



2022

**Sinochem International
Sustainability Report**

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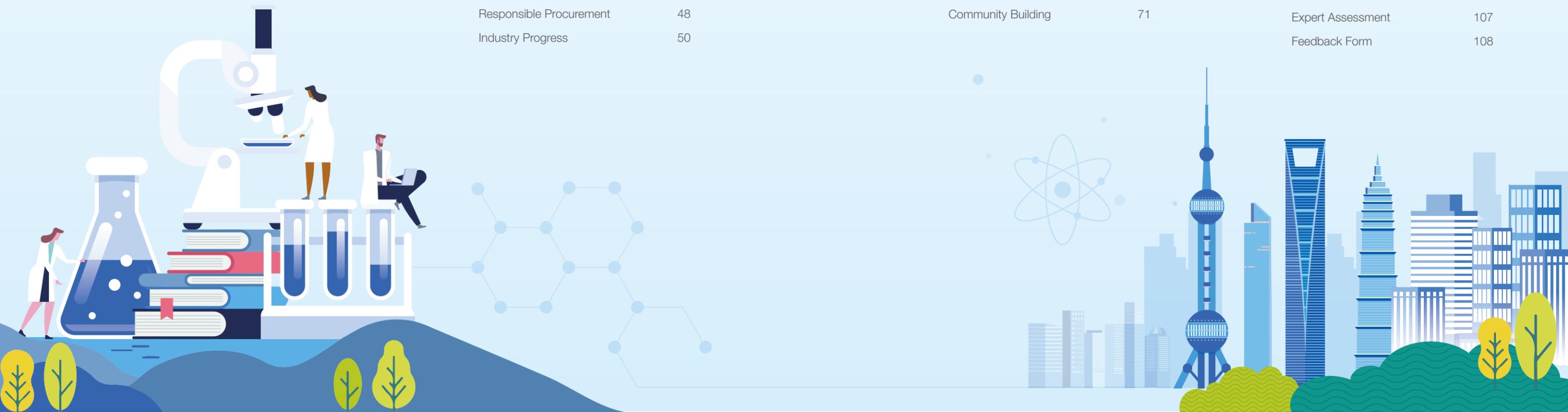
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Report Descriptions

This report is the 19th Sustainability Report published by Sinochem International Corporation.

Reporting Entity and Related Terms

Sinochem International Corporation. For ease of expression, the said corporation is referred to by the terms "Sinochem International", "the company", or "we/our/us". Sinochem International's parent company, "Sinochem Holdings Corporation Ltd." is referred to as "Sinochem Holdings" for short.

Scope of Report

Organizational scope: Includes Sinochem International and its holding subsidiaries at all levels. For the detailed scope of the reporting entity, please refer to the *2022 Sinochem International Annual Report*.

Report time frame: 1 January to 31 December 2022, consistent with the time frame of the company's financial report. In order to maintain the integrity and continuity of information, the content for some of the items in this report might be out of the stated time frame.

Report publication frequency: This report is an annual report.

Basis of Report Preparation

This report is in accordance with the Global Sustainability Standards Board's (GSSB) *GRI Sustainability Reporting Standards 2021* (GRI Standards 2021), and is based on the *Shanghai Stock Exchange's Listed Companies Self-Regulatory Guidelines No.1 - Standardized operation and Corporate Social Responsibility Report guidelines*, TCFD frame work recommendation, United Nations' Ten principles of the Global Compact and 2030 SDGs, *Corporate Social Responsibility Guidelines* under the International Organization for Standardization's ISO 26000: 2010 international standard, the SASAC's *Guiding Opinions on the Implementation of Corporate Social Responsibility by Central Enterprises*.

Data Description

All the data used in this report are taken from the company's official documents and statistical reports. Due to statistical reasons, appropriate corrections have been made in the report on relevant data from previous years. In case of discrepancies, the data stated in this report shall prevail.

Unless otherwise specified, the currencies stated in this report are all in RMB.

How to Retrieve the Report

You may visit Sinochem International's official website (www.sinochemintl.com) to browse the report online or download the digital version of the report. The report includes both simplified Chinese and English versions. In case of discrepancies, the simplified Chinese version shall prevail.

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Board Statement

As the company's business continues to develop and steadily increase its economic contribution, the Board of Directors of Sinochem International is committed to improving its ESG governance. Meanwhile, we also aim to ensure the balanced development of the economy, society and environment in order to create a bright and sustainable future. The Board of Directors' ESG Management Statement is as follows:



The company's Board of Directors is the highest decision-making and supervisory body for the company's ESG governance efforts and is fully responsible for all ESG-related matters. Established under the Board, the "Sustainable Development Committee" chaired by the Chairman of the Board holds regular discussions and reviews on the company's ESG-related risks and opportunities, so as to ensure the effective operation of its risk management and internal control systems. Annual hearings of specific reports on ESG issues are held, whereby oversight recommendations are put forward and the implementation of decisions is supervised.



The company's Board of Directors formulated the ESG management guidelines and strategy as well as reviewed and approved the "Sinochem International Sustainable Development Management Methods" document in 2022. These documents incorporate ESG governance requirements into the company's day-to-day management systems and serve as guides for the operation-level "Sustainable Development Executive Committee" and five professional sub-committees to carry out ESG-related tasks. At the start of every year, the Board of Directors analyzes information such as external environmental changes, macro policies and ESG ratings while engaging in extensive and in-depth communication with various stakeholders through different channels. Meanwhile, we also update and reorder ESG issues, strengthen management for key issues, and continuously deliver responses pertaining to these said issues in order to keep improving ESG performance.



The company's Board of Directors continuously strengthen monitoring and participation in terms of ESG governance. In 2022, upon deliberation by the company's Board of Directors, Sinochem International published its sustainability goals over the 14th Five-Year Plan period while also internally formulating 2022 yearly objectives covering all business units. The Board of Directors holds regular hearings of reports from the company management regarding the implementation progress of the previous year's objectives, reviews and evaluates the achievement of the said objectives and plans for the next year's objectives and work plan.



The company regularly publishes its annual sustainability report to present detailed disclosures of its performance and progress in terms of the environment, society and governance while also actively responding to stakeholder concerns. All the disclosed information have been reviewed and approved by the Board of Directors.

The Board of Directors of Sinochem International Corporation

Chairman's Address



Li Fanrong, Chairman of Sinochem International Corporation

Dear Friends,

On behalf of the Board of Directors, I would like to thank you from the bottom of my heart for your concern and support for Sinochem International.

In 2022, the successful convening of the 20th CPC National Congress marked a new milestone in Chinese-style modernization. Driven by the objective of "building a leading enterprise specializing in innovative new chemical materials", Sinochem International has tackled risks and challenges posed by a complex external environment to realize deterministic growth amid uncertainty. Meanwhile, as a corporate citizen with a deep sense of corporate social responsibility, we have accelerated the building of our ESG system and continued to improve our ESG governance capabilities. These measures are instrumental in fulfilling our mission to strike a balance in terms of economic, environmental and social development factors.

Strengthening the industrial chain and building a new development pattern

In 2022, we maintained a strategic focus on our core business, whereby numerous strategic projects achieved industrialization and our new chemical materials industrial cluster started to scale-up. By accelerating transformation and upgrading efforts through industrial chain-based thinking, we keep honing our core capability of "the leader of industrial chain". While our two industrial chains of epoxy resins and additives offer a strengthened competitive advantage, and the two independently-innovated strategic products of Para-aramid fiber and PA66 contribute to China's chemical industry by strengthening areas of weakness.

Deploying the innovation chain and promoting the commercialization of scientific research

In 2022, we remained driven by innovation as we strengthened the building of our platform in order to start our new science and technology journey with higher standards. Having launched the new Headquarters of Sci-Tech Innovation Center, we set up four research centers for new materials under the central research institute of Sinochem Holdings. Meanwhile, our product manufacturing processes for rubber antioxidants, aramid fibers and epichlorohydrin have been recognized by authoritative industry accreditation bodies to be of internationally-advanced standards. There has been an 41% year-on-year increase in sales revenue for new products, and remarkable results have been achieved in terms of the coordinated development of the "innovation chain" and "industrial chain".

Improving the ecological chain and creating a "low-carbon" competitive advantage

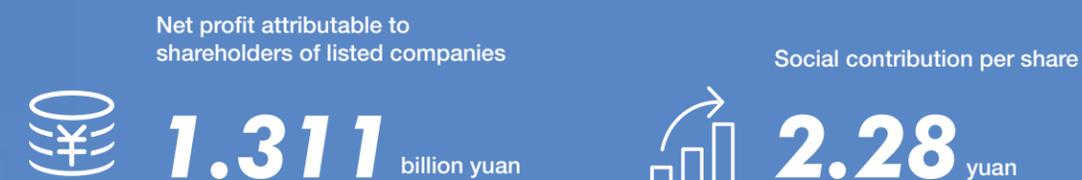
In 2022, we accelerated our green transition efforts to take up the responsibility in building a community with a shared future for mankind. We promoted the building of "dual carbon" systems, established steering teams and working bodies for "dual carbon" tasks, formulated low carbon development plans and implemented solutions. Meanwhile, we promoted a comprehensive green manufacturing system, improved the green financing management system, and conducted multi-dimensional and multi-level special training sessions. We also performed energy-saving diagnosis services for subsidiary companies while steadily realizing the company's "dual carbon" commitment, thereby leading the green transition and upgrading of the chemical industry.

Improving the value chain and promoting the company's transformation and upgrading

In 2022, we strengthened our ESG management and advanced the implementation of sustainability goals over the 14th Five-Year Plan period in an orderly fashion, creating a comprehensive ESG management system in a top-down manner. We revised the *Sustainable Development Management Methods and Evaluation Criteria* documents and organized advanced ESG seminars covering all business units. We also implemented self-evaluations pertaining to ESG management for all business units and subsequently formulated upgrading and improvement plans to guide them in the construction of ESG management systems, thereby improving the company's overall ESG governance standards. We are also committed to offering our employees shared value and growth as we work with our customers, suppliers and partners to promote the sustainable and coordinated development of the value chain.

Due to the excellent ESG performance, Sinochem International has been listed on the "ESG Pioneer 50 Index of Central Enterprises" under the State-owned Assets Supervision and Administration Commission of the State Council for the second year. We have also been conferred Wind's "Best ESG Practice Award for by A-share Companies" and Aon's "2022 Best ESG Employer in China". On top of that, we have also improved our ESG ratings assigned by mainstream accreditation bodies such as EcoVadis and MSCI-ESG.

We keep forging ahead and embarking on new endeavors. In 2023, against the backdrop of China's "dual carbon" objectives and opportunities arising from reforms in the chemical industry, we will resolutely implement the spirit of the 20th CPC National Congress, continue to rapidly develop our core business of new chemical materials, improve ESG governance standards, and pursue high ESG standards and performance, strive to become a role model for sustainability as a world-class fine chemical enterprise.



About Sinochem International

Sinochem International Corporation is an international large-scale state-holding listed company (stock code: 600500.SH) with core competitiveness in the fields of intermediates, new materials, polymer additives and servicing customers in over 100 countries and regions worldwide.

Sinochem Holdings Corporation Ltd. ("Sinochem Holdings"), the actual controller of Sinochem International, is formed through the restructuring of Sinochem Group Co., Ltd. and China National Chemical Corporation Ltd. It is a leading state-owned enterprise under the supervision of State-owned Assets Supervision and Administration Commission of the State Council.

In accordance with the corporate vision of "Fine Chemistry, Green Life", Sinochem International has gradually taken fine chemicals as its main business with focusing on new chemical materials. We are implementing transformation driven by integrating industry chain and integration industry layout, creating a new materials industrial cluster with leading technologies and key competitive advantages in its pursuit of becoming a global material science platform.



To find out more,
please visit our official website

www.sinochemintl.com

Corporate Vision

Fine Chemistry, Green Life. We take safety, environmental protection and occupational health as our social responsibility, aim to build a China's leading innovative new chemical materials enterprise, and unwaveringly promote the innovative development and industrial upgrading of China's new chemical materials industry.

Corporate Mission

We strive to become a leading enterprise in innovative new chemical materials that is rooted in China while operating globally. We provide innovative, high-quality, green products and integrated solutions in the field of material science while sharing the fruits of growth with the society, customers shareholders and employees.

Strategic Objectives

Upholding the value of "In Science We Trust", we implement an innovation-driven strategy and keep focusing on our core business of new chemical materials. We are committed to optimizing and upgrading core industries such as high-performance materials and polymer additives, aggressively developing strategic emerging industries, and appropriately developing lithium battery materials business by coordinating the industrial chain of lithium battery. By leveraging the strengths of Lianyungang Circular Economy Industrial Park and our self-owned breakthrough key technologies, we aim to be the leading enterprise in innovative new chemical materials with a reasonable industrial structure and extensive product portfolio.

Business Structure

Sinochem International operates different business units in chemical intermediates, new materials, polymer additives, new energy, pharmaceuticals and healthcare, and have multiple key products with leading positions in domestic and even global markets. During the “14th Five-Year Plan” period, we undertake the material science strategy of Sinochem Holdings, focus on the core business of new chemical materials and build a “2+2+2” industrial chain pattern driven by technology innovation, strive to be the leader of the said industrial chains.

Production Base

Sinochem International is adhere to integrated and specialized base strategy, and to develop “1+N” base pattern. The company boasts a strong production and operation network, with advanced chemical parks such as the Sinochem Lianyungang Circular Economy Industrial Park, Sinochem Yizheng New Material Industrial Park, Sinochem Zhongwei Circular Economy Industrial Park, and Yancheng Binhai New Material Industrial Park. Sinochem International has also established 20 factories in many places nationwide.



Awards and Recognition

Sinochem International	Fortune China 500 No.171 Top 500 Petrochemical Companies in China 2022 (enterprises with independent production and operations) No.11 Top 500 Petroleum and Chemical Listed Enterprises in China 2022 No.13
Yangnong Group	China Brand Value List for the Energy and Chemical Industry 2022 No.17
Sennics	Top 100 Chinese Fine Chemicals 2022 No.43
ELIX Polymers	Top 10 Material Manufacturing Enterprises in Europe 2022

Sustainability Strategy and Management

Sinochem International comprehensively incorporates ESG core concepts and standards into its enterprise management while taking into consideration the actual circumstances of the company to build a scientific and professional ESG management system. It identifies the full impact that environmental, social and governance related factors have on the enterprise and employs goal-driven measures to implement effective management, thereby promoting a healthy cycle of enterprise development and fulfillment of corporate social responsibility.

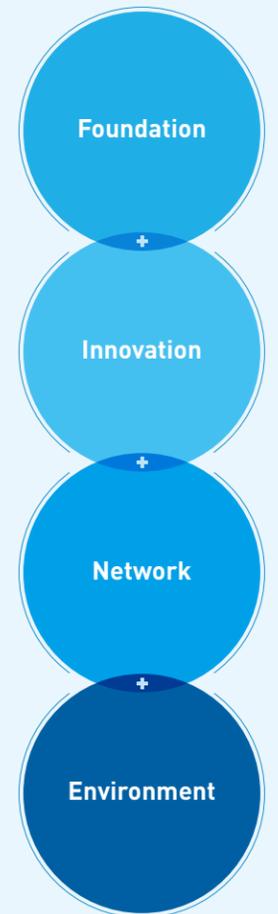
Sustainability Strategy



Sinochem International published “FINE 2030 Action”, driven by the four action-based tracks of “Foundation”, “Innovation”, “Network” and “Environment”, systematically promotes the sustainability work. Every year, the action book is published whereby the annual progress and performance under each track is disclosed.

“FINE 2030 Action” Objectives	Progress in 2022
<ul style="list-style-type: none"> To increase the production quantity of sustainably developed products by 50% To increase the ratio of subsidiaries with sustainability-related third-party certification to 80% Continuous reduction of carbon dioxide emissions per ton of products Formation of a sustainable development network to realize sustainable production and operation methods 	<ul style="list-style-type: none"> Production quantity of sustainably developed products increased by 46.07% 86% ratio of subsidiaries hold sustainability related third-party certification Achieved 21.73% reduction of carbon dioxide emissions per ton of products 100% of supplier approval assessments completed 61.54% of core supplier on-site assessments completed 0 major procurement risk incidents

Note: “FINE 2030 Action” objectives and 2022 progress are based on 2018



Sustainability Results

Progress of Sustainability Goals over the 14th Five-Year-Plan Period

In 2021, Sinochem International identified the key areas most closely related to the development of the company based on the new development stage and latest sustainable development trends. These key areas were then used to formulate sustainable development strategy objectives during the period of the 14th Five-Year Plan (2021-2025). The company identified specific work plans based on the various objectives and drove the implementation thereof, announcing the implementation progress of these objectives on a regular basis.

