integrity risks.

Intensified Anti-corruption Education

Conducted targeted training on key risks and integrity management in procurement, enhancing the integrity awareness and risk prevention capabilities of material supply personnel.

Compiled 12 case studies of typical violations based on a comprehensive study of cased happened in material bidding and procurement found during audits in the past three years. The case studies, with in-depth cause analysis and relevant risk control measures, serve as a tool for warning education and have further enhanced the legal compliance awareness and risk prevention capabilities of personnel related to bidding and procurement.

In 2024, a total of 652 contractors/subcontractors, including 381 contractors and 271 subcontractors, received the Company's business ethics and anti-corruption training.

For years, the Company has placed great emphasis on auditing and supervising supplier management, focusing on 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. The Company also entrusted third-party credit rating agencies to conduct compliance and integrity evaluations of contractors and suppliers, assigning comprehensive credit ratings in an effort to establish a system that incentivises integrity while penalizing violations, effectively reducing business risks. In 2024, the Company conducted third-party due diligence assessments on 2,507 suppliers, and completed due diligence assessments on 11,857 suppliers in total. During the reporting period, the Company disqualified 16 suppliers involved in corruption cases.

11,857

Number of suppliers completed due diligence assessments

Anti-unfair Competition

Sinopec Corp. adheres to the principles of fair competition. The Company safeguards consumers' legitimate rights and interests and public interests, refrains from and opposes fraud, coercion, collusion, obstruction and other illegit behaviours, and prohibits damaging the legitimate rights and interests of other operators or consumers through monopoly and unfair competition, and disrupting market competition order. In 2024, the Company had no incident of litigation or major administrative penalties due to unfair competition activities.

The Company has formulated a number of compliance guidelines and risk lists regarding this issue, such as the *Integrity and Compliance Management Manual, Anti-Unfair Competition*, and *Prohibition of Abuse of Market Dominance*, further clarifying its compliance management requirements on ensuring a fair and just market order, firmly preventing unfair competition behaviours, and ensuring compliant market operations.

The Company closely follows the requirements of China's antitrust laws and regulations, and issued the *Notice on Further Improving Antitrust Compliance* to raise awareness of compliance risks and optimise work processes. The Company included anti-trust factors such as concentration of operators into the internal control risk matrix, and set up relevant information modules in its legal compliance management system. In 2024, a total of 8 operator concentration cases were reported, all of which were successfully approved.

Indicators	2024
Monetary value (in RMB10,000) of lawsuits or major administrative penalties due to the unfair competition behaviour	0

Fair Treatment for Small and Medium-sized Enterprises

Sinopec Corp. strives to treat small and medium-sized enterprises equally and promote the joint co-development with upstream and downstream industrial chain partners. As of the end of 2024, the Company's accounts payable (including notes payable) balance was RMB256.6 billion, with no payment overdue (including payment overdue to small and medium-sized enterprises).

Indicators	2023	2024
Accounts payable (including notes payable) balance (RMB10,000)	25,900,062	25,659,687
Percentage of accounts payable (including notes payable) balance to total assets (%)	12.8	12.3
Overdue unpaid (RMB10,000)	0	0
Overdue unpaid to small and medium-sized enterprises (RMB10,000)	0	0

Tax Management

The Company has formulated the *Tax Management Measures* and other relevant policies to ensure tax compliance, and conscientiously fulfills 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. In 2024, the Company closely followed state tax policies, and organised briefings and learning sessions on policy trends as well as tax-related trainings and accordingly. In addition, The Company also updated its tax management information system and relevant policies and procedures accordingly.

The Company complies with relevant tax laws and regulations in jurisdictions where it operates, establishes transfer pricing management policies for related transactions, determines transfer pricing based on market principles, and supports and complies with the Base Erosion and Profit Shifting (BEPS) programme, contributing to social and economic development while pursuing the sustainable development for the Company.

The Company continuously optimises internal control processes and management policies. The Company has established a quantitative assessment model for tax risks using information technology and digital applications, regularly evaluates tax risks, standardises business processes from the source, and actively promotes normalised, systematic, and precision risk management, so as to enhance its capability to prevent and control tax risks. In 2024, the Company had no incident of major tax-related litigation or arbitration.

Intellectual Property Protection

Sinopec Corp. continuously emphasises the central role of intellectual property in corporate competitiveness. Focusing on key business development, the Company actively conducts strategic research on intellectual property in key technological areas, and optimises strategic layout and the protection system for 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, such as the *Sinopec Intellectual Property Protection Regulations*, the *Sinopec Patent Management Measures*, the *Sinopec Proprietary Technology Management Measures*, and the *Sinopec Technology Trade Management Measures*, etc. to ensure the effectiveness of the creation, application, protection, and management of intellectual property, allowing intellectual property to play a more important role in supporting and leading the Company's innovation and development.

1.4 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 programmes. 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. The Company continuously strengthens its internal control management and optimises its sound management mechanism of systems, policies, and supervisory functions. In 2024, the Company had no significant risk incident.

Risk Management

01 Risk Management System

The Company has established a risk management system framework with management at different levels function as the main body, and various business lines form the main report line, ensuring effective risk management in accordance with each level's management responsibilities from the headquarters to subsidiaries. The Company has formulated the *Comprehensive Risk Management Measures* to specify risk management responsibilities, key procedures, risk management culture, and relevant assessment and supervision measures.

Risk Management System of Sinopec Corp.

Board of Directors	The Company's Board of Directors is the top decision-making body for risk management, with the Chairman of the Board acting as the highest-level person oversees the risk management, monitoring and audit performance of the Company.
Audit Committee of the Board	Responsible for checking the Company's risk management system and regularly reporting to the Board; responsible for discussing and evaluating the effectiveness of risk management system with the management, and researching the important investigation results regarding risk management matters and the relevant measures taken by management.
Headquarters Departments	Responsible for management of relevant risks in line with the functions, including environmental protection, climate response, production safety, finance, legal affairs, anti-corruption, and overseas security.
Subsidiaries	Establish own comprehensive risk management leading teams in accordance with the requirements of the *Comprehensive Risk Management Measures* to ensure the effective implementation of risk management initiatives.

The Company continues to strengthen its risk management indicator system, formulating a major operational risk management indicator system. The risk indicators focus on proactive prevention. The Company optimised and adjusted indicator calculation models and the risk indicator database to ensure deep integration of risk indicators with business operations. In 2024, the Company conducted quarterly calculation of risk indicator thresholds and issued early warning reports based on the results, and further strengthened dynamic risk assessment and monitoring, achieving predictive functionality with increasing accuracy for 10 risk indicators such as pollutant risk index and information security risk index. In addition, the Company closely monitors external risk events, conducting timely analysis and assessment accordingly to develop effective response measures.

The Company includes risk management as a mandatory performance indicator for the compensation appraisal system for senior management staff of the Company and its subsidiaries, with deductions of performance score for unachieved targets such as incidents of major decision-making errors or legal disputes.

The Company has fully integrated risk control concepts into various trainings of its business units and organises risk management trainings annually. In 2024, the Company organised three training sessions on risk management and internal control, covering more than 300 leaders and key personnel from relevant departments.

02 Incorporating ESG Risk Management into the Comprehensive Risk Management System

The Company has incorporated ESG risk management into its comprehensive risk management system. Its 2024 risk assessment results identified 24 major risk. Among the top 10 risk categories, there are two related to ESG: HSE risk (safety production risk, ecological and environmental protection risk) and technology innovation risk. 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.

03 Risk Identification and Assessment Procedures

The Company conducts risk identification based on its annual major risk control performance, issues identified through internal and external audits, macro trends home and abroad, as well as internal and external information collected, analysing causes, formulates risk lists, assessing risk classification with both qualitative and quantitative methods, and clarifying the key tasks for risk management. Risk assessment includes annual risk assessments targeted risk assessment, and daily (dynamic) risk assessment.

Risk Identification and Assessment by Category

1. Annual Risk Assessment	2. Targeted Risk Assessment	3. Daily (Dynamic) Risk Assessment
To conduct comprehensive risk assessment annually, summarise and analyse the risk assessment results, determine the annual major risk rankings, and prepare the annual comprehensive risk assessment report.	To conduct targeted risk assessment during the feasibility study phase for major and related investment projects of the Company. To identify the various risk factors for investment projects, conduct qualitative and quantitative risk analysis, comprehensively assess the risk tolerance of the investment project, formulate feasible risk response measures, and prepare a dedicated risk assessment report.	Continuously monitor changes in risks, strengthen dynamic assessment and monitoring, track and analyse quarterly risk monitoring indicators and major risk events, prepare quarterly risk management reports, and actively take measures to effectively respond to risks. Each subsidiary conducts dynamic assessments of relevant risks based on annual risk assessment results, combined with daily operational management.

2024 Major Risk Identification and Assessment Process

1. Questionnaire Survey Assessment	2. Targeted Analysis and Assessment	3. Major Risk Report and Response
Developed a 2024 annual risk assessment survey questionnaire in accordance with risk assessment standards, and surveyed 2,498 personnel from headquarters and subsidiaries using the questionnaire, ranking risked based on questionnaire questions on both the dimension of likelihood of occurrence and dimension of the degree of impact of risks.	Entrusted internal and external advisory agencies to evaluate key risks for Sinopec Corp. in 2024 based on a comprehensive analysis on macro and industry trends both home and abroad, analysing risk causes, proposing response measures, and compiling a targeted risk assessment report.	Compiled the Annual Major Risk Management Report based on annual major risk control results, analysing the Company's annual major risks focusing on risk control targets and risk causes, proposing response measures.

Internal Control Management

The Company has established a two-level internal control management system at the headquarters and subsidiaries, with robust organisational framework, policies and systems, and evaluation mechanism at each level. Each year, the Company also reports to the Board of Directors through onsite meetings the revision of internal control manual in January, and the annual internal control evaluation results in April.

Internal Control Management System of Sinopec Corp.

Management Module	Headquarters Level	Subsidiary Level
Two-level 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, with the Comprehensive Risk Management Office under the Enterprise Reform and Legal Department as its implementation body and responsible for ensuring 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.	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 subsidiary.
Two-level Institutional System	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.
Two-level Evaluation Mechanism	The Audit Department carries out various audits and continuously supervises the Company's internal control independently under the guidance of Board. The Enterprise Reform and Legal Department is responsible for the daily supervision and special supervision of the Company's internal control.	Follow the management requirements of headquarters, and supervise and evaluate the internal controls through of each unit through comprehensive regular testing, self-inspection and audit.

Risk Management and Internal Control Audit

To promote the construction of a robust internal control system, ensure effective implementation of internal control systems and compliance in management practices, and prevent and mitigate major risks, the Company also hires external auditors to conduct internal control and risk management audits over its headquarters and several key subsidiaries each year alongside the economic responsibility audits. Meanwhile, all other audit projects are risk-oriented, with internal control as the main focus of audit supervision.

The Company implements both self-inspections and inspection and evaluation by the headquarters to guarantee the effectiveness and adequacy of the supervisory evaluations. Self-inspections include quarterly tests conducted regularly at functional departments of both the headquarters and subsidiaries, annual comprehensive inspections and evaluations conducted by the Internal Control Management Department of the headquarters and the Internal Control Audit Departments of the subsidiaries, as well as targeted inspections and key spot checks conducted by various functional departments of both the headquarters and subsidiaries. Evaluations conducted by the headquarters include the annual comprehensive inspections and evaluations of subsidiaries in accordance with the annual audit plan, as well as the risk and internal control inspection of selected subsidiaries each year based on a three-year comprehensive inspection plan.

In 2024, the Company conducted internal control and risk management audits. The audits emphasised on the effectiveness of internal control design and execution, focusing on the integrity and feasibility of internal control measures for major risks, and the implementation of key business processes, key control points, and high-risk control points. Issues identified during the audits were included in the risk list and rectified through measures such as revision of the internal control implementation measures or other relevant policies.

TECHNOLOGICAL INNOVATION

2

2.1 Governance 035

2.2 Strategy 037

2.3 Management of Impacts, Risks and Opportunities 038

2.4 Technological Innovation Achievements 039

2.5 Metrics and Targets 040

2.1 Governance

Governance Structure and Personnel

Sinopec Corp. is committed to fully integrating technological innovation into its strategic planning, corporate governance system, comprehensive risk management system, as well as daily operation and management. The Company has established a "Board-Management-Implementation" three-level governance structure with well-defined responsibilities at each level.

Board Level 1

Organisation	Strategy Committee	Audit Committee	Sustainability Committee
Members	Chairman, Executive Directors, Independent Directors	Independent Directors	Chairman, Non-Executive Directors, Executive Directors, Independent Directors
Authorities, tasks and objectives	Responsible for reviewing technological innovation plans, policies, and providing the Board with suggestions on the strategic positioning and layout of technological innovation. Responsible for reviewing and supervising the planning and progress of major technological innovation projects. Responsible for identifying, assessing, and managing the risks, opportunities and impacts related to technological innovation, and reviewing the list of major risks and annual evaluation reports.	Responsible for assessing the effectiveness of the Company's risk management and internal control systems.	Responsible for conducting research on policies, strategies, and action plans related to sustainability issues, including technological innovation. Responsible for reviewing the Company's annual sustainability report and supervising the Company's disclosure of technological innovation related information.

Management Level 2

Organisation	The Technology and Academic Committee
Members	Mainly consists of senior management personnel with extensive knowledge and experience in technology research and development, such as senior vice presidents of the Company and heads of functional departments like the Technology Department.
Authorities, tasks and objectives	Responsible for researching and reviewing the Company's technological innovation strategic plans, approving annual technological innovation plans, making decisions and reviewing major technology projects, guiding the revision of technological innovation-related policies and systems and ensuring their implementation, and supervising the implementation of relevant functional departments and subsidiaries.

Implementation Level 3

Composition	Mainly consists of relevant functional departments, subsidiaries, and research institutes of the Company.

Organisation	Technology Department	Comprehensive Risk Management Office	Subsidiaries/ Research Institutes
Authorities, tasks and objectives	Responsible for researching and formulating the Company's medium and long-term technology development plans and targeted technology development plans, promoting in-depth reform of the technology system and mechanism, organising and managing technology projects, promoting domestic and international technology cooperation and exchange, and enhancing technological innovation management.	Integrate technological innovation-related risks into the Company's comprehensive risk management system and internal management processes. Organise annual risk identification and assessment, prepare quarterly risk management report, monitor technological innovation related risk management results, and prepare relevant reports to the Board.	Responsible for implementing technological innovation plans, accelerating the research and development of new technologies and upgrading existing technologies, promoting the transformation and application of research findings, cultivating tech talents, and conducting academic exchanges and cooperation.

Professional Skills and Capabilities

The Company selects directors and management personnel with adequate professional knowledge and experience in technology research and development to provide guidance and professional support for the Company's technological innovation endeavours, effectively facilitating with the implementation of relevant initiatives. The Company has formulated and implements a professional talent training plan to enhance technological innovation capabilities, inviting senior industry experts to provide training on latest technological innovation policy environment, technical trends, and recent developments, guaranteeing that the Board of Directors and senior management are informed of the latest progresses in the relevant fields. All of these efforts provide professional support for the Company's technological innovation initiatives.

Reporting, Supervision and Evaluation

The Company has established an internal reporting and supervision mechanism for technological innovation and incorporated it into the internal control system of the Company. The Board of Directors annually reviews the implementation, performance and work plans of the technological innovation strategic plan. Company management regularly hears reports from functional departments regarding strategy implementation, results, and future goals in this regard, giving guidance and ensuring the implementation of related initiatives. Company subsidiaries and research institutions report the progress of technological research and development along the regular report line in a timely manner through regular reports or targeted reports.

The Company has established a technological innovation assessment system that covers headquarters business units and professional subsidiaries, directly affiliated research institutes, and directly affiliated production and operation entities, incorporating into operational performance evaluation a number of relevant assessment indicators, such as R&D investment, and key breakthroughs of core technologies. Each year, the Company recognises outstanding technological innovation teams and individuals, and selects innovation projects for awards and recognition, such as the Sinopec Technological Innovation Merit Award, the Visionary Fundamental Research Science Award, the Technological Invention Award, and the Science and Technology Progress Award.

Incorporating Technological Innovation Consideration into Management Decision-Making

When formulating overall development strategies, supervising the implementation of strategies, making significant transaction decisions, and managing risks, the Company fully considers the impacts, risks, and opportunities related to technological innovation, closely follows relevant state policy requirements, evaluates policy impacts, formulates responsive measures, and continuously optimises the Company's development strategy and systems accordingly.

2.2 Strategy

Risks	Time Frame of Impact*	Response Measures
Technological Innovation Risks The research and application of new technologies may come across risks such as technological bottlenecks or failures, and failure to follow the trends of cutting-edge technologies timely and effectively may have impact on the Company's resource allocation, slow down growth, and reduce competitiveness.	Long-term	Focus on industry and market demands, strengthen top-level design, and consolidate breakthroughs in technological strength in existing businesses, such as oil and gas exploration and development, oil refining, chemical materials, and new energy, and actively deploy strategic emerging industries and cultivate future industries.
Intellectual Property Risks The Company has not conducted freedom-to-operate analysis prior to external technology licensing, or the ownership of intellectual property is not agreed upon in advance or is unclear, both practices may lead to unauthorised use of the technologies by others, resulting in the theft of key technologies or infringement of influence.	Medium- and Long-term	Strengthen the intellectual property management system, enhance intellectual property risk management, and continuously optimise the review of external technology licensing to avoid intellectual property infringement disputes.
Opportunities	**Time Frame of Impact***	**Response Measures**
Policy Opportunities There will be tax incentives, financing support, etc. for technology and innovation investment, which may reduce the operating costs and provide financial and resource support for innovative development of the Company.	Medium- and Long-term	Follow policy trends, formulate policy implementation plans, further strengthen strategic planning and project management, and improve the allocation of innovation resources internally.
Market Opportunities High-quality economic development generates demand for new technologies and products, and the development of new products and services through technological innovation helps the Company to meet new market demand, explore new markets or enter new business sectors, resulting in revenue growth.	Long-term	Adhere to the "customer-centric" concept, closely follow the dynamics in end markets, formulate effective research and development strategic layouts and marketing strategies, and strengthen the integrated mechanism of "production, sales, research, and application" to accelerate the development of new products, new processes, and new technologies.

*Short-term: Within 1 year; Medium-term: 1-5 years; Long-term: More than 5 years.

23.6
RMB billion

R&D investment in 2024

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. The Company continuously invests in research and development to enhance its innovation capabilities and core competitiveness, and the commercialisation of technological research achievements, with total R&D investment reaching RMB23.6 billion in 2024. R&D investment for 2025 will be stable in accordance with the Company's technological innovation work plan, which will not lead to significant changes in the financial performance of the Company.

Consolidating Innovation Resources

To strengthen the construction of national-level innovation platforms in advantageous fields, and build an innovation platform system that centres on national key laboratories and with organic connections and mutual support among various levels of platforms; explore the construction of a cross-field joint R&D platform based on "industry-academia-research-application" cooperation.

Enhancing Basic Research

To continuously enhance the system and mechanism for basic research and applied basic research, formulating medium and long-term plans, optimising long-term investment mechanism, and steadily intensifying investment, so as to stimulate the innovative vitality of basic research.

Intensifying Incentive

To optimise the assessment and evaluation mechanism to prioritise technological rewards and recognition towards new technology, new products, and new processes that are more challenging, more innovative and original, and with greater value-added.

Strengthening Open Innovation

To cooperate closely with universities and research institutions, leverage the roles of joint R&D platforms and technological cooperation projects, and continuously promote new organisational and implementation models for tackling technological challenges, such as the "Being the First to Accept Challenges" and the "Seed Plan" innovation campaigns.

2.3 Management of Impacts, Risks and Opportunities

The Company has formulated the *Comprehensive Risk Management Measures* to specify the responsibilities and processes for managing risks related to technological innovation. The Company regularly conducts risk identification and assessment, using both qualitative and quantitative methods to evaluate the rankings of technological innovation and intellectual property related risks. Each year, the Company conducts a comprehensive risk assessment, using questionnaires, targeted analyses, major risk reports and other measures to assess and identify significant risks that may impact the implementation of development strategies and business objectives in the coming year. The results of the 2024 major risk assessment classified the technological innovation risk as a strategic risk with a high priority ranking.

2.4 Technological Innovation Achievements

In 2024, the Company focused its research efforts on key core technologies with a series of basic, cutting-edge, and disruptive technological research projects, and had made considerable achievements in a number of fields.

1 Oil and Gas Exploration and Development

Established a theoretical and technological system for the development of shale oil in terrestrial rift basins.

Made breakthroughs in key technologies for the evaluation of shale gas exploration in thin layers, providing important support for the development of a second trillion-cubic-meter scale new reservoir in China.

2 Oil-derived Chemicals and Specialty Chemicals

Completed the application of producing light aromatic (BTX) products with light cycle oil using hydrogen cracking and aromatic extraction catalyst technology, further enhancing the adaptability of oil-derived chemical products.

Achieved bulk application of a number of specialty oil products, such as animal vaccine white oil and ultra-high voltage transformer oil.

3 Biomass Fuel

Completed the flight application of the bio-jet fuel developed and produced independently in domestically produced commercial aircraft, filling the application gap of domestic bio-jet fuel in domestic aircrafts.

4 New Chemical Materials

Successfully operated the world's first industrial device for the cyclohexene esterification hydrogenation to produce cyclohexanone (400,000 tonnes per year) as the first industrial application of the new generation of green technology for caprolactam.

Achieved industrial transformation of key technologies such as ultra-high molecular weight polyethylene fibres and linear alpha olefin (LAO).

The iron-based butyl rubber plant has achieved industrial production, producing tires with wet skid resistance meeting EU's highest Grade A standards.

5 Energy Efficiency Improvements, Energy-Saving and Emissions Reduction Technologies

Innovatively developed new heat exchanger technology and built China's first domestic cold and heat energy exchange station, achieving energy coupling between a LNG receiving station and large petrochemical devices for the first time in China, and saving 13 million cubic meters of fuel gas and 3 million kWh of electricity annually.

6 Hydrogen Energy Industrial Chain

Hydrogen production: Completed and put into operation the hundred-kilowatt SOEC electrolysis hydrogen production device; conducted demonstration application of the independently developed direct seawater electrolysis hydrogen production technology, successfully completing China's first plant-scale seawater hydrogen production demonstration project.

Hydrogen storage and transportation: Completed the development of resin, carbon fibre materials, and bottling technologies for hydrogen gas storage cylinders, with the fabricated IV-type high-pressure hydrogen gas cylinders passing third-party testing.

Completed the vehicle demonstration application of the hundred-kilowatt hydrogen fuel cell stack using self-developed catalysts and membrane electrode assembly.

7 Big Data and Digitalisation

Zhongke (Guangdong) Refinery & Petrochemical has built the world's first digital twin intelligent ethylene plant, building a complete intelligent system from process optimisation to equipment management, with a production automation rate exceeding 99.5%.

Ten subsidiaries, including Zhenhai Refining & Chemical and Sinopec Jiujiang Company, were selected as National Intelligent Manufacturing Demonstration Factories, and seven refining plants were rated as National Excellent Intelligent Factories.

2.5 Metrics and Targets

Sinopec Corp. strives to further strengthen research and development investment, build a strong team of high-level technological talent, enhance intellectual property management, and achieve stable growth and effective quality improvement of patents, continuously boosting the supply capabilities for high-quality technological outcomes.

Indicators	2023	2024
Number of patent applications filed in the year	9,601	9,666
Number of patent applications granted in the year	5,483	5,550
R&D investment (RMB100 million)	232	236
Proportion of R&D investment to main business revenue (%)	0.68	0.72
Number of R&D employees	6,506	6,802
Indicators	**As of the end of 2023**	**As of the end of 2024**
Cumulative number of patents granted globally	55,335	60,885

3 ADDRESSING CLIMATE CHANGE AND ENERGY TRANSITION

3.1 Governance 043

3.2 Strategy 045

3.3 Management of Impacts, Risks and Opportunities 051

3.4 Metrics and Targets 051

3.5 Reducing GHG Emissions 054

3.6 Promoting Energy Transition 061

3.1 Governance

Governance Structure and Personnel

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 "Board-Management-Implementation" three-level climate governance structure with well-defined responsibilities at each level.

Board Level 1			
Organisation	Strategy Committee	Audit Committee	Sustainability Committee
Members	Chairman, Executive Directors, Independent Directors	Independent Directors	Chairman, Non-Executive Directors, Executive Directors, Independent Directors
Authorities, tasks and objectives	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. Responsible for identifying, assessing and managing the risks, opportunities and impacts related to climate change and ecological environment protection, and reviewing the list of major risks and annual evaluation reports.	Responsible for assessing the effectiveness of the Company's risk management and internal control systems.	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 2	
Organisation	The Comprehensive Risk Management Implementation Leading Group The Carbon Peak and Carbon Neutrality Working Group
Members	Mainly consists of presidents, senior vice presidents, vice presidents and other management personnel, as well as heads of relevant functional departments and responsible persons from subsidiaries with knowledge and experience in the green and low-carbon fields.
Authorities, tasks and objectives	Under the comprehensive risk management framework, the Comprehensive Risk Management Implementation Leading Group is responsible for the identification and assessment of climate change-related risks and opportunities, researching on relevant response measures, and reporting to the Board, the Audit Committee and the Sustainability Committee. The Carbon Peak and Carbon Neutrality Working Group is responsible for the coordination and implementation of national laws, regulations, rules, policies, and standards related to China's carbon peaking and carbon neutrality initiatives.

Implementation Level 3			
Organisation	Department of Health, Safety, and Environmental Management	Office of Comprehensive Risk Management	Subsidiaries
Authorities, tasks and objectives	Submit the quarterly report on major risk management, organise monthly environmental compliance inspections, conduct targeted 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 trading of the Company.	Incorporate ecological and environmental protection and other related risks into the comprehensive risk management system and internal management processes; organise and implement annual risk identification and assessment; compile quarterly report on major risk management and report to the Board. Supervise the management of ecological and environmental protection and other related risks through annual risk control and internal control inspections, and corporate self-assessment.	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.

Professional Skills and Capabilities

Sinopec Corp. has appointed independent directors and management personnel with expertise in green and low-carbon related fields to provide professional support and guidance for its climate change initiatives. The Company has organised a dedicated task force comprised of individuals with relevant expertise, and a dedicated Department of Health, Safety, and Environmental Management to ensure the effective implementation of related initiatives. The Company has developed and continuously implements green and low-carbon related training programmes, inviting industry experts to lecture on the latest green and low-carbon policy backgrounds, development trends and best practices, updating the Board and the senior management on latest developments in relevant fields. All these efforts provide strong professional support for the Company's research and management improvement related to addressing climate change.

Reporting, Supervision and Evaluation

The Company has established an internal reporting and supervision mechanism for climate change and incorporated it into the internal control system of the Company. Every six months, the Board of Directors and the Sustainability Committee review reports or issues on climate change related strategy formulation, implementation, performance and targets, and hear the management team's reporting of the progress on climate change-related initiatives. The Carbon Peak and Carbon Neutrality Working Group meets annually to hear reports from relevant functional departments on the strategic implementation, progress and future goals of the Company's carbon peaking initiatives, deliberates on carbon peaking and carbon neutral action plans, and guides and supervises the implementation of the initiatives. Company subsidiaries report their progresses to relevant functional departments through statistical datasheet.

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 compulsory indicators that linked to annual performance bonuses. Each year, the Company selects units, management staff, and individuals with outstanding performance in energy conservation and environmental protection for recognition, and recognised units and individuals making exceptional contributions to energy conservation, emission reduction, and carbon reduction with relevant awards respectively.

Incorporating Climate Change Consideration into Management Decision-Making

The Company attaches great importance to respond to climate change, and has fully incorporated climate impacts, risks and opportunities in formulating overall development strategy and supervising the implementation of the strategy, making key business decisions, and managing risks. The Company closely follows government policy trends and makes timely adjusts of its development strategies and action plans. Based on thorough studies and impact evaluations of international agreements such as the targets set by the *Paris Agreement*, the *2030 Sustainable Development Agenda*, as well as government policies such as the *Opinions on Fully and Accurately Implementing the New Development Philosophy to Achieve Carbon Peak and Carbon Neutrality*, the Company has formulated relevant response measures to optimise internal management systems accordingly. The Company has also 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 incorporated into the decision making process of the projects.

3.2 Strategy

Physical Risks	Time Frame of Impact*	Response Measures
Acute Risks Extreme weather events such as typhoons and other natural disasters during flood season may disrupt and affect the Company's normal operations and lead to supply chain interruptions, resulting in reduced revenue. Improper prevention and response may lead to safety accidents and cause asset losses.	Short-, Medium- to Long-term	Formulate and implement natural disaster prevention management systems, strengthen risk analysis and control regarding extreme weather events and geological disasters, formulate response plans, and strictly prevent supply chain interruptions. Optimise targeted emergency plans and preventive equipment maintenance strategies to enhance the capabilities to prevent disaster risks. Regularly conduct post-disaster reviews and summaries to improve natural disaster prevention capabilities.
Long-term Risks Rising sea levels or prolonged high temperatures may affect the equipment, employees, and supply chain of the Company, causing productivity losses or operational interruptions, and resulting in revenue loss. The Company needs to invest funds to mitigate the negative impacts of rising sea levels or prolonged high temperatures, such as reinforcement or relocation of operation sites in coastal areas, or equipment upgrades to be more heat-resistant, which incur increased operational costs.	Long-term	Enhance equipment reliability in high temperatures, and conduct regular maintenance and inspections to prevent equipment failure or increased downtime due to exposure to long-term high temperatures. Enhance supply chain resilience through diversification of suppliers and optimisation of logistics routes to reduce the risk of supply chain disruptions. Provide adequate protective measures and a good working environment, and strengthen health monitoring and training for employees to protect them from heatstroke and other health issues due to high temperatures.
Long-term Risks Increases in average temperature may increase operating costs, such as increased demand for equipment cooling water and for cooling and heating of operating facilities.	Long-term	Improve equipment heat dissipation performance and lower equipment operating temperature in high-temperature environment to reduce cooling needs. Adjust the operating parameters of equipment based on temperature trends. Strengthen energy management and reasonably adjust the operating parameters of the cooling system to reduce energy consumption.

Transition Risks	Time Frame of Impact*	Response Measures
Policy Risks - Compliance China is accelerating the transition of governance focus from total energy consumption and energy intensity to total carbon emissions and carbon intensity. Industries with high emissions and energy consumptions will face greater compliance risk and higher carbon reduction requirements, resulting in higher capital expenditures and operating costs.	Long-term	Actively invest in strategic emerging industries, such as new energy and environmental protection, in accordance with policy requirements, supporting the green development of the Company. Steadily intensify energy-saving and carbon reduction efforts, optimise energy structure, increase the utilisation of renewable energy, strengthen carbon assets management, actively participate in carbon trading, and effectively reduce carbon emission costs. Strengthen green awareness raising and enhance the carbon reduction awareness of all employees.
Policy Risks - Compliance The government continues to deepen methane emission reduction actions. The Company needs to continuously strengthen methane emission management, and increase investment in facilities and technology, which may increase operating costs.	Long-term	Continuously carry out methane emission monitoring, comprehensively identify equipment, facilities and processes in the industrial chain that have methane emissions, and continuously conduct methane emission data accounting. Optimise production processes, integrated methane detection and treatment together with VOCs, and carry out natural gas recovery, focusing on methane collection and treatment in key links such as exploration, development, transportation, and processing.
Policy Risks - Carbon Market Mechanism The national carbon emission trading market was launched in 2021. As its market capacity grows, most subsidiaries of the Company may be included in the emission control list, which may increase the Company's carbon emission compliance costs accordingly.	Medium- to Long-term	Closely monitor changes in national carbon market policies and timely adjust response strategies. Strengthen carbon assets management, and enhance the operation and management capabilities of carbon assets. Enhance carbon trading capabilities, formulate reasonable carbon trading strategies, and effectively control carbon emission costs. Strengthen energy-saving and carbon-reduction management to effectively enhance carbon emission control.

*Short-term: Within 1 year; Medium-term: 1-5 years; Long-term: More than 5 years.

Transition Risks	Time Frame of Impact*	Response Measures
Market Risks During the green and low-carbon transformation process, consumer and customer demand for green and low-carbon products continues to grow. Failure to launch green products and services that meet market trends may reduce the revenue of the Company.	Medium- to Long-term	Accelerate the construction of battery charging and swapping networks, systematically build hydrogen refuelling stations and the "hydrogen corridor", and boost the supply capacity of clean low-carbon energy such as bio-jet fuel and low-carbon hydrogen. Build a high-end carbon materials industrial chain to support the development of China's new energy industry. Promote green and low-carbon transformation, such as recycling of waste plastics and utilisation of bio-based materials, promote the application and R&D of green and low-carbon technologies, promote the research and application of carbon dioxide in biological and chemical fields, and accelerate the layout of the green circular economy. Carry out preliminary work for green product certification and launch green products based on market demand.
Technology Risks The Company is intensifying its technological R&D efforts during the low-carbon transformation, which may increase investment intensity. The application of new technologies carries the risk of operational instability or R&D failures, which may increase the Company's operating costs.	Long-term	Continue to promote key technological breakthroughs in low carbon, zero carbon and negative carbon fields, accelerate the application of energy-saving and emission-reduction technologies, and continuously reduce the energy consumption intensity and emission intensity of process units. Actively promote the R&D and industrial application of CCUS technology. 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.
Reputation Risks The petrochemical industry's responses to climate risks are increasingly attracting the attention of regulatory agencies, investors, the general public, and other stakeholders. Lack of adequate resolutions and actions may cause the Company being questioned by stakeholders and cause damage to brand image and reputation, leading to a decrease in investment attracted.	Long-term	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. Cooperate and communicate with external partners to explore carbon peaking and carbon neutrality road maps for the petrochemical industry, contributing wisdom and strength to the low-carbon transformation of the petrochemical industry as well as other related industries.

Opportunities	Time Frame of Impact*	Response Measures
Resource Efficiency To tackle climate change, the Company actively optimises energy and resource efficiency by implementing energy-saving measures and the "Energy Efficiency Improvement Plan" to reduce energy and resource consumption, and consequently, lower operating costs.	Short-, Medium- to Long-term	Continuously advance the Energy Efficiency Improvement Plan, promote the application of energy-saving and carbon reduction technologies, and implement energy-saving and carbon reduction renovation projects to improve energy efficiency and cut energy consumption.
Energy Sources The Company actively utilises renewable energy sources such as solar energy and hydrogen to achieve its emission reduction targets. As the cost of green electricity gradually decreases in the future, allowing the Company to reduce its energy expenses, achieving a reduction in operating costs.	Long-term	Promote the efficient development of photovoltaic and wind power businesses, increase the absorption rate of green electricity, and achieve large-scale carbon reduction through green electricity. Actively and steadily promote the development of hydrogen energy business, and steadily advance the implementation of green hydrogen projects.
Products and Services Consumers and customers of the Company increasingly prefer low-carbon products and services. Innovative low-carbon products and services can help the Company enhance its competitiveness and better meet consumer and customer needs, resulting in revenue growth.	Medium- to Long-term	Enhance the competitiveness of clean energy supply, accelerate the construction of battery charging and swapping networks, systematically build hydrogen refuelling stations and the "hydrogen corridor", and boost the supply capacity of bio-jet fuel. Accelerate the research and application of CCUS technologies, and actively promote the construction of CCUS projects and the industrial application of CCUS technologies.

*Short-term: Within 1 year; Medium-term: 1-5 years; Long-term: More than 5 years.

In response to the risks and opportunities brought by climate change, the Company makes timely adjustment to its green and low-carbon development strategy and investment decisions based on actual conditions, adjusts resource allocation accordingly, and explores the implementation of climate scenario analysis and climate adaptability assessments. The Company has formulated 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 incorporated into the decision making process of the projects.

The Company follows the overall roadmap of China's carbon peaking and carbon neutrality targets, striving to cultivate green leadership with achieving "net zero" carbon emissions as the ultimate goal. The Company has formulated and started implementing the *Sinopec 2030 Carbon Peaking Action Plan*. Guided by China's carbon peaking and carbon neutrality goals, the Action Plan aims to coordinate and balance the relationship between development and emission reduction, between overall and local interests, and between short-term and medium- to long-term goals, and puts forward and implements the "Eight Major Actions for Carbon Peaking". The Company is striving to achieve both carbon peaking and carbon neutrality goals with high quality. To respond to climate change and accelerate the promotion of the carbon reduction strategy, the Company has intensified its investments in green and low-carbon industries in the fields of natural gas, hydrogen energy, battery charging and swapping, wind and solar green electricity, energy conservation and environmental protection, and CCUS, and more.

In 2024, the Company invested RMB56.4 billion in green and low-carbon businesses, with another RMB60 billion earmarked approximately to be invested in 2025 in accordance with its climate change action plan, which has no significant impact upon the financial condition of the Company.

1 Full Industrial Chain Development of the Natural Gas Business	Focusing on the full industrial chain development of the natural gas business. For traditional fossil energy, the natural gas business can both support the Company's transformation and generate satisfactory returns. The Company continues to increase the proportion of low-carbon energy, especially natural gas, whose production shall maintain a relatively high growth rate during the 14th Five-Year Plan period.
2 New Energy Businesses such as Hydrogen Energy and Wind and Solar Green Power	Accelerating the development of new energy businesses such as hydrogen energy and wind and solar green power. The Company vigorously develops the integrated hydrogen energy business focusing on hydrogen energy for transportation and green hydrogen refining, and the photovoltaic and wind power businesses. With projects such as the "Ten Thousand Photovoltaic Stations" initiative, the Company strives to achieve the in-depth integration of wind and solar green electricity with its traditional businesses, and continues to increase the utilisation of green electricity.
3 Green and Low-Carbon Circular Development	Leading the green and low-carbon circular development of the industry. The Company accelerates industrial structure adjustment, retires production capacity with high energy consumption and low-energy efficiency, and promotes industrial upgrading and efficiency improvement. The Company actively develops molecular oil refining and green hydrogen refining, and continuously increases the utilisation of low-carbon chemical raw materials. The Company has also initiated the building of a "Zero Waste Group", intensifying the recycling of waste oil and grease, waste plastics, and waste rubber products, and encouraging the recycle and reuse of resources.
4 Green Carbon-Negative Technologies	Achieving major breakthroughs in green carbon-negative technologies. The Company has intensified R&D investment to develop low-carbon and carbon-negative processes and technologies, contributing to the green and low-carbon transition of the petrochemical industry. The Company puts forward the R&D and application of CCUS technologies. A million-ton scale CCUS full industrial chain demonstration project and its auxiliary carbon dioxide pipelines have been completed and started operation. The Company conducted to invest in the R&D and industrial application of technologies for producing chemical products and high-end materials from carbon dioxide, such as methanol and lithium battery electrolytes. The Company also actively implements methane emission reduction measures as well as intensifies the recovery of methane.
5 Carbon Emission Management	Optimising carbon emission management. The Company vigorously implements the "Green and Clean" development strategy, explores the transition of governance focus from energy consumption to carbon emissions, including both consumption and intensity targets, and reduces the lifecycle carbon footprints of products. The Company also participates in carbon trading, increases forest and grassland carbon sink capacity, continuously develops carbon neutrality demonstration projects, contributing China's enterprise best practice to global climate governance.

3.3 Management of Impacts, Risks and Opportunities

Sinopec Corp. has formulated the *Comprehensive Risk Management Measures*, specifying the responsibilities and processes for managing risks related to climate change and other HSE factors. The Company closely tracks and monitors climate-related impacts, risks and opportunities, actively conducts identification, analysis, management, and response to climate impacts, risks and opportunities, incorporating them into internal control systems. The relevant management policies and processes will be revised accordingly in a timely manner in the event of significant changes. The Company comprehensively assesses its energy use and carbon emissions by studying energy use and value chain emissions, conducting carbon accounting, and calculating product carbon footprints, to identify the impact of the Company's operations on climate change. The Company also evaluates the time frames and impacts of climate-related risks and opportunities to formulate response measures and work plans. The results of the 2024 major risk assessment rank HES risks, which include climate change, as the top major risk for the Company.

3.4 Metrics and Targets

Climate-related Targets

In order to achieve its carbon peaking and carbon neutrality targets, the Company has developed medium- and long-term emissions reduction targets based on corporate development plans and business performance. The Board of Directors and the Sustainability Committee regularly supervise the completion of related goals and indicators. Implementation results of the carbon peaking and carbon neutrality targets are linked to management performance, which are evaluated annually.

Total GHG Emissions

2030

Peaking carbon emissions before 2030, limiting the increase to no more than 30% compared to 2020 level.

2040

By 2040, carbon emissions will be reduced by more than 25% compared to peak level.

2050

Strive to achieve carbon neutrality around 2050.

Total GHGs Emissions

The Company adopts the operational control right method to calculate and report greenhouse gas emissions. The calculation is conducted in accordance with the *Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals* (ISO 14064-1:2018), and the *Requirements of the Carbon Emissions Accounting and Reporting Part-16: Oil and Gas Production Enterprise* (GB_T 32151.16-2023). Both direct and indirect greenhouse gas emissions are calculated, including six types of gases: CO_2, CH_4, N_2O, HFCs, PFCs and SF_6.

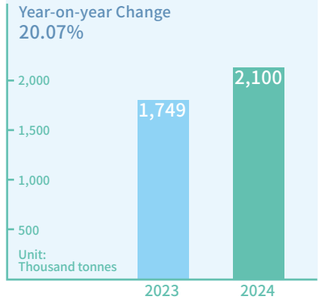
CO_2 CH_4 N_2O HFCs PFCs SF_6

Total Emissions

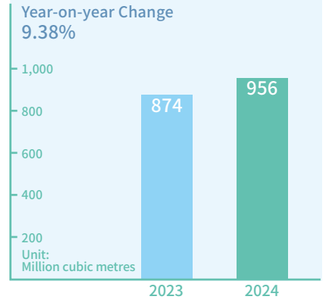
Indicators	2023	2024	Year-on-year change
GHGs emissions (million tonnes CO_2-equivalent)	**168.64**	**167.95**	**-0.4 %**
Of which: Direct GHGs emissions	142.28	139.09	-2.2%
Indirect GHGs emissions	26.36	28.86	9.5%
Of which: Exploration and production segment	20.33	21.43	5.4%
Refining and chemicals segment	146.70	145.02	-1.1%
Marketing and distribution segment	1.61	1.50	-6.8%
Methane emissions (million cubic metres)	**250.21**	**239.48**	**-4.3%**
Of which: Exploration and production segment	216.55	208.57	-3.7%
Refining and chemicals segment	14.78	15.80	6.9%
Marketing and distribution segment	18.88	15.11	-20.0%

Emission Reduction Performance

CO_2 Capture



Methane Recovery



3.5 Reducing GHG Emissions

Sinopec Corp. places a strong emphasis on monitoring and controlling GHG emissions, conducts comprehensive audits and assessment of the carbon emissions of its subsidiaries, and ensuring robust carbon asset management. The Company reduces GHG emissions by implementing various "Energy Efficiency Improvement Projects", using new energy to replace traditional energy, research and application of CCUS technologies, and reduction of methane emissions, etc., continuously strengthening the "dual control" management of both total carbon emissions and carbon intensity.

Carbon Emission Reduction Policies and Systems

Carbon-related Laws and Regulations	*Interim Regulations on the Administration of Carbon Emission Trading* *Interim Measures for the Administration of Carbon Emissions Trading* *Measures for the Management of Lawfully Disclosing Enterprise Environmental Information* *Management Measures for Voluntary Emission Reduction Trading of Greenhouse Gases (Trial)*
Carbon-related Policies of Sinopec Corp.	*Sinopec Carbon Emissions Management Measures* *Sinopec Carbon Trading Management Measures* *Sinopec Management Measures for Carbon Emission Assessment of Fixed Asset Investment Projects* *Guiding Opinions on Sinopec's Carbon Peaking and Carbon Neutrality Actions* *Sinopec 2030 Carbon Peaking Action Plan* *Implementation Plan for Establishing Sinopec Product Carbon Footprint Management System (2024-2027)* *Notice on the Implementation of Voluntary Greenhouse Gas Emission Reduction Projects*

Carbon Emissions Monitoring and Management

The Company actively carries out carbon audits, leveraging both internal audits 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 required 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 annual carbon emissions reports submitted by its subsidiaries, some of which are selected for on-site verifications. Some subsidiaries, in accordance with national and local government requirements, received third-party verification to verify and confirm carbon emissions data.

In 2024, the Company was selected as a Carbon Peaking "Front-runner" Enterprise by the China Federation of Industrial Economics.

Product Carbon Footprint

As a forerunner in calculating product carbon footprint, the Company has completed the information-based accounting of carbon footprint for certain categories of oil and petrochemical products.

In April 2024, the Company issued the *Implementation Plan for Establishing Sinopec Product Carbon Footprint Management System (2024-2027)*, specifying key tasks and methodologies for product carbon footprint accounting, such as the accounting standards referenced. In July 2024, the Company and its partners jointly initiated the establishment of a Carbon Footprint Alliance for the Energy and Chemical Industrial Chain, driving upstream and downstream enterprises to strengthen carbon footprint management collectively and promote coordinated full product life-cycle emission reduction across the entire industrial chain.

Energy Conservation

The Company continuously optimises its energy management policies and systems. 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*, the *Energy Conservation Examination and Management Measures of Fixed Asset Investment Projects of Sinopec*, and the *Detailed Regulations on Energy and Environmental Source Control for Construction Projects of Sinopec (Refining Segment)*, to highlight energy management responsibilities. The Company established the Sinopec Carbon Peaking and Carbon Neutrality Working Group, responsible for implementing relevant state laws, regulations, policies, and standards regarding energy conservation, and coordinating the energy-conservation initiatives of the Company. The Company has set an energy-saving target to reduce the comprehensive energy consumption per RMB10,000 output value (at 2020 comparable prices) by 5% by 2025.

1 Strengthening Management Of Total Energy Consumption and Intensity

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

Strictly ensured the energy intensity and total consumption of new, transformation and expansion construction projects under control, and implemented the *Detailed Regulations on Energy and Environmental Source Control for Construction Projects of Sinopec (Refining Segment)*, specifying energy efficiency targets and design requirements during the design phase and aiming at improving the intrinsic energy conservation capabilities of construction projects.

Carried out energy-saving audits of 32 key fixed asset investment projects in 2024, setting energy efficiency indicators based on best domestic benchmarks to raise the standards for project eligibility.

2 Deepening the Implementation of the Energy Efficiency Improvement Plan

Oilfield segment: Focused on the implementation of energy-saving and efficiency improvement projects with integrated injection, extraction, and transportation operations.

Refining segment: Focused on projects such as promoting plant-level optimisation of the energy system, and waste heat and cold energy utilisation.

Marketing and distribution segment: Accelerated the construction of photovoltaic power generation projects in sales subsidiaries.

Upgrade of Feed Heat Exchanger at Qingdao Refining & Chemical Co., Ltd.

CASE

In response to issues such as long operation cycle and high temperature and pressure differences of the feed heat exchanger, Qingdao Refining & Chemical Co., Ltd. implemented an upgrade project, replacing the reforming feed/product heat exchanger with a spiral tube heat exchanger. The upgrade solved the problem of high temperature difference at the hot end. Under normal operation conditions, this upgrade can help achieve an annual energy savings of approximately 5,658 tonnes of standard coal per year, or an annual energy-saving benefits of approximately RMB21.37 million per year.

5,658
Tonnes of standard coal
Annual energy savings achieved

21.37
RMB million
Annual energy-saving benefits achieved

Energy Efficiency Improvement Plan

The Company has been vigorously implementing the Energy Efficiency Improvement Plan, conducting energy efficiency benchmarking studies and continuously improving energy conservation performance. All key energy-consuming units of the Company have established their respective energy management systems and obtained energy management system certifications such as ISO50001 certification. In 2024, Sinopec implemented 470 energy efficiency improvement projects, saving 790,000 tonnes of standard coal, which is equivalent to the reduction of 2.05 million tonnes of carbon dioxide. The comprehensive energy consumption per RMB10,000 of production output of the Company (at 2020 comparable prices) decreased by 4.92%.

470
Number of energy efficiency improvement projects

790,000↓
Tonnes of standard coal
Energy saved by energy efficiency improvement projects

3 Conducting 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 topped the industry.

During the 2023 selection of key oil and chemical products Energy Efficiency "Forerunner" Enterprises, eight subsidiaries of the Company, including Qingdao Refining & Chemical Co., Ltd., Guangzhou Petrochemical Company, Zhongke (Guangdong) Refinery & Petrochemical Company Limited, and Zhenhai Refining & Chemical, Jiujiang Company, Zhong An United Coal Chemical Co., Ltd., ZTHC Energy, and Sinopec Natural Gas Company Qingdao were awarded the title of Energy Efficiency "Forerunner" Enterprises benchmark enterprises.

4 Promoting R&D and Application of New Technologies

Carried out multiple research projects to promote technological innovation, such as the efficient conversion of green electricity, enhancing the resilience of grid with large-proportion renewable energy feeds, and low-carbon, high-efficiency electric heating catalytic reactors.

5 Carrying out Annual Energy Conservation Inspections and Diagnostic Services

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

Carried out construction project energy conservation post-evaluation, verifying the implementation of energy conservation inspection opinions and energy efficiency performance, and building an energy efficiency assurance mechanism for construction projects.

Conducted energy-saving and efficiency improvement diagnostics for coal-fired power plants, and carried out diagnostic work on energy efficiency enhancement of ethylene units cooling, proposing improvement measures.

Indicators	2023	2024
Consumption of crude oil (million tonnes)	1.07	1.08
Consumption of natural gas (billion cubic metres)	4.70	4.85
Consumption of purchased electricity (billion kWh)	36.53	38.18
Consumption of coal (million tonnes)	37.84	33.75
Total energy savings (10,000 tonnes of standard coal)	86	79
Comprehensive energy consumption per RMB10,000 output value (tonnes of standard coal per RMB10,000)	0.976	0.928

New Energy Utilisation

The Company actively promotes the utilisation of clean energy in its production process, continuously optimising energy structure, and vigorously promoting the construction and utilisation of renewable energy projects such as wind power, photovoltaics, and biomass energy. The Company steadily advances the construction of wind and solar green electricity projects through the construction of auxiliary wind and solar green electricity projects in key construction projects, continuously increasing the proportion of green energy utilisation. In 2024, the Company launched the "Ten Thousand Photovoltaic Stations" initiative, with a plan to build about 10,000 photovoltaic oil and gas fields, petrochemical industrial parks, and services stations by 2027.

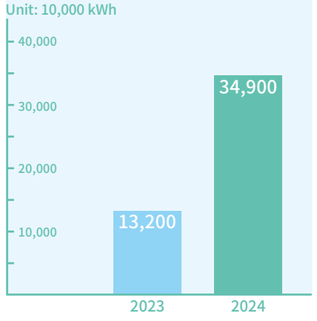
As of the end of 2024, more than 5,000 photovoltaic stations have been built cumulatively. In 2024, by co-firing biomass, our standard coal consumption was reduced to 287.15 grams/kWh, a decrease of 6.67 grams/kWh year-on-year. The thermal coal consumption was reduced to 20.49 million tonnes, a reduction of 2.88 million tonnes year-on-year. The Company also continuously promotes green electricity and purchased a total of 4.3 billion kWh of green electricity throughout the year.

5,000+

Number of photovoltaic stations built cumulatively

Photovoltaic Power Generation

Unit: 10,000 kWh



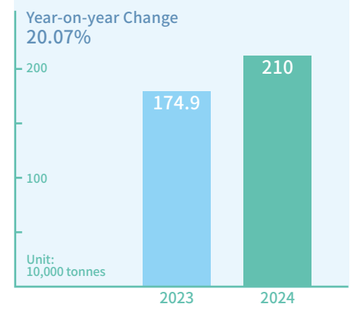
Carbon Capture, Utilisation and Storage (CCUS)

The Company attaches great importance to the research and industrial application of CCUS technologies, and has intensified R&D investment and the construction of key projects to vigorously promote the full-industrial chain application of CCUS technologies. In 2024, the Company continued the research on the recovery and utilisation of high-concentration carbon dioxide from hydrogen production and synthetic ammonia production processes, capturing a total of 2.10 million tonnes of carbon dioxide, an increase of 20.07% year-on-year. A total of 966,000 tonnes of carbon dioxide was utilised in oil displacement operations, an increase of 14.05% year-on-year, achieving satisfactory results in both reducing carbon emissions and increasing oil production.

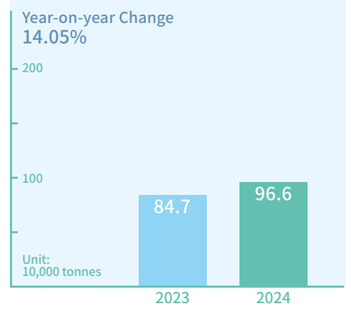
Sinopec Corp. has developed a full-industrial technological capabilities for CCUS, including technological development, engineering design, equipment manufacturing, and engineering construction capabilities. The Company has also developed internationally advanced low-concentration capture technology, and constructed the largest industrial-grade carbon dioxide experimental circuit in China, building a solid foundation for the construction and operation of China's first million-tonne CCUS demonstration project and first million-tonne long-distance carbon dioxide pipeline. Our subsidiary, Jinling Petrochemical, collaborated with Jiangsu Oilfield to carry out carbon dioxide capture and oil displacement operations, timely adjusting production loads and operational parameters based on oilfield demand, seasonal temperature variations and other factors to ensure the stable operation of the capture devices.

Sinopec is cooperating with Saudi Basic Industries Corporation (SABIC) and KazMunayGas to launch the International CCUS Technology Innovation Cooperation Organization, which will contribute to global climate and environmental governance.

CO_2 Capture



CO_2 Injected in Oil Displacement



The Qilu Petrochemical-Shengli Oilfield Million-tonne CCUS Full-process Demonstration Project Was Selected as a Model Case

CASE

The Qilu Petrochemical-Shengli Oilfield million-ton CCUS project adheres to the high-pressure and mixed-phase development concept, iterating the "pressure drive + alternating water-CO_2 drive" injection model, strengthening the full-process injection and production coordination and corrosion prevention, optimising processes such as the high-pressure self-flow well release process and the gas recovery and reinjection process, and innovating the digital twin intelligent operation and maintenance technology for carbon dioxide pipeline transportation. The project has become the largest CCUS full industrial chain demonstration base in China.

In 2024, at the Intellectual Property and Green Innovation Development Forum & Launch Ceremony of the "Hundred Chains and Thousand Enterprises" Patent Industrialization Promotion Project, the Qilu Petrochemical-Shengli Oilfield million-ton CCUS full-process demonstration project was selected as a 2024 Green Technology Innovation Model Case. The event was co-hosted by the China Patent Protection Association, the World Intellectual Property Organisation China Office, and the Carbon Neutrality Intellectual Property Operation Centre.