Sustainability Goals over the 14th Five-Year-Plan Period		Progress in 2022	Plans for 2023
Overall Strategic Objectives	To increase the EcoVadis rating from top 32% to top 20% by end-2025	The EcoVadis rating increased to top 19%	Maintain the ratio under the prerequisite that EcoVadis rating standards are improved on a year-by-year basis
	0 incidents of leaked trade secrets	0 incidents of leaked trade secrets	Continue to maintain 0 incidents of leaked trade secrets
	100% anti-corruption education and training rate for all employees	85% coverage	Increase coverage to 90%
Health, Safety and Environment	8% decrease in total amount of water pollutants compared to 2020	30% decrease in total amount of water pollutants compared to 2020	1.7% decrease in total amount of water pollutants compared to 2022
	10% decrease in total amount of air pollutants compared to 2020	22% and 18% decrease in SO ₂ and NO _x respectively compared to 2020	2% decrease in SO ₂ and NO _x compared to 2022
	0 fatal accidents 0 general and higher environmental emergencies 0 new occupational diseases 0 major HSE issues causing negative public opinion 0 customer safety or injury-related accidents for which the company is responsible	0 incidents for 5 incident types	Maintain 0 incidents for 5 incident types



Sustainability Goals over the 14th Five-Year-Plan Period		Progress in 2022	Plans for 2023
Carbon and Emission Reduction	15% decrease in comprehensive energy consumption per 10,000 yuan of output value compared to 2020	14% decrease compared to 2020	15% decrease compared to 2020
	18% decrease in carbon dioxide emissions per 10,000 yuan of output value compared to 2020	11% decrease compared to 2020	13% decrease compared to 2020
Labor Rights	100% employee complaint handling rate with results	0 complaints	Ensure a 100% employee complaint handling rate
	100% labor union coverage of employees with personnel contract	100% coverage	Maintain a 100% coverage
Sustainable Supply Chain	A 50% to 95% increase in the cumulative coverage rate of core suppliers assessed for sustainable procurement	75.81% cumulative coverage rate	Increase cumulative coverage rate to 80%
	A 26% to 95% increase in Supplier Code of Conduct signing rate	67.46% signing rate among all suppliers	Increase signing rate among all suppliers to 80%
	A 68% to 100% increase in Supplier Code of Conduct signing rate among core suppliers	100% signing rate among core suppliers	Maintain 100% signing rate among core suppliers
	A 3% to 30% increase in the cumulative coverage rate of supplier sustainability training	8.75% coverage rate among all suppliers	Increase coverage rate among all suppliers to 10%
	A 59% to 100% increase in the cumulative coverage rate of core supplier sustainability training	100% coverage rate among core suppliers	Maintain 100% coverage rate among core suppliers

Highlights of the Year for ESG Governance

Sinochem International regards ESG as one of the enterprise's key competitive advantages. As such, the company believes that the identification of ESG-related risks is a key starting point to increase ESG ratings, systematically promote the building of ESG management systems, implement multiple ESG improvement plans and keep improving its ESG competitiveness.

ESG Risk Identification

The company incorporate ESG risk identification into its routinized risk management system, whereby the Board of Directors will be wholly responsible for the decision making and supervision of ESG risks. An audit and risk committee established under the Board of Directors is responsible for assessing the impact of ESG risks on the company's operations and finances and supervising the effectiveness of risk management system operations. The company continues to monitor ESG risks against the backdrop of policy guidelines, environmental risks or social changes. It systematically identifies risk factors and formulates targeted management measures in order to effectively control and avoid the impact that the risks could bring to the business and operations.

Key ESG Risks Identified in 2022

Category	Identified Risks	Risk Description	Management Measures
Environment	Climate Change Risks	The chemical industry faces two forms of challenges, namely development and carbon reduction. Failure of the company to develop appropriate carbon reduction solutions might result in more increased costs and impact the company's reputation	Optimize the <i>Carbon Peaking and Carbon Neutrality Action Plan</i> ; launch the carbon peaking and carbon neutrality plan for subordinate plants in batches
	Environmental Risks	Failure of the company to properly prevent and control pollution might result in waste discharges that fail to meet standards or waste disposal is not in compliance with the requirements, thereby damaging the company's reputation and operations	Strengthen the management of chemical products and waste, aggressively promote pollution prevention and control measures, continue promoting the optimal operations of the environmental protection management system, and prevent the occurrence of environmental pollution incidents
	Energy Risks	There is still a gap between the energy efficiency indicators of the chemical industry and internationally advanced standards, and clean energy alternatives are a future development trend. The company needs to implement the relevant changes in order to avoid increased operating costs due to tightened energy regulatory trends	Annual cumulative purchase of 99,987 MWh of green electricity; supply electricity for production through photovoltaic energy, wind energy and other projects; gradually increase the usage proportion of renewable energy
Society	Market Risks	The petrochemical industry has increasingly higher requirements for technological innovation, safety and environmental protection. Failure of the company to accelerate its transformation might adversely impact the company's operations and performance, or even result in the risk of elimination from the market	Implement innovation-driven strategies, increase investment in R&D, and accelerate the transformation of scientific research findings. Consolidate the core business and become a modern industrial chain leader. Fortify the HSE bottom line while continuing to build a clean, low-carbon and circular green manufacturing system
	Community Risks	Improper safety management by the company could result in safety-related incidents which could endanger safety of the surrounding community	Continue to improve the HSE management system, improve the management and control of the entire safe production process, improve intrinsic safety standards, and strengthen communication with the community
	Supply Chain Risks	Procurement and supply chain have an increasingly prominent impact on sustainability. If upstream and downstream enterprises perform poorly in terms of sustainability, it might result in disruptions to the company's supply chains, higher costs and impaired operations	Integrate the principles of sustainability into the entire supplier management and procurement process, improve the sustainable development ability of suppliers, and motivate partners to build a sustainable supply chain
	Human Resources Risks	If the company's human resources does not match that of its business development requirements, or labor rights disputes arise, it will adversely affect the company's operations and reputation	Expand talent recruitment channels, provide employees with broad career development prospects, extensive personal development resources and training programs, and respect and protect the human rights of employees
	Compliance Risks	Governments, regulatory agencies, and capital markets have imposed higher and stricter compliance requirements in terms of governance. Should companies violate relevant regulations, it may result in damage to the company's reputation, significant cost increases and loss of competitiveness	Continue to improve the structure of ESG management systems of the headquarters and subsidiary enterprises, implementing targeted improvement measures primarily based on external ratings, strengthening ESG awareness and compliance awareness among all employees, and increasing the company's overall ESG competitiveness
Governance	Information Disclosure Risks	With higher ESG information disclosure requirements, insufficient or inaccurate disclosure of ESG information may result in decreased company ESG ratings and impact the company's reputation	Continue to benchmark ourselves against internationally advanced standards, improve ESG information disclosure and day-to-day communication mechanisms, perform third-party verification processes on our sustainability report, and improve the accuracy and credibility of disclosed information

ESG Management

The company has continuously improved its ESG management system, strengthened the management of substantive issues, built employee awareness and capabilities in terms of sustainable development, and promoted the establishment of a responsible brand in a planned and deployed manner, creating competitiveness in social responsibility that is compatible with sustainable development.

ESG Governance Measures in 2022

Policy Revisions



- Released the revised *Sustainable Development Management Methods and Evaluation Criteria* documents to clarify the responsibilities of the five professional sub-committees under the sustainable development executive committee, spelling out the management requirements under these five key areas

Capability Upgrades



- Based on the sustainability goals over the "14th Five-Year-Plan", we formulated 31 annual ESG work targets and 38 annual ESG action plans. Subsidiary enterprises formulated corresponding annual plans that were submitted to the Board of Directors for approval
- Implemented self-evaluations for business units based on the *Sustainable Development Management Criteria*, whereby self-evaluation reports and improvement plans were then formulated to guide the subsidiary enterprises in building ESG management systems
- Established a "dual carbon" work steering team and work organization to drive the in-depth implementation of "dual carbon" tasks
- Actively explored the "green finance" model and improved our "green financing" management system. In 2022, the company successfully issued the first sustainability-linked corporate bond of Shanghai Stock Exchange

Talent Development



- Targeted towards all employees: Held 7 sustainable development-themed public classes talking about "dual carbon" strategies, new chemical materials industrial transformation and green development, labor rights, and other new policy directions
- Targeted towards key ESG employees: Organized and implemented high-level ESG training groups revolving around the five key development themes, invited relevant experts to conduct classes while synchronously uploading micro-classes on the company's internal training platform for all employees to learn as well, thereby improving the level of ESG awareness among employees

Performance Assessment



- Every year, controlling shareholders assess the company in terms of its accrual operations, information communication, strategic decision-making, risk prevention and reform effectiveness, whereby the assessment results affect the performance of the Board of Directors
- Sustainability and HSE are incorporated into the organizational performance assessment, whereby the assessment results have a direct impact on the performance and bonuses of company executives

Responsible Brand



- Established an ESG communications column, published Sinochem International's ESG concept video and hold "community communication week" campaigns. Showcased the company's ESG governance plans, actions and results to stakeholders through various means
- Published the *Sustainable Supply Chain White Paper* to disclose the progress of the "13520 objective"

Sinochem International's Successful Issue of its First Sustainability-linked Corporate Bond on the Shanghai Stock Exchange



In January 2022, Sinochem International successfully issued a sustainability-linked corporate bond on the Shanghai Stock Exchange with a financing scale of RMB 3.5 billion. This is the first sustainability-linked corporate bond of Shanghai Stock Exchange and is also Sinochem International's largest single bond financing in history. This bond issue created a new bond financing model that organically combines economic benefits with the fulfillment of social responsibilities. This will facilitate the company's efforts in actively undertaking its "dual carbon" commitment, taking the lead in implementing ESG responsibilities, and leading the chemical industry in green transformation upgrades.

Sinochem International actively participates in and responds to various sustainable development initiatives launched by the local government, industry, and domestic and international society, contributing to the sustainable development of mankind through the thorough implementation of corporate social responsibility.



Sustainability-related initiatives or goals that Sinochem International has participated in

- Responsible Care
- ICC Business Charter for Sustainable Development
- United Nations Global Compact
- Sustainable Development Goals
- Together for Sustainability
- The Catalan Office for Climate Change
- Operation Clean Sweep
- China Goldenbee CSR 2030

Note: Subsidiaries set their own respective commitment goals and action plans when participating in various initiatives

Sinochem International's subsidiary Sennics Participates in the TFS Initiative



In April 2022, Sennics leveraged its influence in the industry to join the Together for Sustainability (TFS) initiative, becoming the second local Chinese enterprise to participate in the said initiative. This move will be instrumental in creating green sustainable supply chain services, whereby upstream and downstream enterprises of the industrial chain join forces to establish a green supply chain movement in an in-depth, solid and long-lasting manner. In turn, this will contribute to build a wonderful resource-saving society.

ESG Ratings and Honors

ESG Ratings and Certifications

Sinochem International

<p>EcoVadis Silver Medal</p>	<p>MSCI-ESG BB Rating</p>	<p>Wind-ESG AA Rating for A-share companies, ranked No. 1 in the materials sector</p>	<p>Filling in the CDP questionnaire for the first time, assigned an industry-average rating</p>
<p>ELIX Polymers</p> <p>EcoVadis Platinum Medal</p>	<p>Sennics</p> <p>EcoVadis Silver Medal</p>	<p>Shandong Sennics</p> <p>SA8000 Social Accountability Management System Certification</p>	<p>Tai'an Sennics</p> <p>SA8000 Social Accountability Management System Certification</p>

ESG Honors

<ul style="list-style-type: none"> • Ranked 37th on the "ESG Pioneer 50 Index of Central Enterprises" by State-owned Assets Supervision and Administration Commission of the State Council • Ranked 6th on the "ESG Risk Management Pioneer 50 Index of Central Enterprises" by State-owned Assets Supervision and Administration Commission of the State Council <p style="text-align: center;">November 2022</p>	<ul style="list-style-type: none"> • <i>Sinochem International 2021 Sustainability Report</i> won the "One-Star Evergreen Award for Excellent Corporate Social Responsibility Report 2022" by <i>China Sustainability Tribune</i> <p style="text-align: center;">December 2022</p>	<ul style="list-style-type: none"> • Aon's "2022 Best ESG Employer in China" <p style="text-align: center;">December 2022</p>
<ul style="list-style-type: none"> • Wind's "Best ESG Practice Award for A-share Companies" (Integrated, top 20) • Wind's "Best ESG Practice Award for A-share Companies" (Environment, top 10) • Wind's "Best ESG Practice Award for A-share Companies" (Governance, top 10) • Wind's "Best ESG Practice Award for A-share Companies" (Materials Industry, top 5) <p style="text-align: center;">January 2023</p>	<ul style="list-style-type: none"> • Shanghai Stock Exchange's 2022 Excellent Issuer of Green Low-carbon Bonds <p style="text-align: center;">January 2023</p>	

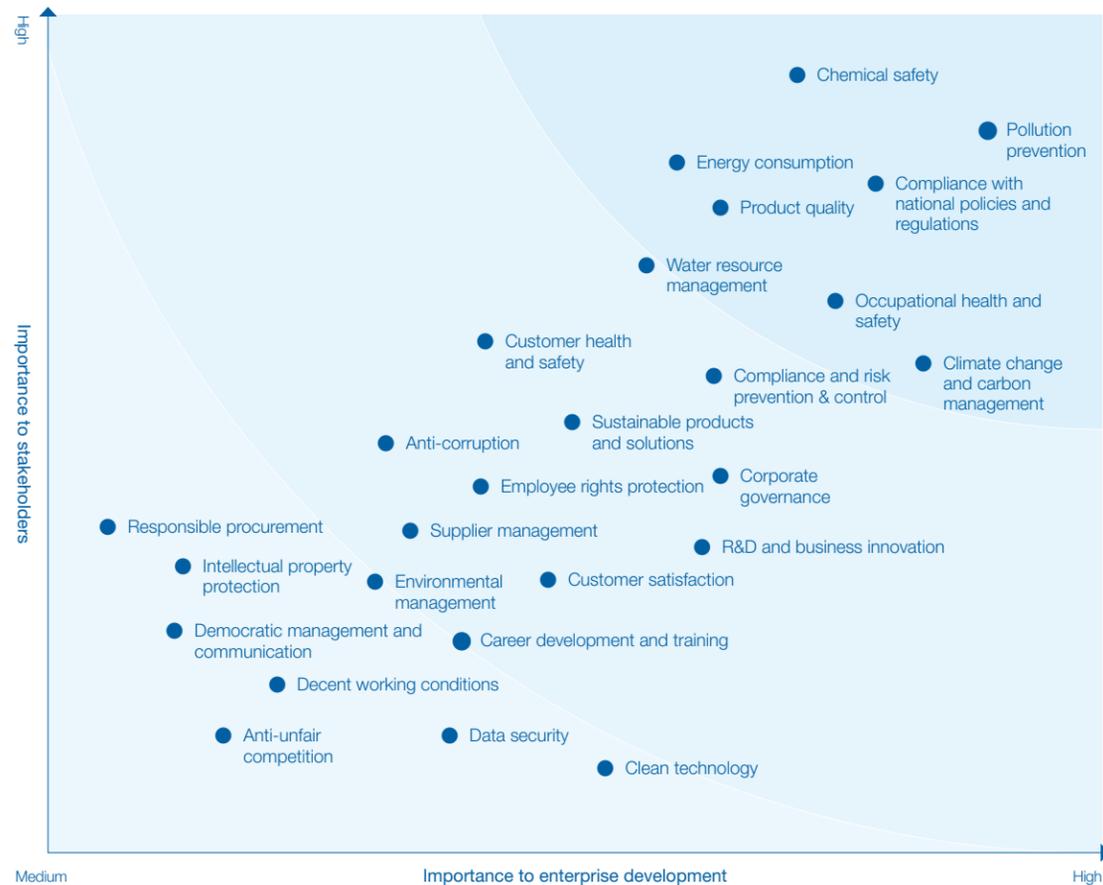
Stakeholder Engagement

Sinochem International considers the expectations and demands of every stakeholder to be of equal importance. The company engages in multichannel communication to understand the issues that stakeholders are concerned with and gain insight into the risks and opportunities related to these issues. Substantive issues are then incorporated into the company's operations and decision-making processes while the company responds in a proactive and targeted manner with regards to these issues.

Analysis of Substantive Issues

Based on its communication with stakeholders, the company performs in-depth research and analysis on national strategic guidelines and chemical industry policy trends. Based on the relevant domestic and international standard requirements and company strategy, the substantive issue database has been updated to comprise 35 issues.

We adopted a combination of qualitative and quantitative methods through distributing survey questionnaires to and conducting expert interviews with internal and external stakeholders. Based on the two dimensions of "importance to stakeholders" and "importance to enterprise development", we then identified 26 substantive issues and arranged them according to order of importance. Based on the latest development strategy and the characteristics of the chemical industry, the Board of Directors then verified the ranking results before ultimately formulating a substantive issue analysis matrix to determine the key disclosure contents of the report and respond to issues of first-level importance.



Stakeholder Communication

We have established a routinized stakeholder communication mechanism, whereby various methods such as "community communication week" campaigns, questionnaires and day-to-day communication to gauge the degree of satisfaction and future demands of stakeholders with regards to current developments. Following this, we make adjustments to our strategies and areas of focus while responding accurately to our stakeholders.