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 Measures*, the *Sinopec Carbon Emission Evaluation Management Measures for Fixed Asset Investment Projects*, and the *Sinopec 2030 Carbon Peaking Action Plan*.

Sinopec's methane emission reduction targets

- By 2028, reduce methane emission intensity by 20% compared to the 2023 baseline.

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 2024, approximately 956 million cubic metres of methane gas was recovered, which was equivalent to a GHG emission reduction of approximately 14 million tonnes of carbon dioxide.

Indicators	2023	2024	Year-on-year change
Methane recovery (million cubic metres)	874	956	9.38%
Methane emissions (million cubic metres)	250.21	239.48	-4.3%
Of which: Exploration and production segment (million cubic metres)	216.55	208.57	-3.7%
Refining and chemicals segment (million cubic metres)	14.78	15.80	6.9%
Marketing and distribution segment (million cubic metres)	18.88	15.11	-20.0%

Strengthening Carbon Assets Management

Sinopec Corp. continues to strengthen carbon assets management, as well as its management capabilities. The Company plays an active role in the national carbon emission trading market, formulating the *Sinopec Carbon Trading Management Measures*, establishing a dedicated carbon trading team, and implementing centralised management of carbon emission transactions. The Company developed well-designed carbon trading plans, 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. In 2024, the Company purchased a total of 4.22 million tonnes of carbon emission quotas, with a fulfilment rate of 100%. During the reporting period, the Company had no instances of being subject to rectification, investigation or penalty by regulatory authorities.

In 2024, the Company actively participated in the first trading day of the China Certified Emission Reduction (CCER) trading market, exploring the possibilities of conducting inclusive carbon transactions in this pilot carbon market. Purchasing green electricity and CCER products can help the Company reduce carbon emission quota fulfilment costs. During the reporting year, three subsidiaries participated in the first day of CCER market and completed a total trading volume of 31,000 tonnes.

Regarding the development of CCER projects, the Company collaborated with partner companies and jointly completed the development and application of methane reduction methodologies for oil and gas fields. The Company also actively applies for upstream emission reduction (UER) projects, cooperating with third-party auditing institutions to complete on-site audits of these applied projects.

Forest Carbon Sink

The Company has formulated the *Greening Management Regulations of Sinopec.*, and implements a variety of greening activities and continuously optimises its greening management, contributing to the increase of forest carbon sequestration while creating ecosystem carbon sinks at the same time. In 2024, the Company's greening activities led to the greening of 1,794,000 square metres, and a total of 1,672,000 trees were planted by employee volunteers, creating about 201,000 tonnes of forest carbon sinks.

Area of newly built green areas

1,794,000

Square metres

Number of trees planted

1,672,000

3.6 Promoting Energy Transition

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 Green and Clean Energy Strategy

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.

Natural Gas

LNG

As a fossil energy with relatively 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 its natural gas business, making continuous efforts to strengthen the natural gas supply capacity of the Company. In 2024, the Company has seen its proven natural gas reserves increased by 373.9 billion cubic metres, and its natural gas capacity increased by 7.68 billion cubic metres, producing a total of 39.57 billion cubic metres of natural gas annually, an increase of 4.7% year-on-year.

373.9
Billion cubic metres
Natural gas reserves increased

7.68
Billion cubic metres
Natural gas capacity increased

Indicators	2023	2024	Year-on-year change
Domestic natural gas production (100 million cubic metres)	378	395.7	4.7%
Proportion of natural gas in domestic oil and gas equivalent (%)	46	47	Increase of 1 percentage points

Hydrogen Energy

H_2

Hydrogen energy is an essential path towards a cleaner and low-carbon global energy structure. With extensive industry experience and competitive advantages in the hydrogen energy sector, Sinopec Corp. positions itself to capitalise on this major strategical opportunity on hydrogen energy. The Company accelerates the development of hydrogen energy as a core business of its new energy portfolio, with a particular focus on the utilisation of hydrogen energy in mobility and green refining, striving to become the top hydrogen energy company in China with the largest scale, leading technologies and top-notch management.

Sinopec's 2050 Hydrogen Energy Vision

Hydrogen Energy Mobility
Maintain the largest number of hydrogen 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 2024

Hydrogen Energy Supply

Utilised hydrogen resource from refinery byproducts, and developed a hydrogen supply centre for fuel cells around the needs of hydrogen refuelling stations in the "3+2" hydrogen fuel cell demonstration city clusters. As of the end of 2024, the Company had built hydrogen supply centres for fuel cells at 11 enterprises, with a total capacity exceeding 40,000 standard cubic metres per hour. In 2024, the Company produced 2,068 tonnes of high-purity hydrogen for vehicle-use.

40
Thousand standard cubic metres per hour
Total hydrogen supply capacity

2,068
Tonnes
Production of high-purity hydrogen for vehicle-use in 2024

Hydrogen Refuelling Station Development

Leveraged our advantages of refining production operations and service station networks, actively promoting the construction of hydrogen fuel cell hydrogen supply centres and hydrogen refuelling stations.

Invested and operated the first overseas hydrogen refuelling station in Hong Kong.

Built 142 hydrogen refuelling stations cumulatively, forming six hydrogen energy mobility corridors, accounting for about 40% of the total hydrogen refuelling volume in China.

Hosting the China Corner Side Event at COP29

CASE

In November 2024, in collaboration with the International Hydrogen Fuel Cell Association and the Centre for International Cooperation and Exchange of the Ministry of Ecology and Environment, Sinopec Corp. co-hosted the side event "Hydrogen Energy Supporting Climate Action: Towards a Clean Energy Future with Net Zero Emissions" at the China Corner during the 29th United Nations Climate Change Conference (COP29). This was the first time that a Chinese energy enterprise hosting a hydrogen-themed event during COP events. The event showcased the progress of China's hydrogen energy innovations, fostering a new round of meaningful international cooperation and exchange.

Hong Kong's First Hydrogen Refuelling Stations Opened to Public

CASE

As the first public hydrogen refuelling station, as well as the first integrated refuelling station that offers "fuel, natural gas, hydrogen, battery recharge, and services" in Hong Kong, the station currently has a daily hydrogen refuelling capacity of 1,000 kilograms, providing round-the-clock refuelling services for various types of hydrogen fuel vehicles including buses, commercial vehicles, private cars, and engineering fleets. In the future, the daily hydrogen refuelling capacity of the station is expected to increase to 2,000 kilograms per day with equipment upgrades and expanded service scenarios.

New Energy Vehicle and Battery Charging and Swapping Related Businesses

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

In line with the strategy of "becoming China's leading battery charging operator and the No. 1 direct sales platform", the Company vigorously develops the battery charging and swapping business, exploring new paths for differentiated growth by focusing on infrastructure rollout, operation, and platform. In 2024, the number of new users on the platform exceeded 11 million. Over 4,000 battery charging and swapping stations were built during the year, totalling more than 10,000 stations cumulatively with nearly 100,000 charging terminals.

The Company has been rolling out battery charging and swapping stations in various locations in China, offering greater charging related service scenarios.

11+ Million

Number of new users on the platform in 2024

4,000+

Number of charging and swapping stations built in 2024

FUJIAN

In Fujian, the Company built its first "photovoltaic – storage – recharging – maintenance – discharging" direct current micro-grid station, the Wenping New Energy Station. The station is equipped with 64 1,000V/180-360kW direct current fast charging piles, a photovoltaic energy storage system with a photovoltaic generation capacity of 164.82kWp and energy storage capacity of 824 kWh.

BEIJING

In Beijing, the all-liquid cooling ultra-fast charging station, the Xiaowuji Charging Station, started operation in January 2024. All charging piles use all-liquid cooling ultra-fast charging technology. With a maximum charging power of 600 kilowatts, the station is capable of meeting the charging needs of 70 new energy vehicles at the same time.

GUANGXI

In Guangxi, the Company's first heavy truck charging station, located in Jinjiang Industrial Park in Tiandong County, Baise City, started operation in April 2024. The station is equipped with 5 units of 360-kilowatt integrated direct current high-power charging piles. Its charging pile, featuring a dual-gun simultaneous charging function, can fully recharge a new energy heavy truck in just 50 minutes.

HONG KONG

In Hong Kong, the Company actively expands the battery charging network, accelerating the transition from traditional gas stations to integrated energy stations, providing vehicle owners with more diverse and more convenient energy supply services.

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.

Lightweight Auto Materials

Fully leveraged our R&D advantages in synthetic resins and continuously developed lightweight materials for new energy vehicles.

Produced 258,500 tonnes of light-odour, low-VOC auto materials in 2024, a year-on-year increase of 29%.

Continuously optimised the performance of foamed polypropylene material and promoted its application in auto parts, producing a total of 4,3400 tonnes in 2024, a year-on-year increase of 21%.

258,500 Tonnes

Production of low-VOC auto materials in 2024

Special Materials for Power Battery Separators

Focused on the R&D, application, and pilot production of special polyolefin materials for making power battery separators, with multiple subsidiaries engaging in the development of special polyolefin materials for lithium battery separators. Both the material developed and the separator products made using the material have outstanding performance. A total of 45,800 tonnes of this material was produced in 2024, a year-on-year increase of 50%.

45,800 Tonnes

Production of the lithium battery separator material

Biomass Energy

Taking full consideration of government industrial policies and market demand, the synergies between Sinopec's traditional businesses and biomass energy and other new energy sources, the variety of factors such as raw materials, market expectations and profitability, the Company has made the plan to focus on grease-based bio-jet fuel and related industries first. Later on, with the support of technological innovation, the Company will actively build a sustainable fuel industrial system with diversified raw material supplies.

Development Goals of Sinopec Crop.'s Biomass Energy Business

- To build a 100,000 tonnes/year bio-jet fuel project.
- To timely develop biomass production capacity, such as bio-jet fuel and biodiesel, based on national industrial policies and plans, market needs of biomass fuel, and raw material resource availability.

C919's Successful Pilot Flight with Bio-jet Fuel

CASE

Sinopec Corp. vigorously promotes the pilot application of bio-jet fuel of domestic flights, aiming at assisting the green and low-carbon development of the aviation and shipping industry.

In June 2024, a domestically produced large passenger aircraft C919, and an ARJ21 model airplane successfully completed their pilot flights on bio-jet fuel independently developed and produced by Sinopec Corp. In September 2024, the National Development and Reform Commission and the Civil Aviation Administration of China launched a pilot application of sustainable jet fuels in Beijing. Twelve flights operated by Air China, China Eastern Airlines, and China Southern Airlines participated in the pilot programme officially. Zhenhai Refining & Chemical provides most of the bio-jet fuel used in these pilot flights.

Recycle and Reuse of Waste Plastic

The Company has been intensifying its efforts to promote the development and industrialisation of chemical technologies for utilising waste plastic materials, leading and promoting the high-quality development of the waste plastic chemical recycling industry with continuous optimisation of the circular industrial chain, the innovation chain, the technology chain, and the standard chain. The Company has formulated and implemented the *Sinopec Full Industrial Chain Plastic Recycling Special Project Implementation Plan (Trial)*, putting forward the "dual circulation" strategy that focusing on both physical and chemical recycling simultaneously.

Full Industrial Chain Plastic Recycling Goals of Sinopec Corp.

- To establish an efficient and orderly nationwide waste plastic recycling system, and become a waste plastic recycling world leader by 2030.

In 2024, the Company resolutely pushed forward its "dual circulation" strategy and effectively implemented several high-quality physical recycling projects as well as chemical recycling projects. To prepare resources for the implementation of the chemical recycling layout plan, the Company actively built a waste plastic resource network, signing strategic agreements with a number of regional waste plastic resource industry partners. Meanwhile, the Company successfully developed a full industrial chain recycling demonstration project with the founding of China's first prouder of bio-based polyolefin based on the synergy between waste grease deep processing and its advantageous polyolefin business.

Vigorously Fulfilling Member Responsibilities of AEPW

CASE

Sinopec Corp. joined the Alliance to End Plastic Waste (AEPW) in July 2019 as its first member enterprise in China. AEPW aims to eliminate plastic waste from the environment by supporting and implementing efficient waste management and recycling systems, technologies and other related solutions. In 2024, the Company proposed several suggestions to the alliance, including industrial collaboration and resource sharing among members, and greater support for projects in China. The Company also actively assisted AEPW in implementing plastic waste recycling, sorting and regeneration projects as well as environmental protection advocacy programmes in China.

ENVIRONMENTAL PROTECTION

4

4.1 Environmental Protection Guidelines and Goals 069

4.2 Environmental Protection Management System 070

4.3 Environmental Risk Management 071

4.4 Environmental Impact Management 073

4.5 Pollution Treatment 075

4.6 Solid Waste Management 077

4.7 Water Resources Management 080

4.8 Prevention of Hydrocarbon Leaks 081

4.9 Land Resource Management 082

4.10 Ecosystem and Biodiversity Conservation 083

4.1 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. Adhering to the principle that "environmental protection starts from design, quality, responsibility, and capability", the Company comprehensively implements clean production initiatives and actively practices the concept of green and low-carbon 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*, the *Solid Waste Pollution Prevention and Control Law of the People's Republic of China*, the *Noise Pollution Prevention and Control Law of the People's Republic of China, etc.* The Company also closely follows and analyses the updates of relevant laws, regulations and policies, and incorporates changes in regulatory requirements into corporate management policies in a timely manner. The Company conducts awareness raising, training, supervision, inspection and other activities to ensure its subsidiaries fully implement the requirements accordingly.

The Company's environmental management policies cover all subsidiaries, joint ventures, and cooperative enterprises under its management, covering the entire production and operational life cycle, including design, construction, operation, and decommissioning processes, the qualification management of all suppliers, service providers and contractors, as well as all due diligence activities for joint ventures, collaborations, and mergers, and acquisitions.

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 Environmental) 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

- An industry leader in pollution control
- No occurrence of major and above environmental incidents

4.2 Environmental Protection Management System

01 Policy System

Sinopec Corp. has formulated a robust environmental management system with relevant policies which the Company regularly optimises. As of the end of 2024, the Company has a total of 16 environmental management policies in effect, forming a sound system covering issues such as pollution prevention and control, ecological protection, environmental management of construction projects, environmental statistics and monitoring, environmental risk management, and emergency response.

02 Organisational System

Sinopec Corp. conducts environmental management activities under the guidance of the HSE management system. In 2024, the Company continued to optimise the effective implementation of the HSE management system, carrying out regular environmental monitoring, continuously studying updates of environmental laws and regulations, conducting assessments of environmental process management performance, and carrying out research on environmental protection standards.

In 2024, all Sinopec subsidiaries carried out internal audits of their HSE management systems and actively rectified identified issues, and conducted third-party certification in accordance with the requirements of local partners and industrial chain partners both upstream and downstream. A total of 39 subsidiaries of the Company have obtained the ISO14000 environmental management system certification.

In 2024, the Company and its subsidiaries organised a series of environmental protection trainings, including an environmental management training for 119 environmental management staff, three classes of training for key environmental protection personnel with a total of participation of 180, as well as targeted training on environmental management for construction projects in the marketing and distribution business segment.

03 Measures and Results

In April 2024, the Company released the *Phase Two of the Green Enterprise Campaign*. The Company conducts strict green enterprise audits for 2024 across its subsidiaries, with 50 subsidiaries receiving the A-level Green Enterprise title. In 2024, Sinopec Catalyst (Beijing) Co., Ltd. and the Shanghai branch both received the national-level Green Factory title, four subsidiaries including the Shengli Oilfield and Shengli Oil Production Plant received the Green Factory title in the petrochemical industry, and three oil and gas fields in Northeastern China were awarded the provincial-level Green Mine title.

4.3 Environmental Risk Management

Sinopec Corp. has incorporated environmental risk management into its comprehensive risk management system, establishing a classification management and hierarchical responsibility system focused on comprehensive environmental risk prevention and control. All 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 the headquarters, 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 of 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 a series of standards such as the *Technical Guidelines for Evaluation of Sudden Environmental Incident Risk Index*, the *Environmental Risk Level Assessment Guidelines*, the *Guidelines for Preparing Emergency Plans for Enterprises Facing Sudden Environmental Incidents*, the *Guidelines for Emergency Material Preparation for Oil Pollution by Enterprises*, and the *Technical Requirements for Risk Prevention and Control of Petrochemical Enterprises Water Environment*. This system provides comprehensive coverage of various environmental risk management items, including the basic management, supervision and assessment of sudden environmental incidents, identification and assessment of environmental risks, compliant preparation of environmental emergency plans, standardisation of emergency material preparation, and water body pollution risk prevention and control, continuously solidifying the foundation of environmental risk management and enhancing the overall environmental risk prevention and control capabilities of the Company.

In 2024, the Company identified three main ecological and environmental protection risks: non-compliant emissions and discharges of pollutants, sudden environmental incidents, and environmental violations in construction projects. The goals for each subsidiary in 2024 include a 100% compliance rate for wastewater discharge, over 99.5% compliance rate for emissions, 100% environmental compliance rate for new construction projects, as well as no occurrence of major and above sudden environmental incidents. In 2024, the Company had no occurrence of major and above sudden environmental incidents.

Indicators	2023	2024
Amont fined for administrative or criminal penalties for environmental incidents by ecology and environment regulatory authorities within the year (RMB10,000)	174	166

Goals related to environmental risks for each subsidiary in 2024

no occurrence of major and above environmental incidents

100%

Compliance rate for wastewater discharge

>99.5%

Compliance rate for emissions

100%

Environmental compliance rate for new construction projects

Environmental Risk Response Measures

1 Strengthening Environmental Compliance Supervision

Developed the *Key Points of Energy and Environment Management 2024* and the *HSE Management Performance Evaluation Indicators*, and signed the *2024 Energy and Environment Responsibility Commitment* to emphasise on environmental management responsibilities.

2 Deepening the Pollution Prevention and Control Campaign

Implemented the *Sinopec Air Quality Improvement Action Plan* and the *2024-2025 Project List for Deepening the Campaign on Pollution Prevention and Control*, enhanced the effectiveness of VOCs management, accelerated the construction of odour-free factories, and strengthened pollution management and monitoring of soil and groundwater in key watersheds.

3 Strengthening Risk Prevention and Control Hazard Governance

Revised the *Sinopec Emergency Management Measures for Sudden Environmental Incidents* to ensure the comprehensive identification, control, monitoring, and early warning of environmental risks throughout the entire lifecycle of projects from construction, operation to exit.

4 Strengthening Full-Process Environmental Management of Construction Projects

Followed up on key project processes such as environmental impact assessment, design, construction, and completion inspection, carried out regular environmental compliance inspections, and provided timely early warnings to eliminate risks of environmental compliance violations.

5 Enhancing Environmental Emergency Response Capabilities

Conducted feasibilities and established a joint prevention and control work mechanism for environmental emergencies of enterprises along the river, ensuring adequate emergency response duties and professional training for handling sudden incidents.

4.4 Environmental Impact Management

Environmental Impact Management Policies and Systems

The Company issued policies that cover all key business segments such as the *Sinopec Ecological Protection Management Measures* and the *Sinopec Construction Project Environmental Protection Management Measures*, requiring all subsidiaries to strengthen ecological 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, ensure adequate funding, and take active measures to protect the environment and natural resource.

The *Sinopec Ecological Protection Management Measures* specifies that all Sinopec subsidiaries must strictly comply with applicable national and local government ecological protection laws, regulations, and standards, and explicitly prohibits the construction of projects included in the national "negative list" in ecologically 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. During the implementation of construction projects, all subsidiaries shall give priority to avoiding ecological protection red lines, conduct environmental impact assessments as required, and strengthen the protection and restoration of the surrounding ecological environment, promoting improvement of the ecological environment.

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.

The Company has established relevant element monitoring metrics covering 10 indicators including hazardous waste compliance disposal, standard conformity of online monitoring data, and ecological environmental administrative penalties. An analysis report on the monitoring results of these HSE management system element indicators is prepared monthly. Abnormal indicators identified will be traced, analysed, and rectified. In 2024, the environmental protection monitoring indicators maintained a positive trend in general, indicating that the ecological environmental protection efforts of the Company are making steady progress.

The Company's audit departments at all levels regularly conduct ecological environmental protection audits and supervision on a variety of related topics, including the construction of environmental management systems, the responsibilities of management staff related to environmental management, the implementation of environmental regulations, full-process pollution control and carbon reduction such as hazardous waste management, VOCs reduction, and groundwater and heavy metal pollution control, as well as the management of key risks such as ecological environmental governance and water body environmental risk control in the Yangtze and Yellow River basins. These audits and supervision activities provide strong support for the Company's clean low-carbon transformation and high-quality sustainable development.

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. During project implementation, all environmental protection measures proposed in the environmental impact assessment and approval opinions must be strictly implemented to effectively control the impact on the ecological environment.

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. In 2024, a number of key projects of the Company obtained environmental impact assessment approval, including the Chengdao Oilfield CB256 Block Capacity Construction Project, the Technical Renovation Project of Qilu Petrochemical, and the YPC Light Hydrocarbons Comprehensive Utilization and New Material Transformation Project.

Project Feasibility Study Phase	1	Environmental impact assessment is carried out simultaneously during the feasibility study stage.
Project Basic Design Phase	2	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 Phase	3	During project implementation, 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 Phase	4	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.

Environmental Technology Development And Environmental Investment

Sinopec Corp. vigorously promotes the development of environmental protection technology, and is committed to continuously improving the Company's environmental management and ecological environmental protection capabilities through technological innovation and research on core technologies. The Company has developed the efficient short-process complete treatment technology, the microbial-enhanced biochemical technology, and the self-stabilising sulphur autotrophic denitrification technology. To deal with the challenges of treating propylene oxide (HPPO) wastewater, such as complex composition, high pollutant concentration, and difficulty in biodegradation, the Company has developed a series of efficient and energy-saving wastewater treatment technologies, including the source separation and pretreatment technology, the difficult-to-degrade pollutant treatment technology, and the high-concentration organic pollutant treatment technology. These technologies have already been put into operation, achieving a variety of benefits, such as the recovery of valuable materials, anaerobic methane production for energy recovery, and green low-carbon treatment of wastewater. In 2024, the Company's total environmental protection investment reached RMB24.01 billion, including RMB5.56 billion in environmental protection capital investment and RMB18.45 billion in environmental protection expenditures, achieving cost savings totalling RMB1.03 billion.

Indicators	2024
Environmental protection capital investment (RMB100 million)	55.6
Environmental protection expenditure (RMB100 million)	184.5
Total environmental protection investment = Environmental protection capital investment + Environmental protection expenditure(RMB100 million)	240.1
Cost savings (cost avoidance, revenue, tax incentives, etc.)(RMB100 million)	10.3

4.5 Pollution Treatment

Control of Atmospheric Pollutants

Sinopec Corp. strictly adheres to 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 *Action Plan for Continuous Improvement of Air Quality*, the *Implementation Plan for Continuous Improvement of Air Quality* and other national and local laws, regulations, policies and standards, as well as relevant industry air pollution emission standards. In accordance with the Sinopec HSE Management System Manual, as well as the requirements of relevant company policies on air pollution prevention and control, such as the *Sinopec Regulations for Pollution Prevention and Control*, the *Implementation Plan of the Sinopec Air Quality Continuous Improvement Action Plan*, and the *Sinopec 2024 Key Points for Energy and Environmental Management*, the Company formulated a list of key tasks and relevant requirements for the prevention and control of air pollutants for the year to keep the sky blue. In accordance with its overall pollution control goals, the Company has signed energy and environmental responsibility commitment with key subsidiaries to specify their reduction targets and pollution control key tasks. The main air pollutants generated in the production and operation process of the Company include sulphur dioxide, nitrogen oxides, particulate matter, and volatile organic compounds (VOCs). Information regarding these pollutants, such as total emissions, emission quotas, and over-the-quota emissions, are publicly disclosed in the pollution discharge permit implementation reports and environmental information disclosure of each subsidiary.

In 2024, to guarantee the quality and reliability of air pollutant monitoring data from key subsidiaries, the Company further strengthened the management of air pollution prevention and control facilities, and carried out quality evaluation and supervision inspections of its environmental monitoring operations covering all oil and gas fields and refining enterprises. The Company also carried out targeted VOC pollution control improvement of 10 key processes. The Company's performance of air pollutant control during the year met the requirements of national and local emission standards. During the reporting period, there was no adverse impact on employees and local communities from the Company's emissions of air pollutants, no significant administrative or criminal penalties incurred upon the Company due to its emissions of air pollutants, and no significant defect was identified in the Company's air pollutant monitoring plan and risk management measures. Enterprises such as Tianjin Petrochemical, SINOPEC-SK (Wuhan) Petrochemical, Anqing Petrochemical, and Zhenhai Refining & Chemical obtained the A-level rating in environmental performance evaluation.

Indicators	2023	2024	Year-on-year change
Sulphur dioxide emissions (tonnes)	4,661	4,652	-0.2%
Nitrogen oxides emissions (tonnes)	19,984	18,482	-7.5%
VOCs emissions (tonnes)	49,714	47,698	-4.1%

Sinopec Jiujiang Company Building An Odourless Factory

CASE

Sinopec Jiujiang Company launched a targeted campaign with the slogan of "No Oil on the Ground, No Gas in the Air, and No Waste in the Soil" , aiming to build an "odourless factory". In 2024, Sinopec Jiujiang Company developed a targeted implementation plan, proposing 17 main tasks and measures, revising 16 reward and punishment clauses, and forming 19 management standards and methodologies, resulting in significant improvements in the environment of production facilities.

Wastewater Treatment

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 *Notice on Issuing the Sinopec Three-Year Action Plan for the Separation and Remediation of Wastewater in Production Areas of Enterprises Along the River*, and other management regulations and action plans in accordance with the requirements of national laws and regulations, such as the *Environmental Protection Law of the People's Republic of China*, 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 its own Sinopec HSE Management System Manual. The Company vigorously implements wastewater pollution prevention and control initiatives. All subsidiaries are required to sign the Energy and Environment Responsibility Commitment, specifying their water pollutant discharge reduction targets and management tasks, with the implementation being part of 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 total discharge, approved discharge limits, and instances of exceeding standards are fully disclosed in the discharge permit implementation reports and environmental information disclosures of each subsidiary.

The Company continuously strengthens its water pollution prevention and control efforts, applying mature and reliable wastewater pretreatment and deep treatment technologies to ensure stable operation of the treatment facilities. The Company has formulated a three-year action plan for the separation and remediation of wastewater in production areas along the river, aiming to reduce its overall discharges and enhancing its risk control of water pollution capabilities.

In 2024, the Company met all national and local wastewater discharge standards and did not cause any adverse impact on employees and local communities due to its wastewater discharges. And there was no incidents of major administrative penalties or criminal liabilities due to water pollutant discharges. The water pollutant monitoring plan and risk management measures had no major deficiencies identified.

Indicators	2023	2024	Year-on-year change
COD discharge (tonnes)	4,550	4,432	-2.6%
Ammonia and nitrogen discharge (tonnes)	71	69	-2.8%

4.6 Solid Waste Management

Sinopec Corp. strictly implements the requirements of national and local laws, regulations and relevant and other relevant standards related to solid waste pollution prevention and control, such as the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste*, the *National List of Hazardous Waste, the Pollution Control Standards for Hazardous Waste Storage*. The Company has successively formulated a series of policies, such as 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)*, and the *Evaluation Indicators for "Waste-Free Enterprises"*, specifying the management requirements for solid waste pollution prevention and control, as well as the goals and tasks for standardized management of solid waste during the 14th Five-Year Plan period. The Company has also incorporated "strictly prohibiting the illegitimate disposal of hazardous waste" into the Company's five major ecological and environmental protection prohibitions. In addition, the Company has formulated the *General Industrial Solid Waste Classification Reference List for the Inspection, Maintenance, and Major Modification of Refining Enterprises* and the *Construction Waste Classification Reference List for the Inspection, Maintenance and Major Modification of Refining Enterprises*, aiming to further enhance the management capabilities regarding the identification and classification storage solid waste, including hazardous waste, at the source.

The Company strives to continuously promote the reduction of various industrial solid waste by organising subsidiaries to conduct clean production audits, implement green procurement, green packaging and other relevant initiatives, improve product conversion rates, and adopt measures such as process greening transformation, cleaner substitution of raw and auxiliary materials, and sludge drying, etc. In 2024, the Company completed the construction of two new regional hazardous waste disposal centres, and established a total of 56 "Waste-Free Enterprises" models cumulatively. The Company also vigorously implemented resource conservation and efficient utilisation initiatives, organising its subsidiaries to complete approximately 1,200 improvement actions. One initiative, the application of shared pallets, resulted in a carbon emissions reduction of about 34,000 tonnes.

Completion of Sinopec's Solid Waste Management Targets in 2024

The emission intensity of industrial hazardous waste was 3.42 kilograms per RMB10,000, with a target of reducing it to less than 3.4 kilograms per RMB10,000 by 2025.

The emission intensity of general industrial solid waste was 11.09 kilograms per RMB10,000, with a target of reducing it to less than 11 kilograms per RMB10,000 by 2025.

The comprehensive utilisation rate of industrial solid waste increased to 94%, meeting the 2025 target put forward in the "Waste-Free Enterprise" pilot plan, developing 59 replicable showcase projects. **94%**

The proper disposal rates of all types of solid waste were maintained at 100%, with no incident of related violations. **100%**

The Company has incorporated the compliance management of solid waste into audits, environmental protection inspections, and HSE inspections, implementing comprehensive environmental supervision throughout the life cycle of hazardous waste, and full process environmental supervision for other solid waste. The Company has also developed a "Waste-Free" information platform. The platform was launched in July 2023 at twelve subsidiaries, allowing them to conduct full-process online management and risk prewarning of hazardous waste. In 2024, a feasibility study was carried out regarding the company-wide implementation of this programme.

Initial Results of the Trial Launch of "Waste-Free" Information Platform

- 100% hazardous waste identification accuracy
- 100% unknown solid waste identification rate
- 100% safety risk assessment rate of environmental facilities with exposure to hazardous waste
- 100% full life cycle environmental supervision and compliance rate for hazardous waste
- 100% compliance rate of environmental facilities related to hazardous waste

100%

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.

Indicators	2023	2024
General industrial solid waste		
General industrial solid waste (thousand tonnes) Note1	1,796.4	1,609.3
Percentage of recycled/reused waste to total amount of waste (%)	92.6	91.4
Hazardous waste		
Hazardous waste (thousand tonnes) Note2	464.8	431.9
Percentage of recycled/reused waste to total amount of waste (%)	65.8	69.7
Consumption of renewable resources (tonnes)	3,300	4,720

Note1: The total amount of general industrial solid waste entrusted by the Company to a third party for disposal.
Note2: The total amount of hazardous waste entrusted by the Company to third-party qualified institutions for disposal.

4.7 Water Resources Management

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 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*, the *Management Measures for Water Withdrawal Permits*, and *Water Conservation Regulations*. The Company strives to continuously conserve water resources and use water resources more efficiently with the goal of "reducing industrial water intake by no less than 1% annually". In 2024, the Company's industrial water intake was 616.6 million cubic metres, a decrease of 1% year-on-year, saving 6.20 million cubic metres of water. The Company currently has no challenges in both the access and utilisation of water resources.

1 **Strengthened source control of water intake.** Strengthened requirement on carrying capacity of water resources and water environment, made reasonable plans based on development layout and scale, strictly limited groundwater extraction, further optimised water use structure, using unconventional water resources instead of fresh water to reduce fresh water use.

2 **Strengthened full process water management.** Optimised water supply and drainage pipework, strictly managed production water use, improved the measuring system for water supply and consumption, and promoted water use management informationisation.

3 **Vigorously promoted water conservation.** Conducted water conservation upgrades, researched and applied water-saving technologies, conducted water efficiency benchmarking analyses, and promoted the application for Water-Saving Enterprise titles.

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

Tianjin Petrochemical Deployed A Smart Water Management System

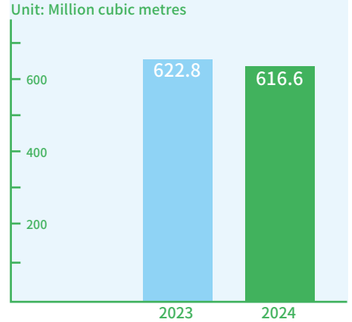
CASE

In 2024, Tianjin Petrochemical put in use its new water-saving and wastewater reduction system for boilers. This system can achieve continuous automatic control of wastewater discharge, effectively reducing fluctuations and ensuring vapor quality. The system helped reduce the wastewater discharge rate from boilers from 3-5% to 1-2%, reducing replenished water use and wastewater discharge by over 100,000 tonnes per year, resulting in direct economic benefits of RMB2.72 million per year.

Water Efficiency "Front-runners" of Sinopec Subsidiaries	
Petroleum Refining Enterprises	Tianjin Petrochemical | Zhenhai Refining & Chemical Qingdao Refining & Chemical | Shijiazhuang Refining & Chemical
Ethylene Production Enterprises	Zhenhai Refining & Chemical | Maoming Petrochemical SINOPEC-SK (Wuhan) Petrochemical
Coal-to-olefin Enterprises	ZTHC Energy
Coal-to-methanol Enterprises	Sinopec Great Wall Energy & Chemical (Ningxia)

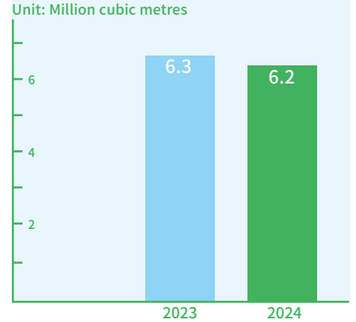
Industrial Water Intake

Unit: Million cubic metres



Amount of Water Saved

Unit: Million cubic metres



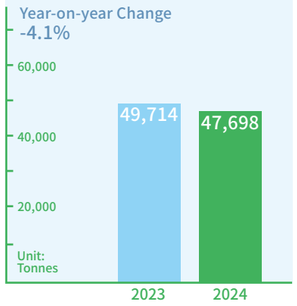
4.8 Prevention of Hydrocarbon Leaks

The Company formulates management regulations such as the *Sinopec HSE Management System Manual*, 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 goal of reducing atmospheric pollutants, the Company has signed energy and environmental responsibility commitments with key subsidiaries, specifying their reduction targets for volatile organic compounds (VOCs) and the key treatment tasks. In 2024, the Company's VOCs emissions met national and local emission standards, causing no adverse impact on employees and local communities The Company had no major administrative penalties or criminal liabilities due to VOCs emissions related reasons, and there were no major defects identified in its VOCs leakage monitoring plan and risk management measures.

Key Measures to Prevent Hydrocarbon Leaks in 2024

1. Implemented the *Implementation Plan of the Sinopec Air Quality Continuous Improvement Action Plan*, specified targets and tasks for the comprehensive treatment of VOCs, and further strengthened comprehensive treatment of VOCs.
2. Compiled the *Technical Guidelines for Grid Monitoring and Tracing System of Atmospheric Pollutants in Petrochemical Enterprises*, encouraged the deployment of VOCs aerial monitoring, infrared imaging devices, FID equipment and other dynamic monitoring equipment in subsidiaries, promoting the grid management of VOCs.
3. Established leak detection and repair (LDAR) teams at major production subsidiaries to ensure timely repairing of leak points and reduce hydrocarbon leakage.
4. Conducted on-site diagnosis for key enterprises on VOCs control and LDAR performance using mobile detection vehicles, infrared imaging devices, LDAR detectors and other equipment, assessing the operation of control facilities and the quality of LDAR operations, and continuously urging the subsidiaries to improve the quality of their LDAR operations.

VOCs



Jinling Petrochemical Build A Comprehensive VOCs Monitoring and Treatment System

CASE

Jinling Petrochemical built and put into operation 20 sets of tail gas treatment devices with a total investment of RMB280 million, establishing a robust VOCs treatment system. The system ensures a comprehensive VOCs monitoring and treatment system at both the macro and the micro level with the deployment of a variety specialised equipment, including photoionization detectors (PID) for grid monitoring, time-of-flight mass spectrometry mobile monitoring vehicle, infrared gas imaging instrument, boundary atmospheric automatic station, PAMs57 VOCs component station, flame ionisation detectors(FID), portable non-methane total hydrocarbon monitors, and ppb (parts per billion) level handheld PID monitors.

4.9 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*. The Company has established a full lifecycle management mechanism of land use, strictly prohibiting its subsidiaries from changing the use of land, prohibiting illegal discharge of pollutants into land, and requiring rigorous soil pollution testing and land reclamation for land no longer in use that needs to be returned to the government.

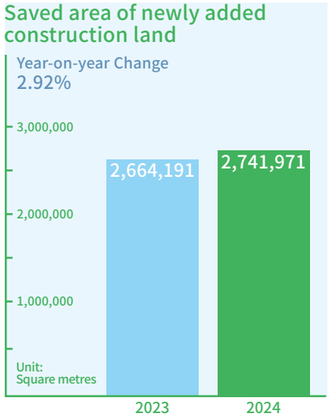
Sinopec's Requirements for Land Reclamation

1. The Company strictly implements national laws and regulations related to land reclamation, follows the requirements of regulatory authorities, allocates funds for land reclamation, and carries out land reclamation and soil testing for land for temporary use and decommissioned construction land.
2. The land used for the oil and gas exploration and development, refining, and product oil sales operations all have relevant requirements for land reclamation and pollution testing. The Company's land reclamation and pollution testing and remediation records have been highly recognised by the government.

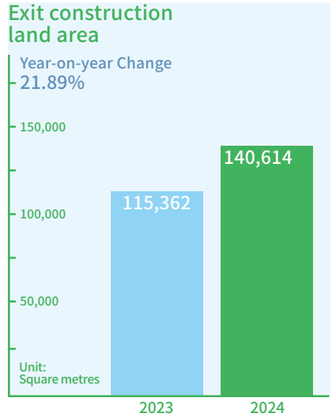
The Company has formulated a series of guideline policies and implementation regarding soil and groundwater pollution prevention and control, including the *Implementation Plan for Soil and Groundwater Pollution Investigation and Control*, the *Sinopec Technical Guidelines for Preliminary Investigation of Soil and Groundwater on Enterprise Lands (Trial)*, the *Technical Specifications for Environmental Investigation of Soil and Groundwater on Enterprise Lands*, and the *Sinopec Land Management Measures*. The Company continuously optimises its land management mechanism and standards for new land in use and actively implements land rehabilitation and reclamation, focusing on the goals of "limiting increments, revitalising stock, and improving quality". In 2024, the Company issued the *Notice on Further Strengthening Environmental Management of Key Aspects in Land Operations* to further enhance the environmental risk management in land disposal operations.

In 2024, the Company explored ways to better use land in use, aiming to achieve more effective and efficient use of land that is not used efficiently to generate benefits. The Company has also established an alert mechanism for land for temporary use and land faces expiration to prevent the risks of overdue land use. The Company actively carries out monitoring and control of pollution sources for soil and groundwater, conducting soil and groundwater pollution investigations and risk assessments and ensuring the timely implementation of risk control or pollution remediation measures. The Company accelerated the implementation of the sewage pipeline network visualisation project, and implemented the pilot projects for "source control" and "production and control simultaneously" for soil and groundwater.

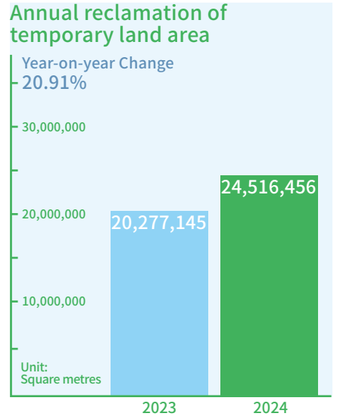
Saved area of newly added construction land



Exit construction land area



Annual reclamation of temporary land area



4.10 Ecosystem and Biodiversity Conservation

Sinopec Corp. strictly complies with various national and local laws, regulations, and requirements related to ecosystem and biodiversity conservation, such as the *Wetland Protection Law of the People's Republic of China*, the *Yangtze River Protection Law of the People's Republic of China*, the *Yellow River 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 *Interim Measures for the Administration of Aquatic Germplasm Resources Protection Areas*, the *Interim Measures for the Administration of National Key Parks*, and the *Regulations on Scenic Spots*. Ecosystem and biodiversity conservation has been integrated into the Company's policy system covering all business segments as well as all supply chain segments, such as the *Sinopec Environmental Protection Management Regulations*, the *Sinopec Environmental Protection Management Measures for Construction Projects*, and the *Sinopec Ecological Protection Management Measures*, requiring all subsidiaries to strictly implement biodiversity conservation measures during project design, construction, and operation to reduce the disturbance to the ecological environment. Meanwhile, the Company continues to strengthen the awareness raising and education of relevant policies and systems, ensuring all subsidiaries comply with the related requirements.

Sinopec Environmental Protection Management Regulations	"To avoid ecologically protected red line areas and take effective measures to reduce the impact on the ecological environment."
Sinopec Ecological Protection Management Regulations	"Strictly abide by the special management regulations for ecologically sensitive areas of state and local governments. For new projects, priority should be given to avoiding ecologically sensitive areas. If it is really unavoidable, a special demonstration should be carried out according to the requirements of the competent authority of the ecologically 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."
Sinopec Greening Management Regulations	"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."

Risk Management Measures for Biodiversity and Ecological Protection in Project Construction

1 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.
2 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.
3 Project Exit	After a production facility is shut down or decommissioned, the subsidiary must conduct an ecological environment status survey and assessment of the site, and carry out relevant pollution control and ecological restoration measures.
4 Ecological Compensation	For engineering construction that may cause ecological disturbances, ecological compensation measures such as stock enhancement and release, as well as follow-up monitoring, shall be carried out over a certain period, to mitigate the impact of project construction on ecologically sensitive and fragile areas.

The Company strictly complies with the ecological and environmental zoning control requirements of the "Three Lines and One List" (ecological protection red line, environmental quality bottom line, resource utilisation top line, and ecological environment access list). In recent years, in accordance with the requirements of national and local governments, some subsidiaries of Sinopec have withdrawn their production facilities located within ecologically sensitive areas, including a total of 992 oil wells, 112 gas wells, 181 water wells, 6 exploratory wells, 20 stations, 24 service stations, 7 oil depots, and 4 docks as of the end of 2024.

In 2024, the Company continued to improve its ecological monitoring and evaluation system and the environmental monitoring network, conducting ecological monitoring at all operational sites, monitoring factors such as air, surface water, soil and vegetation in the surrounding areas of production operations, with a total of 1,320 sets of ecological monitoring data collected from 114 ecological monitoring points during the year. The monitoring results showed that local ecological functions have not been affected by the Company's production and operations.

In 2024, the Sinopec Natural Gas Company Qingdao LNG Receiving Station carried out a release and replenishment activity at Dongjiakou Port in Xihaian New District in Qingdao, Shandong. A total of 2.02 million and 2.82 million of flathead sole and paralichthys maximus fish fry were released into the water in support of the restoration of the marine ecological environment and the replenishment of fishery species resources. Beihai Refining & Chemical also invested over RMB10 million in a release and replenishment ecological compensation programme to minimise the disturbance to the marine ecosystem caused by engineering projects.

The overseas subsidiaries of the Company also attach great importance to biodiversity conservation and actively carry out biodiversity conservation plans. In 2024, UDM in Russia released a total of 6,000 fish fry, including carp, crucian carp, and pike, into the Kama River and Cheptsa River waters.

The "Clear and Clean, Protection of the Yangtze River" Rare Species Protection Programme

CASE

Hubei Oil Products Company adheres to the principle of balancing resource development with ecological protection and actively implements the "Clear and Clean, Protection of the Yangtze River" campaign. The company has invested RMB4 billion to upgrade environmental protection facilities to safeguard the important habitats for the Chinese sturgeon and the Yangtze River dolphin.

Along the river, the company shut down 11 oil depots and 17 oil accepting and unloading terminals, and relocated or dismantled 12 floating fuelling stations. Oil depots and terminals shutdown were turned into a series of education bases for the protection of the Yangtze River, including education centres and observation viewpoints for the Yangtze River dolphin, receiving hundreds of thousands of visitors and hosting more than 20 themed activities. The company collaborated with the only Chinese sturgeon protection area to carry out public welfare projects, releasing over 1,800 Chinese sturgeons into the river. August 15 (National Ecological Day) has been designated as the "Clear and Clean, Protection of the Yangtze River" Responsibility Action Day, making the programme a strong public welfare brand with comprehensive components.

SAFETY MANAGEMENT

5

5.1 Production Safety and Occupational Health 087

5.2 Contractor Safety 095

5.3 Public Security 096

5.4 Cybersecurity and Privacy Protection 097

5.1 Production Safety and Occupational Health

Governance

Governance Structure and Personnel

The Company is committed to integrating safety and occupational health into its strategic planning, corporate governance system, comprehensive risk management system, as well as its daily operation and management. The Company has established a "Board-Management-Implementation" three-level governance structure with well-defined responsibilities at each level.

Board Level 1

Organisation	Strategy Committee	Audit Committee	Sustainability Committee
Members	Chairman, Executive Directors, Independent Directors	Independent Directors	Chairman, Non-Executive Directors, Executive Directors, Independent Directors
Authorities, tasks and objectives	Responsible for reviewing development plans related to safety and occupational health, and providing the Board with suggestions on this issue. Responsible for reviewing and supervising the Company's safety and occupational health work plan and its implementation. Responsible for identifying, assessing and managing the risks and impacts related to safety and occupational health, and reviewing the list of major risks and annual evaluation reports related to this issue.	Responsible for assessing the effectiveness of the Company's risk management and internal control systems.	Responsible for conducting research on policies, strategies, and action plans related to sustainability issues, including safety and occupational health. Responsible for supervising the commitment and performance of the Company on key issues such as safety and occupational health, and providing suggestions to the Board accordingly. Responsible for reviewing the Company's annual sustainability report and supervising safety and occupational health related information disclosure of the Company.

Management Level 2

Organisation	HSE Committee
Members	Mainly consists of presidents, senior vice presidents, vice presidents and other senior management personnel, as well as heads of relevant functional departments.
Authorities, tasks and objectives	Research, guide, and coordinate the Company's safety and occupational health management. Research and propose the Company's safety and occupational health guidelines and policies. Review, approve and issue the Company's annual safety and occupational health targets and work plans. Analyse the Company's safety and occupational health performance, and address challenges related to safety and occupational health.

Implementation Level 3

Organisation	Department of Health, Safety, and Environmental Management	Office of Comprehensive Risk Management	Subsidiaries
Authorities, tasks and objectives	Research and propose safety and occupational health policies, annual goals and related measures; supervise, inspect and guide the Company's safety and occupational health initiatives. Implement the tasks and targeted actions from the HSE Committee, organise safety and occupational health inspections and targeted supervision, and ensure the rectification of problems identified.	Incorporate safety and occupational health related risks into the comprehensive risk management system and internal management processes; organise and implement annual risk identification and assessment; compile quarterly report on major risk management and report to the Board. Supervise the management of safety and occupational health related risks through annual risk control and internal control inspections, and corporate self-assessment.	Implement the requirements of the HSE Committee, and propose working measures. Organise internal audits and inspections within the enterprise system and ensure the rectification of problems identified. Research and formulate the annual safety and occupational health targets and work plans, and supervise and inspect to ensure implementation.

Professional Skills and Capabilities

The Company appoints directors and management personnel with expertise in safety and occupational health management related fields to provide professional support and guidance for its safety and occupational health management. The Company has established a dedicated work committee comprised of individuals with relevant expertise to ensure the effective implementation of related initiatives. The Company has developed and continuously implements safety and occupational health management related training programmes, inviting industry experts to lecture on the latest safety and occupational health policy backgrounds, development trends and innovative practices, updating the Board and the senior management on latest developments in relevant fields. All these efforts provide strong professional support for the Company's safety and occupational health management undertakings.

Reporting, Supervision and Evaluation

The Company has established an internal reporting and supervision mechanism for safety and occupational health management related issues and incorporated the mechanism into the internal control system of the Company. Every six months, the Board of Directors and the Sustainability Committee review reports or issues on safety and occupational health management, including related strategy formulation and implementation, performance, and future targets, and hear the management team's reporting of the progress on safety and occupational health management. The HSE Committee meets annually to hear reports from relevant functional departments on the strategic implementation, progress and future goals of the Company's safety and occupational health management, and guides and supervises the implementation of relevant initiatives. Company subsidiaries report their progresses to relevant functional departments through monthly and quarterly statistical datasheet as well as themed report.

Safety and occupational health management indicators, such as production safety incidents, have been integrated into the annual performance assessment for both the senior management and the subsidiaries as compulsory indicators. To do so, the Company has established a process performance evaluation mechanism as well as relevant process monitoring indicators, linking their performance with annual performance bonuses. Each year, the Company selects units, management staff, and individuals with outstanding performance in safety management for recognition, and recognises units and individuals making exceptional contributions to safety and occupational health management with dedicated awards, such as the dedicated HSE Award, respectively.

Incorporating Safety and Occupational Health Consideration into Management Decision-Making

The Company attaches great importance to safety and occupational health, and has fully incorporated safety and occupational health related impacts, risks and opportunities in formulating overall development strategy and supervising the implementation of the strategy, making key business decisions, and managing risks. The Company closely follows government policy trends and makes timely adjusts of its development strategies and action plans. Based on thorough studies and impact evaluations of government safety and occupational health policies, the Company has formulated and implements a series of safety and occupational health management policies, such as the *Sinopec Production Safety Risk Classification Control and Hazard Investigation and Management Dual Prevention Management Regulations*, the *Sinopec Emergency Management Regulations, and the Sinopec Occupational Health Management Measures*.

Strategy

Risks	Time Frame of Impact*	Response Measures
Risks associated with the retirement and renovation of old devices and storage tanks Many materials involved in the dismantling and modification of devices and storage tanks are flammable and explosive. Fire or explosion accident may result in significant losses for the Company and society, as well as higher operational costs. The retirement and upgrading of old devices and storage tanks mainly happen in the midstream refining sector. In short- to medium-term, this may lead to a decrease in production capacity, thereby reducing revenue, as well as disrupting the operation of the petrochemical industrial chain to certain degree.	Short- and Medium-term	Conduct risk analysis and develop risk prevention measures before construction starts; strengthen education and training for construction personnel and enhance construction safety supervision. Make reasonable planning to complete equipment and tank upgrade and modification along with maintenance to minimise the impact on production; adjust storage plans to reduce the impact of tank upgrades on upstream and downstream operations.
Risks in the development of new materials and new processes During the development of new materials and new processes, there are risks of fire and explosion accidents, uncertain results, and insufficient safety analyses, posing significant safety challenges. The Company needs to invest in preliminary safety and environmental protection analyses and plan development, thereby increasing costs. New process development is a supplement and extension of the petrochemical industrial chain, which may cause fluctuations in capacity and economic benefits due to inadequate risk identification or imperfect process design.	Short-term	Conduct inherent safety assessments from the early stage of process development, carry out planning and implementation from an overall perspective, and ensure inherent safety, quality and efficiency through digital and green transformation.
Safety risks in offshore oil and gas production Offshore oil and gas production faces risks of platform capsizing or oil leakage from pipelines due to extreme weathers, complex sea conditions, and aging equipment. Safety incident may cause casualties, marine environmental pollution, and the product stoppage at offshore platforms. The direct losses, compensation, fines, and cleanup and restoration incurred can put financial pressure and cash flow stress on the Company, increasing operating costs. The social impact of safety accidents and the huge compensation and fines incurred may force the Company to readjust its offshore oil exploration and development strategy, or even halt offshore oil exploration and development, which would significantly impact the Company's operations and profitability.	Short-, Medium- and Long-term	Intensify the collection, analysis, and research of geological and geomorphological data in the offshore oilfield area, optimise offshore safety systems, utilise information technology to enhance rapid risk identification and emergency response capabilities, and improve the production command system for offshore and coastal oil facilities. Conduct aging assessments for aging platforms and pipelines, and in-depth assessments for manned platforms, and establish an offshore oil safety risk monitoring and early warning system to ensure safety of offshore oil operations.
Safety risks in the exploration and development of high-sulphur gas fields The exploration and development of high-sulphur gas fields face well control or leakage risks due to factors such as aging equipment, geological disasters, and complex terrain. Safety accidents may cause casualties, environmental damage, and production disruption of the gas field. The direct losses, compensation, fines, and cleanup and restoration incurred can put financial and cash flow pressures on the Company, increasing operating costs. The public trust crisis and environmental damage caused by safety accidents may force the Company to readjust its natural gas development strategy or even suspend exploration and development in the high-sulphur gas field sector, which could impact the Company's long-term profitability.	Short-, Medium- and Long-term	Continuously enhance inherent safety design standards, conduct systematic risk assessments, monitoring and early warning, targeted emergency drills, and rescue capability building. Optimise existing operational model from both organisational management and engineering technology dimensions, strictly implement the HSE management system, conduct regular compliance evaluations and controls for sulphur-containing natural gas wells and pipelines, accelerate intelligent transformation, and ensure that safety risks in high-sulphur gas fields are controllable.
Safety risks of new energy business As an emerging business, the new energy sector faces issues such as the lack of effective verification for long-cycle operational reliability of equipment, insufficient safety management personnel, and lagging industry safety standards, increasing the possibility of safety accidents. Due to the volatility and intermittency of wind and solar resources, as well as the high-pressure characteristics of gaseous hydrogen, the long-cycle operational reliability of new energy equipment faces certain challenges under complex conditions. Equipment failure or hydrogen leakage may lead to explosion accidents, increasing the Company's operational costs.	Short- and Medium-term	Conduct training for and develop a talent reserve of new energy safety management personnel. Focus on improving the inherent safety operation of equipment, conducting systematic research from aspects such as material selection, structural design, monitoring of service status, and emergency response. Strengthen the research and application of relevant standards and regulations for new energy safety management.

Opportunities	Time Frame of Impact*	Response Measures
Opportunities for the retirement and upgrading of old equipment and storage tanks Elimination and upgrading of old equipment can improve equipment safety, reducing the likelihood of safety accidents and losses and costs incurred. Elimination and upgrading of old equipment help to optimise the industrial chain, accelerate corporate transformation, enhance production efficiency, boost competitiveness, leading to increased profits.	Long-term	Develop a comprehensive plan for the update of old equipment and development plan of the refining business, optimise processes, and drive comprehensive improvements in equipment, technology, and energy efficiency through digital transformation and green upgrade to achieve inherent safety and improve quality and efficiency. Actively seek financing through multiple channels, such as applying for long-term treasury bond funding support and preferential loans.
Opportunities for the development of new materials and new processes The development of new processes and new materials supplements and improves the Company's industrial chain, especially the downstream industrial chain, contributing to enhancing internal collaboration and reducing costs. Continue to invest in fields such as fine chemicals, high-end chemicals, and high value-added products, which helps diversify investment risks, improve investment returns, and increase revenue.	Medium- and Long-term	Study market situation and invest early in technologies, incorporating the design concept of inherent safety from the process development stage, comprehensively enhancing the competitiveness of the process.