Stakeholders	Issues of Concern	How to Respond
 Government/Supervisory Bodies	<ul style="list-style-type: none"> Compliance with national policies and regulations Anti-corruption Anti-unfair competition Environmental management Pollution prevention Climate change and carbon management Water resource management Energy consumption Clean technology 	<ul style="list-style-type: none"> Pay tax in accordance with the law Periodic work reports Project approval Annual sustainability reports Participating in policy research and planning
 Shareholders/Investors	<ul style="list-style-type: none"> Corporate governance Compliance and risk prevention & control Anti-corruption Climate change and carbon management Clean technology 	<ul style="list-style-type: none"> Shareholder meetings Investor meetings Online/tele-seminars Periodic financial reports Information disclosure
 Clients	<ul style="list-style-type: none"> Product quality Sustainable products and solutions Customer health and safety Customer satisfaction Information security 	<ul style="list-style-type: none"> Customer service platform Customer satisfaction surveys Client meetings and interviews Handling customer complaints
 Suppliers	<ul style="list-style-type: none"> Supplier management Responsible procurement 	<ul style="list-style-type: none"> Supplier training Supplier assessment Publish sustainability supply chain white book
 Employees	<ul style="list-style-type: none"> Occupational health and safety Employee right's protection Decent working conditions Career development and training Democratic management and communication 	<ul style="list-style-type: none"> Workers' Congress Staff seminar Employee satisfaction surveys Collecting and responding to employee comments and suggestions
 Community	<ul style="list-style-type: none"> Chemical safety Pollution prevention 	<ul style="list-style-type: none"> Public open house Community communication activities
 Industry Associations/Partners/Research Institutions	<ul style="list-style-type: none"> R&D and business innovation Intellectual property protection Anti-unfair competition 	<ul style="list-style-type: none"> Participating in industrial forums Participating in standard formulation Strategic cooperation

Paying Tribute to the 20th CPC National Congress

The 20th CPC National Congress provides the way forward and establishes the fundamental rules for the high-quality development of enterprises in this new era and new journey. Guided by “Xi Jinping Thoughts on Socialism with Chinese Characteristics for a New Era”, Sinochem International has embarked on the diligent learning and comprehensive implementation of the spirit of the 20th CPC National Congress, and practically implemented the 20th CPC National Congress key strategies in its various management and operations-related tasks, unswervingly keep forging ahead on the road to becoming the “leading enterprise of innovative new chemical materials”.

Building Consensus through the Spirit of the 20th CPC National Congress

Sinochem International comprehensively promoted the learning, publicity and implementation of the spirit of the 20th CPC National Congress as soon as it could, distributed its *Working Plan to Learn, Publicize and Implement the Spirit of the 20th CPC National Congress*. Through subject-based learning, intensive lectures and special practices, the company publicized and implemented the said spirit among all its employees. Using the spirit of the 20th CPC National Congress to build consensus, we implemented various major decisions, and interpreted our mission with a more uplifted mindset and a higher-quality development.

Measures for Learning, Publicizing and Implementing the Spirit of the 20th CPC National Congress in 2022

Intensive Learning

All party members and cadres watched the opening ceremony of the 20th CPC National Congress to diligently study the spirit espoused in the meeting and the important speech delivered by Xi Jinping, General Secretary of the CPC Central Committee

Theme-based Speeches

Held 3 symposiums and arranged for the leading cadres of Party members to participate in the lecture-cum-report meeting on the SASAC's Central Enterprises system as well as Sinochem Holdings' specific topic meetings and seminars. Party committee members at all levels presented subject-based lectures 65 times

Special Practices

Leveraging internal and external communication platforms, we set up a learning column. We also held various special activities such as advanced typical lectures, theme-based days, knowledge contests, online messages, calligraphy exhibitions and other activities in order to promote the learning of the spirit of the 20th CPC National Congress



Reading class on “Xi Jinping Thoughts on Socialism with Chinese Characteristics for a New Era” was held in Xibaipo



The study session on learning, publicizing and implementing the spirit of the 20th CPC National Congress was held simultaneously with the first batch of “Five Star Party Branch” meeting to summarize the initiatives established

Striving in Unity to Strengthen Faith through Party Building

Sinochem International effectively integrates the CPC's leadership with corporate governance. As it implements the CPC's new era organizational path and fortifies the CPC's organizational system, the company builds high-quality cadres and talent teams to drive the enterprise's high-quality development through high-quality Party building initiatives.

Arming mindsets with the CPC's theories

We followed General Secretary Xi Jinping's latest speeches and the major meeting of the CPC Central Committee in real time, learning up the spirit espoused in Xi's speeches, the major meeting and important documents. We also published 16 issues of learning materials, organized learning seminars over 90 times, while Party committee members at all levels gave theme-based presentations to the grassroots over 200 times

Establishing a clear direction of primary-level Party building

We established 25 first batch of “Five Star Party Branches” and established 59 tackling teams and 82 commando teams among Party members to focus on production and operations practices. We also selected and established 227 model posts and implemented the division of responsibilities into 20 areas, thereby maximizing the role of primary-level Party organizations as a fighting fortress and pioneering model

Building high-quality cadres and talent teams

We formulated annual study, education and training plans for Party members. Through flexible online and offline methods, training was performed for Party members in different levels and categories. Based on the concept of “Learning from pioneer, Setting up models, and Forging ahead”, we have employed the modeling effect in order to create a working and entrepreneurial atmosphere that drives excellence through the setting of benchmarks

Party members

1,939

Organized Party-building activities

498 times

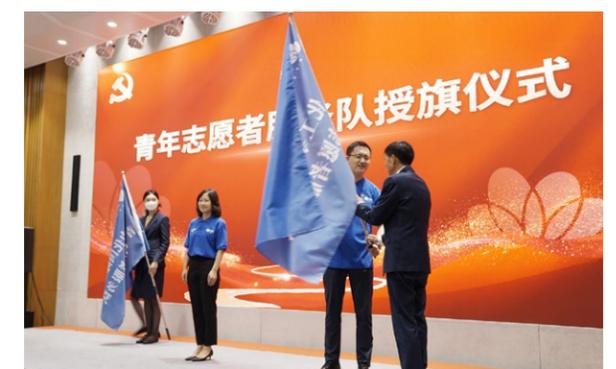
Employee coverage rate

100 %

2022 KPI



A ceremony was held to celebrate the 101st anniversary of the founding of the CPC and to commend outstanding Party members, exemplary Party workers, and advanced primary-level Party organizations



Organized a youth volunteer service team, and the Secretary of the Party Committee presents the flag to the representatives

Forging ahead with Enterprise and Fortitude

A new era brings a new journey. Sinochem International has an in-depth grasp of the intrinsic requirements of Chinese-style modernization, being resolute in implementing the various strategic decisions made during the 20th CPC National Congress. As the company accelerates its efforts to build "a leading enterprise specializing in innovative new chemical materials", it also keeps improving environmental, society and governance practices while empowering the company's high-quality development of production and operations. In the process of building a new development pattern and establishing Chinese-style modernization in China, we hope to demonstrate the new way of how Central Enterprises do things.

Environmental

Green Transition



Guidelines of the report to the 20th CPC National Congress

Implement a comprehensive conservation strategy, conserve resources of all types and use them efficiently, and move faster to put in place a system for recycling waste and used materials. Fiscal, taxation, financial, investment, and pricing policies and systems of standards will be improved to support green development. Boost green and low-carbon industries and accelerate the R&D, promotion, and application of advanced energy-saving and carbon emission reduction technologies.

Action Recap

We accelerated the pace of green transition and the transformation of old and new growth drivers, and focused on building the core structure of our strategic transformation plans--Sinochem Lianyungang Circular Economy Industrial Park, leveraging the characteristics and advantages of circular development and intensive development to serve as a green transition model for China's chemical industry. The park also performs new breakthroughs in extending the circular economy product chain and realizing the utilization, reduction, and reuse of resources. In 2022, we successfully issued the first sustainability-linked corporate bond of the Shanghai Stock Exchange amounting to RMB 3.5 billion, using green financing to assist in our green transition efforts.

Future Outlook

Perform further explorations in the area of building a green manufacturing system throughout the entire life cycle, continue to promote the construction of an integrated circular economy industrial park, focus on the development of clean production and green technology applications, promote the implementation of energy-saving and low-carbon projects, improve the green financing management system, and transform green and low-carbon features into practical operating advantages to boost the company's value.

Implementing "Dual Carbon" Measures



Guidelines of the report to the 20th CPC National Congress

Work actively and prudently toward the goal of carbon neutrality. Promote clean, low-carbon and high-efficiency energy use, and push forward the clean and low-carbon transition in industry, construction, transportation and other sectors.

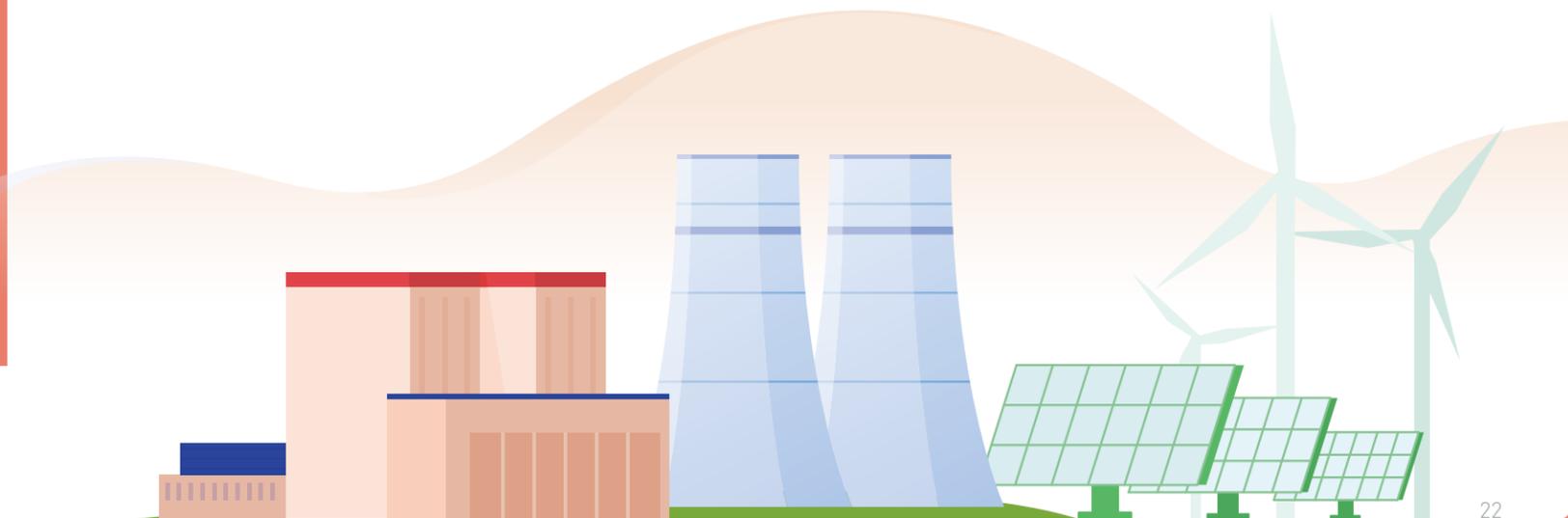
Action Recap

We promoted the implementation of the "dual carbon" strategy with practical actions, prepared the *Carbon Peaking and Carbon Neutrality Action Plan*, optimized carbon management working mechanisms and action paths, and comprehensively implemented low-carbon transition measures. In recent years, our traditional businesses have seen the implementation of measures such as "Relocating from cities to suburban industrial park" and the promotion of emission reduction technologies and equipment transformation to enable the in-depth expansion of carbon reduction potential. Meanwhile, for our incremental businesses, we have strengthened low-carbon technology and process R&D while developing new energy businesses such as lithium battery materials, thereby comprehensively promoting energy transformation.

Future Outlook

Continue to thoroughly implement the national "dual carbon" goals, promote a clean and low-carbon energy structure, aggressively promote clean technology and energy-saving equipment, and actively deploy new green industries.

By 2025, we hope to see a **15%** decrease in comprehensive energy consumption per 10,000 yuan output value and a **18%** reduction in carbon dioxide emissions per 10,000 yuan output value compared to the end of the 13th Five-Year Plan.



Social

Developing Modernized Industries



Guidelines of the report to the 20th CPC National Congress

Support enterprises that use special and sophisticated technologies to produce novel and unique products, move the manufacturing sector toward higher-end, smarter, and greener production. Promote the integrated and clustered development of strategic emerging industries and cultivate new growth engines such as new-generation information technology, artificial intelligence, biotechnology, new energy, new materials, high-end equipment, and green industry.

Action Recap	Future Outlook
<p>We focused on the core business of new chemical materials, built strategic projects and new material industry clusters with core competitive advantages, and created a number of national, provincial and municipal-level “specialized, sophisticated, unique and novel” enterprises. Fruitful results have been achieved in terms of industrial chains for epoxy resin, additives, special fibers, and engineering plastics. Leveraged lithium battery materials, lithium battery manufacturing, battery recycling and other fields to extend the upstream and downstream industrial chain. Promoted the creation of a new form of modernization and development of the new energy industry.</p>	<p>Focus on the strategy to “create multiple modern industrial chains with comprehensive competitive advantages in terms of technology, cost, and scale”, build a “2+2+2” industrial chain structure and “1+N” industrial base structure.</p> <p>By 2025, we hope to form an industry layout with outstanding core industrial chains and market-leading core products.</p>

Strengthening the Supply Chain



Guidelines of the report to the 20th CPC National Congress

Based on the principle of promoting high-quality development, keep striving to improve the resilience and security level of the industrial and supply chain.

Action Recap	Future Outlook
<p>We created a batch of original and breakthrough technologies to ensure that the new chemical material industry chain is independent and controllable with a secure level of supply. Integrated sustainability concepts into procurement activities and day-to-day management while accelerating the establishment of a sustainable supply chain management system in terms of supplier management, supplier sustainability improvement, and reduction of supply chain carbon emissions. We also jointly launched the “3S sustainability supply-chain” initiative to ensure long-term stability, security, mutual trust, and win-win cooperation with suppliers and partners in both industrial downstream and upstream sectors.</p>	<p>Through “shoring up weaknesses and plugging gaps”, we aim to safeguard the security and stability of the industrial chain and supply chain, drive the creation of an advanced “industrial chain ecosystem” in China’s new chemical material industry, and hone the key capability of “the leader of industrial chain”. Continue to create a sustainable supply chain development model to serve as a pioneer which will drive the sustainable development of upstream and downstream partners.</p>

Governance

Deepening Reforms and Improving Quality and Efficiency



Guidelines of the report to the 20th CPC National Congress

Deepen reform of state-owned capital and state-owned enterprises (SOEs), accelerate efforts to improve the layout of the state-owned sector and adjust its structure, work to see state-owned capital and enterprises get stronger, do better, and grow bigger, and enhance the core competitiveness of SOEs.

Action Recap	Future Outlook
<p>We successfully completed the “Three-Year Action Plan for State-owned Enterprise Reform”, deepened the construction of the governance system through reform, and effectively improved the level of corporate governance. Improved market-oriented operating mechanisms to stimulate the company’s operating vitality; focused on core businesses, promoted the implementation of major strategic projects of the core industry chains, and promoted concentration of the resources on main businesses. Several key tasks were significantly successful such as special quality and efficiency improvement actions and the RMB 5 billion private placement.</p>	<p>Based on the perspective of the CPC’s and nation’s development, we will understand and view the current tasks, risks and challenges pertaining to business development at a higher level, and employ systematic thinking patterns and overall planning measures to ensure the high-quality coordination of various tasks to “stabilize growth, prevent risks, and promote reform”. In turn, this would facilitate business integration, quality and efficiency improvement, and sustainable development.</p>

Innovation-driven Development



Guidelines of the report to the 20th CPC National Congress

Promote closer enterprise-led collaboration between industries, universities, and research institutes, stay goal-oriented, and promote the industrial application of scientific and technological advances. Reinforce the principal role of enterprises in innovation, and promote deeper integration of the innovation, industrial, capital, and talent chains.

Action Recap	Future Outlook
<p>We upheld an innovation-driven strategy and continuously increased investments in technological innovation. From 2017 to 2022, a cumulative sum of almost RMB 5 billion has been invested into R&D efforts. Created an integrated technological innovation system covering “basic research, process development, engineering research, and product application research and development”, focused on the development of R&D platforms and the forming of scientific and technological talent teams, and accelerated the transformation of mature key technologies and existing basic research project achievements. In 2022, our new product sales volume reached RMB 9.01 billion with a year-on-year increase of 41%.</p>	<p>Accelerate the pace of “shoring up the weaknesses” of new chemical materials, concentrate efforts to promote key core technology research, create a strong engine for technological innovation, bravely assume the mission of producing original technology, and keep promoting the in-depth integration of the innovation, industrial, capital and talent chains.</p>

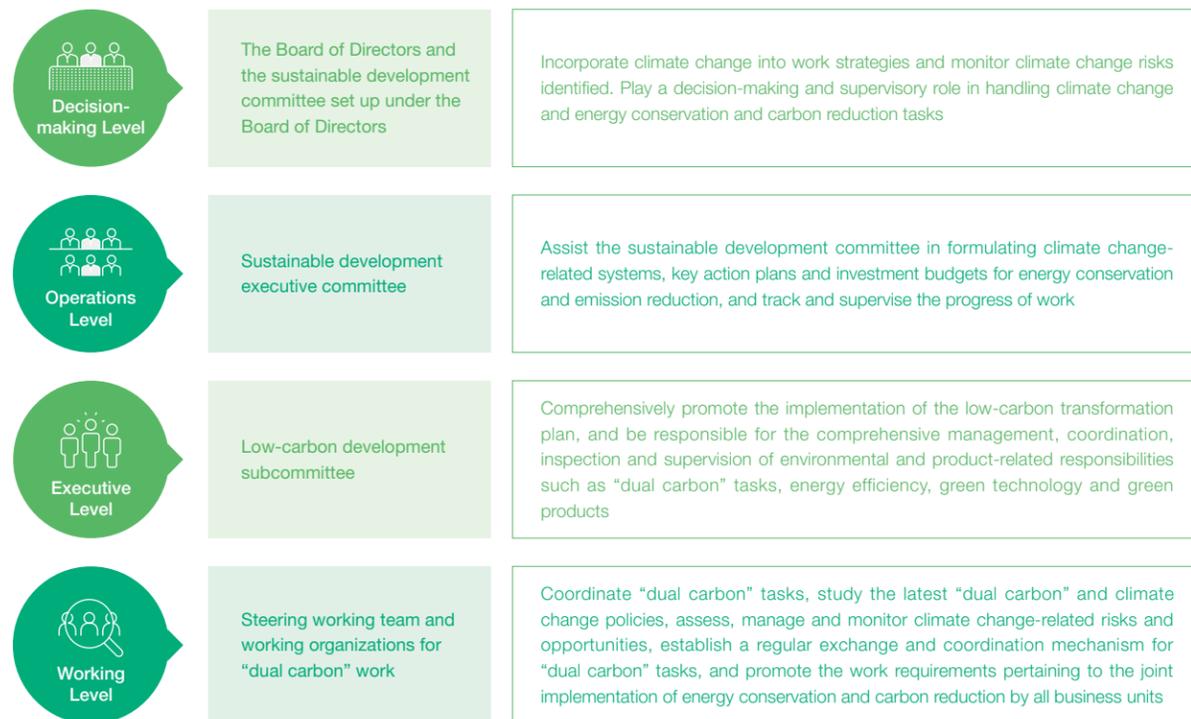
Responding to Climate Change

Handling climate change and low-carbon transition have become common challenges for mankind. Sinochem International has actively responded to the 1.5°C goal of the *Paris Agreement* and China's "Carbon Peaking and Carbon Neutrality" goal. Based on the framework of recommendations put forth by the Task Force on Climate-related Financial Disclosures (TCFD), the company incorporated climate change risks into its risk management system, formulated the *Carbon Peaking and Carbon Neutrality Action Plan*, optimized carbon management working mechanisms and action paths, and comprehensively implemented low-carbon transition.

Governance

Sinochem International has incorporated climate change governance into the sustainable development governance framework, holding discussions based on the topic of "low-carbon development". "Dual carbon" tasks are initiated by the top level and are performed in a top-down manner. The Board of Directors is responsible for the deliberation and supervision pertaining to the "dual carbon" action proposal, objectives, and implementation of measures.

Governance Framework to Tackle Climate Change



Strategy

Based on the *Carbon Peaking and Carbon Neutrality Action Plan*, Sinochem International promotes low-carbon transition from the two stages of "in-depth low-carbon measures" and "zero-carbon oriented measures". In view of the 14th Five-Year-Plan, the company set carbon reduction objectives, discussing the implementation paths and results while forming a low-carbon transition plan and a special plan for carbon reduction.

Strategies to Tackle Climate Change

Formulation of Medium and Long-term Plans	<ul style="list-style-type: none"> With medium and long-term plans as guidelines, the goals were broken down year-by-year and implemented dynamically. All departments incorporated the relevant tasks stipulated in the plan into their annual plans and bore responsibility for the implementation of these tasks In 2022, the preparation and deliberation of the "dual carbon" work plan of the headquarters and each business unit was completed
Low-carbon Improvement Actions	<ul style="list-style-type: none"> Drove the implementation of strategies with key carbon reduction projects, clearly identifying the persons and departments in charge of major energy-conservation and low-carbon projects, formulating goals and timelines, standardizing project implementation procedures, and strengthening supervision, assessment and accountability of project Conducted the 2022 annual appraisal activity for excellent low-carbon achievements
Promotion of Carbon Data Management	<ul style="list-style-type: none"> Formulated greenhouse gas inventories list based on ISO 14064 and relevant national laws and regulations, performed dynamic adjustments and updates of the said list based on actual circumstances Based on the national standard, we performed carbon inventory checks on all subsidiary plants, determined inventory scope and boundaries, tabulated and consolidated the carbon emissions of various emission sources to form a database, and ensured the consistency and accuracy of the data Introduced a low-carbon management information system to realize the digital online management of the carbon business throughout the entire process across all levels of the organization
Innovative Technologies and Models	<ul style="list-style-type: none"> Established a low-carbon technology innovation system that integrates the industry, education and research sectors while increasing support for the R&D, promotion and application of low-carbon technologies Explored the "zero-carbon industrial park" model, and formulated the first draft of the plan proposal for the "zero-carbon park" features of Sinochem Zhongwei Circular Economy Industrial Park Performed carbon emission reduction-related industry exchange activities, stayed updated on the latest technology and policy requirements in a timely manner, and promoted the application of green energy and intelligent carbon reduction
Professional Talent Development	<ul style="list-style-type: none"> Set up particular positions in carbon management for the coordination and management of related tasks Held "dual carbon" training sessions, developed 10 sessions of "Carbon Peaking and Carbon Neutrality" courses and a series of advanced courses to improve the low-carbon management abilities
Strengthening Supervision and Management	<ul style="list-style-type: none"> Employed internal and external supervision to internally analyze and check the implementation results of the plan in the middle and end of the year while performing dynamic improvements. On an annual basis, we externally publish the third-party assessed greenhouse gas verification information or product carbon footprint information
Improvement of Information Disclosure	<ul style="list-style-type: none"> Gradually improved carbon emission information disclosure standards according to relevant domestic and international information disclosure requirements. 2022 was the company's first year of filling in the CDP questionnaire, and the company was assigned a chemical industry-average rating

Sinochem International's Subsidiary Sennics' "Carbon Manager" System Goes Online and Commences Operations



In August 2022, Sennics self-developed "Carbon Manager" Carbon Emission Management System went online and commenced operations. Based on the ISO 14064 carbon inventory standard system, the system integrates digitalization and dual carbon management in an orderly fashion, serving as a digital safeguard for the company to comprehensively track carbon emissions, carbon management data, and implement "dual control" indicators.

Risk Management

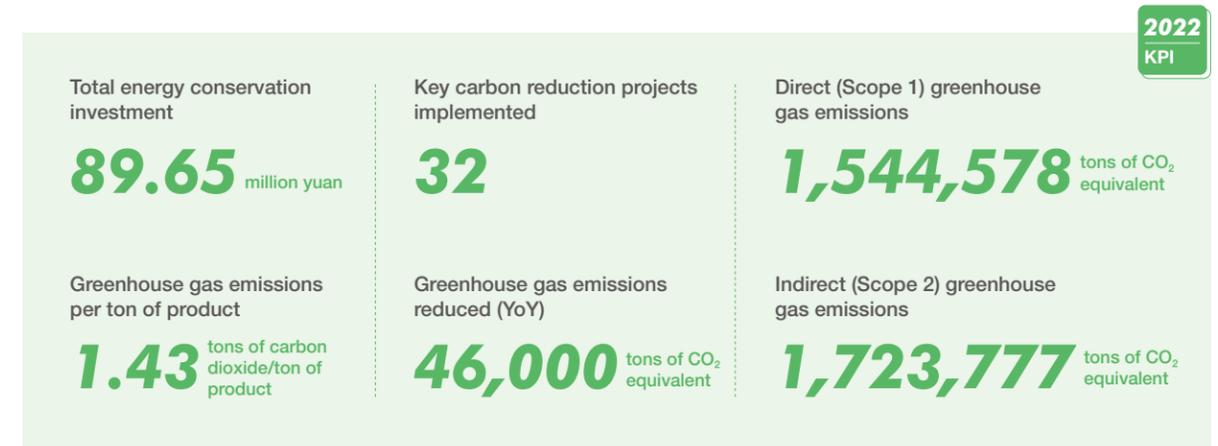
Sinochem International has incorporated climate change risks into the company's risk assessment and management system. The company systematically identifies and analyzes the climate risks and opportunities faced in the company's business and operations, regularly reviewing and updating them while proactively formulating relevant policies and measures in order to seize opportunities for value creation.

Climate Change Risks Identified and Responses in 2022

Risk Type	Risk Description	Potential Financial Impact	Responses
Physical Risks	Short-term Risks	<ul style="list-style-type: none"> Increased severity of extreme weather such as hurricanes and floods 	<ul style="list-style-type: none"> Reduced revenue due to reduced production capacity arising from transportation difficulties, supply chain disruptions, and other factors Continuously improve the emergency management system and capacity upgrades; regularly organize emergency drills
	Long-term Risks	<ul style="list-style-type: none"> Changes in precipitation patterns and extreme changes in climate patterns 	<ul style="list-style-type: none"> Damage to equipment due to extreme weather, which translates to increased operating and capital costs Stay updated on natural disaster information every day, and issue early warnings in a timely manner
Transition Risks	Policy and Law-related Risks	<ul style="list-style-type: none"> Rising greenhouse gas emissions pricing Higher carbon emissions reporting disclosure requirements Mandatory requirements and regulation of existing products and services 	<ul style="list-style-type: none"> Policies incorporating high-energy consumption industries into the carbon emission trading market have been introduced in various regions. The chemical enterprises are carbon intensive and a key regulatory field Learn up the latest low-carbon policies, analyze the policy guidance and orientation, identify potential risk points, and reduce risks through standardized management Participate in the CDP survey and improve the quality of carbon management information disclosure
	Market and Technological Risks	<ul style="list-style-type: none"> Low-emission alternatives to existing products and services Costs of transitioning to low-emission technologies 	<ul style="list-style-type: none"> Increased investment in R&D of innovative technologies and research on alternatives The demand for green and low-carbon products among downstream customers is forcing upstream companies to accelerate green innovative developments and strategic transformation Increase investment in innovation, strengthen the application of clean technology, and explore more eco-friendly solutions for green products Formulate carbon reduction plans and programs, implement carbon reduction measures, and explore green energy transactions

Indicators and Objectives

Sinochem International set climate change and carbon emission reduction goals, spelling out the corresponding responsibilities and plans in the annual performance scorecard. Energy conservation and carbon reduction components are included in the performance appraisal system for the persons-in-charge of the management team. The company regularly reviews the completion of carbon reduction targets, and promotes energy conservation and emission reduction through process upgrades, equipment upgrades, energy substitution, and recycling, to constantly upgrade green and sustainable competitive advantages.



Note: 1. The greenhouse gas emissions statistics is base on *Methods and Reporting Guidelines for Greenhouse Gas Emissions of Chemical Production Enterprises in China (Trial)* and *Accounting and Reporting Guidelines for Greenhouse Gas Emissions, Power Generation Facilities*
 2. The data does not include overseas subsidiaries



Sinochem International's products, 9-fluorenone and β-Methylnaphthalene, were awarded **"Carbon Label Certification" by the China Electronic Energy Conservation Technology Association**

Sinochem International's subsidiary Yangnong Group's "production of epichlorohydrin by biological crude glycerin" was awarded **ISCC PLUS certification (International Sustainability and Carbon Certification), making it the first epichlorohydrin producer with ISCC certification in China**

Sinochem International's subsidiary Sennics was awarded **enterprise carbon emission verification and certification status under ISO 14064 by the British Standards Institution**

Sinochem International's subsidiary Sennics was conferred the **"2022 Carbon Neutrality Model Enterprise" Award**

Fine Management for Long-term Steady Development

Challenges

Due to external environmental factors, the enterprise faces a new combination of uncertainties. Under the current global trend of strengthened compliance, the enterprise now faces challenges in terms of adapting to the needs of marketization, rule of law, and internationalization. In order to boost the “certainty”, it is imperative that the enterprise strengthens its corporate governance and compliance operations.

Risks and opportunities

Government have released the *Work Plan for Improving the Quality of Listed Companies Controlled by Central State-Owned Enterprises* and *Measures for the Compliance Management of Central State-Owned Enterprises*. These documents, which set higher requirements for Central State-Owned Enterprises pertaining to governance and compliance tasks, present new risks and opportunities for the company's reform and development as well as its strengthening, optimizing and expanding efforts.

Management strategy

Continue to improve the legal governance structure while establishing and improving an internal control system that is stringent, standardized, comprehensive and effective based on a risk management-oriented and compliance management-focused approach. Abide by business ethics, and treat every business partner with integrity, respect and fairness, so as to help the company to achieve high-quality development.

Substantive issues

- Compliance with national policies and regulations
- Corporate governance
- Compliance and risk prevention & control
- Anti-corruption
- Anti-unfair competition
- Data security

In response to SDGs



Corporate Governance

Sinochem International abides by the *Company Law*, *Securities Law*, *Governance Guidelines for Listed Companies*, and relevant laws and regulations of the China Securities Regulatory Commission. Construct a governance structure with clear positioning, specified rights and responsibilities, and standardized processes, and continuously perform improvements and upgrades according to the actual development of the enterprise, so as to enable the enterprise to achieve stable operations and value creation.

Improvement of Governance Structure

During the reporting period, the Board of Directors comprised 7 board members, of which 3 were independent directors who respectively served as the chairpersons of the Nomination and Corporate Governance Committee, the Remuneration and Assessment Committee, and the Audit and Risk Committee. Independent directors made up the majority of the three important professional committees of the Board of Directors. When deliberating major production and operation-related decisions, external investment, nomination of senior executives and their remuneration and assessment, internal audit, sustainable development and other matters, independent directors employed their professional knowledge, extensive professional backgrounds and industry experience to make prudent judgments and express independent opinions. This helped to ensure the objectivity and independence of the Board of Directors. The company's external directors actively participated in the meetings of the Board of Directors and various special committees. All the directors participated in discussions, provided feasible management recommendations, and ensured and supervised the implementation of the company's strategic decisions.

All committee members of the company possess the relevant industry experience and professional knowledge. The company provides sufficient training and other supporting resources to newly appointed directors, including training on the company's business and operations, statutory regulatory obligations, ability improvement, compliance and anti-corruption, so as to ensure the continued improvement of the directors' ability to perform their duties while also boosting their scientific decision-making level.

The Board of Directors of the company submits an annual work report to the controlling shareholder every year, and the controlling shareholder evaluates and assesses the governance and operations of the Board of Directors in integration with the day-to-day management situation. This helps the Board of Directors to continuously improve their ability to exercise powers and fulfill responsibilities, and maximizes the governance of energy efficiency. The assessment dimensions cover authority and responsibility operation, information communication, strategic decision-making, risk prevention and reform effectiveness.



Key Measures to Improve Corporate Governance in 2022

- Formulated and revised supporting system-related documents such as *Strategic Management Regulations*, *Investment Management Regulations*, *Administrative Measures for Total Remuneration*, *Measures for Liabilities Management* and *Management Measures for the Selection and Appointment of Management-Level Employees*. These documents set a solid system-based foundation for the Board of Directors to comprehensively implement various rights in a legal manner while strengthening risk prevention and controls

Revision of the Corporate Governance System

Strengthening of the Standardized Operations of the Board of Directors

- Formulated the *External Director Performance Guarantee Work Plan* to further improve the performance guarantee mechanism for external directors
- Improved working mechanisms involving reports from the management to the Board of Directors as well as pre-meeting and post-meeting communications with independent directors



For corporate governance-related policies, responsibilities, and member information, please refer to the *Sinochem International 2022 Annual Report* or the company's official website

<http://www.sinochemintl.com>

2022 Meetings of the Board of Directors and Supervisors

Shareholder meetings	Board meetings
5	12
Meetings of the Board of Supervisors	
10	
Strategy Committee meetings	Audit and Risk Committee meetings
2	7
Remuneration and Assessment Committee meetings	
4	
Sustainable Development Committee meeting	
1	
Nominating and Corporate Governance Committee meetings	
2	



Information Disclosure and Investor Relations Management

Sinochem International strictly adheres to the relevant regulations of the China Securities Regulatory Commission and the stock exchange in ensuring the authenticity, accuracy and completeness of information disclosure. Guided by investor needs, the company continuously enhances the pertinence and effectiveness of the information disclosed, thereby providing comprehensive and integrated information for investors as they make value judgments and investment decisions.