*Short-term: Within 1 year; Medium-term: 1-5 years; Long-term: More than 5 years.

01 Safety And Occupational Health Strategies and Management Systems

24.4
RMB billion
Annual expenditure on safety-related costs

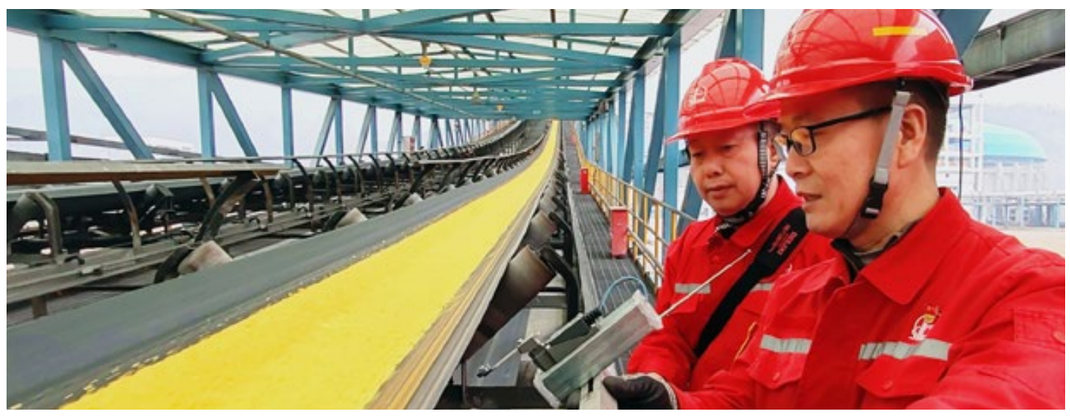
The Company ensures its safety and occupational health concepts by adhering to the safety principles of "people-oriented, safety first, emphasising on prevention, and comprehensive governance," , and takes a zero-tolerance approach to all violations. The Company has established an HSE management system with policies and regulations covering all relevant aspect, including comprehensive safety management, safety risk and hazard management, safety technology management, supervision of contractors and direct operations, fire and accident emergency management, public security management, and employee health management. The HSE management system and related policies cover all workers of Sinopec Corp., including its employees, suppliers, as well as contractors. The Company conducts annual audits of the HSE management system performance, and develops improvement suggestions to continuously enhance the effectiveness of the HSE management system.

The Company has formulated the *Sinopec's Three-Year Action Plan for Production Safety (2024-2026)*, outlining 70 improvement actions. As of the end of 2024, all actions scheduled for 2023 Safety Management Strengthening Year and the 2024 Safety Management Improvement Year had been completed. The Company attaches great importance to invest in safety management to effectively respond to safety risks, spending RMB 24.4 billion in 2024, continuously enhancing the inherent safety of equipment and facilities. Safety spending for 2025 will be kept stable in accordance with the Company's safety and occupational health work plan, which will not lead to significant changes in the financial performance of Company.

The Company has established a "1+7" occupational health standard system, newly formulating the *Sinopec Occupational Health Management Measures* and the enterprise standard *Technical Specifications for Monitoring Occupational Hazardous Factors*. It further standardizes management practices in areas such as the "three simultaneities" of occupational disease protection facilities in construction projects, hearing protection, occupational health surveillance, occupational health training, warning signs and notifications of occupational disease hazards, and occupational health records. The Company strives to create a healthy work environment for employees through source prevention and control, and to provide workers with proper labour protection through sound process management, systematically and holistically advancing the safeguarding of employee health.

02 System Audit and Certification

The Company supervises and reviews the strategy, objectives, and implementation of safety and occupational health 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 conducts internal audits and organises major HSE inspections and system audits annually. In 2024, the Company conducted system audits for its subsidiaries, assessing the operational status of their systems to identify problems to improve. As of the end of 2024, there were 71 subsidiaries of the Company had completed ISO 45001 Occupational Health and Safety Management System certification.



Management of Impacts, Risks and Opportunities

The Company has formulated the *Comprehensive Risk Management Measures*, specifying the risk management mechanism and work processes related to safety and occupational health. The headquarters functional departments are responsible for managing relevant issues as well as the management of specialised risks, identifying and assessing specialised and targeted risks, implementing control policies, and preparing the quarterly major risk management reports. The Company has integrated safety risks into its operational risk management and conducts a comprehensive risk assessment annually.

The Company has formulated 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*, laying out the risk management principle of tiered management. Sinopec subsidiaries are required to conduct a comprehensive risk identification at least once a year, and formulate their own tiered risk lists based on the risk identification results. During the 2024 comprehensive risk identification, HES risks, including safety and occupational health, are identified as the No. 1 risk factor of the Company.

Metrics and Targets

In 2024, the Company achieved its annual safety and occupational health targets, with no major safety accidents, nor any lawsuits related to safety or occupational health.

Safety and Occupational Health Targets of Sinopec Corp.

- Eliminate major and above level safety accidents and strive for zero accidents.
- No incidents of production safety liability accidents due to inadequate prevention of natural disasters.
- 100% detection rate of occupational disease hazard factors.
- 100% rectification rate of facilities not meeting occupational health standards.
- 100% customised intervention rate for high health risk individuals.

Indicators	2023	2024
Number of accidents reported	1	0
Number of deaths due to production safety accidents	1	0
Total recorded accident (Incident) rate (per 200,000 working-hours)	0.00023	0
Fatal accident rate (per 200,000 working-hours)	0.05052	0.0426
Number of production safety emergency drills (10,000 times)	59	59
Participation of production safety emergency drills (10,000 person-times)	333	331
Number of newly diagnosed cases of occupational diseases	4	2
Employee work-related injury insurance expenses (RMB10,000)	48,188.5	58,251.5
Employee safety production liability insurance expenses (RMB10,000)	6,957	7,920
Coverage of employee work-related injury insurance (%)	100	100
Coverage of safety production liability insurance (%)	100	100
Lost workdays due to work-related injuries (days)	5,586	5,992

Safety Management Measures in 2024

Fully Implemented the Year of Safety Management Improvement Campaign	Established a leadership group led by Chairman of the Company and five targeted working groups, formulating implementation plans and a mechanism of weekly inspections, monthly supervision, quarterly summaries, and annual evaluations. 50 tasks planned for the year were all completed. Carried out the "Hundred Days Safety, Zero Accidents" campaign, with 21 measures implemented.
Strengthened HSE Responsibilities for All	Revised the company-wide safety responsibility system and required employees at all levels to sign HSE responsibility commitment.
Enhanced HSE Competency at All Levels	Carried out HSE performance evaluations for new senior management personnel and establish HSE competency records for the leadership teams and personnel of subsidiaries. Launched the Safety Month event, organising 14,000 safety awareness lectures and conducting 47,000 "Open Pathway of Life" emergency drills. Organised safety training for key HES personnel at all levels with a total participation of 120,000 person-times, safety training for safety managers and leaders of grassroots units, and targeted training for HSE system auditors.
Strengthened Risk Hazard Control	Carried out targeted chemical safety hazard rectification campaigns; implemented targeted safety governance in eight fields including aged facilities and equipment, high-risk sub-sectors, and land oil safety risks; strengthened safety supervision of hazardous chemical transportation, optimising the risk monitoring and early warning mechanism for hazardous chemical transportation. Strengthened risk prevention for seasonal natural disasters and achieved full-chain informationalised management for geological disaster risk points.
Deepened Safety Supervision	Carried targeted and regional supervision of subsidiaries, completing the inspections of 117 enterprises; organised the annual HSE major inspection, conducting in-depth inspections on 106 enterprises.
Enhanced Emergency Response Capabilities	Optimised the organisational structure and personnel arrangement of the fire brigade, and upgraded the emergency command system. Revised the *Sinopec Emergency Plan for Sudden Incidents*, conducted emergency drills to enhance the comprehensive response capabilities for major emergencies.




Occupational Health Management Measures in 2024

The Company vigorously implements the construction of Healthy Enterprise, with significant improvements achieved in the health environment, health management and services, and health culture at various subsidiaries. Among its subsidiaries, there are 83 subsidiaries recognised with the title of provincial Healthy Enterprises and 49 subsidiaries with municipal Healthy Enterprises, increased from 19 and 22 respectively compared to 2023. 28 cases have been selected as outstanding cases for national Healthy Enterprise construction. And the Company won the national "Typical Case of Healthy Enterprise Construction" award.

Strengthened the Foundation of Occupational Health Management	Identified annual health management priorities, including 17 key tasks in five areas, to guide subsidiaries to better implement health management systems based on actual situations.
Improved Work Environment and Conditions For Employees	Intensified and improved the supervision of the "three simultaneous" process for occupational disease prevention facilities in construction projects, strictly ensuring the simultaneous designing, construction and operation of occupational disease prevention facilities with the main project. Strengthened the rectification of facilities failed to meet standards, specified key supervision projects for monthly follow-ups to ensure timely rectification.
Enhanced Employee Occupational Health Awareness	Organised 4,400 occupational health training classes, with 220,000 employees receiving dedicated training in occupational health knowledge. Organised company-wide training and practical exercises on AED use, CPR skills and other first aid skills.
Strengthened Occupational Disease Prevention and Control Capabilities	Conducted verification of occupational disease hazard project applications, with over 23,000 applicants in compliance the requirements. Encouraged the subsidiaries to establish occupational health management departments, adding 103 full-time dedicated personnel; conducted in-depth analysis during HSE supervision and inspections to identify health issues for improvement, further enhancing the health management capabilities of subsidiaries.


5.2 Contractor Safety

The Company has formulated policies, such as the *Sinopec Contractor Safety Supervision Management Measures*, the *Sinopec Regulations on the Management of Construction and Maintenance Contractors*, and the *Sinopec Management Measures for Training and Assessment of Contractor Project Personnel*, to specify the detailed safety supervision and management requirements for various operation procedures, such as contractor admission, bidding, qualification review, contract signing, process control, supervision and inspection, and evaluation. Meanwhile, the Company also specifies the HSE supervision requirements for contractors in a relevant policies and systems, such as the *Sinopec HSSE Inspection Supervision Management Regulations*, the *Sinopec All-employee Safety Behaviour Norms, the Sinopec All-employee Safety Scoring Management Measures (Trial)*, the *Sinopec Management Regulations for Safety Production Accidents*, the *Sinopec Occupational Health Management Measures*, and the *Sinopec Safety Production Education and Training Management Measures*. In addition, the Company has established a safety performance process evaluation mechanism that with regular quantitative evaluations of the safety management performance of contractors of its subsidiaries, with evaluation results reported to the subsidiaries.

In 2024, the Company revised the *Sinopec Contractor Safety Supervision Management Measures*, requiring its subsidiaries to formulate detailed rules for contractor safety assessment with specific penalties for violations. The Company implements a shared contractor "blacklist" mechanism among its subsidiaries. All subsidiaries have access to the shared blacklist of contractors and contractor personnel. Since the launch of shared blacklist platform July 2024, information on the violations of 131 contractors has been shared, with 79 contractors and 612 individuals blacklisted, initially achieving company-wide sharing of blacklisted contractors.

In 2024, the Company carried out the annal HES inspection and comprehensively reviewed the safety management of suppliers in ten aspects, including management system, qualification review, contract management, site management, construction plans, and process control. The Company has implemented the "Targeted Rectification Campaign on Contractor and Construction Operation Safety", effectively prevent the occurrence of violations in high-risk operations by continuously enhancing contractors' compliance management, safety awareness and capabilities, as well as standardised management of construction operations.

5.3 Public Security

Facing the complex and ever-changing global security challenges, Sinopec Corp. coordinates the needs for both development and security, and 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 17 consecutive years.

In 2024, the Company further optimised its overseas public safety system, formulating the *Guidelines for Adjusting Overseas Security Risk Classifications* and the *Standards for Assessing Overseas Security Vulnerability*, promoting the standardised and scientific assessment of risks. The Company attaches great importance to protect the security of employees overseas, continuously enhancing the capabilities to prevent, control and deal with security risks. The Company further strengthened its emergency response capabilities, carrying out regular security emergency drills to enhance practical emergency response skills. The Company also completed the construction of an emergency command system(enterprise side) for overseas security protection, applying information technology to dynamically monitor the operational status and other information of overseas projects, effectively improving the informatisation level of safety protection for employees overseas. In 2024, the Company organised a total of 84 training sessions on overseas with a total participation of 4,627 person-times.

4,627

Number of overseas public safety training participants in 2024

The Company adheres to systematic thinking and continues to strengthen the closed-loop, full-cycle risk prevention and management regarding overseas projects.

For New Projects	Continuously optimised the assessment metrics, rules and methodologies for high-risk and sensitive countries abroad, strictly strengthened the implementation of negative list management, and continuously optimised pre-emptive risk assessment for new projects, ensuring scientific decision-making. Formulated the *Sinopec Guidelines for the Preparation of Overseas Project Country Risk Assessment Report*, ensuring its subsidiaries follow standardised procedures to prepare their comprehensive risk assessments of overseas projects.
For Existing Projects	Intensified risk investigation, systematically screened risks that overseas businesses may face during decision-making and operations, formulated the *Overseas Operation Risk List*, conducted comprehensive risk investigations on overseas projects and trading entities, and established and dynamically updated the *Overseas Operation Risk Ledger*.

5.4 Cybersecurity and Privacy Protection

Cybersecurity

Sinopec Corp. attaches great importance to cybersecurity, strictly complying with the requirements of state 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*, the *Regulations on the Management of Network Data Security*, and the *Regulations on Security Protection of Critical Information Infrastructure*. Following the guideline of ensuring effective protection and reasonable use of data, the Company has constructed the Sinopec cybersecurity governance framework, continuously optimising its cybersecurity policy system. The Company has formulated a number of management policies and standard specifications, such as the *Sinopec Data Resource Management Regulations*, the *Sinopec Cybersecurity Management Measures*, and the *Sinopec Application System Security Design Technical Requirements*, specifying the requirements for data security and personal information protection. In 2024, the Company had no occurrence of any data security-related incidents.

01 Cybersecurity Management System

The Company has established a Cybersecurity and Information Committee, with Chairman of the Board serving as the chairperson, responsible for coordinating the Company's data and network security management, reviewing the medium- and long-term planning, annual plan, and key tasks related to data and network security, providing guidance, coordination, and supervision for data and network security of its subsidiaries, and promoting the implementation of tasks and responsibilities related to data and network security. The Company's cybersecurity technical support unit, PCITC Limited, has passed the ISO 27001 certification.

Building a Comprehensive Cybersecurity Defence System 1

Cybersecurity incidents are centralised managed by their classification, with responsibilities of relevant departments clearly defined, in accordance with the *Sinopec Cybersecurity Incident Emergency Plan*, following a 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.

The Sinopec Security Response Centre (SSRC) proactively monitors cybersecurity threat alerts, conducts real-time analysis of cybersecurity attack behaviours, and promptly addresses cybersecurity abnormalities and threats.

Built a data lifecycle protection framework using various technologies, effectively enhancing cybersecurity service capabilities and ensuring the safety of important data and privacy information.

Establishing a Cybersecurity Alert Mechanism 2

Timely issue cybersecurity alerts and rectification notifications, and follow-up on the rectification process to ensure the timely elimination of security hazards.

Cybersecurity hazards are reported through three channels, including the cybersecurity operation command system, internal instant messaging system, and the corporate email system, to SSRC, whose experts will investigate, analyse and handle the reported threats.

Establishing Performance Evaluation Mechanism 3

Include cybersecurity and personal information protection in the annual assessment evaluation of employees, with results directly linked to annual performance using a point deduction mechanism.

Employee violations of cybersecurity regulations will face disciplinary actions in accordance with the *Sinopec Employee Disciplinary Regulations*.

02 Cybersecurity Awareness Raising and Skills Training

The Company has been organising the Cybersecurity Awareness Week activities for eight consecutive years. The 2024 Cybersecurity Awareness Week was conducted in September. Employees participated in a variety of activities, such as exhibitions, online pop-science sessions, interactive shows, themed lectures, promotional materials, and an open competition of relevant techniques and tactics, learning more knowledge on cybersecurity, confidentiality, data security, and personal information protection.

In 2024, the Company organised cybersecurity skills training for over 500 participants to further strengthen the construction of a professional cybersecurity talent team. The trainings included cybersecurity technological component service capability trainings, such as organisational data encryption, data de-identification, and database auditing, as well as trainings on data classification, grading, and risk assessment, effectively enhancing the professional skills of cybersecurity personnel.

Indicators	2023	2024
Monetary value of cybersecurity security incidents (RMB10,000)	0	0
Losses caused by violations of laws and regulations regarding data breach (RMB10,000)	0	0
Coverage of data security-related standard certifications (%)	100	100
Coverage of trainings on cybersecurity (%)	100	100
Coverage of trainings on sensitive data encryption (%)	100	100
Coverage of trainings on access control mechanism (%)	100	100

Privacy Protection

In compliance with the provisions of the *Personal Information Protection Law of the People's Republic of China*, the Company has established a robust consumer privacy protection management system covering the collection, storage, use, sharing and deletion of consumer data. The Company regularly conducts privacy protection training for employees to raise their awareness of privacy protection, and strengthens partner management by specifying confidentiality obligations in contracts with partners, requiring partners to sign the *Safety Responsibility Commitment* and pass the level three National Information Security Graded Protection Certification.

The Company has established a dedicated team responsible for external data disclosure and process approval, supervising the implementation of privacy protection policies, and monitoring the compliance with privacy protection policies through internal inspections and lawyer reviews and assessments to ensure the timely identification of potential compliance and security risks. The Company has also established a dedicated complaint handling mechanism to promptly respond to and address complaints arising from the leakage of consumer information. In 2024, the Company had no incidents related to the leakage of consumer information.

Indicators	2023	2024
Monetary value of customer privacy leakage cases (RMB10,000)	0	0
Losses caused by violations of laws and regulations related to customer privacy leakage (RMB10,000)	0	0
Verified complaints involving breaches of customer privacy and loss of customer data (cases)	0	0
Customer privacy protection training coverage (%)	100	100

RESPECTING HUMAN RIGHTS AND CULTIVATING TALENTS

6

6.1 Respecting and Protecting Human Rights 101

6.2 Employee Development 107

6.1 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 *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 the *Regulations on the Prohibition of Child Labour*, and other relevant laws, regulations and policies 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, ethnicity, 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 Commitments 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 all business activities comply with international labour standards and UNGC requirements.

Actively fullfill 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 human rights protection and is committed to respecting and protecting human rights, and Company operates in compliance with the relevant requirements of the *UN Guiding Principles on Business and Human Rights (UNGPs)*. The Company regulates labour relations in accordance with relevant laws and regulations, establishing a comprehensive human resource management system adhering to the principles of people-centeredness, strengthening democracy, and safeguarding employees' legitimate rights and interests, including the right to work, privacy rights and other rights, and forbidding 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 state 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*, prohibiting child labour, and refraining from forced or compulsory labour of all forms. The Company continues to promote the legitimate and compliant management of labour relations, ensuring the effectiveness of the human rights policy through supervision and inspection. Potential human rights risks will be promptly reported, investigated and addressed. In 2024, the Company had no incidents of using child labour, or forced or compulsory labour. Respecting human rights and protection of employee rights were included as major topics of concerns in various audit projects, such as economic responsibility audit, internal control audit evaluation, and fixed asset investment audit, carried out in 2024, all of which found no incidents of such violations of human rights.

Regarding human rights management in the supply chain, the Company requires and supervises its contractors and suppliers to legitimately manage their labour practices, strictly implement national and local government regulations on wage standards, social insurance, and workplace safety and health, pay outsourced personnel wages on time and in full amount, comply with government regulations on working hours and rest and leave, effectively fulfilling the responsibility of respecting and protecting human rights.

Regarding 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, ensuring that human rights are duly considered, respected and protected.

The Company has formulated relevant policies, such as the *Guidelines for Overseas Human Resource Management*, to regulate its overseas employment behaviours 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.

01 Human Rights Risk Management Procedures

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

Risk Identification 1	Fully study potential human rights risk factors in the supply chain, such as forced labour and environmental issues, through various approaches, including comprehensive operation review, supply chain assessment, employee feedback and participation, and stakeholder engagement.
Risk Assessment 2	Conduct qualitative and quantitative analyses of risks based on international and domestic human rights standards and principles, identifying their likelihood and impact, and prioritising risk categories accordingly.
Risk Response 3	Formulate risk response measures, such as improving supply chain management, enhancing employee training, and optimising internal management systems, based the assessment results, ensuring the timely rectification human rights violations; ensure the effectiveness of risk response measures with regular reviews and updates.
Continuous Improvement 4	Continuously monitor and evaluate the effects of human rights policies and measures based on employee feedback and stakeholders engagement results, and make adequate adjustments and optimisations in a timely manner.
Communication 5	Maintain transparent communication and cooperation with stakeholders, timely respond to the expectations and feedback of stakeholders, developing mutual trust and promote human rights protection with collaborated efforts.

02 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

The Company vigorously 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, striving to create a lawful, fair, and friendly working environment and continuously enhance employees' sense of inclusiveness, happiness, and security regarding their human rights. The Company strongly opposes any act that ignores or tramples human rights, and forbids any forms of discrimination with regard to recruitment, promotion, training, and remuneration based on nationality, gender, age, ethnicity, religion, pregnancy, and disability, insisting on treating all employees with equity and building harmonious and stable labour relations with employees.

Employee Management	Comply with the *Prohibition of the Use of Child Labour Regulations*, preventing child labour by conducting qualification review and verification in the recruitment process. Ensure open and transparent recruitment process, providing real and accurate job information to university graduates that apply voluntarily, with a clear prohibition on forced labour. Sign written labour contracts with employees adhering to the principles of "equality, free-will, and consensus through consultation", containing articles on the term, job responsibilities and location, working hours, rest and leaves, remuneration, labour protection, and occupational hazard prevention, etc. All articles are approved or supervised by local labour authorities. Formulate relevant labour management policies to ensure the effective implementation of labour contract and adequate protection of employee rights and interests.
Rest and Vacation Arrangement	Strictly ensure the rights of employees to work and rest in accordance with state laws and regulations. Personnel implementing flexible working hours or comprehensive working hour calculation follow the latest policy requirements on special working hour systems, as well as suggestions from the labour union, protecting employees health with work-life balance.
Working Environment	Employees are free to choose their work, quit, and choose other jobs without violating confidentiality, non-competition, or service period requirements. Employees' personal freedom are strictly protected and must not be infringed through any means. Prohibit any form of forced labour for any reason, and never allow forced labour through withholding documents and money, surveillance, threats, and other methods.

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, and provides employees with fair and equal compensation opportunities and pays and benefits. The Company leverages its industrial advantages to continuously strengthen the support for labour needed in minority areas, and provides employees with equal career development opportunities with a fair and equal talent selection mechanism. In 2024, the percentage of minority employees of the Company continued to grow.

The Company advocates for a corporate culture that values respect, equality, and fairness, emphasising on employee value and dignity. The Company conducts anti-discrimination and anti-harassment training and education for employees, incorporating relevant content from the *Labor Law of the People's Republic of China* and other relevant laws and regulations into the training, in order to educate and guide employees to adhere to relevant laws and regulations as well as the employee code of conduct, enhance their professional ethics, help them better understand discriminatory and harassing behaviours and learn how to avoid and deal with such behaviours and safeguard their legitimate rights and interests. Meanwhile, the Company has established a complaint and grievance mechanism to allow employees to timely report incidents of discrimination and harassment, with the privacy and legitimate rights of whistleblowers strictly protected. All discriminatory and harassing behaviours, once confirmed, will be handled seriously in accordance with relevant laws, regulations and policies , with the handling results disclosed to the affected parties and the public.

Female Employees	Established the Female Employee Committee at the trade union to better protect the rights of female employees. All labour contracts must include provisions on the protection of the rights and benefits of female employees to be deemed legitimate and effective, providing a foundation for ensuring the rights and special needs of female employees. 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 workplace, carry out supervision and inspection on safety and health for female workers, and make continuous efforts to improve the working environment and conditions for female workers.
Employees with Disabilities	Carry out special recruitment activities for people with disabilities, provide job opportunities suitable for handicapped people with certain work skills. Strengthen the placement and assistance programme for employees with disabilities, and timely distribution of living subsidies for severely disabled and nursing care subsidies for disabled persons in need, ensuring stable job opportunities for people with disabilities.

Employee Participation and Caring

Sinopec Corp. has formulated the *Implementation Measures for Employee Representative Assembly of Directly Affiliated Units of Sinopec Corp.* and *Implementation Measures for Factory Affairs Disclosure of Directly Affiliated Units of Sinopec Corp.* in accordance with the *Trade Union Law of the People's Republic of China*, the *Regulations on Democratic Management of Enterprises*, and other relevant laws and regulations, further strengthening the democratic management system of enterprises that is based on the Employee Representative Assembly mechanism. The Company fully guarantees the employees' rights to information, participation, expression, and supervision, actively cultivates employees' sense of ownership, and vigorously encourages and protects employees' enthusiasm to participate in the governance of the Company. Meanwhile, the Company specifically requires its subsidiaries to include democratic management and democratic decision-making in their articles of association and major decision-making mechanisms, seek employee opinions before making major decisions, and make sure that all major issues affecting employees' vital interests have to go through a review process of the Employee Representative Assembly.

01 Optimising the Collective Bargaining Mechanism

In order to give full play to the democratic participation of employees, trade unions at all levels of the Company have established a collective bargaining mechanism with each enterprises in accordance with the *Labor Contract Law of the People's Republic of China* as well as other relevant laws and regulations, signing collective contracts with enterprises on behalf of employees. The collective contract shall contain provisions for the protection of female employees' rights, workplace safety, and the prevention of occupational diseases in accordance with the law. The draft collective contract must be reviewed and approved by the Employee Representative Assembly. The implementation of the collective contract is an important aspect of the inspections conducted by employee representatives. The Employee Representative Assembly regularly hears reports on the implementation of the collective contract to ensure the effective safeguarding of employees' rights and interests.

The Company regularly solicits proposals from employee representatives on topics such as workplace safety, environmental protection, corporate management, operations, and employee welfare, establishing a closed-loop proposal handling mechanism in accordance with the *Implementation Measures for Employee Representative Assembly of Directly Affiliated Units of Sinopec Corp.* The filing, supervision, and implementation of employee proposals are disclosed to all employees via various channels, and reported to the next Employee Representative Assembly. Suggestions not accepted as proposals shall have a written explanation regarding the reason for rejection.

1,386

Number of Employee Representative Assembly resolutions filed (Directly affiliated subsidiaries level)

In 2024, the Company carried out an evaluation of the effectiveness of the Employee Representative Assembly in order to further standardise the mechanism, deepen transparency, and improve democratic management. In 2024, Zhongyuan Oilfield and Nanjing Chemical Industries were awarded the title of National Demonstration Units for Factory Affairs Transparency and Democratic Management, while Southwest China Petroleum Bureau, Yanshan Petrochemical, and Great Wall Energy and Chemical (Guizhou) were awarded the title of National Advanced Units for Factory Affairs Transparency and Democratic Management.

02 Listening to Employee Voices

The Company has established various channels, such as online forums, WeChat applet, and staff meetings, to actively listen to the voices of employees, extensively solicit employee opinions and suggestions, timely respond to employee expectations, so as to further deepen employees' participation in major corporate reform initiatives. Employee representatives are given greater weight in the evaluation of management staff to ensure greater employee participation. In addition, the Company has developed an employee self-service information platform, where employees can search for information, get policy interpretation, and learn professional skills, becoming a hallmark self-service employee platform with Sinopec characteristics.