The company performs the in-depth implementation of its governance concept based primarily on information disclosure, having formulated systems such as the *Information Disclosure Management System* and *Accountability System for Major Errors in Information Disclosure of Annual Reports*. We continuously strengthen information disclosure awareness and quality, creating a good internal environment for the management of information disclosure affairs while improving the transparency of listed companies.

In order to cater to the concerns and demands of investors, the company upgraded and revised its annual report since 2022 to feature key changes such as optimized business classification categories; refined core content and consolidated information on scattered businesses and operating conditions based on investors' focus points, presenting the information in a consolidated and prominent manner; reorganization of the core competitiveness analysis; and adoption of a visual design scheme for the annual report.

In 2022, Sinochem International received an A-level evaluation in the Shanghai Stock Exchange's 2021-2022 information disclosure work evaluation for listed companies.

Based on the *Investor Relations Workbook*, Sinochem International has established two-way communication mechanism and an open and transparent platform for investors. We respond to investors' questions via our official WeChat, investor hotline, SSE e-interactions, and other platforms. Annual reports, performance presentations, resolution announcements, news information, shareholders' meetings, etc., ensure that investors have prompt and accurate important information about factors such as company strategy, major events, corporate operations and etc. We strengthen two-way communication with small and medium investors through visits, special internet phone exchanges, one-to-one (or one-to-many) roadshows, and small-scale strategy meetings.

Sinochem International Launched a Series of Roadshow Activities for its RMB 5 billion Private Placement Project



In 2022, Sinochem International comprehensively launched roadshow activities for its RMB 5 billion private placement project. For medium and long-term investment institutions, the company organized 66 one-to-one roadshows, 4 one-to-many roadshows and 2 on-site surveys at Lianyungang Industrial Park (participated in by 195 representatives from 144 institutions) throughout the year. In total, we engaged with 476 investment institutions to gauge their intention to invest, which ultimately led to 18 investment institutions subscribing to the company's stock. This is the largest single-sum equity refinancing project since the company went public.

2022
KPI

Periodic reports

4

Company announcements

86

Documents published online

78

including the resolutions of the Board of Directors, the Board of Supervisors and the general meeting of shareholders, equity incentives, refinancing and profit distribution

Market value management reports

3

Investor communication meetings

3

Institution roadshows

138

Investor questions answered on the SSE e-interaction platform

41

Compliance Management

Sinochem International complies with the *Measures for the Compliance Management of Central State-Owned Enterprises*, being supported by compliance culture, led by the "key minority", and safeguarded by effective supervision. We continue to improve the company's compliance management system, safeguard the bottom line of compliance, and control compliance risks.

Operational Compliance

The company executed the relevant requirements of Sinochem Holding's "Year of Strengthening Compliance Management" implementation plan. To this end, we continuously improved the construction of the compliance management system and incorporated compliance requirements into business processes and key stages. We also strengthened the collaborative work among the "three lines of defense", promoted compliance culture, strengthened employee compliance awareness, and continuously improved the professional capabilities of the compliance team.

2022
KPI

Compliance trainings

9

Employee compliance training coverage

100%

Compliance Management Measures in 2022

Construction of the Compliance Framework



- Appointed a Chief Compliance Officer, a position held concurrently by the general counsel. The holder of the position is to lead and be responsible for the overall management of legal affairs, the construction of the compliance management system and the construction of a rule of law culture, as well as to coordinate and handle compliance management matters
- Drafted the *Administrative Measures for the Chief Compliance Officer* to further promote the construction of the chief compliance officer system and specify the qualifications, performance guarantee and supervision of duty and performance for this position

Improvement of the Compliance System



- Based on the principle of fully encompassing key businesses, key processes, and key positions, we compiled a compliance risk identification list, a position-based compliance responsibility list, and a process control list. These documents summarize the key points of compliance management, implement process control measures and assign responsibilities based on positions

Prevention and Control of Compliance Risks



- Conducted compliance investigations from all dimensions, all fields and all-levels 30 times, discovering and solving problems in a timely manner, improving work processes or systems, and formulating long-term rectification measures
- Published 10 compliance risk warnings covering multiple fields

Establishment of Compliant Data Practices



- Optimized and upgraded the transaction party screening system (blacklist system) and expanded the scope of application. The average daily screening volume was about 370,000 times, significantly improving the efficiency of compliance management
- Completed the promotion of the Smart Contract Management System (Phase I) for 16 subsidiaries

Building of the Compliance Culture



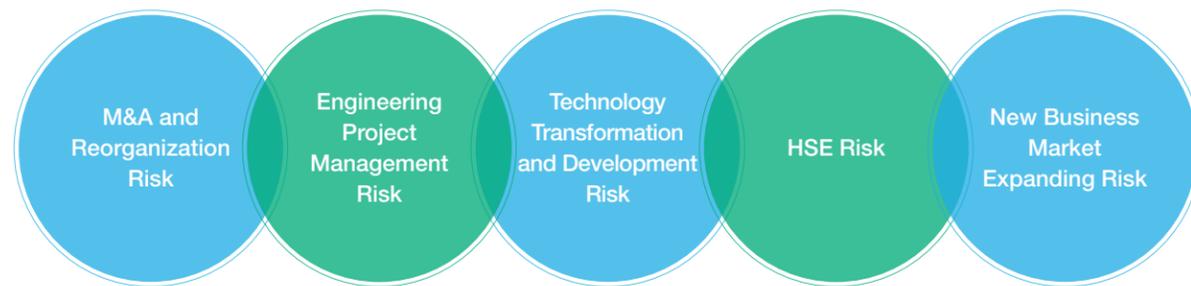
- All employees signed the *Compliance Responsibility Letter*
- Participated in the SASAC rule of law lectures and Sinochem Holdings' compliance training sessions
- Organized diversified compliance training and publicity campaigns, including theme-based essays, knowledge contests, etc.
- Published *Micro-Classes on the Legal Affairs Management System* to interpret domestic and foreign laws and regulations that are related to actual work



In the *Asian Legal Business* 2022 China Regional Market Law Awards, Sinochem International was conferred the **“2022 Company Legal Team Award for Compliance and Risk Management in East China”**

Risk Management

During the reporting period, the company revised the *Risk Management Regulations*, *Internal Control Management Regulations*, *Operational Risk Event Reporting Management Measures* and other systems. We also continued to improve risk management and internal control tasks, and regularly reported to the Audit and Risk Committee of the Board of Directors on risk response, internal control and internal audit-related matters. In 2022, the company had no events with major business risk.



Prior Five Key Risks Evaluated and Identified in 2022

◎ Risk Management Measures in 2022



Construction of the Digital Risk Control System

- The digital risk management dashboard went online and displayed core risk management indicators in real time to enable the timely issuing of early warnings of key risks
- Started the construction of the financial derivatives information system which covers the entire business process and realized the management of “an integrated futures and cash system”
- Further optimized and upgraded the credit management big data system



Reinforce the Control of the “Two Funds”

- Over achieved the yearly objective for the management and control of the “Two Funds” (accounts receivable and inventory), and improved working capital management



Promotion of Internal Control Management Improvement Projects

- Continued to promote the improvement of internal control systems among subsidiaries based on the strategy as well as internal and external environment changes while evaluating the effectiveness of internal controls. The systems cover key areas such as company, personnel, financial, procurement, sales, and engineering management, realizing risk management forward on the basis of compliance management
- Continued to promote internal control management improvement projects in “three new” enterprises such as Ningxia Sinochem Lithium Battery and Sinochem Engineering Plastics (Yangzhou)

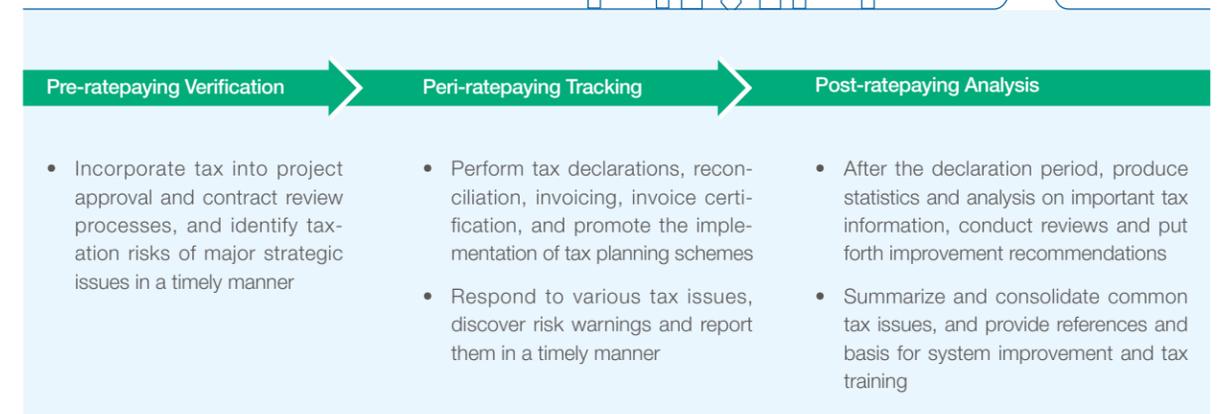
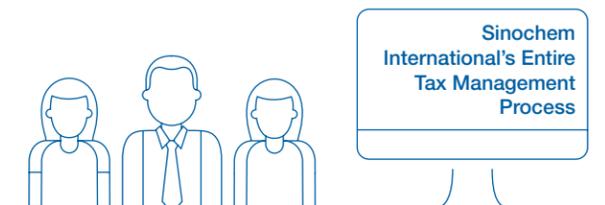


Sinochem International discloses the *Internal Controls Evaluation Report* signed by the Board of Director on a yearly basis and performs both internal and external control audits, covering the company level, business process and information system. The report focuses on the operation effectiveness of the management system in the high-risk areas of compliance such as strategic research, safety and environmental protection, labor human rights, information security, anti-corruption and anti-unfair competition. In recent years, there have been no major weaknesses in the company’s internal control and the company’s overall internal control operations are effective.

Tax Management

The company abides by the principle of “complying with laws and regulations, paying all that is due, and enjoying all that should be enjoyed”. According to relevant tax laws and regulations as well as the company’s actual situation, the company has formulated the *Tax Management Measures*, *Related Party Transaction Management Measures* and various tax management procedures for the strict management of all tax-related tasks under all categories.

The company has established a working mechanism that closely connects tax consulting with tax operations, integrating tax-related tasks throughout the entire process of business operations. We routinized the use of tax management information systems to realize the automatic collection of tax-related data, automatic rule verification of declaration data, statistics of multi-dimensional data indicators and tax risk management. Tax informatization is employed to improve efficiency and the quality of declaration data while reducing tax risks.



The company regularly summarizes its tax operations and tax payment situation, takes stock of tax resources, and reports these matters to the management. Through regular monthly meetings, tax-related experience sharing and other methods, the company publicizes and implements tax law updates to subsidiary companies in a timely manner.

Business Ethics

Sinochem International adheres to business ethics and market rules. To this end, it has published the *Integrity and Compliance Manual* during the reporting period, standardized the daily behavior of employees, and established sound business ethics management methods and supervision mechanisms. We have also shared guidelines with partners while striving to form ideal business relationships based on principles of fair competition and integrity.

Sinochem International encourages employees to report any violations of laws and business ethics. The company has published the reporting channels on the official website, the “Chemical Qingfeng” WeChat public account and other platforms while continuing to keep reporting channels open and accessible. We have also established a reasonable reporting mechanism and whistleblower protection system to ensure the receiving of reported information and independence of management personnel.



Tip-off hotline
021-31768859



Tip-off E-mail
antifraud@sinochem.com

Anti-corruption and Anti-bribery

The company has formulated the *Anti-Corruption Policy* and revised the *Anti-Corruption System Management Measures*, and identified corruption-related risks. We are clearly against the implementation of any form of corruption and dishonesty, including bribery, conflicts of interest, fraud, money laundering, misappropriation, concealment of the truth, and influencing of transactions involving public officials or business partners for the purpose of influencing decision-making.

The company signed the *Supplier Honesty and Integrity Commitment Letter* with all suppliers to convey its zero-tolerance policy for any form of corruption and dishonesty. We also avoid business dealings with companies and personnel known for or suspected of engaging in corrupt practices.

Anti-corruption and Anti-bribery Initiatives in 2022

Management of Corruption-related Risks



- Focused on high-risk areas such as engineering construction and procurement bidding. Ensured the diligent tracking and supervision of the entire process of major projects
- Explored the use of big data models, supplier blacklists and other mechanisms to supervise key processes such as project bidding procedures, contract performance, usage of funds, and cost control

Management of Sensitive Transactions



- Published the *Administrative Measures for the Management of Official Gifts Received by Employees*, performed hierarchy-based management of official gifts handed in by employees, set up a centralized handling department for subsidiaries, and appointed special personnel to be responsible for the registration, safekeeping, and handling of official gifts handed in

2022
KPI

Anti-corruption training for key positions

4,335

Integrity training for key positions coverage

100%

Talks on integrity

920

Anti-corruption training for board members

6

Totalling

12 hours

Lawsuits related to corruption and bribery

0

Anti-corruption training for employees

18,138

Totalling

26,009 hours



Improvement of Supervision Efficiency



- Continued to deepen the implementation of the large supervision system, and set up 11 large supervision projects over the entire year
- Promoted the reform of the discipline inspection and supervision system and formulated the *Implementation Plan for Promoting the Reform of the Discipline Inspection and Supervision System to the Grassroots*. Specified the setup, staffing, responsibilities and powers, working mechanisms and team building measures of discipline inspection organizations, and strengthened implementation guarantees
- Performed inspections focusing on “three new” (new technologies, new projects, new teams) enterprises and the “three keys” (key fields, key processes, key personnel) fields

Special Governance Activities



- Performed special governance activities in adherence to the “Spirit of the Central Committee Eight-point Regulations”

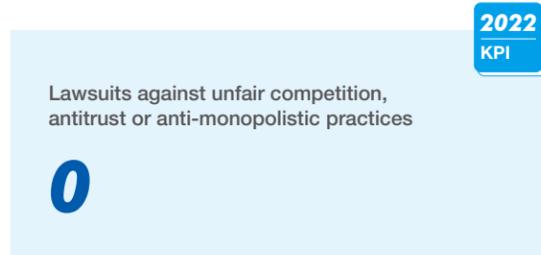
Increasing of Anti-Corruption Awareness



- Organized all the supervised personnel to attend the educational conference which delivered warnings about anti-corruption matters
- The Headquarters Commission for Discipline Inspection ran in-depth publicity campaigns on integrity-based culture and policies for 18 subsidiaries
- Performed anti-corruption policy publicity campaigns and integrity-based educational campaigns in various forms for all employees
- Continued to improve the “Database of Cases to Serve as Warnings for Educational Purposes”, which contains 120 cases in total

Anti-unfair Competition

Sinochem International complies with relevant regulations stipulated in documents such as *Sinochem Holdings' Internal Control Standards* and *Sinochem Holdings' Anti-Monopoly Compliance Manual*. These documents ensure standardized operations, respect towards competitors and the promotion of a business environment with fair competition, thereby maintaining orderly market competition and preserving the legitimate rights and interests of market players.



Anti-unfair Competition Measures in 2022

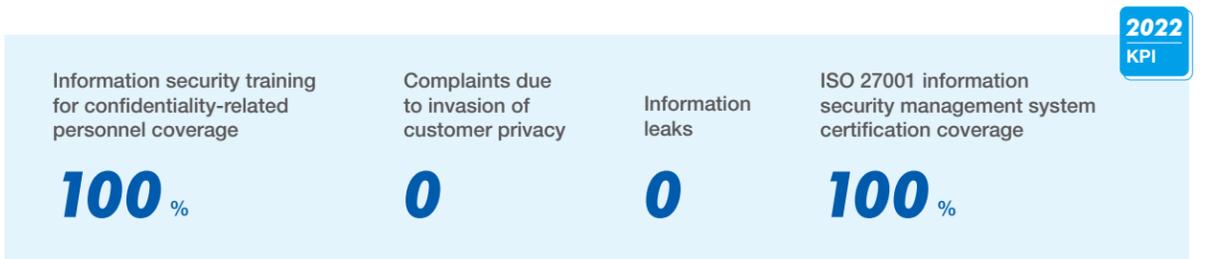
<p>Risk Identification</p> <p>Identified anti-unfair competition and anti-monopoly risks and drafted the "Summary table of anti-unfair competition risks". Analyzed the discovered risk factors and formulated improvement measures</p>	<p>Increasing of Awareness</p> <p>Invited external lawyers to conduct special training on <i>Anti-Unfair Competition and Patent Utilization</i> for sales, marketing and risk management department employees to regulate competition behavior</p>	<p>Special Audit</p> <p>Regularly conducted special anti-unfair competition audits, covering key issues such as product pricing and marketing in the audit to ensure fair competition</p>
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Information Security

Sinochem International formulated the *Administrative Measures for Information Security* and *Administrative Measures for Confidentiality* while continuously improving the information security management and confidentiality management system, organizational structure and assessment system. We also implemented the responsibility system for confidentiality-related tasks to strictly prevent information leakage incidents.