Deepening Transparency and Democratic Management

CASE

The No.1 Oil Production Plant of the Northwest Oilfield vigorously deepens the "Direct & Interactive" transparency model, feeding employees on company information through a variety of channels, including briefings, corporate WeChat account, and daily broadcasts. Meanwhile, the company launched the "Sunshine Escort QR Code Service" to employees. With segments on livelihood service needs, management suggestions, transparency inquiries, and problem reporting, the platform provides employees with an open channel to voice their concerns and get responded in 24 hours. Through the vigorous implementation of transparency and democratic management initiatives, employee satisfaction of the company increased from 95% in 2021 to 99% in 2024.

03 Caring for Employee Wellbeing

The Company actively listens to voices of employees. Leveraging the synergy of different grassroots employee engagement programmes, such as the "Grassroots Tours and Family Visits" campaign and the "Solving Practical Issues for Employees" programme, the Company vigorously visits grassroots teams and employee families, and listens to employee expectations and suggestions, focusing on addressing issues that concern employees the most. The Company continues to implement the "Sinopec Read, Sinopec Health, and Sinopec Care" programmes, building shared intelligent bookcases, organising cultural and sports activities, and providing assistance for difficulties, to encourage employees to take better care of their physical and mental health.

The Company provides assistance to five groups of employee families: families with low per capita income, those suffering from major diseases, those affected by accidents or natural disasters, students who are children of families facing difficulties, and other disadvantaged individuals. In 2024, the company provided a funding support to 29 directly affiliated subsidiaries of RMB15 million for employee assistance. As of the end of 2024, the Company provided RMB178 million cumulatively.

The Company also attaches great importance to caring for overseas employees, using policy and financial support to ensure continuous support for overseas employees, establishing health consultation and assistance hotlines, carrying out health education activities and team-building activities, and arranging dedicated personnel to regularly communicate with families of overseas employees to help them solve problems.

04 Implementing Employee Assistance Programme

EAP

The Company attaches great importance to employees' mental health, initiating an Employee Assistance Programme (EAP) to assist employees in effectively dealing with emotional challenges and stress. EAP management is integrated with both the HSE management system and corporate culture initiatives, further enhancing employees' participation in and recognition of the EAP programme.

Psychological Knowledge Sharing	Promoted psychological knowledge, provided EAP cloud classes and psychological popular science articles for employees, and organised EAP-related courses and lectures, aiming to help employees better understand, learn, and apply psychological knowledge in their daily lives.
Psychological Counselling Hotline	Set up a 7*24 psychological counselling hotline to provide timely psychological assistance for employees, including those stationed overseas.
Psychological Counselling and Crisis Intervention	Launched the EAP "Mindfulness Express Frontline Tour" campaign, selecting EAP personnel to form a psychological crisis intervention expert team to providing targeted online counselling. Included psychological crisis intervention in the enterprise emergency response system, setting protocols for intervention measures for different types and degrees of crises. Since 2023, a total of 1,250 counselling sessions have been conducted, 11 psychological crises were resolved through mandatory intervention.
Employee Survey	Conducted a survey on employees' mental health, and implemented customised interventions for high-risk individuals. Conducted a mental health survey covering 5,595 overseas project employees, aiming to better understand and improve the mental health status of employees stations overseas.
EAP Talent Cultivation	Developed a detailed list of psychological counsellors, EAP psychological agencies and experts to ensure reliable supply of grassroots backbone EAP support. Organised trainings for key EAP personnel to build capacities and ensure the effectiveness of EAP services.

6.2 Employee Development

Human Resources Management

01 Human Resources Risk 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 based on evaluation results. In 2024, several policy revisions were made regarding the performance assessment and renumeration management of the senior management team, and labour cost management, ensuring the policies and systems in alignment with the actual needs of the Company's human resources development.

The Company attaches great importance to the identification of human resources management risks, and systematically monitors talent turnover across its subsidiaries. Focusing on subsidiaries facing challenges in this regard, the Company conducts analyses of brain drain patterns and causes to formulate targeted solutions, such as expanding talent development opportunities, implementing more targeted and effective incentives, and creating a high-quality ecosystem that values and cherishes talent, to address talent loss in a comprehensive way. A rich variety of methodologies and tools, such as the job value assessment tool, the evaluation tool for market-oriented employment mechanisms, the competency model, the "three-system" reform assessment tool, and balanced scorecards, have been used by the Company to ensure better understanding and analysis of human resources data to achieve more effectiveness decision-making.

Job Value Assessment Tool	Developed a unified job value assessment tool, established a strategic job positioning model based on the job positioning tool, compiled and updates job descriptions, job catalogue compilation norms, job competition norms, and other policies. The tool has been implemented in more than 40 subsidiaries and achieved good results.
Evaluation Tool for Market-Oriented Employment Mechanisms	Established an evaluation tool for market-oriented employment mechanisms, organised and guided all directly affiliated subsidiaries to conduct self-assessment on the construction of market-oriented employment mechanism. Focuses on 19 quantitative and qualitive indicators of five factors, such as management system, open recruitment, and contractual management, this evaluation model can provide data support for enterprises to better identify gaps and implement improvement measures.
Evaluation Tool for The Reform Of Labour, Personnel, And Distribution Systems	Constructed an evaluation model regarding the reform of labour, personnel, and distribution systems focusing 18 indicators under four factor categories, including the effectiveness, efficiency, benefits, and results of reform measures; conducted annual evaluations regularly to identify and address prominent issues and optimise the relevant systems.

02 Focusing on Talent Introduction

In line with its short-term, medium-term, and long-term goals of business development strategy, as well as its development needs and key core technology needs, the Company vigorously attracts high-level talents from domestic and abroad focusing on job compatibility and targeted talent introduction. In addition, the Company implements a differentiated talent recruitment strategy. While exploring a self-registered talent recruitment system, the Company also actively encourages talent optimisation and exchanges that benefit the overall growth of the Company by breaking down barriers to talent mobility between business segments, regions, and subsidiaries. The Company adheres to the principles of openness, fairness, and justice and insists on the "three opennesses" of recruitment information, process, and results regarding the recruitment of college graduates, aiming to provide equal employment opportunities. Meanwhile, the Company actively strives to promote industry-education integration, pilot on a new apprenticeship system for enterprises, and develop a team of talent with operational skills.

Salary and Benefits

Sinopec Corp. continues to deepen the renumeration system reform, 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-term to long-term incentives based on factors such as job value, capability level, and performance and contribution. The Company conducts regular market benchmarking of salary management, adjusts the distribution gaps between different positions and levels, establishing a reasonable distribution system by improving salary competitiveness for key talent as well as ensuring the reasonable income for frontline employees. The Company has established a multi-layered and diversified employee welfare system, providing employees with social insurance and benefits such as paid vacations, maternity leave, and breastfeeding leave in accordance with relevant state and local policy regulations, as well as supplementary medical insurance and corporate annuity in line with the Company's actual situation, ensuring a solid guarantee for employees.

The Company has established a comprehensive performance appraisal management system for all employees, establishing a target management mechanism, and implementing 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 scope of assessment and sign relevant performance contracts with all employees regarding the requirements for both performance and competency. Assessment results are communicated to each employee in a timely manner, and referenced in other related occasions.

The Company has incorporated sustainability/ESG indicators as assessment criteria in the annual performance evaluation of the management personnel of its subsidiaries. Failure to meet assessment goals will result in point deductions. If any major or higher-level safety, environmental protection, or quality accident or incident occurs, the assessment result will be directly downgraded to unsatisfactory.

Sustainability/ ESG Indicators

- Safety, including but not limited to safety incidents penalised, and contractor safety incidents
- Energy conservation and environmental protection, including but not limited to carbon peaking and carbon neutrality goals, GHG emissions, pollutant control, energy efficiency management, and environmental penalties
- Quality management
- Compliance management

The Company has formulated the *Guiding Opinions on the Medium-term and Long-term Incentives of Sinopec Corp.* and a diversified employee incentive mechanism, including equity incentives for listed companies, equity and dividend incentives for technology-based enterprises, excess profit sharing mechanisms, follow-on investment, and other incentive methods, which effectively stimulate the innovation and efficiency of management personnel and key employees. Meanwhile, the Company implements a deferred incentive payment mechanism, where cash incentives generally start to be paid after 2 years; equity incentives generally start to be paid after 3-5 years.

3,296

As of the end of 2024, there were 3,296 Sinopec employees covered by the long-term incentive plans.

Key Performance Assessment Indicators Linked to Long-Term Incentives

- Indicators for the lifting of restrictions on restricted stock: Net asset cash return rate, compound growth rate of net profit, economic value added
- Indicators for excess profit-sharing: Net profit
- Indicators for project revenue bonus: Project revenue growth rate, number of patents and intellectual property rights of project, growth rate of new project contracts
- Indicators for follow-on investment: Cumulative operating income, number of Chinese invention patent applications

Employee Cultivation and Development

01 Employee Training

Sinopec Corp. is committed to integrating the government strategic priority of job creation with its own talent development strategy, continuously optimising the top-level design of employee education and training, formulating policies such as the *Sinopec Employee Education and Training Management Regulations*, the *Sinopec Online Training Management Measures*, and the *Sinopec Education and Training System Outline*. In 2024, the Company developed the *2024-2028 Employee Education and Training Plan*, specifying the capacity enhancement actions for management personnel, professional technical talents, highly skilled talents, international talents, as well as grassroots employees. The Company provides employees with diversified training and development opportunities, including various internal and external trainings, professional seminars, joint-cultivation, and participation in further education courses, to help employees improve their professional skills. The Company also sets training participation duration requirements for different categories of employees, encouraging employees to actively participate in training to enhance their career development capabilities.

Strengthening the Training for Key Talents

In 2024, the Company organised 36 training programmes for key talents with a total participation of 3,880 person-times. The company innovates training assessment and evaluation methods, establishing a comprehensive evaluation system and conducting training quality assessments to continuously improve training quality.

Management Talent	Optimised the progressive and systematic job capability training system for management personnel, carried out digital transformation and change management training camps innovatively, further strengthening management innovation and job performance capabilities of management personnel.
Grassroots Employees	Conducted targeted training for grassroots staff on job capabilities, established a dedicated resource library for safety training and frontline training materials, covering over 11 million participants with regular online training; organised demonstration trainings for enterprise safety training management personnel, workshop directors, team leaders, and other employees, and comprehensively intensified certification training for HSE key position personnel.
Innovation Talent	Organised seminars on new industrialisation trends and high-quality oil and gas development focusing on how to accelerate the cultivation of new quality productivity; organised themed training classes on integrated geological engineering, national craftsman, and the integration of industry and finance; organised training camps for the development of new materials and international business strategies to comprehensively enhance the innovative capabilities of various employees.

Building a Strong Team of Technology Talents

Sinopec Corp. regards the construction of a strong team of technology talents as a top priority, and has formulated and implemented a comprehensive reform pilot plan for the development system and mechanism of technological talents. As of the end of 2024, Sinopec Corp. has a total of 19 academicians, 15 national candidates for the Hundred-Thousand-Ten Thousand Talent Project, 32 high-level overseas experts, one Outstanding Talent and six Leading Talents in Scientific And Technological Innovation under the Ten Thousand Talent Programme, 364 personnel recipients of special government allowances, eight winners of the China Skills Award, and 108 National Skilled Talents.

In order to promote talent exchange and cultivate multidisciplinary talent, the Company launched the "Hundred Boats, Thousand Sails" Youth Talent Practical Training Programme, which aims to cultivate 400 elite young talents with the "Hundred Boats" programme and 1,000 core youth talents with the "Thousand Sails" programme over five years, formulating a normalised mechanism for cross-segment, cross-unit, and inter-disciplinary talent exchange and training. The first cohort of the "Hundred Boats, Thousand Sails" programme included 41 candidates for overseas practical training and 362 candidates for practical training in China.

Cultivating Skilled Talents

The Company launched the "Year of Enhancing the Skills Talent Team Construction" campaign, organising a variety of activities to enhance the capabilities of skilled personnel and systematically promote the development of skilled talents.

"Year of Enhancing the Skills Talent Team Construction" Activities	Carried out an inventory of skilled talents, and recruited graduates from urgently needed and scarce majors to replenish skilled talent pool.
	Organised cross-unit practical training for skilled talents, allowing shared learning from opportunities such as the activation, shutting-off, and maintenance of refining facilities.
	Organised vocational skill competitions, selected and commended 20 Sinopec Master Craftsmen and 200 Sinopec Technical Experts, and granted 100 innovative achievements by skilled talents for promotion.

Deepening Joint-cultivation of Talent

The Company actively deepens a new model for joint talent cultivation between universities and enterprises, establishing the Sinopec Outstanding Engineer Training Centre, which has jointly trained 350 master's and doctoral engineers with 14 universities, accelerating the cultivation of reserve talents for outstanding engineers.

02 Supporting Employee Career Development

The Company has completed the revision of the policy documents such as the *Implementation Opinions on Improving the Construction of Talent Growth Channels* and the *Sinopec Expert Management Measures*, establishing three talent career tracks for management, professional technology, and skill operation personnel, as well as three tiers, senior, mid-level, and grassroots, for each track, forming a scientific, reasonable, coordinated, smooth, and flexible career development pathway.

Further clarified the positioning and responsibility objectives of each tier of positions in the professional technology track, deepening the construction of a professional, differentiated, and tiered career channel, and continuously broadening the growth paths for talent; Deepened expert-oriented management, establishing the Sinopec Consultation Centre as an expert platform, supporting and encouraging experts to fully utilise their expertise.

Intensified on-job training and participation for all employees, promoting the "Strongest Operation Competition" model innovated by Zhenhai Refining & Chemical, hosting multiple competitions at different levels, forming teams to participate in national competitions in 7 work categories, awarding the Sinopec Technical Expert title to 54 employees, and promoting 50 individuals to senior technicians.

The Company revised the vocational skill level certification system and continues to promote the reform of professional title evaluation and vocational skill level certification processes. Meanwhile, the Company continues to deepen talent evaluation in accordance with the *Sinopec Management Measures of Academic Qualification Assessment* and the *Sinopec Management Measures of Vocational Skill Level Assessment*. In 2024, a total of 351 professor-level employees and 1,458 senior technicians passed the assessment. It was the first time that foreign employees received vocational skill level certificates.

351

Number of employees passed professor-level titles assessment in 2024

1,458

Number of employees passed senior technician assessment in 2024

ACTIVELY FULFILLING SOCIAL RESPONSIBILITY

7

7.1 Product Quality Management 115

7.2 Contributing to Philanthropy 121

7.3 Sustainable Supply Chain 126

7.4 Community Communications and Engagement 130

7.1 Product Quality Management

Governance

Governance Structure and Personnel

The Company is committed to fully integrating product quality into its strategic planning, corporate governance system, comprehensive risk management system, as well as its daily operation and management. The Company has established a "Board-Management-Implementation" three-level governance structure with well-defined responsibilities at each level.

Board Level 1

Organisation	Strategy Committee	Audit Committee	Sustainability Committee
Members	Chairman, Executive Directors, Independent Directors	Independent Directors	Chairman, Non-Executive Directors, Executive Directors, Independent Directors
Authorities, tasks and objectives	Responsible for reviewing development plans, policies, and systems related to product quality management, and providing the Board with suggestions accordingly. Responsible for reviewing and supervising the implementation of product quality management related initiatives. Responsible for identifying, assessing, and managing the risks and impacts related to product quality, and reviewing the list of major risks and annual evaluation reports.	Responsible for assessing the effectiveness of the Company's risk management and internal control systems.	Responsible for conducting research on policies, strategies, and action plans related to sustainability issues, including product quality management. Responsible for supervising the commitment and performance of the Company on key issues such as product quality management, and providing suggestions to the Board. Responsible for reviewing the Company's annual sustainability report and supervising product quality management related information disclosure of the Company.

Management Level 2

Members	Mainly consists of president, senior vice presidents and other management, as well as heads of relevant functional departments.
Authorities, tasks and objectives	Review work plans related to product quality management, guide the formulation of relevant policies and ensure their implementation, and review and approve key decisions on matters related to product quality management. Approve the standard system, workflow, and annual work plan for product quality testing and monitoring. Supervise the implementation of relevant functional departments and subsidiaries, continuously promoting the company's product quality and certification management.

Implementation Level 3

Composition	Implement the management system of unified leadership, hierarchical management, and division of labor. The Department of Technology is the overall management sector of the Company's quality, measurement, and standardization work. Each business units / professional companies are the professional management sector, and the subsidiaries are the main body of the quality management responsibility.			
Organisation	Department of Technology	Office of Comprehensive Risk Management	Business Units/ Professional Companies	Subsidiaries
Authorities, tasks and objectives	Supervise and coordinate the Company's quality management initiatives. Formulate and revise quality management guidelines, objectives and policies. Formulate annual quality management priorities. Guide the establishing and certification, and supervise its implementation of the quality management system. Organise investigations and handle particularly severe quality accidents.	Incorporate product quality related risks into the comprehensive risk management system and internal management processes; organise and implement annual risk identification and assessment; compile quarterly report on major risk management and report to the Board. Supervise the management of product quality risks through annual risk control and internal control inspections, and corporate self-assessment.	Formulate and revise quality management measures and regulations. Set specific quality objectives, develop quality work plans and ensure implementation of the plans. Organise major quality improvement projects, promote the application of advanced quality management methods. Supervise and inspect the product quality, engineering quality, service quality, and quality management system of subsidiaries.	Implement the Company's quality management policies, formulate specific quality management rules and work plans. Establish and improve the quality management system, strengthen laboratory construction and management. Organise and carry out quality education and training for all employees. Manage and supervise the quality of products and services.

Professional Skills and Capabilities

Sinopec Corp. has appointed directors and senior management with expertise in quality management to provide professional support and guidance for the Company's quality management related initiatives. The Company has developed and continuously implements professional training programmes on quality management, inviting industry experts to lecture on the latest policies and regulations, development trends and best practices regarding quality management, updating the Board and the senior management on latest developments in relevant fields. All these efforts provide strong professional support for the Company's quality management efforts.

Reporting, Supervision and Evaluation

The Company has established an internal reporting and supervision mechanism for product quality management and incorporated it into the internal control system of the Company. Each year, the Board of Directors and the Sustainability Committee review reports on product quality related strategic planning, implementation, and results, as well as hear the management team's report on the progress of product quality management. To ensure efficient and well-coordinated quality management, the Company implements a quarterly quality management meeting mechanism where management listens to reports on last quarter's quality management of each business unit and professional companies, coordinates the resolution of quality issues, and prioritises key quality management task for the next phase.

According to the *Sinopec Quality Incident Management Regulations*, all subsidiaries shall report significant or greater quality incidents to relevant business unit or professional companies, as well as the Department of Technology within 24 hours, determine the nature of the incident, conduct statistical analysis, and develop rectification measures accordingly. Subsidiaries responsible for quality incidents will be held accountable, and their management team will have their performance evaluation points deducted or face demotion.

Incorporating Product Quality Considerations into Management Decision-Making

The Company attaches great importance to product quality management, and has fully incorporated quality related impacts, risks and opportunities in formulating its overall development strategy and supervising the implementation of the strategy, making key business decisions, and managing risks. The Company closely follows government policy trends and makes timely adjusts of its development strategies, plans, and relevant policies and systems.

Strategy

Risks	Time Frame of Impact*	Response Measures
Compliance Risk Regulators has strict standards and requirements for refined oil and chemical products regarding safety and quality. If its products do not meet relevant standards, the Company may face risks such as compensation, administrative fines, product recalls, which could lead to increased non-operating expenses and operating costs, and decreased revenue.	Short-, Medium- to Long-term	Optimise the standardisation management of the Company, continuously improving the effectiveness of the quality management system.
Reputation Risks Product safety or quality issues may cause a reputational crisis for the Company, affecting its brand image and consumer trust, leading to decreased revenue.	Short-, Medium- to Long-term	Rigorously carry out product quality testing. Promptly respond to and handle customer complaints, reflecting on the causes of problems and correcting them, to minimise or eliminate negative impacts. Strengthen cultural construction, and enhance the quality consciousness of the whole personnel.
Opportunities	**Time Frame of Impact***	**Response Measures**
Market Opportunities By providing high-quality products, the Company can establish a good brand image, enhance consumer and customer loyalty and satisfaction, which in turn helps to strengthen the market competitiveness.	Medium-term	Continuously improve product quality. Carry out events such as the *Sinopec Quality Day* and the *National Quality Month* to enhance quality awareness and brand image.
Technological Innovation The Company increases investment in technological R&D, promoting the development of new technologies or new products, so as to open up new markets.	Medium-term	Promote technological innovation, facilitate the commercialisation of research outcomes, and ensure their industry application.

*Short-term: Within 1 year; Medium-term: 1-5 years; Long-term: More than 5 years.

238
RMB million
Annual expenditure amount for product quality management

Return process for lubricating oil products

1. Customer submits return request.
2. Sales department issues handling suggestions based on specific conditions and carries out internal approval procedures.
3. Quality department signs for quality related returns, while sales department signs for returns related to sales practice and policy issues.

The Company strictly complies with the *Product Quality Law of the People's Republic of China*, the *Metrology Law of the People's Republic of China*, and other relevant laws and regulations, and has formulated a series of quality, measurement, and standard management policies and systems, including the *Sinopec Quality Management Measures,* the *Sinopec Quality Accident Management Regulations*, the *Sinopec Quality Supervision and Spot Check Management Measures for Petroleum and Petrochemical Products, and Procurement Materials of Oilfield Enterprises*, the *Sinopec Standardisation Management Measures*, and the *Sinopec Metrology Management Measures*. The Company actively implements government policies such as the *Quality Power Construction Outline* and the *Implementation Opinions on Excellent Quality Engineering in Manufacturing*, optimises its quality management system, accelerates quality management digitalisation, effectively intensifies the identification and prevention of quality risks, striving to achieve significant improvements in quality efficiency.

The Company continuously strengthens supervision and inspection to achieve comprehensive management of product quality and avoid problematic products from entering the market. Its subsidiaries carry out production control, testing, and evaluation of their products to ensure that the products or services meet established quality standards. The business units and professional companies set clear quality control requirements for their subsidiary companies and continuously enhance the quality management of products and services through strengthened process management, setting critical control points, and applying rigid quality inspection measures. The Department of Technology conducts on-site inspections of the quality management and metrology management of the subsidiaries, which are required to conduct thorough analysis as well as rectification of the identified issues accordingly.

The Company has formulated the *Sinopec Quality Management Measures, Sinopec Domestic Upstream Enterprises Quality Management Measures*, *Sinopec Refining Enterprises Quality Management Measures*, *Sinopec Chemical Enterprises Quality Management Measures*, and other policies regarding product quality control and the handling of quality related complaints. In response to customers' after-sales service needs or quality-related complaints, the Company communicates in a professional way, carries out internal and external investigations, and actively negotiate with customers to avoid or reduce customer losses, striving to ensure customers' understanding and satisfaction.

In 2024, the Company spent a total of RMB238 million on product quality inspection, measurement, and identification. This expenditure is expected to remain stable in 2025, having no significant impact upon the financial performance of the Company.

Management of Impacts, Risks and Opportunities

Sinopec Corp. has formulated the *Comprehensive Risk Management Measures*, which defines a series of risk management responsibilities and processes, including those related to product quality risks. The Company has established and continuously improves its risk management indicator system, regularly conducts risk identification and assessment, and uses a combination of qualitative and quantitative methods to evaluate the risk ratings associated with product quality. In the annual comprehensive risk assessment, the Company identifies and assesses major risks that may affect the achievement of development strategies and operational management objectives in the coming year. Product quality risks fall under operational risks. The risk assessment results for 2024 show that the quality risk management of the Sinopec product ranks among the best in the industry, with a relatively low risk priority ranking.

Over the past decade, the Company's product quality has been generally maintained stable, with no significant or above quality incidents, or quality related events affecting the its brand image. Although product quality management is not a high priority issue in the annual risk assessment results, the Company is still committed to continuously strengthening quality management at every stage of the production process.

The Company conducts annual identification and assessment of quality risks and opportunities, analyses influencing factors of quality risks, and formulates response strategies to improve the quality risk management mechanism. In accordance with the principle of ensuring full coverage in a three-year period, the Company conducts quality measurement inspections of its subsidiaries to continuously optimise their quality management. The Company also organises and carries out education and training on quality management for all employees to continuously enhance their quality awareness, ensuring that products quality risks are effectively managed across the Company.

Metrics and Targets

Sinopec Corp.'s goal of quality risk control is to eliminate major or above quality accidents and strive for "zero quality accidents" and "high quality, sufficient quantity, and customer satisfaction".

Indicators	Sales of Refined Oil Products	Sales of Chemicals
Pass rate of third-party quality system certifications (%)	100	71
Number of subsidiaries and affiliated units passing the ISO9001 Quality Management System certification	40	5
Customer satisfaction rate (%)	99.9	97.4
Number of customer complaints cases	24,851	101
Customer complaint resolution rate (%)	100	100
Percentage of products recalled for safety and health reasons (%)	0	0
Number of products recall cases	0	0

Quality Management in 2024

The Company continues to optimise its quality management system, actively carrying out quality management system certification, product certification, and service quality management system certification. During the reporting period, the Company carried out quality supervision and spot checks of products and purchased materials, with a total of 1,615 petroleum and petrochemical products checked. Strict adherence to the supervision and spot check procedures, the subsidiaries with non-compliant products were required to undertake rectification procedures to build a strong defence line against quality risk.

Adhering to the "customer-centred" service concept, the Company is committed to providing customers with high-quality and convenient services, and continuously improving customer satisfaction. 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. The Company also strives to continuously enhance its brand image through strengthening terminal image recognition, product packaging, and the management of promotional materials.

The Company operates a centralised national customer service centre, and continuously builds up a centralised knowledge base for customer service.

Cultivating Quality Culture at Sinopec Corp.

Two achievements won the Gold Award at the 49th International Quality Management Group Meeting, and five achievements were awarded first-class results in the 2024 National Quality Management Group Activities.

In 2024, organised quality-related trainings for 349 subsidiary enterprises with a total participation of 888 person-times.

Three cases were selected by the State Administration for Market Regulation as an Outstanding Cases in Metrology Promotes New Quality Productive Forces Development.

7.2 Contributing to Philanthropy

The Company focuses on industrial development, 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.

Supporting Rural Revitalisation

The Company attaches great importance to supporting rural revitalisation, organically integrating rural revitalisation initiatives corporate development strategy, and formulated comprehensive rural revitalisation plans for the "15th Five-Year Period" to consolidate and enlarge the remarkable achievements in poverty alleviation. The Company strives to deepen the achievements of its educational assistance, expand the "One County, One Chain" industrial assistance plan, and use consumption support to boost sales and revenue in the assisted areas, so as to further broadening the benefits of its rural revitalisation efforts. In 2024, the Company provided rural revitalisation training for 84.4 thousand person-times.

01 Continuously Deepening "Industry + Consumption" Assistance

The Company continuously deepened the "industry + consumption" assistance model by extending industrial chains, upgrading value chain, and creating supply chains, helping the assistance counties develop specialty industries and consistently consolidating the results of the "One County, One Chain" industrial assistance plan.

Industrial Development and Cooperation	Signed industrial development cooperation agreements with nine assistance counties such as Dongxiang County, Fenghuang County, and Yuexi County. In 2024, signed a framework agreement for assistance with Youyang County, and provided funding support of RMB25 million throughout the year, focusing primarily on education assistance, industrial assistance, and cultural tourism.
Strengthening Demonstration Projects	In Zeku County: Established a "One County, One Chain" demonstration yak husbandry industrial park, created a regional public brand "Zeku Premium", and realised RMB40 million of sales of specialty agricultural products through Sinopec's sales platform cumulatively. In Yingshang County: Invested RMB2 million to build the Maoqiao Lotus Culture Exhibition Hall, which plays a positive role in promoting lotus culture, enriching local cultural life, and facilitating the integration of culture and tourism. In Youyang County: Implemented the "Joint Action of Small and Medium-sized Science and Technology Museums" project, creating a new demonstration of the integration of popular science and cultural tourism.
Extending the Industrial Chain	In Dongxiang County: Continued to promote the local quinoa industry, which has become a local specialty brand, achieving an average income growth of RMB8,000 per household of local communities. In Yuexi County: Established the Yuexi County Tea Industry Research Institute, helping increase the average income of local tea farmers, directly benefiting 12 thousand tea farmers with the development of the tea industrial chain. In Fenghuang County: Provided technical support for the planting and processing of kiwifruit, benefiting over ten thousand farmer households. In Yuepuhu County: Introduced 31 high-quality cotton varieties, with a cumulative planting area of 930 mu, helping to solve the shortage of high-quality cotton varieties in the Kashi region.
Fostering Integrated Development of Industries	In Yuexi County: Constructed a mountain sightseeing railway and supported the development of boutique tourism projects such as tea towns and homestays. In Fenghuang County: Invested over RMB28 million to support the development of the boutique homestay business, creating 268 jobs for the community directly and 1,298 jobs in related businesses, benefiting 5,521 people in three surrounding townships.

02 A "Neighbourhood School" for the People

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

"Centralised" Experience Sharing 1	Organised a training course for principals of Sinopec education assistance schools, training 61 principals from 59 schools.
"Three-Dimensional" Assistance 2	Implemented targeted educational quality improvement initiatives in 59 supported schools, focusing on campus, teachers, and students. Continued to organise the "Academician Classroom" lecture series in Yuexi County, where over 15 thousand students from 31 schools watched the lectures of Chinese Academy of Science academicians online in real time. Carried out the "Sinopec Rural Classroom for Retired Principals" programme in Dongxiang County, inviting retired principals to make field trip to rural schools, sharing their advanced educational concepts and management experience, and helping to enhance the local educational quality. Deepened the "Spring Bud Power Station" programme with a partnership with China Children and Teenagers' Fund, donating 1,756 "Build Your Future" growth energy packs for schoolgirls at 12 Warm Stations in six provinces, and awarding RMB387.2 thousand as "Spring Bud Power Station" scholarships to 250 girls from 59 schools, supporting the healthy growth of girls.
"Paired" Training 3	54 CPC branches from directly affiliated enterprises paired with 59 assistance schools in targeted assistance counties in partnerships, aiming to help the schools improve education quality. The "NeiGao" class of Aqike Township Middle School in Yuepuhu County ranked first in the county in college admission rate for two consecutive years. Completed the second-phase of the "Sinopec School Buddy" information platform to further enhance the management of partner schools as well as the effectiveness of paired learning. In 2024, the platform published a total of 466 articles with 267,822 views in total, with 2,747 individuals and 648 groups benefited from paired learning, and a total of RMB814 thousand of scholarships donated via the platform.



03 Advancing Rural Talent Revitalisation

The Company is committed to advancing talent revitalisation in its overall rural revitalisation undertakings, enhancing the accuracy of training, creating jobs for villagers, and helping to cultivate an increasing number of talent rooted in local communities.

1 Advancing Talent Training

In Yuexi County and Luxi County: Signed framework agreements for talent revitalisation assistance to cultivate vocational skills talent.

In Dongxiang County: Provided quinoa planting technology training with a total participation of 3,594 person-times.

In Youyang County: Organised professional training through the mixed training model of "fieldtrip study + hometown entrepreneurship training".

2 Creating Jobs for Villagers

Promoted the implementation of more open talent policies in rural areas to attract outstanding talent.

Cooperated with the assistance counties to build "Rural Revitalisation Empowerment Stations" to attract professional talent, helping nearly 1,000 poverty alleviation beneficiaries in 9 counties obtained stable employment opportunities.

In Yuepuhu Country: Implemented the Grand Bazaar project, attracting merchants to do business in the bazaar and encouraging farmers to operate independently, creating over hundreds of jobs in the local community.


04 Improving Rural Infrastructure and Public Services

The Company actively assists villagers in improving their quality of life and promoting rural civilisation construction through supporting infrastructure development, providing medical assistance, conducting themed education and legal trainings.

For a long time, the Company has been vigorously supporting rural revitalisation, accelerating the consolidation of the assistance model of "empowering development with education assistance, driving industrial development with consumption assistance, and powering rural revitalisation with industrial assistance", forming a virtuous cycle that results in higher education quality, more profitable industries, higher income for local population, and better development of local communities, winning high regards of local communities, consumers, media, and other stakeholders, further enhancing the brand image and reputation of Sinopec Corp., and thus contributing to the business development of the Company. In 2024, the Company invested a total of RMB0.25 billion in rural revitalisation assistance fundings.

Infrastructure Improvement

In Yuepuhu County: Built an activity square and a villager service centre.

In Luxi County: Built a library complex integrating reading, intangible cultural heritage promotion, training, and cultural creative activities, which was awarded the title of "National First-Class Library".

Medical Assistance

In Yuepuhu County: Since 2021, donated over RMB3 million to the Cerebral Palsy Children's Hospital. Thirteen children with cerebral palsy have been treated after receiving free treatment and were able to start school. The treatment effective rate for 134 children with cerebral palsy in the county was 100%. Five children with hearing impairments turned a new leaf of their lives after surgery.

In Baingoin County: Coordinated with Baichuan Company and medical experts from Beijing to carry out free medical assistance field trips.

Themed Education and Legal Trainings

In Dongxiang County: Hosted the "New Journey Lecture Hall" lecture series, inviting university professors to teach themed education courses.

In Yuepuhu County: Regularly carried out legal trainings to assist the model governance village construction initiatives of local communities.

Indicators	2023	2024
Number of beneficiaries of Sinopec rural revitalisation initiatives(persons)	595,200	615,200

Philanthropic Programmes

Sinopec Corp. has been carrying out a series of philanthropic programmes, such as the "Sinopec Lifeline Express" Programme, "Warm Stations" Programme, "Driver's Home" Programme, etc., contributing to the construction of a better society and enhancing the Company's brand influence. In 2024, Sinopec employee volunteers provided a total of 985 thousand person-times, totalling 1.712 million volunteer service hours. The Company contributed a total of RMB40.09 million in 2024 to support various public welfare undertakings.

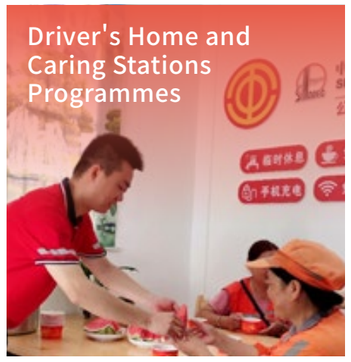
Sinopec Lifeline Express Programme

In 2024, "Sinopec Lifeline Express" travelled to Zhumadian in Henan Province, Dingxi in Gansu Province, and Fuzhou in Jiangxi Province to provide free cataract surgeries for patients, successfully curing 3,054 patients throughout the year, benefiting nearly 60,000 cataract patients cumulatively. The programme also invited renowned medical experts to provide professional training for grassroots doctors, allowing them to better help patients in local communities. In addition, the Company donated an ophthalmology centre to the Bayingol Mongolian Autonomous Prefecture People's Hospital in Xinjiang Autonomous Region.

3,054
Number of patients cured by "Sinopec Lifeline Express" in 2024

Nearly 60,000
Cumulative number of cataract patients cured

Driver's Home and Caring Stations Programmes



The Company leverages its resources and turns its extensive service stations into windows for volunteer services, continuously implementing its hallmark the "Driver's Home" programme and the "Caring Stations" programmes, providing heartwarming services such as resting area, dining, hot water, shower, laundry, parking, and battery charging for mobile workers such as truck drivers, sanitation workers, and delivery personnel, striving to provide them with a "home on the road". As of the end of 2024, the Company has established and offers a nationwide service network of 4,338 "Driver's Homes" and 7,056 "Caring Stations".

4,338
Total amount of "Driver's Homes"

7,056
Total amount of "Caring Station"

Warm Stations Programme

For twelve consecutive years, Sinopec Corp. has been launching the "Warm Stations" public welfare programme to care for homebound migrant workers around the Chinese New Year holidays. In 2024, close to 100 "Warm Stations" were set up at Sinopec service stations in eight provinces, including Guangdong, Guangxi, Guizhou, Hunan, Jiangxi, Hubei, Yunnan, and Henan. Homebound migrant workers on motorcycles can have free refuelling, as well as emergency medicine, hot water, vehicle maintenance, and other services. Nearly 100,000 Sinopec volunteers offered their services and caring during the programme duration in 2024, serving holiday season travellers for over 4.80 million person-times, including 40,000 person-times for homebound motorcyclists. As of the end of 2024, the "Warm Stations" Programme had cumulatively provided services to over 62.60 million holiday travellers, including over 4.62 million homebound migrant workers on motorcycles.

4.8+
Million person-times
Services for holiday travellers in 2024

62.6+
Million person-times
Services for holiday travellers cumulatively

Indicators	2023	2024
Total employee volunteer service times (10,000 person-times)	97.2	98.5
Total employee volunteer service hours (10,000 hours)	165.5	171.2

7.3 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, safeguarding supply chain security, aiming at building a transparent, healthy, and honest ecosystem with supply chain partners through opening-up and strategic cooperation.

The Company regularly optimises its supply chain management, making continuous efforts to strengthen supply chain management system and capabilities in accordance to the principles of ensuring "secure, timely, green, and economical" supply, and taking full considerations of ESG factors, such as energy consumption and environmental performance.

The Company has formulated a series of management policies, such as the *Sinopec Material Supply Management Regulations*, the *Sinopec Green Procurement Management Measures*, and the *Sinopec Key Material Supply Security Supervision and Management Measures*, forming a scientific, standardised, and comprehensive procurement and supply chain management system. The Company also cooperates with suppliers extensively on accelerating the digital transformation of the supply chain, continuously enhancing the strategic support, resource assurance, value creation, risk management capability, and security resilience of its supply chain.

In 2024, the Company completed a comprehensive revision of its supplier qualification review standards, further strengthening the management factors related to HSE management, green product standards, and the fulfilment of social responsibilities of suppliers in the qualification review standards and on-site review standards, encouraging suppliers to comprehensively enhance their ESG capabilities. The Company also completed the revision of the qualification review standards and on-site review standards for 318 group procurement material suppliers, further standardising the requirements on suppliers' HSE management, and conducted reviews of the implementation and performance of suppliers' safety management, environmental protection, and occupational health protection initiatives.

1 Environmental protection and resource utilisation

Formulated the *Sinopec Green Enterprise Evaluation Guidelines (2024 Edition)*, specifying relevant green supply chain evaluation factors in accordance with the *Sinopec Green Procurement Management Measures*, including green procurement, green logistics, green packaging, and green disposal.

2 Occupational health and safety

Formulated the *Sinopec Key Material Supply Safety Supervision Management* Measures, specifying the acceptance standards for key safety facilities, such as fire alarm systems and gas detection alarm systems, as well as for hazardous chemicals.

3 Anti-corruption and compliance

Formulated the *Sinopec Ten Prohibitions on Material Procurement*, specifying ten prohibited actions, including intervention in procurement, restriction on competition, unlawful bidding operations, accepting benefits from suppliers and others, defining the bottom line and red lines for material procurement.

01 Supplier Risk Management

The Company organised relevant departments and subsidiaries to carry out the 2024 risk assessment based on the prevention and control activities from the previous year, issues identified through internal reviews and external inspections, as well as the current domestic and international circumstances. Referencing risk assessment standards, potential supply chain risks were identified and assessed from the dimensions of likelihood of occurrence and impact severity, followed by the development of corresponding response strategies.

Key Supply Chain Risk Categories and Response Measures

Procurement and Supply Chain Management Risks	Improved the material supply management mechanism by identify problems for improvement through quantitative indicators assessment and enterprise self-inspection, enhancing material supply management capacity. Optimised supplier qualification review standards, established a supplier business information management and risk early warning system, strengthened the supervision of suspended supplier, and enhanced the management of supplier resources. Conducted 134 flight inspections throughout the year on suppliers and supervisors of key engineering projects and high-risk quality materials, effectively promoting the overall optimisation of the supply chain. Built a digital procurement supply chain system, achieving risk early warning and closed-loop management through a procurement full-process management supervision platform, preventing major risks, and enhancing the risk prevention and control capabilities of the procurement and supply chain management system.
Inventory Management Risks	Optimised the analysis, reporting, early warning, and assessment mechanisms for material reserves, conducted quantitative evaluation of inventory management of subsidiaries, conducted supply chain management inspections and optimised inventory structure of subsidiaries, ensuring a reasonable level of inventory. Encouraged the sharing of reserve resources, facilitated the integration and real-time sharing of inventory information, and continuously strengthened the strategic reserves of key materials.
HSE Risks	Intensified HSE risk awareness raising activities among employees and suppliers. Strengthened the effective implementation of safety responsibilities, and the standardisation and normalisation of HSE management processes, further consolidating the foundation for safety management. Optimised emergency plans and drills to enhance the emergency response capabilities of front-line workers. Intensified HSE assessment to motivate subsidiaries to ensure more stringent control of supply chain safety risks.
Compliance Risks	Dynamically tracked changes in relevant laws and regulations regarding export controls, economic sanctions, antitrust, and anti-unfair competition in where the Company operates, enhanced assessments and training, as well as the capabilities of identifying and preventing compliance risks. Conducted timely adjustments of supplier management policies and management regulations based on compliance risk assessment results. Optimised the workflow for supplier compliance screening, standardising the screening and timely alerting of blacklisted entities.

02 Safeguarding Supply Chain Security

The Company is committed to safeguarding the security of the material procurement supply chain, continuously reducing procurement costs, and enhancing the independent control capabilities of its supply chain.

Supply Chain Risk Prevention	Identified critical materials and equipment with supply chain disruption risks and formulate medium- and long-term R&D plans accordingly. For medium- and long-term projects not ready for project initiation, encouraged our subsidiaries to take the lead in R&D while conducting extensive sourcing and research.

03 Green Procurement

Continuously improve and perfect procurement standards and policies, integrating the concept of green and low-carbon throughout the entire process of design, procurement, production, and packaging of products.

Guide suppliers to provide supplementary information on the qualifications, standards, and related certification materials concerning green procurement, and urge suppliers to continuously enhance their green management systems.

Strengthen the promotion and application of green evaluation indicators in the evaluation standards, such as green management system construction, clean production, safe production, green warehousing, packaging, and logistics, based on industry characteristics, guiding suppliers' transition towards green manufacturing.

The Company actively embraces the concept of green low-carbon procurement by optimising procurement standards and policies, conducting qualification reviews, credit certification, and quality evaluations, and promoting the application of green evaluation results. Suppliers are encouraged to improve their green management systems and develop green technologies and products. All these efforts have resulted in a collaborative green procurement mechanism that drives upstream and downstream of the industrial chain to achieve green and low-carbon transformation together.

The Company comprehensively carries out supply chain emission reduction initiatives, formulating detailed work plans, integrating relevant requirements for suppliers to reduce harmful waste, exhaust gas, and wastewater to all stages of supplier assessment and daily management. Performance on these aspects are thoroughly reviewed in the supplier evaluation process. In 2024, there were 3,514 suppliers been inspected, accounting for 12% of all suppliers of the Company.

In 2024, the Company piloted the application of carbon footprint data in procurement to promote low-carbon procurement. In the bidding procurement of steel plates for the Hainan Phase II crude oil commercial storage project, 1.5% of the total score was assigned to a carbon footprint evaluation indicator, which is evaluated from two dimensions: whether the supplier has a carbon footprint accounting report and the ranking of its carbon footprint values among competing suppliers. The Company has started to track carbon emissions and evaluate carbon footprints for chemical raw material companies, and has completed the project initiation for the formulation of carbon footprint group standards for lubricant products.

04 Sunshine Procurement

The Company has established a management mechanism that regularly monitors suppliers' anti-corruption behaviour and credit risks, entrusting third-party evaluation agencies to conduct background credit certification of suppliers, continuously track the credit profile of suppliers, and monitor suppliers' business risks in real time. In 2024, 16 suppliers were disciplined for violating the *Business Integrity Commitment*, and three suppliers were added to the supplier blacklist.

Supplier Management Procedures

Supplier Registration 1	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 2	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: Conduct comprehensive assessment of suppliers' production capacity, quality management, and after-sales service, with emphasis on the implementation of ISO14000 and ISO18000 management systems, safety and emergency management systems. In 2024, the Company carried out on-site inspections of 1,599 suppliers in total.
Supplier Evaluation 3	Established a quantitative supplier evaluation system, covering aspects such as corporate credit certification, product quality appraisal, and market performance. Indicators such as green production, environmental protection, safety management, and administrative compliance are included to encourage suppliers to intensify their efforts on developing green technologies and products.
Supplier Due Diligence 4	Entrust third-party evaluation agencies to conduct due diligence studies through on-site inspections and interviews on suppliers' legal entity credit, product quality, etc. In 2024, the Company conducted due diligent studies of 2,507 suppliers, and a total of 11,857 suppliers have received due diligence surveys cumulatively.
Supplier Violation Disciplining 5	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 6	Provided supplier trainings covering the Company's material supply management concept, summary of bidding-related policies, and features of the new electronic procurement platform. Suppliers were required to further improve their green procurement management, safety management, operational compliance, and risk prevention and control. In 2024, the Company carried out 19 supplier training sessions, with a total participation of 1,787 person-times.

05 Supplier Communication

The Company strives to establish a dynamic and efficient communication mechanism with suppliers, working together through business cooperation, exchanges and discussions, and collaboration on indigenous innovations to create a transparent, healthy, and trustworthy supply ecosystem.

Indicators	2023	2024
Number of suppliers passed qualification assessment	26,186	30,289
Of which: Number of suppliers from mainland China	24,446	28,468
Number of oversea suppliers	1,740	1,821
Percentage of suppliers qualified by QHSE management system (%)	30.5	28.4
Number of suppliers qualified by the quality management system (ISO9000)	10,815	11,922
Percentage of suppliers qualified by the quality management system (ISO9000) (%)	41.3	39.4
Number of suppliers qualified by the environmental management system (ISO14000)	9,208	10,647
Percentage of suppliers qualified by the environmental management system (ISO14000) (%)	35.2	35.2
Number of suppliers qualified by the occupational health and safety management system (ISO18000)	7,869	8,860
Percentage of suppliers qualified by the occupational health and safety management system (ISO18000) (%)	30.0	29.3
Percentage of procurement through tender (%)	86.7	83.0
Percentage of procurement by open tender (%)	97.0	98.8
Total number of suppliers assessed via desk assessments/on-site assessments	26,186	30,289
Percentage of significant suppliers assessed (%)	72.8	54.3
Number of suppliers assessed with substantial actual/potential negative impacts	1,794	1,997
Percentage of suppliers with substantial actual/potential negative impacts with agreed corrective action/ improvement plan (%)	31.0	44.6
Number of suppliers with substantial actual/potential negative impacts that were terminated	220	203

7.4 Community Communications and Engagement

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

01 Community Relations Management Policies and Systems

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, sincerely addressing the demands and expectations of the communities where it operates. The Company has formulated social responsibility policies based on the mutual benefits of both the Company and the communities, aiming to standardise its community engagement efforts and protect the legitimate rights and interests of the communities. The Company regularly communicates with local governments, communities, and the public through community townhalls, face-to-face visits, and phone and email communications, enhancing the local community's understanding and trust of the Company.

Sinopec's overseas subsidiaries attach great important to the communication and engagement with indigenous peoples, identifying and mitigating the impacts of their operations on indigenous communities, respecting local cultures and customs, strictly adhering to the FPIC (Free, Prior, and Informed Consent) principles, committing to protect cultural heritage from operational activities, and taking effective measures to reduce impacts on the normal lives of indigenous peoples. The Company has also established a complaint mechanism for local communities and the public, assigning dedicated agencies to address received complaints.

In public security management, Our overseas subsidiaries strictly abide by relevant laws, regulations, public policies, and standards where they operate. They have established security management procedures, systems, and checklists, formulated emergency plans for security emergencies, and regularly carry out emergency drills, so as to properly respond to possible violence and conflict incidents. The Company has also intensified security awareness education, integrating security risk control measures into relevant production and operational processes, policies, and mechanisms, continuously enhancing the capabilities to prevent, control, and eliminate risks, and effectively ensuring the safety of employees.

02 Community Impact Assessment and Management

The Company has established a robust pre-production social impact assessment procedure, covering the processes of project proposal development, construction plan formulation, and environmental protection acceptance. Our overseas subsidiaries have established a community affairs consultation mechanism, which requires public hearings and consultations before any major designs, plans, and environmental permits are approved, so as to ensure that the environmental impact of their construction and production activities complies with both applicable environmental regulations and the expectations of local communities, and there is appropriate participation of local communities in project management. Mansarovar in Colombia has established a standardised project implementation monitoring process and strictly conducts social and environmental impact due diligence studies to fully protect community rights. For next step, Mansarovar in Colombia plans to hold dialogues with stakeholders and conduct risk analysis as initial step for each new project.

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 conduct research on project planning, including factors such as project site selection, land use, and environmental capacity in the preliminary preparation 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 state industry polices 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.

03 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 2024, 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.

Since 2013, the Company has organised the "Opening the Door to Run Enterprises" event, which was upgraded in 2016 to the "Sinopec Public Open Day" brand activity. For twelve consecutive years, the Company and its subsidiaries in nearly a hundred cities across China open their doors to local communities, students, government officials, and media reporters, establishing a bridge for communication between enterprises and the public. As of the end of 2024, there were over 5,000 various activities had been organised under this event cumulatively, with more than 240,000 people visited Sinopec facilities and over 100 million people participated through online live streams. Over a hundred enterprises across the entire upstream, midstream, and downstream industrial chain participated in this event, allowing the public to gain an in-depth understanding of the production processes and environmental protection measures in the petrochemical industry.

2.42
million visitors

In 2024, 85 Sinopec subsidiaries organised a total of 482 "Public Open Day" events with over 2.42 million visitors to Sinopec facilities and an offline participation of 12 thousand person-times.

Sinopec (Hong Kong) Limited Actively Conducts Community Communication

CASE

In March 2024, the Sinopec (Hong Kong) Limited held the "Sinopec Public Open Day" event and the "You Make It Beautiful" student visit event, inviting about 50 students and over 30 friends of company volunteers to visit the Hong Kong Tsing Yi Oil Terminal to explore smart energy and experience the charm of Sinopec up close.

In April 2024, the liquefied petroleum gas team of the Sinopec (Hong Kong) Limited held a symposium in Fu Shan Village, Tai Po District, Hong Kong, working together with local district councillors to study ways to strengthen the gas safety assurance for residents in antiquated residential buildings to prevent safety accidents. Both parties are committed to further enhancing the safety awareness and capabilities of community residents through long-term cooperation in safety promotion activities.

In December 2024, the Electrical and Mechanical Services Department of HKSAR Government filmed a hydrogen energy popular science education promotional video at a Sinopec hydrogen refuelling station, and jointly held a national resource security lecture and hydrogen refuelling station field visit activity with the Education Bureau of HKSAR Government. More than 50 science teachers and students participated in this event and had the opportunity to learn about hydrogen energy technology and the operation of hydrogen refuelling station up close.

Sinopec 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.

04 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 local suppliers in procurement, and encourage and support the development of local industries and manufacturers. The Company continues to optimise the procurement system, standardising the management of local procurement to promote the healthy development of locally based supply chains. In 2024, the localisation ratio for the Company's overseas projects is 98%, with a female employee ratio of 29%.

Percentage of Localised Procurement

CIR in Kazakhstan	Mansarovar in Colombia	UDM in Russia	Block 18 in Angola
69%	98%	100%	100%

In 2024, the overseas projects of the Company, such as Mansarovar in Colombia, CIR in Kazakhstan, and Block 18 in Angola, implemented a number of community services and investment activities, including infrastructure improvement, community skills training, college scholarships, and cultivating youth talents, providing our help and support to facilitate with the development of local communities.

CIR in Kazakhstan: Cultivating Local Talents

CASE

CIR in Kazakhstant focuses on cultivating local talents and strives to continuously increase the localisation of employees, providing 1,136 jobs for the local community in 2024. CIR is committed to safeguarding employee rights, and providing employees with competitive salary and benefits. The various subsidiaries of CIR regularly optimise their training and career development support systems, allocating 1% of production expenses to support trainings for local employees, empowering their career development with trainings on new processes and technologies, industrial safety, fire safety, vocational skills, mental health, and laws and regulations. In 2024, CIR spent $1.31 million on trainings programmes for local employees, with a total participation of 2,753 person-times.

Angola Company: Sponsoring STEM Education

CASE

Angola Company sponsored a robotics engineer training programme initiated by an innovative Angolan robotics company, Arotec. The programme aims to provide training for children and young students interested in learning STEM (Science, Technology, Engineering, and Mathematics), providing students with the opportunity to learn the basics of electronics and programming, and practice assembling kits related to petroleum engineering, playing an active role in promoting STEM education in local communities.

KEY PERFORMANCE

Environmental Performance

GHGs Emissions and Management

Indicators	2022	2023	2024
GHGs emissions (million tonnes CO_2-equivalent) Note1	161.79	168.64	**167.95**
Of which: Direct GHGs emissions	137.72	142.28	**139.09**
Indirect GHGs emissions	24.07	26.36	**28.86**
Of which: Exploration and production segment	20.36	20.33	**21.43**
Refining and chemicals segment	139.82	146.70	**145.02**
Marketing and distribution segment	1.61	1.61	**1.50**
GHGs emissions intensity (tonnes CO_2-equivalent/RMB million) Note2	48.76	52.50	**54.63**
CO_2 capture (thousand tonnes)	1,534	1,749	**2,100**
Methane recovery (million cubic metres)	834	874	**956**
Methane emissions (million cubic metres)	253.79	250.21	**239.48**
Of which: Exploration and production segment	222.32	216.55	**208.57**
Refining and chemicals segment	11.06	14.78	**15.80**
Marketing and distribution segment	20.41	18.88	**15.11**

Note1 The Company conducts GHGs emission (direct and indirect) accounting and verification according to ISO14064-1:2006 standards, covering six gases including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydro fluoro carbons (HFCs), per fluorinated compounds (PFCs) and sulphur hexafluoride (SF_6).