The company respects and protects the business secrets, data and sensitive information of stakeholders. The sharing, transferring or disclosure of confidential information to any other organization or individual without the consent of the relevant parties and the permission of the company are strictly prohibited. The company also signs confidentiality agreements with all suppliers, partners and information technology personnel to protect the business secrets of partners and ensure the security of customer information.

In terms of network security, the company formulated and published 7 systems and 1 standard such as the *Network Security Management Regulations* and *Cyber Security Incident Emergency Plan* during the reporting period. We strictly abide by various standard procedures, building a scientific network security system, adopting IRP (Information Resource Planning) for vulnerability management, and preventing and responding to network security incidents in a timely manner.



Note: The network data center is operated and maintained by the Sinochem International Headquarters, and the subordinate enterprises do not independently carry out information security management system certification

Risk Assessment

- Performed information system risk assessments, promoted information system penetration testing and vulnerability scanning, and improved information system security protection capabilities
- Performed network security risk assessments, detected threats in the network architecture, boundary protection, access control and intrusion prevention, and improved infrastructure security and prevention capabilities
- Performed information security risk assessments, detected the vulnerability and threats of information assets, formulated solutions and emergency handling measures, and checked and rectified the implementation thereof in a timely manner
- Regularly scanned the system for vulnerabilities, and repaired or upgraded the vulnerabilities after risk assessment and verification tests

Data Maintenance

- Enabled the overall backup processes of the server. The backup system stores the last 14 days of backup data in the entire application system in real time. The tape backup is archived every quarter, and the archived tapes of the last year are stored. The backup timings of the database content are set by the system management staff, and the database is backed up by server
- Completed the construction of the disaster recovery computer room, backed up important data through bare optical fibers, used jump servers and firewalls for backup server security protection, and only granted operation rights to backup administrators

Increasing of Awareness

- All employees signed the *Personal Network Security Commitment Letter*
- Conducted network security training and organized phishing email drills for all employees
- Conducted special training on network security for R&D personnel who are responsible for ensuring confidentiality
- Conducted special training on commercial secrets protection and organized a series of publicity and educational campaigns on the topic of confidentiality

Certification Audit

- Completed the ISO 27001 management system review
- Passed the acceptance tests for the technical component of the comprehensive protection platform project for industrial enterprise network security, and formed a unified industrial control security protection scheme
- Passed 7 items of information security Grade 2 and 1 item review of Grade 3
- Passed network security exercises such as "Operation Azure" and "Operation Rock"

Information Security and Confidentiality Measures in 2022

Cooperating with Partners for Value Creating

Challenges

Risks such as the climate crisis and global economy recovery imbalance have brought about new forms of impact on the chemical industry. Technology is the primary productive force and innovation is the primary driving force of this industry. Chemical enterprises are faced with the challenges of figuring out how to establish a more effective and independent innovation mechanism and improving technological levels to avoid the risk of potential disruption to industrial chains.

Risks and opportunities

The *Guiding Opinions on Promoting the High-quality Development of the Petrochemical and Chemical Industry during the 14th Five-Year Plan* places innovation at the top to achieve high-quality development in the industry. The said document also deems the supporting role of digital transformation as extremely important in the high-quality development of the industry and requires chemical enterprises to clinch information technology-related opportunities and develop new innovative business formats.

Management strategy

Implement an innovation-driven strategy which starts from optimizing the technological innovation system, bringing in industry-leading talents, stimulating the vitality of technological innovation, improving the ability to transform findings, and promoting digital transformation. These initiatives will drive the common progress of upstream and downstream suppliers and partners while helping the chemical industry to realize industrial upgrades.

Substantive issues

Intellectual property protection

R&D and business innovation

Supplier management

Responsible procurement

In response to SDGs



Technological Innovation

Sinochem International implements an innovation-driven strategy, continuing to increase investments in science and technology while enhancing the core competitiveness of technological innovation. Based on the innovation management concept of I2P (Idea to Profit) and the two-tiered R&D structure, the company has created an integrated technological innovation system covering basic research, process development, engineering research, and product application research and development. We have formed multiple important R&D platforms in order to lay a solid foundation for building a leading innovative new chemical materials enterprise.

Key Platforms Promoted in 2022

The new site of Sinochem International's Sci-Tech Innovation Center in Shanghai Pudong New Area was officially inaugurated, starting the new journey in technological research and development with its larger scale and higher technological standards. As a "think tank" of Sinochem International's headquarters, this new center leverages six key technological platforms, namely the industrial catalysis, advanced materials, special nylon, high-end composite materials, engineering center, and analysis & testing center platforms to actively carry out common technology research, business incubation and forward-looking exploration processes

Sinochem International's subsidiary Sennics' Technological Innovation Center was inaugurated, focusing on the polymer additive industry and new process research and development while also dealing with technological applications and commercial research and development

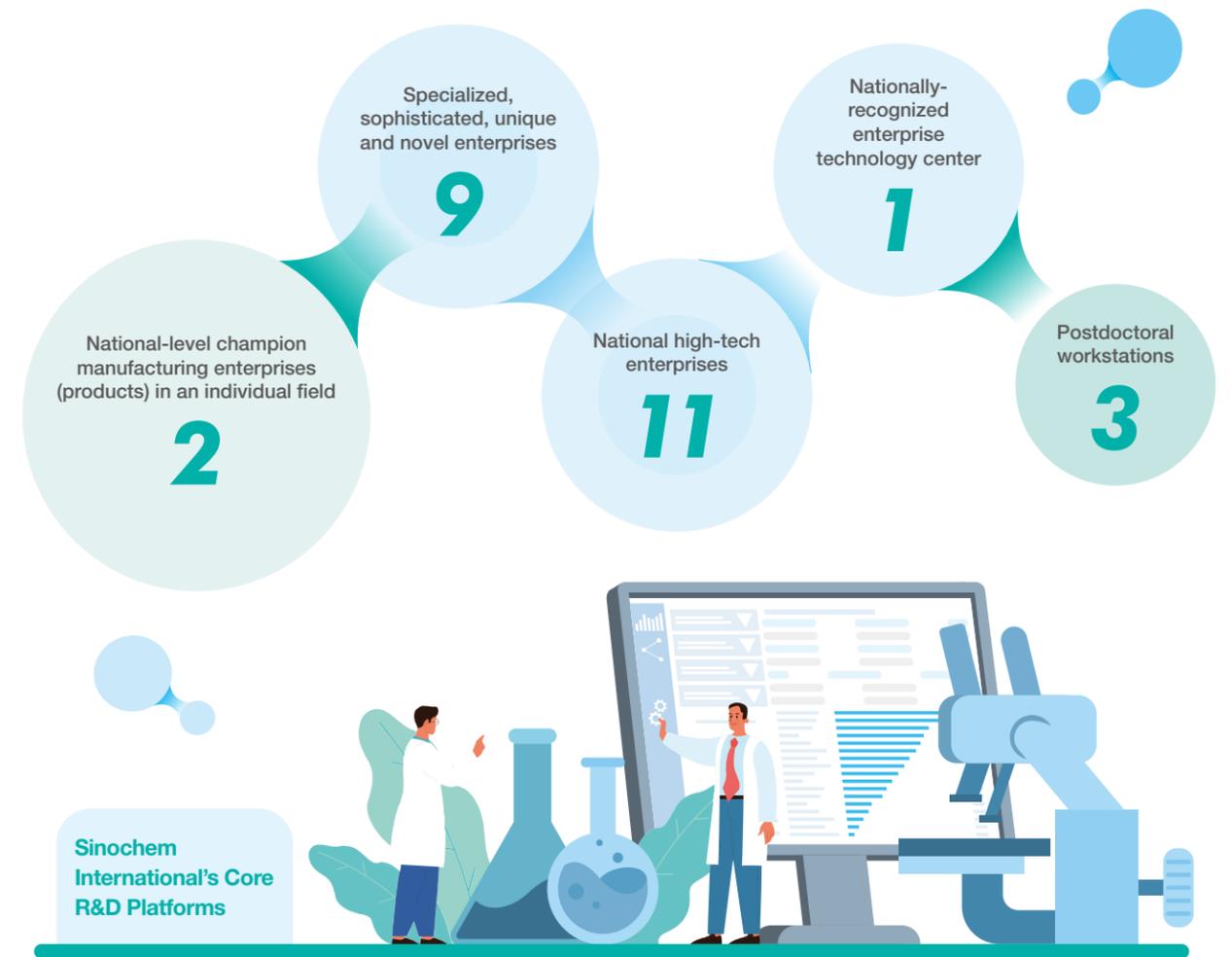
Established four research centers for new materials under the central research institute (the polymer additive research center, specialty resin research center, high performance fiber research center and engineering plastics research center), determined their organizational structure and operating models and established 10 research and development projects



In February 2022, the new site of Sinochem International's Sci-Tech Innovation Center was inaugurated



In September 2022, Sinochem Sennics' Technological Innovation Center was inaugurated

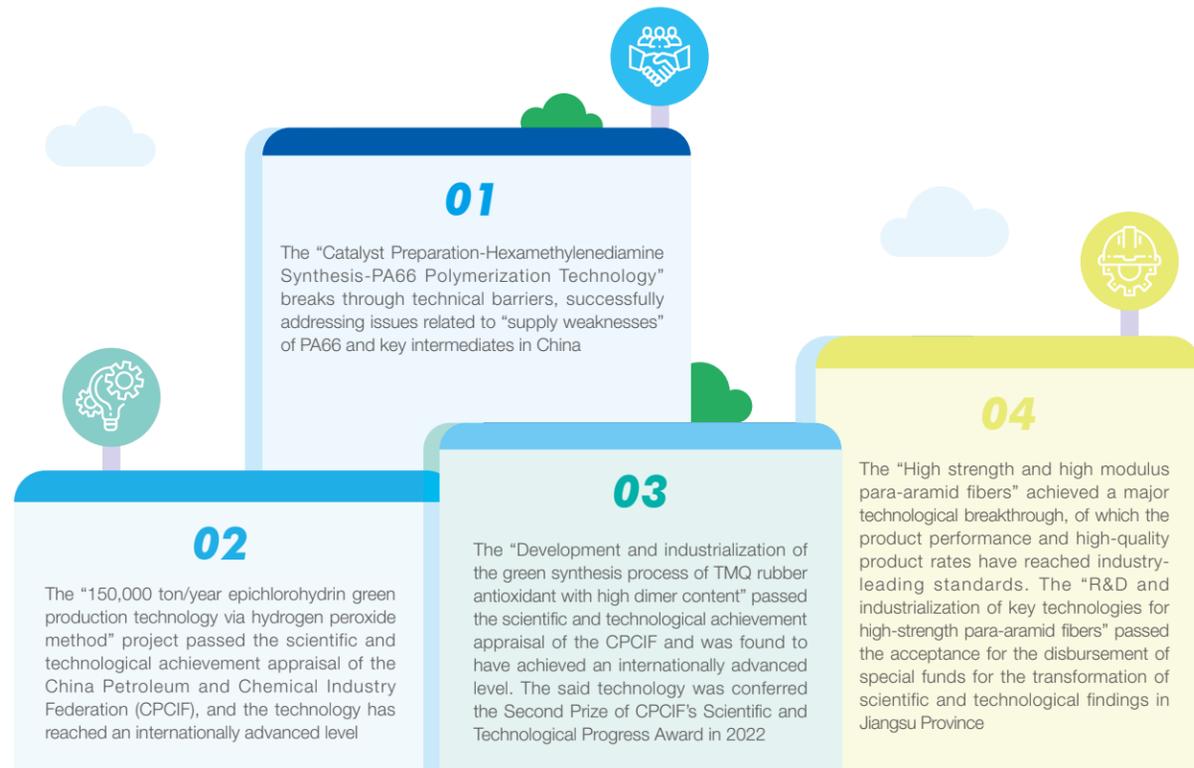


Sinochem International focuses on cultivating innovative talents, creating an innovation environment and cultural atmosphere that encourages innovation and tolerates failure. It builds the scientific sequence R&D professional channel of job qualification standard and an incentive system for scientific and technological innovation covering the whole life, fully enhances the subjective initiative of R&D personnel, attracts more outstanding talents to join scientific research teams, and improves scientific and technological innovation.



The company focuses on key industrial chains, promotes key research and development projects in an orderly manner and accelerates the transformation of mature key technologies and existing basic research project. Through realizing the coordinated development of innovation chain and industrial chain, this provides strong technological potential for the development of China's new chemical material industry.

◎ **Sinochem International's Transformation Projects of Key Scientific and Technological Achievements in 2022**



The company continued to improve its intellectual property management system, and revised the *Intellectual Property Management Regulations*, *Patent Risk Management Measures* and other systems during the reporting period. We incorporated intellectual property management into the full life cycle management of R&D and industrialization projects, specifying the management requirements of key processes and preventing intellectual property risks. We also standardized the processes pertaining to patent rights protection, material investigation and evidence collection, and infringement risk assessment, thereby protecting ourselves and our partners from the violation of intellectual property rights.

◎ **Intellectual Property Protection Measures in 2022**

- Organized professional personnel to study external intellectual property protection situations, analyze and respond to potential patent infringement risks during R&D and industrialization processes
- Strengthened the legal review procedures of intellectual property rights for major projects and contracts. Actively discussed rights and obligations related to intellectual property rights with partners, and strictly performed contracts and commitments

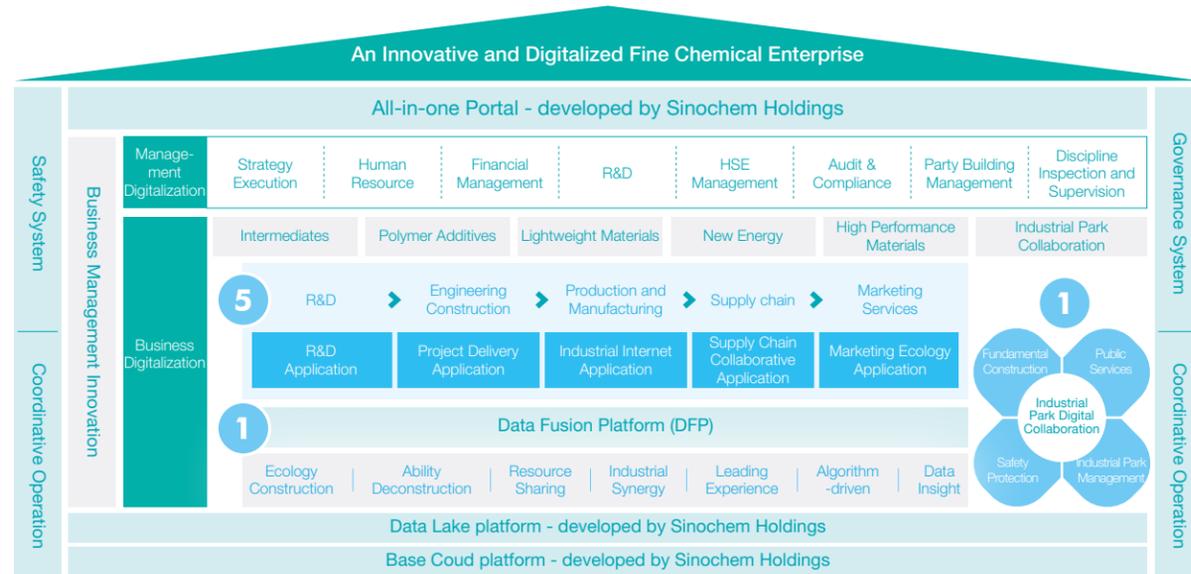


- Performed intellectual property promotion activities and conducted publicity campaigns for subsidiaries on intellectual property rights in terms of creation, application, protection and management
- Held intellectual property seminars, performed training sessions over 20 times on topics such as the intellectual property management system, patent searches, and patent infringement analysis



Digital Transformation

According to the “Sinochem Online” strategic plans, Sinochem International has established a “5+1+1” digital planning framework revolving around the business value chain, data fusion, and industrial park collaborations. We focus on developing scenario-based applications in R&D, procurement, supply chain, manufacturing and marketing, performing in-depth data analysis and mining, building smart plants and digital industrial parks, and promoting the new development of the company and China’s chemical industry through digital transformation.



“5+1+1” Digital Planning

🕒 Digital Transformation Measures in 2022

Business Value Chain

Engineering Management / The shared financial management system for engineering went online and commenced operations, and the “dual fee control” mechanism was used as a starting point to promote the refined and standardized accounting of engineering projects

R&D / Through the simulation cloud computing platform, core technology database and other projects, we promoted the sharing of R&D computing, software, technology and other resources

Supply Chain / Comprehensively rolled out the procurement informatization platform (SRM System) with a coverage rate of 85%

HSE / Comprehensively rolled out digital solutions for the “3+2” HSE focus points (unconventional operations, intelligent inspection, dual prevention, personnel positioning, monitoring of major hazards)

Production / Continued to promote the construction of the smart plant production management system

Marketing / Promoted the construction of integrated marketing systems and ERP systems among subsidiaries

Data Fusion

Leveraged the construction of the “chemical database” to promote the process of the “import of raw data into a centralized database” as well as data analysis and mining applications

Industrial Park Collaboration

Promoted the construction of a digital business system for public auxiliary facilities, emergency fire control platform and data sharing center in the Lianyungang Circular Economy Industrial Park

Responsible Procurement

Sinochem International integrates the principle of sustainable development into the entire process of supplier management and procurement business, having formulated systems such as the *Supplier Code of Conduct* and *Sustainable Procurement Management Measures*. The company established a supply chain social responsibility management kit and developed a sustainable supply chain training kit in order to conduct sustainable procurement training for internal procurement personnel and external suppliers, thereby improving suppliers’ sustainable development capabilities while driving partners to build sustainable supply chains.

The company implemented whole-process management in terms of supplier on-boarding assessment, classification and categorization, qualification review, performance evaluation and supplier exit, incorporating safety and environment, labor human rights, and social responsibility components into the evaluation criteria. According to the results of the evaluation and assessment, the suppliers will be rewarded, corrected, downgraded or eliminated.

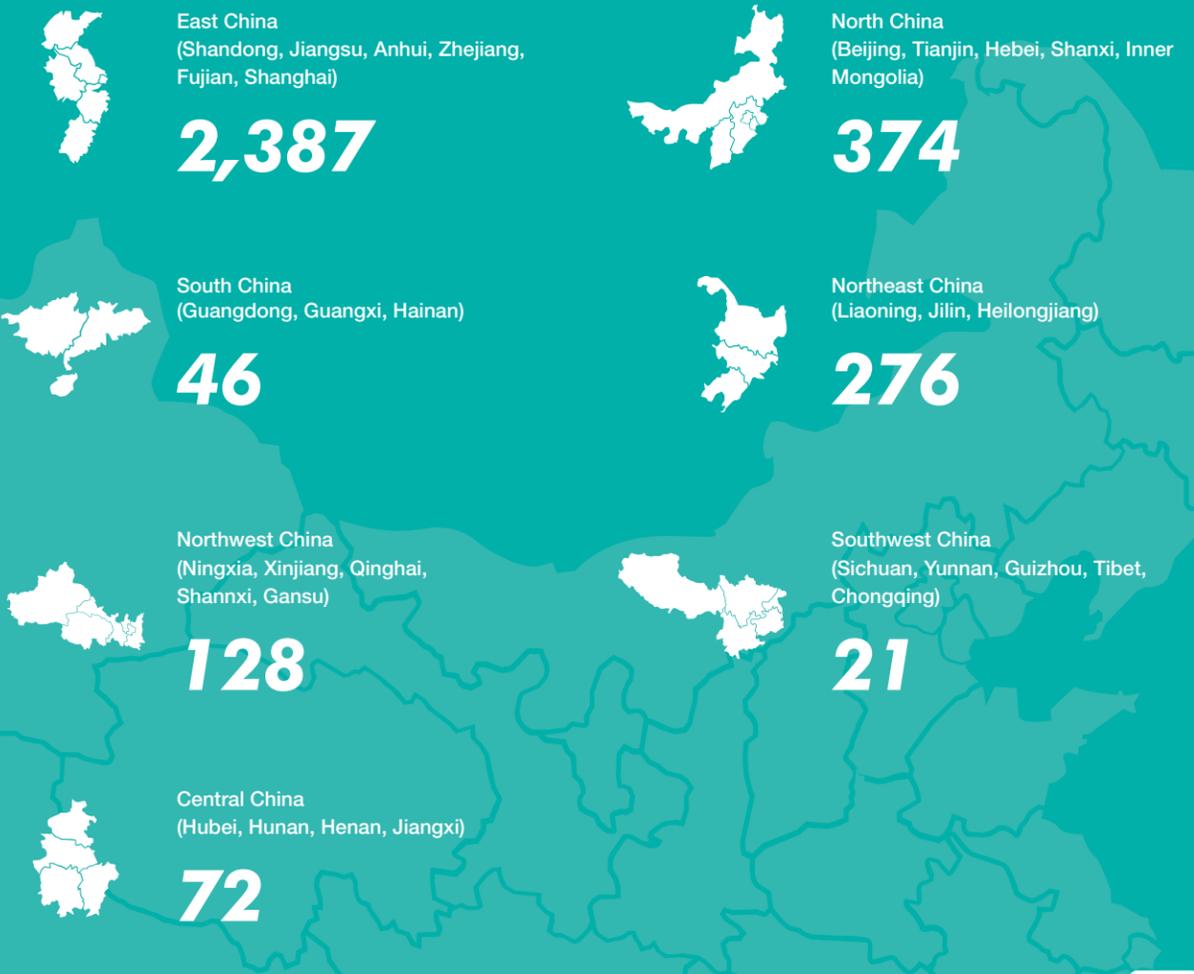
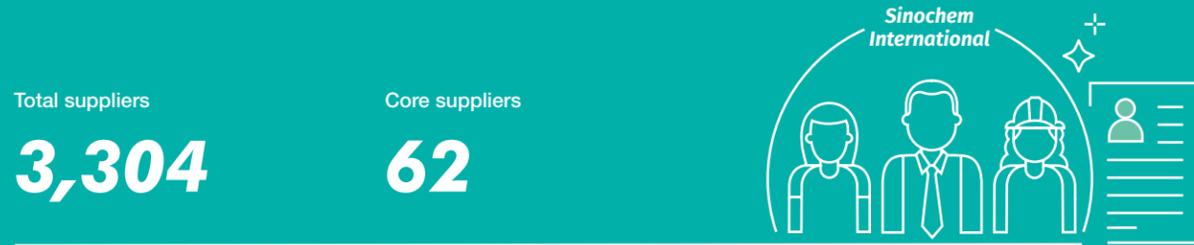


Sinochem International Supplier Management Procedure

🕒 Key Tasks of Sustainable Supply Chain in 2022

Supplier Assessments	<ul style="list-style-type: none"> Continued to improve the supplier social responsibility management kit, and continued to track the implementation of the core supplier improvement plan according to the evaluation results, with a coverage rate of 78.21%
Trainings on Special Topics	<ul style="list-style-type: none"> Conducted special training sessions on sustainable supply chain construction for subsidiaries twice Completed the formulation of online training sessions regarding sustainable supply chain, and cumulatively conducted 19 sessions of courses for suppliers and internal procurement personnel
Brand Communication of Sustainable Supply Chain	<ul style="list-style-type: none"> Regularly published the company’s sustainable supply chain work information through official WeChat and other platforms, and organized communication and interaction sessions with suppliers Compiled and released the <i>Sustainable Supply Chain White Paper</i> and disclosed sustainable supply chain management practices and achievements to external parties
Publishing of the Supplier Diversity Plan	<ul style="list-style-type: none"> Publicly released the global supplier diversity plan to establish friendly relationships with more supplier partners Training sessions for procurement personnel includes Diversity, Equality and Inclusion (DEI) training to enhance their awareness Actively encouraged suppliers to build a DEI culture, set requirements for suppliers to establish a diverse, inclusive and equal working environment, and conducted training micro-classes on diversified topics for suppliers
Exploration of Supply Chain Carbon Management	<ul style="list-style-type: none"> Formulated the <i>Supply Chain (Scope 3) Carbon Emission Statistics Plan</i>, specified the categories of assessment scope 3, and explored data collection methods Established a <i>Recyclable Packaging Scheme</i> and promoted the implementation of the recyclable packaging scheme for the company’s products and supply chain processes in two major areas, namely self-operations and supply chain management. Regularly tracked the progress of the scheme and collected the relevant data

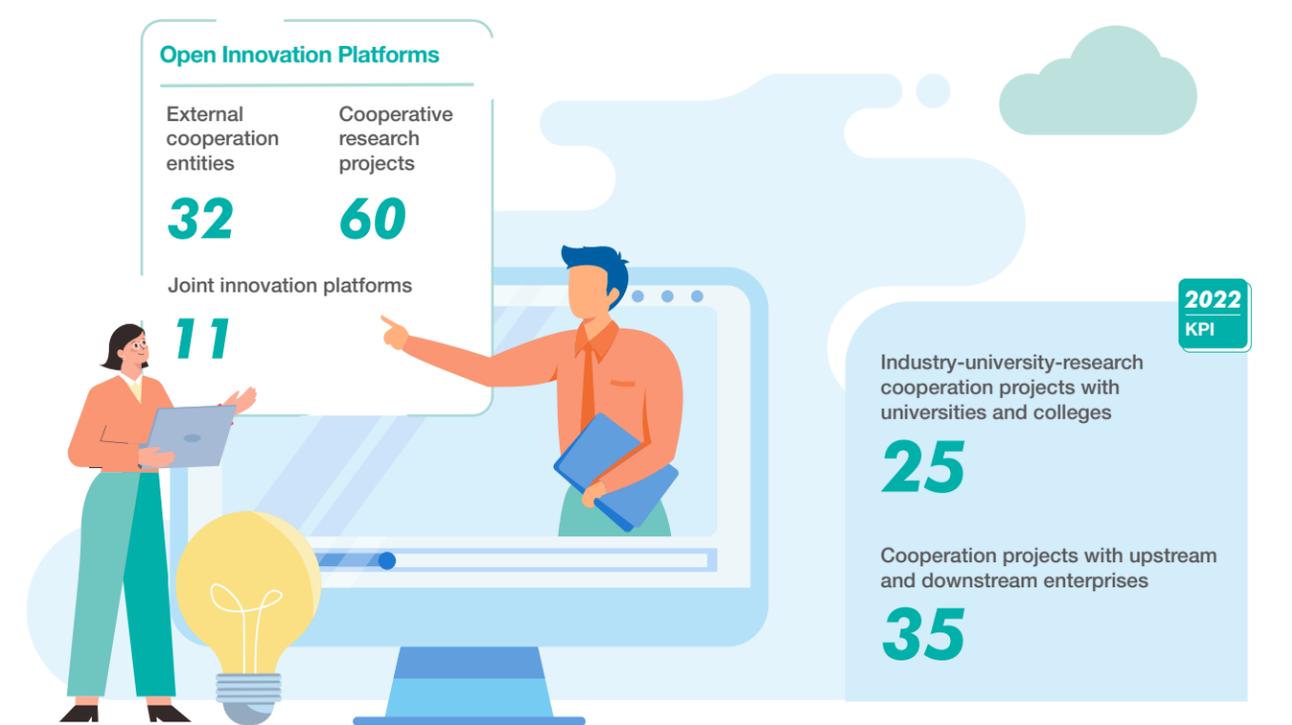
Number of Suppliers in 2022



Note: Core suppliers refer to suppliers whose materials and services are core materials for the enterprise's production and operations, and suppliers whose quality, price and supply sustainability have a significant impact on the production and operations of the enterprise

Industry Progress

Sinochem International is building an open innovation mechanism that envelops the industry chains, and actively engages in exchanges and cooperation with leading industry enterprises, upstream and downstream enterprises, universities, colleges and other partners, integrating the advantages and resources of multiple parties to promote the construction of research platforms, the development of innovation projects and breakthroughs in key technologies. Industry-university-research, research-production-marketing and other cooperation modes are applied to promote progress in the chemical industry.



Quality Products for Better Addressing Customer Needs

Challenges

The global new chemical materials industry is being restructured, and finding ways to “strengthen, supplement and extend supply chains” on the basis of one’s own production logic amidst increasing market competition, not only to meet the strategic requirements of the country and industry but also to satisfy our customers’ demands for products and services, has become a crucial consideration in any upgrade to an enterprise’s production.

Risks and opportunities

The Guiding Opinions on Promoting the High-quality Development of the Petrochemical and Chemical Industry during the 14th Five-Year Plan emphasize adjustments to the industry structure, proposing the vigorous development of new chemical materials and high-end chemical products. Chemical enterprises must seize this opportunity for transition, and transform to focus on high-end, green, differentiated, customized and other high-added value products.

Management strategy

Sci-tech innovation must be upheld to develop the new chemical materials industry, satisfy market and customer demand for more sustainable, higher quality and greener product solutions and high-quality service.

Substantive issues

- Product quality
- Customer satisfaction
- Sustainable products and solutions
- Customer health and safety

In response to SDGs

7 AFFORDABLE AND CLEAN ENERGY
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Customer Healthcare and Safety

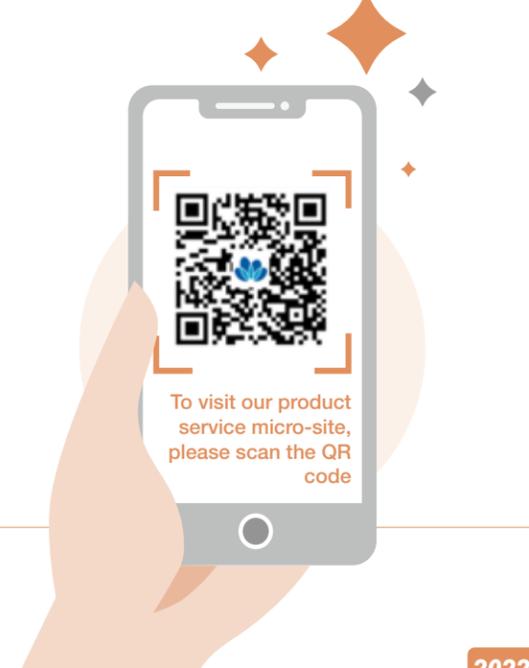
Sinochem International insists on a “customer-centered” service concept, and has formulated *Customer Health & Safety Protection Management Measures*, strictly manages and controls production processes and product safety specifications, applies chemical product safety labeling for storage, transport and other processes in accordance with national standards, and provides product SDS (safety data sheets) and MSDS (material safety data sheet for chemical products), and provides realistic information to customers regarding product risk factors and safety & protection measures, taking responsibility for the health and safety of customers.

The company insists on innovative service capabilities, enhancing its communications with customers, and undertaking that the use of all product promotions, information and logos are correct and standardized, the traceability of production operations and inspections is insured, and customers are provided with service before, during and after the sales. Customers can seek advice or submit a complaint via the official websites, WeChat accounts, or SDS and MSDS complaint hotlines, inter alia, of the various product manufacturers involved. The company carries out regular customer satisfaction surveys, collects customer needs and opinions, and resolves customer issues in a timely manner.

Sinochem International Launched Product Service Micro-site



In 2022, Sinochem International further optimized its product WeChat service platform to cover four major service scenarios including product searches, information searches, sample requirements, and sales contacts. Customers can find out more about over 100 Sinochem International star products and industry solutions, download product and industry manuals, etc., and query product-related issues online.



2022 KPI

Customer complaint handling rate

100 %

Customer satisfaction rate

97.75 %

Marketing violations

0

Violations in terms of health and safety impact from products and services

0

Violations in terms of product and service information and labels

0

Product Quality

The company has implemented overall quality management measures, updating and improving the *Quality Management Measures for Production Enterprises*, and strengthening its publicity and implementation to continuously improve the management level of product quality.

Major Product Quality Management Tasks in 2022

- Promoted subsidiaries to obtain certifications such as ISO 9001, IATF 16949 and other quality certification systems, participate in certification renewal audits, and formulate quality control standards and control procedures
- Promoted subsidiaries to formulate new documents and revise quality management systems and procedural documents
- Two new subsidiaries passed the National Accreditation Committee CNAS laboratory accreditation
- QC group activities were continuously carried out
- System standard and internal auditor training courses were organized to build an internal audit team
- A quality academy was established to organize quality training and improve employee quality planning, quality control and quality improvement skills
- Quality Month activities were held to shape our quality culture through knowledge contests, skill competitions and other events



- *Customer Health and Safety Risk Factor Checklist* was issued to mature subsidiaries, and self-assessments and improvements were carried out in a timely manner
- Process-wide quality system inspection activities were enhanced, and hidden quality dangers were investigated and corrected in segments including product shipping management, manufacturing process control, and raw and auxiliary material quality management
- A quality risk and opportunity list was prepared to effectively control identified risks
- Major export products have passed EU REACH testing and RoHS certification
- Hazardous material restriction requirements have been passed onto upstream suppliers



Sinochem International's Subsidiary Sennics Completed the Development of a Low-odor Antioxidant Product



In 2022, Sennics successfully developed a low-odor antioxidant product, significantly reducing inherent volatile substances in products, and greatly improving the pungent smell of the product that is handed over to the end-customer, improving end-customer recognition in the downstream market, while improving the company's own working environment.

Sinochem International's Subsidiary Sennics Improved TMQ Product Quality



In 2022, based on market demand, Sennics focused on improving the effective content of TMQ products, and successfully developed an S-TMQ Pro product, the quality of which is higher than TMQ and can improve thermal oxidation protection on tires, effectively satisfying end-customer demands relating to product quality.