Note2 GHGs emissions intensity (tonnes CO_2-equivalent/RMB million) = Greenhouse gas emissions / revenue (RMB million)

Energy and Resources

Indicators	2022	2023	2024
Consumption of crude oil (million tonnes)	1.06	1.07	**1.08**
Consumption of natural gas (billion cubic metres)	4.40	4.70	**4.85**
Consumption of purchased electricity (billion kWh)	33.88	36.53	**38.18**
Consumption of coal (million tonnes)	38.19	37.84	**33.75**
Total energy saving (ten thousand tonnes of standard coal)	94.6	86	**79**
Fresh water withdrawal for industrial use (million cubic metres)	629.10	622.8	**616.6**
Fresh water withdrawal for industrial use intensity(cubic metree/RMB million) Note1	189.59	193.88	**200.55**
Total water savings (million cubic metres)	—	6.3	**6.2**

Note1 Fresh water withdrawal for industrial use intensity (cubic metre/RMB million) = Fresh water withdrawal for industrial use/ revenue (RMB million)

Emissions, Effluents, and Wastes Note1

Indicators	2022	2023	2024
COD (tonnes)	4,755	4,550	**4,432**
Ammonia and nitrogen (tonnes)	75	71	**69**
Approved annual COD (tonnes)	—	—	**19,106**
Approved annual ammonia and nitrogen (tonnes)	—	—	**1,966**
Sulphur dioxide (tonnes)	4,910	4,661	**4,652**
Nitrogen oxides (tonnes)	19,247	19,984	**18,482**
VOCs (tonnes)	51,119	49,714	**47,698**
Approved annual sulphur dioxide (tonnes)	—	—	**46,258**
Approved annual nitrogen oxides (tonnes)	—	—	**82,025**
Approved annual VOC (tonnes)	—	—	**78,251**
Solid waste (thousand tonnes) Note2	2,036.9	1,796.4	**1,609.3**
Solid waste intensity(kilogram/RMB10,000) Note3	9.43	12.19	**11.09**
Solid waste recycled/reused (thousand tonnes)	12,821.7	13,967.3	**12,343.4**
Solid waste disposed (thousand tonnes)	2,158.8	1,912.2	**1,629.8**
Amount disposed by third-parties (thousand tonnes)	2,036.9	1,796.4	**1,609.3**
Hazardous waste (thousand tonnes) Note4	515.0	464.8	**431.9**
Hazardous waste intensity(kilogram/RMB10,000) Note5	2.38	3.59	**3.42**
Hazardous waste recycled/reused (thousand tonnes)	1,069	1,009	**1,077**
Hazardous waste disposed (thousand tonnes)	1,253.1	675.0	**659.5**
Amount disposed by third-parties (thousand tonnes)	515.0	464.8	**431.9**

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 (kilogram/RMB10,000) = amount of solid waste/Industrial output value (in constant 2020 prices, calculated in RMB10,000)

Note4: The total amount of hazardous waste entrusted by the Company to third-party qualified institutions for disposal.

Note5: Hazardous waste intensity (kilogram/RMB10,000) = amount of hazardous waste/Industrial output value (in constant 2020 prices, calculated in RMB10,000)

Social Performance

Employment

Indicators	2022	2023	2024
Total number of employees	374,791	368,009	**355,952**
Of which: Employees aged 30 years and below	43,826	48,819	**52,335**
Employees aged between 31 and 50 years	224,068	209,558	**192,251**
Employees aged 51 years and over	106,897	109,632	**111,366**
Of which: Male employees	258,762	254,938	**249,543**
Female employees	116,029	113,071	**106,409**
Percentage of female employees (%)	31.0	30.73	**29.89**
Percentage of female employees in management (%)	13.45	13.63	**14.16**
Percentage of female employees in technological staff (%)	36.53	36.46	**36.25**
Percentage of female employees in operational staff (%)	31.13	30.64	**29.08**
Of which: Master degree or above	23,780	31,199	**33,888**
Bachelor or below	351,011	336,810	**322,064**
Of which: Domestic employees	—	367,797	**355,760**
Of which: Full time employees	349,964	345,025	**334,655**
Percentage of ethnic minority employees (%)	4.2	4.36	**4.53**
Number of employees newly hired during reporting period	20,891	28,941	**21,995**
Of which: Male employees	12,082	15,069	**12,873**
Female employees	8,809	13,872	**9,122**
Of which: Employees 30 years of age and below	14,088	15,740	**14,426**
Employees between 31 and 50 years of age	6,722	12,788	**7,382**
Employees 51 years of age and over	81	413	**187**
Number of employees turnover during reporting period	15,046	18,425	**17,633**
Turnover rate (%)	0.69	0.50	**0.55**
Of which: Turnover rate of male employees (%)	0.60	0.45	**0.55**
Turnover rate of female employees (%)	0.97	0.62	**0.54**
Of which: Turnover rate of employees aged 30 years and below (%)	2.65	1.73	**2.43**
Turnover rate of employees aged between 31 and 50 years (%)	0.59	0.39	**0.30**
Turnover rate of employees aged 51 years and over (%)	0.30	0.17	**0.18**
Of which: Turnover rate of senior management (%)	0.60	0.25	**0.00**
Turnover rate of mid-level management (%)	0.23	0.22	**0.15**
Turnover rate of grassroots employees (%)	0.71	0.54	**0.56**
Of which: Turnover rate of domestic employees (%)	—	0.50	**0.55**
Collective contract coverage (%)	—	100	**100**

Employment

Indicators	2022	2023	2024
Social insurance coverage (%)	100	100	**100**
Enterprise annuity coverage (%)	80	87	**88**
Percentage of employees with labour union membership (%)	100	100	**100**

Training

Indicators	2022	2023	2024
Vocational training participation (person-time)	1,442,848	1,979,853	**1,520,552**
Of which: Training participation of male employees	—	1,390,561	**1,066,968**
Training participation of female employees	—	589,292	**453,584**
Of which: Training participation of senior management	—	2,610	**1,338**
Training participation of mid-level management	—	28,757	**29,675**
Training participation of grassroots employees	—	1,111,807	**1,113,936**
Online training participation (person-time)	6,375,520	5,895,570	**6,010,535**
Total amount of online training (hours)	60,847,600	50,855,000	**57,088,000**
Vocational training coverage (%)	99.3	99.4	**99.5**
Of which: Vocational training coverage of senior management (%)	—	100	**100**
Vocational training coverage of mid-level management (%)	—	100	**100**
Vocational training coverage of grassroots employees (%)	—	99.3	**99.4**
Of which: Vocational training coverage of male employees (%)	—	99.4	**99.5**
Vocational training coverage of female employees (%)	—	99.4	**99.5**
Total amount of vocational training (hours)	14,815,488	20,675,680	**23,719,149**
Average training hours of employees (hours)	39.53	56.18	**66.63**
Of which: Average training hours of male employees (hours)	58.31	57.15	**67.58**
Average training hours of female employees (hours)	58.68	54.06	**65.12**
Of which: Average training hours of senior management (hours)	61.35	70.52	**71.26**
Average training hours of mid-level management (hours)	58.56	60.23	**61.57**
Average training hours of grassroots employees (hours)	54.21	55.78	**57.63**
Of which: Training participation rate of male employees (%)	42.74	43.67	**44.58**
Training participation rate of female employees (%)	41.63	43.35	**44.29**
Of which: Training participation rate of senior management (%)	96.28	98.53	**99.12**
Training participation rate of mid-level management (%)	94.75	97.61	**98.56**
Training participation rate of grassroots employees (%)	89.63	92.35	**93.37**
Employee training expenses (RMB10,000)	—	126,405	**112,429**

Workplace health and safety

Indicators	2022	2023	2024
Number of accidents reported	1	1	**0**
Number of deaths due to production safety accidents	2	1	**0**
Total recorded accident (Incident) rate (per 200,000 working-hours)	0.07046	0.05052	**0.0426**
Fatal accident rate (per 200,000 working-hours)	0.00045	0.00023	**0**
Lost workdays due to work-related injuries (days)	—	5,586	**5,992**
Number of production safety emergency drills (10,000 times)	59	59	**59**
Participation of production safety emergency drills (10,000 person-times)	332	333	**331**
Employee occupational health examination coverage (%)	99.9	99.9	**99.9**
Coverage of health examinations and health records (%)	—	99.9	**99.9**
Number of newly diagnosed cases of occupational diseases	10	4	**2**
Employee work-related injury insurance expenses (RMB10,000)	—	48,188.5	**58,251.5**
Employee safety production liability insurance expenses (RMB10,000)	—	6,957	**7,920**
Coverage of employee work-related injury insurance (%)	—	100	**100**
Coverage of safety production liability insurance (%)	—	100	**100**

Supply Chain

Indicators	2022	2023	2024
Number of suppliers passed qualification assessment	26,768	26,186	**30,289**
Of which: Number of suppliers from mainland China	24,917	24,446	**28,468**
Number of oversea suppliers	1,851	1,740	**1,821**
Percentage of suppliers qualified by QHSE management system (%)	29.8	30.5	**28.4**
Number of suppliers qualified by the quality management system (ISO9000)	11,634	10,815	**11,922**
Percentage of suppliers qualified by the quality management system (ISO9000) (%)	43.5	41.3	**39.4**
Number of suppliers qualified by the environmental management system (ISO14000)	9,271	9,208	**10,647**
Percentage of suppliers qualified by the environmental management system (ISO14000) (%)	34.6	35.2	**35.2**
Number of suppliers qualified by the occupational health and safety management system (ISO18000)	8,273	7,869	**8,860**
Percentage of suppliers qualified by the occupational health and safety management system (ISO18000) (%)	30.9	30.0	**29.3**
Percentage of procurement through tender (%)	86.0	86.7	**83.0**
Percentage of procurement by open tender (%)	96.9	97.0	**98.8**
Total number of suppliers assessed via desk assessments/on-site assessments	—	26,186	**30,289**
Percentage of significant suppliers assessed (%)	—	72.8	**54.3**
Number of suppliers assessed with substantial actual/potential negative impacts	—	1,794	**1,997**
Percentage of suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plan (%)	—	31.0	**44.6**
Number of suppliers with substantial actual/potential negative impacts that were terminated	—	220	**203**

INDEPENDENT ASSURANCE REPORT

English Translation for Reference Only

Independent Practitioner's Limited Assurance Report

毕马威华振通字第 2500094 号

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

Report on selected information in China Petroleum and Chemical Corporation's Sustainability Report as of 31 December 2024 and for the year ended 31 December 2024

Conclusion

We have performed a limited assurance engagement on the following information in the Sustainability Report of China Petroleum and Chemical Corporation (the "Company") as of 31 December 2024 and for the year ended 31 December 2024 (hereafter referred to as "the assured sustainability information"):

The assured sustainability information	Point in time or period subject to assurance
GHGs emission (million tonnes CO_2-equivalent)	For the year ended 31 December 2024
GHGs emissions intensity (tonnes CO2-equivalent/RMB million)	For the year ended 31 December 2024
Direct GHGs emission (million tonnes CO_2-equivalent)	For the year ended 31 December 2024
Indirect GHGs emission (million tonnes CO_2-equivalent)	For the year ended 31 December 2024
CO_2 capture (thousand tonnes)	For the year ended 31 December 2024
Consumption of purchased electricity (billion kWh)	For the year ended 31 December 2024
Chemical Oxygen Demand (COD) (tonnes)	For the year ended 31 December 2024

Independent Practitioner's Limited Assurance Report (Continued)

毕马威华振通字第 2500094 号

Conclusion (Continued)

The assured sustainability information	Point in time or period subject to assurance
Ammonia and nitrogen (tonnes)	For the year ended 31 December 2024
Nitrogen oxides (tonnes)	For the year ended 31 December 2024
Sulphur dioxide (tonnes)	For the year ended 31 December 2024
Hazardous waste (thousand tonnes)	For the year ended 31 December 2024
Number of accidents reported	For the year ended 31 December 2024
Number of deaths due to production safety accidents	For the year ended 31 December 2024
Total recorded accident (Incident) rate (per 200,000 working-hours)	For the year ended 31 December 2024
Fatal accident rate (per 200,000 working-hours	For the year ended 31 December 2024
Total number of employees	As of 31 December 2024
Employees with master's degree or above	As of 31 December 2024
Employees with bachelor's degree or below	As of 31 December 2024
Employee turnover rate (%)	For the year ended 31 December 2024
Turnover rate of male employees (%)	For the year ended 31 December 2024
Turnover rate of female employees (%)	For the year ended 31 December 2024
Percentage of female employees (%)	As of 31 December 2024
Percentage of female employees in management (%)	As of 31 December 2024
Percentage of ethnic minority employees (%)	As of 31 December 2024
Number of patients cured by "Sinopec Lifeline Express Programme"	As of 31 December 2024
Number of patent applications filed in the year	For the year ended 31 December 2024
Number of patent applications granted in the year	For the year ended 31 December 2024

Independent Practitioner's Limited Assurance Report (Continued)

毕马威华振通字第 2500094 号

Conclusion (Continued)

Based on the procedures performed and evidence obtained, nothing has come to our attention to cause us to believe that the Company's assured sustainability information as of 31 December 2024 and for the year ended 31 December 2024 is not prepared, in all material respects, in accordance with the criteria set out in the appendix to this report.

Our conclusion on the assured sustainability information does not extend to any other information that accompanies or contains the assured sustainability information and our assurance report (hereafter referred to as "other information"). We have not performed any procedures as part of this engagement with respect to the other information.

Basis for conclusion

We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board (IAASB). Our responsibilities under this standard are further described in the "Our responsibilities" section of our report.

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies International Standard on Quality Management (ISQM) 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements, issued by the IAASB. This standard requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Restriction on use

This report is made solely to you, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Our conclusion is not modified in respect of this matter.

Independent Practitioner's Limited Assurance Report (Continued)

毕马威华振通字第 2500094 号

Responsibilities of the Board of Directors for the assured sustainability information

The Board of the Company are responsible for:

- designing, implementing and maintaining internal control relevant to the preparation of the assured sustainability information that is free from material misstatement, whether due to fraud or error;
- selecting or developing suitable criteria for preparing the assured sustainability information and appropriately referring to or describing the criteria used; and
- preparing the assured sustainability information in accordance with the criteria set out in the appendix to this report.

Inherent limitations in preparing the assured information

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.

Our responsibilities

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the assured sustainability information is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to the Board of the Company.

Independent Practitioner's Limited Assurance Report (Continued)

毕马威华振通字第 2500094 号

Our responsibilities (Continued)

We exercised professional judgment and maintained professional skepticism throughout the engagement. We designed and performed our procedures to obtain evidence about the assured sustainability information that is sufficient and appropriate to provide a basis for our conclusion. Our procedures selected depended on our understanding of the assured sustainability information and other engagement circumstances, and our consideration of areas where material misstatements are likely to arise. Within the scope of our work, we only performed procedures on the Head Office of the Company, Sinopec Beijing Oil Products Company and Sinopec Zhenhai Refining & Chemical Branch. In carrying out our engagement, our procedures include:

- Assessing the risk of material misstatement of the assured sustainability information in the Sustainability Report, whether due to fraud or error;
- Conducting interviews with relevant staff at the Company who are responsible for providing assured sustainability information;
- Performing analytical review procedures on the assured sustainability information;
- Inspecting the assured sustainability information on a sample base;
- Recalculating of the assured sustainability information;
- 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 deemed necessary.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

KPMG Huazhen LLP

Beijing, China

21 March 2025

Appendix: Compilation and Reporting Basis of the assured sustainability information

GHGs emission (million tonnes CO_2-equivalent):

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

GHGs emissions intensity (tonnes CO2-equivalent/RMB million):

GHGs emissions intensity disclosed herein refers to Greenhouse gas emissions / revenue (RMB million).

Direct GHGs emission (million tonnes CO_2-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_2-equivalent):

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

CO_2 capture (thousand tonnes):

CO2 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.

Ammonia and nitrogen (tonnes):

Ammonia and nitrogen herein refers to the Ammonia and nitrogen 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.

Appendix: Compilation and Reporting Basis of the assured sustainability information (Continued)

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.

Sulphur dioxide (tonnes):

Sulphur dioxide herein refers to the amount of Sulphur dioxide 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.

Hazardous waste (thousand tonnes):

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 Petroleum & Chemical 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.

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 at 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 full-time employment contracts with China Petroleum & Chemical Corporation, excluding dispatched employees.

Appendix: Compilation and Reporting Basis of the assured sustainability information (Continued)

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).

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 management:

Percentage of female employees in management herein refers to the proportion of the number of female employees in the 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 management function who have signed full-time employment contracts.

Appendix: Compilation and Reporting Basis of the assured sustainability information (Continued)

Percentage of ethnic minority employees:

Percentage of ethnic 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 by "Sinopec Lifeline Express Programme":

Number of patients cured by "Sinopec 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 patent applications filed in the year:

Number of patent applications filed in the 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 patent applications granted in the year:

Number of patent applications granted in the 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.

REPORT CONTENT INDEXES

Guidelines No.14 of Shanghai Stock Exchange for Self-Regulatory of Listed Companies– Sustainability Report (Trial)

Scope	No.	Subject	Terms	Pages
Enviromental	1	Response to Climate Change	Articles 21 to 28	43-60; 133
	2	Pollutant Emissions	Article 30	74-76; 81; 134
	3	Waste Management	Article 31	50; 66; 77-78; 134
	4	Ecosystem and Biodiversity Conservation	Article 32	83-84
	5	Environmental Compliance Management	Article 33	69-74
	6	Energy Utilization	Article 35	46-48; 50-51; 55-57; 61-66; 133
	7	Water Utilization	Article 36	80; 133
	8	Circular Economy	Article 37	50; 57-58; 61-66; 77-80; 134
Social	9	Rural Revitalization	Article 39	121-124
	10	Social Contributions	Article 40	84; 121-122; 125
	11	Innovation Drive	Article 42	35-40; 47-50; 56; 58; 64; 74; 110; 117
	12	Technological Ethics	Article 43	N/A[Note1]
	13	Supply Chain Security	Article 45	27; 46; 126-129; 138
	14	Equal Treatment of Small and Midsize Enterprises	Article 46	28
	15	Safety and Quality of Products and Services	Article 47	115-120
	16	Data Security and Customer Privacy Protection	Article 48	97-98
	17	Employee	Article 50	87-94; 96; 101-112; 131; 135-137
Sustainable Development Governance	18	Due Diligence	Article 52	22; 24; 27; 29-32; 69-74; 126-128; 130
	19	Stakeholder Communication	Article 53	10; 102; 105-106; 129-130
	20	Anti-Commercial Bribery and Corruption	Article 55	21-27; 126-128
	21	Anti-unfair competition	Article 56	28; 127-128
Self-disclosure subjects (corporate governance, risk management and compliance, community communication and engagement)				14-19; 21-32; 130-132

Note1: The Company is not engaged in scientific research or technological development activities in technology ethics-sensitive fields such as life sciences and artificial intelligence, therefore this topic is not applicable to the Company. In the process of technological innovation, we has taken the principles of green and low carbon, increasing human well-being, reasonable control of risks and information security protection into consideration, actively preventing and controlling the risks of scientific and technological innovation, and effectively promoting the development of scientific and technological innovation.

HKEX ESG Reporting Guide Content Index

Subject Areas, Aspects, General Disclosures and KPIs			Pages
A Environmental			
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.		52; 54; 75-78 80-84
	KPI A1.1	The types of emissions and respective emissions data.	52; 59; 75-78; 81; 133-134
	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).	52; 133
	KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g., per unit of production volume, per facility).	77-78; 134
	KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g., per unit of production volume, per facility).	77-78; 134
	KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	51; 54-66; 75-81
	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.	77-78
Aspect A2 Use of Resources	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials.		48; 55-57; 61-62 66; 77-78; 80
	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).	55-56; 133
	KPI A2.2	Water consumption in total and intensity (e.g., per unit of production volume, per facility).	80; 133
	KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	55-57; 61-66
	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.	80
	KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	N/A[Note1]
Aspect A3 The Environment and Natural Resources	General Disclosure Policies on minimizing the issuer's significant impacts on the environment and natural resources.		54-55; 69-73 76; 82-83
	KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	54-61; 66 69-84
Aspect A4 Climate Change	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.		44; 51-52 54-55; 59
	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.	45-50; 54-66

Note1: The indicator is not applicable since the main products sold by the Company are energy and chemical products.

Subject Areas, Aspects, General Disclosures and KPIs			Pages
B Social			
Employment and Labour Practices			
Aspect B1 Employment	General Disclosure Information on (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equity opportunity, diversity, anti-discrimination, and other benefits and welfare.		101-105 109-111
	KPI B1.1	Total workforce by gender, employment type (for example, full- or part- time), age group and geographical region.	108; 135
	KPI B1.2	Employee turnover rate by gender, age group and geographical region.	108; 135
Aspect B2 Health and Safety	General Disclosure Information on (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.		88; 91; 93; 95-96 101; 103
	KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	92; 137
	KPI B2.2	Lost days due to work injury.	92; 137
	KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	89-91; 93-96
Aspect B3 Development and Training	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.		107; 110-111
	KPI B3.1	The percentage of employees trained by gender and employee category (e.g., senior management, middle management).	112; 136
	KPI B3.2	The average training hours completed per employee by gender and employee category.	112; 136
Aspect B4 Labour Standards	General Disclosure Information on (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.		101; 103
	KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	103
	KPI B4.2	Description of steps taken to eliminate such practices when discovered.	101-104

Subject Areas, Aspects, General Disclosures and KPIs			Pages
B Social			
Operating Practices			
Aspect B5 Supply Chain Management	General Disclosure Policies on managing environmental and social risks of the supply chain.		126; 128
	KPI B5.1	Number of suppliers by geographical region.	129; 138
	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.	27; 128-129 138
	KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	27; 127
	KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	128-129
Aspect B6 Product Responsibility	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 health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.		116; 118-120
	KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	119
	KPI B6.2	Number of products and service related complaints received and how they are dealt with.	117-119
	KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	28; 37-38; 40
	KPI B6.4	Description of quality assurance process and recall procedures.	115-116; 118-119
	KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	97-98
Aspect B7 Anti-corruption	General Disclosure Information on (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.		21; 23-25; 27
	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.	23-27
	KPI B7.3	Description of anti-corruption training provided to directors and staff.	25; 27
Community			
Aspect B8 Community Investment	General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.		121-125; 130
	KPI B8.1	Focus areas of contribution (e.g., education, environmental concerns, labour needs, health, culture, sport).	121-125; 131-132
	KPI B8.2	Resources contributed (e.g., money or time) to the focus area.	121-125; 131-132

UNGC Ten Principles Index

Scope	UNGC's Ten Principles	Pages
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights.	10; 101-104; 130-131
	2. Make sure that they are not complicit in human rights abuses.	10; 101-104; 130-131
Labour	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	105
	4. The elimination of all forms of forced and compulsory labour.	101; 103
	5. The effective abolition of child labour.	101; 103
	6. The elimination of discrimination in respect of employment and occupation.	101; 104
Environment	7. Businesses should support a precautionary approach to environmental challenges.	43-66; 69-84
	8. Undertake initiatives to promote greater environmental responsibility.	43-66; 69-84
	9. Encourage the development and diffusion of environmentally friendly technologies.	50; 55-59; 61-66; 75-84
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	21-27; 126; 128

SDGs Mapping Table

SDGs	Sinopec Corp. Actions Disclosure Index in 2024 (Pages)
1 NO POVERTY	121-125
2 ZERO HUNGER	121-124
3 GOOD HEALTH AND WELL-BEING	87-95; 137
4 QUALITY EDUCATION	110-112; 121-124 131-132; 136
5 GENDER EQUALITY	101-106; 108 122; 135
6 CLEAN WATER AND SANITATION	76; 80; 133
7 AFFORDABLE AND CLEAN ENERGY	61-66
8 DECENT WORK AND ECONOMIC GROWTH	101-112; 135-136
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	35-40; 61-66
10 REDUCED INEQUALITIES	101-106; 121-125
11 SUSTAINABLE CITIES AND COMMUNITIES	63-66; 75-81
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	91-95; 117-120 126-129
13 CLIMATE ACTION	43-66
14 LIFE BELOW WATER	76; 80; 82-84
15 LIFE ON LAND	83-84
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	21-32
17 PARTNERSHIPS FOR THE GOALS	38-40; 62

TCFD Index

TCFD Recommended 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.	3; 9; 14-17; 29-32 35-36; 43-44; 69
	b) Describe the management's role in assessing and managing climate-related risks and opportunities.	3; 14; 19; 43-44; 51; 69
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.	45-66; 89-90
	b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.	45-66
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2° C or lower scenario.	39; 45-51; 89-90
Risk Management	Disclose how the organisation identifies, assesses and manages climate-related risks.	
	a) Describe the organisation's processes for identifying and assessing climate-related risks.	43-44; 50-51
	b) Describe the organisation's processes for managing climate-related risks.	43-44; 50-51
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.	11; 29-30 43-44; 50-51
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.	45-48; 51-52 56-64; 133
	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions, and the related risks.	51-52; 133
	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	51-52; 54-66

UNGC Criteria Index

Scope	Criteria for UNGC		Pages
Strategy Governance and Engagement	Criterion 1:	Key aspects of the Company's advanced level sustainability strategy in line with Global Compact principles	3
	Criterion 2:	Effective decision-making processes and systems of governance for corporate sustainability	3; 9-11; 29-30
	Criterion 3:	Engagement with all important stakeholders	10
UN Goals and Issues	Criterion 4:	Actions taken in support of broader UN goals and issue	152
Human Rights Implementation	Criterion 5:	Robust commitments, strategies or policies in the area of human rights	101-104; 131
	Criterion 6:	Effective management systems to integrate the human rights principle	101-104; 130-131
	Criterion 7:	Effective monitoring and evaluation mechanisms of human rights integration	101-104; 130-131
	Criterion 8:	Key outcomes of the human rights integration	101-104; 108; 130-131; 135-136
Labour Principles Implementation	Criterion 9:	Robust commitments, strategies or policies in the area of Labour	101-104
	Criterion 10:	Effective management systems to integrate the Labour principle	101-104; 107; 109-111
	Criterion 11:	Effective monitoring and evaluation mechanisms of the labour principle integration	101-104; 107; 109-111
	Criterion 12:	Key outcomes of the Labour principle integration	101; 105-108; 112; 135-136
Environmental Stewardship Implementation	Criterion 13:	Robust commitments, strategies or policies in the area of environmental stewardship	43-50; 54-66; 69-84
	Criterion 14:	Effective management systems to integrate the environmental principle	70-73
	Criterion 15:	Effective monitoring and evaluation mechanisms for environmental stewardship	69-74
	Criterion 16:	Key outcomes of the environmental principle integration	54-66; 75-84
Anti-Corruption Implementation	Criterion 17:	Robust commitments, strategies or policies in the area of anti-corruption	21-27
	Criterion 18:	Effective management systems to integrate the anti-corruption principle	23-27
	Criterion 19:	Effective monitoring and evaluation mechanisms for the integration of anti-corruption	23-27
	Criterion 20:	Key outcomes of the anti-corruption principle integration	25; 27
Value Chain Implementation	Criterion 21:	Implementation of the Global Compact principles in the value chain	115-120; 126-129
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	139-147

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
China Petroleum & Chemical Corporation
No.22 Chaoyangmen North Street, Chaoyang District, Beijing 100728, PRC

Your Information

Name:_____

Organisation:_____ Title:_____

Tel:_____ Fax:_____ E-mail:_____

Multiple choice questions (please place a check mark ✓ in the answer box)

Content	Very good	Good	Fair	Poor	Very poor
1 This report provides a complete and accurate description of the significant economic, social and environmental impacts of Sinopec Corp.	☐	☐	☐	☐	☐
2 This report responds to and discloses information about the concerns of stakeholders.	☐	☐	☐	☐	☐
3 The information, indicators and data disclosed in this report are clear, accurate and complete.	☐	☐	☐	☐	☐
4 This report is easy to read, i.e., its structure, content, wording and layout are well designed.	☐	☐	☐	☐	☐

Open-ended questions

1 What do you like the most of this report?

2 What other information do you think that should be included in this report?

3 What are your suggestions that how we can better prepare our sustainable development progress report in the future?

WE SUPPORT
UN GLOBAL COMPACT

中国石化
SINOPEC

Address:
No.22 Chaoyangmen North Street,
Chaoyang District, Beijing, PRC
Zip code: 100728
Tel: 86-10-59960028
Fax: 86-10-59960386
Website: http://www.sinopec.com/listco/en

This report is printed on environmentally friendly paper