2022
KPI

Product recalls

0

Production subsidiaries with ISO 9001 certification coverage

94.7%

Production subsidiaries' labs accredited by CNAS

7



Diverse Products and Solutions

Sinochem International has focused on new chemical materials as a core business, is engaged in market-oriented sci-tech innovation, and is accelerating the roll-out of epoxy resins, polymer additives, high-performance fiber materials, lightweight materials and other high-potential industries, to meet growing market demand, provide customers with high-quality, green and sustainable chemical products and solutions, serve the national economy and people's livelihoods, and create a better life for the wider public.

Epoxy Resins

Epoxy resins are chemical materials with excellent performance characteristics that include high environmental tolerance, low shrinkage rates and good mechanical properties, inter alia. They are widely used in wind power, electronics and electrical engineering, industrial coatings as well as other areas and applications, and comprise an important basic material necessary for the development of new energy, new infrastructure and other areas.

Against the backdrop of the "dual carbon", the global energy structure is undergoing significant change, and the wind power industry is ushering in rapid development, which has brought about a surge in demand for composite resins. Telecommunication radio frequency base stations and their associated products, water-to-oil coatings, architectural decorations and other global trends have driven steady growth in demand for epoxy resins.

Sinochem International has a production capacity of epoxy resin of up to 350,000 tons, ranking first in China.

Progress in 2022

In June, Sinochem International's 180,000 tons/year epoxy resin project in Lianyungang started up to yield qualified products. The PDH-based project involves major raw materials such as 480,000 tons/year of bisphenol-A and 150,000 tons/year of epichlorohydrin using green technology, inter alia, enhancing the ability to control key intermediates, creating an integrated industrial chain, and further improving the company's overall competitiveness in the field of epoxy resins.



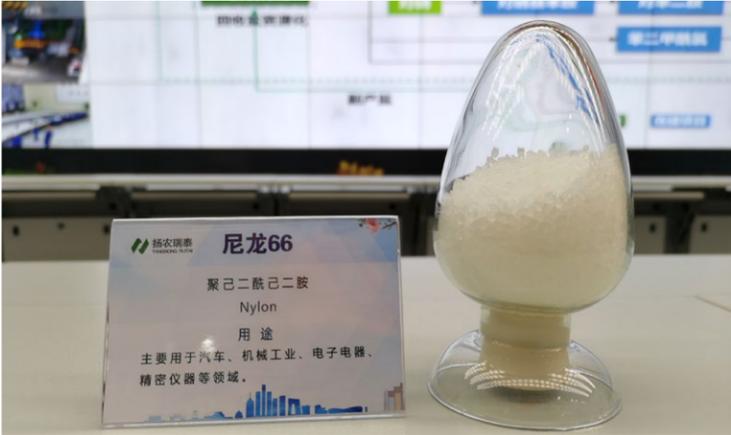
PA66

PA66 offers high mechanical strength and good fiber elasticity, and is widely used in high-end engineering plastics and high-end industrial fibers, including the manufacture of automotive components, electrical and electronic devices, cord and airbag fabrics, and yarns for civilian use, inter alia.

After years of research and development, the company has independently developed China's first full-process processing technology for "catalyst preparation - hexamethylenediamine synthesis - PA66 polymerization", breaking the foreign monopoly on the technology for and supply of PA66's key raw material, and improving China's independent ability to control the PA66 production chain and level of supply security. Compared with the traditional process, its advantages include more easily obtained raw materials, lower investment required, no highly toxic chemicals, and higher levels of safety and environmental protection.

Progress in 2022

In May, Sinochem International's PA66 project with an annual output of 40,000 tons of PA66 and 25,000 tons of the intermediate Hexamethylene diamine (HMD) in Zhongwei, Ningxia Province, started up to yield qualified products.





Special Fibers

Special fibers is an important national strategic emerging industry.

Thanks to their extra strength and high modulus, Sinochem International's Para-aramid products can be used in a wide range of applications such as electronic communications, lightweight materials, green environmental protection, personal protection and marine development, providing customers with complete technology solutions.

Electronic Communications	Lightweight Materials	Marine Development	Personal Protection	Composite Materials
<ul style="list-style-type: none"> The ideal non-metallic reinforcing material for telecommunications fiber optic cables, widely used in indoor and outdoor optical cabling, FTTH fiber optic cables and ADSS fiber optic cables 	<ul style="list-style-type: none"> Used in the manufacture of broadband wave-transparent materials for transportation tools, and structural components able to withstand impacts Used in tire cords, brake pads, high-pressure gas cylinders and other areas 	<ul style="list-style-type: none"> Used in the manufacture of reinforced oil pipes for the extraction and transportation of oil and natural gas Used in the manufacture of various cable materials used in deep sea exploration and the fishing industry 	<ul style="list-style-type: none"> Used in the manufacture of protective clothing (firefighting clothing, flame-retardant and heat-retardant work clothing), protective gloves, etc. 	<ul style="list-style-type: none"> Para-aramid composite materials are applicable in a wide range of wind power, container, building reinforcement, sports equipment and other industries

Progress in 2022

In 2022, Sinochem International's high-strength, highly moldable Para-aramid products achieved major technological breakthroughs, of which the product performance and high quality product ratios have reached industry-leading standards. These said products have received customer certification in tire rubber, fiber optic cable and other areas, and sales volumes have increased rapidly, achieving production-based sales.



ABS Engineering Plastics

ABS materials offers high strength, optimal toughness, easy processing and molding and coloring, inter alia, and it is today one of the world's most widely used polymers.

Sinochem International developed and produced ecologically friendly ABS products for the automotive manufacturing, medical treatment, electrical equipment, electronic equipment and other industries. The company gives full play to the synergistic advantages of Sinochem Holding's own ABS, PC and other basic resins and, on the basis of the internationally leading technology advantages and business modes of its subsidiary ELIX Polymers, it is rolling out modified ABS projects in China, accelerating the implementation of the ABS China strategy.

Progress in 2022



In August, Sinochem International inaugurated a modified ABS materials plant in Yangzhou, highlighting the formation of company's ABS business capacity layout at home and abroad. With the global supply system and international marketing service capabilities, we can provide customers with innovative, high-quality, green customized products and solutions.

Polymer Additives

Additives are indispensable in the preparation of polymer materials such as rubber, plastics, and fibers.

Sinochem International is a global leader in the polymer additives market segment, as well as a strategic partner for many of the world's best known tire manufacturers. The company has developed a number of process technology projects to which it owns the intellectual property rights, and it has taken the lead in formulating numerous Chinese national standards for the rubber additives industry, while continuing to satisfy customer and market demand.

Progress in 2022

In January, Sinochem International's high-end antioxidant S-TMQ Pro project with an annual output of 20,000 tons was put into production, in which the research and industrialization applied the company's own intellectual property rights, and its technology standards and product quality lead the way internationally.



Sinochem International's Subsidiary ELIX Polymers Completed Product Life Cycle Assessment



In 2022, ELIX Polymers introduced a standard method for product life cycle assessments (LCA) and completed its first assessment. The assessment results show that products with mechanically and chemically recycled components can significantly reduce the environmental impact of the final product, and help companies to implement circular economy strategies.



In May, Sinochem International's polymer additives factory in Thailand was put into production with an annual output of 25,000 tons of rubber antioxidant, filling a gap in rubber antioxidant production in Southeast Asia and providing even more convenient localized services to the Southeast Asian production sites of downstream customers.

Social Responsibility for a Shared Beautiful Life

Challenges

Labor and human rights standards still continue to improve, and attention and control must be strengthened with regard to major issues identified under international standards such as child labor, as well as forced labor, discrimination and harassment.

Risks and opportunities

The 20th CPC National Congress has shown the way forward for adhering to the Chinese path to the development of human rights, promoting the overall development of human rights, and comprehensively driving rural revitalization. The commonly used international GRI standard includes human rights as part of an organization's influence, makes clear that enterprises must disclose their impact on human rights, and proposes more stringent requirements regarding an enterprise's protection of human rights and information disclosure.

Management strategy

Respect and protect employees' human rights, provide employees with a broad career development space, plentiful development resources, a safe and comfortable working environment, a salary and benefits that cover the cost of living, actively participate in activities such as rural revitalization, public welfare and charity work, and community construction, inter alia, so as to promote positive interaction between the company and the community.

Substantive issues

Employee rights protection

Career development and training

Decent working conditions

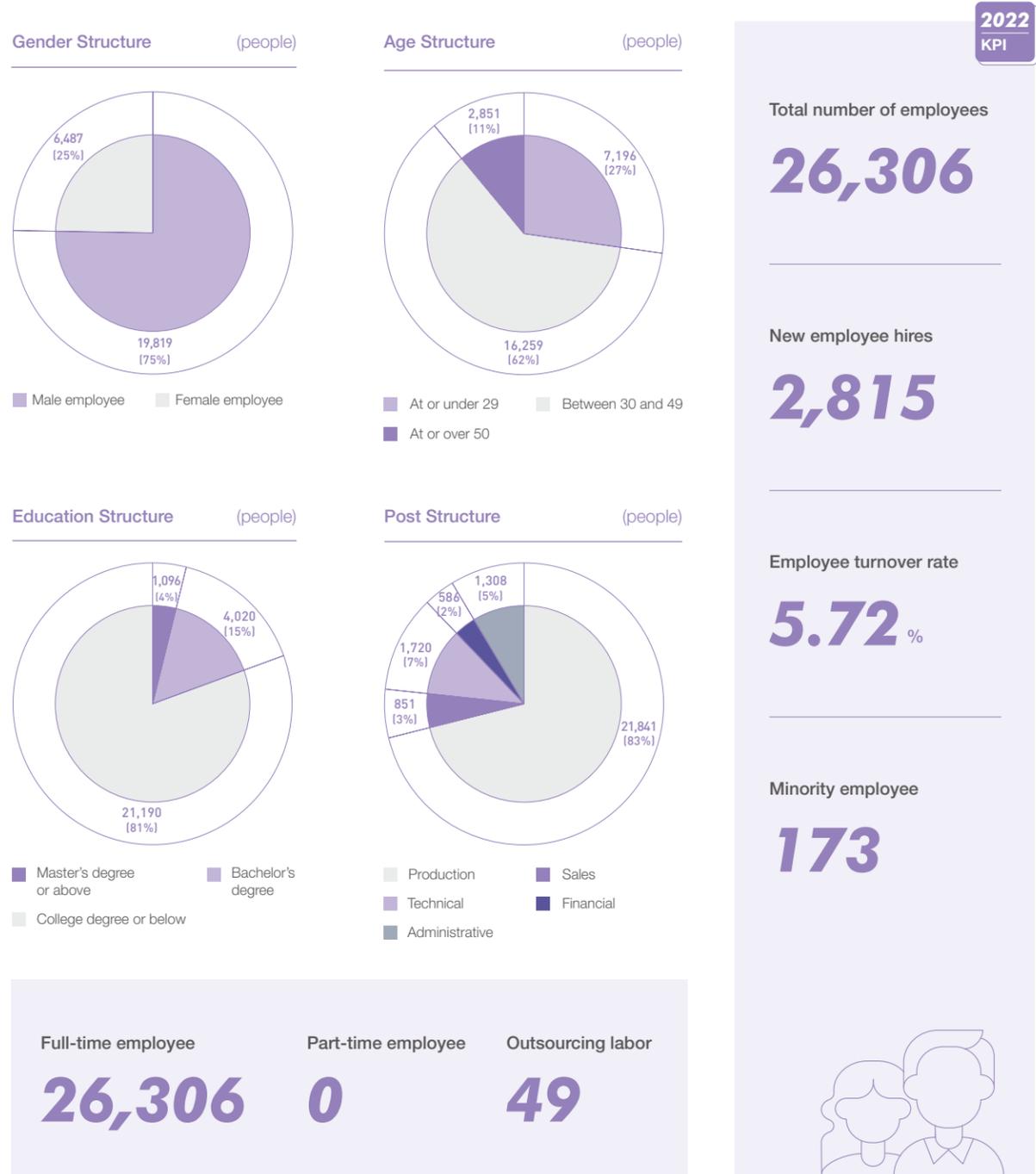
Democratic management and communication

In response to SDGs



Employee Rights

The company strictly abides by the laws and regulations of China and the various overseas regions it operates in, having formulated the *Labor and Human Rights Policy*. Upholding the “fair, equitable and transparent” principle of legally compliant employment, we value and safeguard the rights and interests of employees, respect their values, individuality and privacy, create a diverse, equal, and inclusive working environment, and build harmonious labor relations.



Labor Rights and Interests

Sinochem International and all of its subsidiaries have signed a *Letter of Responsibility for Standardized Employment*, and insist on equality of employment, clearly prohibiting any discriminatory treatment of an employee for any reason. Harassment, child labor, and any form of forced labor are strictly prohibited. The company encourages and supports the employment and career development of women, ethnic minorities and the disabled, and promotes their group integration through measures such as the setting up of toilets for the disabled, and protection for pregnant women and their employment.

The company and the labor union signed a *Collective Labor Contract*, *Specific Contract for the Protection of Special Interests of Female Employees* and *Collective Wage Agreement*. It has been agreed that both parties reserve the right to propose ad-hoc consultation meetings to negotiate and revise the relevant clauses in the contract and annexes, which will be subsequently passed and filed based on the original process. The company also views human rights clauses as a significant factor in key investment acquisition agreements.

Recruitment

- Employee Recruitment Management Measures have been formulated, undertaking that all employees have equality of opportunity and will not be discriminated against in employment. The company does not discriminate on the grounds of race, social class, religion, disability, gender, sexual orientation, age, marital status, pregnancy or political affiliation
- Information on applicants is strictly reviewed, and underage workers are categorically rejected
- Employment contracts are signed in accordance with the law on the basis of equality, voluntariness and mutual agreement

Appointments/Promotions

- The use of child labor, forced labor, discrimination and harassment, and other hidden human rights violations are identified in a timely manner by means of regular self-assessments, risk assessments and internal audits, and remedial action and education is provided
- We insist on the gender equality, equal pay for equal work, and apply working skills as the sole criterion for career development and promotion

Dimission

- Employment relationships are ended in accordance with the law on the basis of equality, voluntariness and mutual agreement
- Employees who cancel or terminate their employment contract are provided with economic compensation in accordance with the statutory standard

Sinochem International also provides a complaint and feedback channel for employees, whereby employees can report violations of employee rights and interests to the company's Human Resources Department by phone, email or directly in person. The company promises to protect the complainant, verify the reported situation, promptly implement corrective measures for violations of laws and regulations, and deal with relevant personnel involved.

Complaint hotline
021-31768820

E-mail for complaint submissions
employeecaring@sinochem.com



Democratic Management

Sinochem International and its subsidiaries have established labor union organization and a democratic management system in the fundamental form of the employee representative congress. We regard the major issues involving the vital interests of employees as the key content of the democratic management, protecting employees' right to know, right to participate and right of oversight.

We respect employees' legal rights of free association and collective bargaining in accordance with the law, and do not object to employees' participation in legal activities by labor unions legally registered locally, based on the premise of non-compulsion and non-violation of local law.

Measures for Participation in Democratic Management in 2022

Employee Representative Congress

Normalized collection, review, processing and implementation mechanism for proposals to Employee Representative Congress

Satisfaction Survey

Annual engagement and satisfaction surveys are performed for all employees, and specific management and improvement measures are applied to issues identified as well as feedback and opinions

Daily Feedback

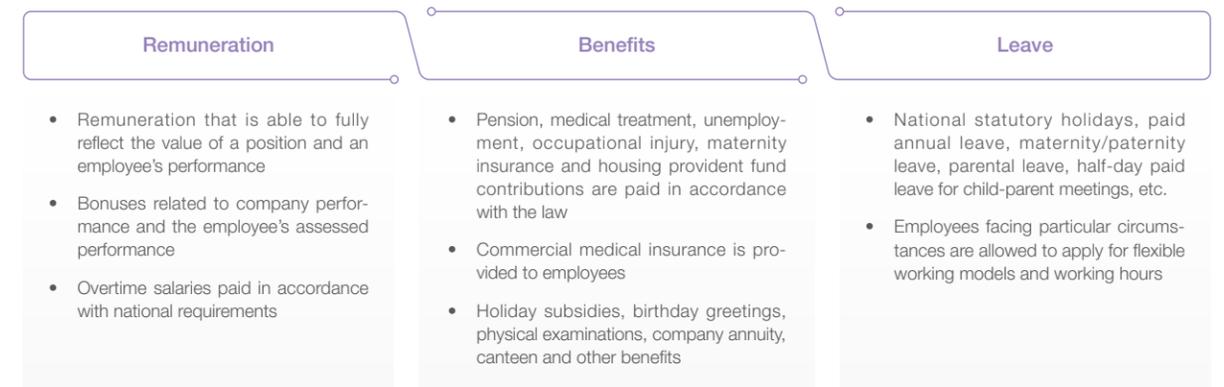
Online An "Opinions and Suggestions" column has been set up on the "Happiness Station" service platform, and employee care mailboxes have been created

Offline Regular employee symposia are organized, together with "Executive Luncheons" "Conversations to Melt Your Heart" and other grassroots activities



Welfare and Care

Sinochem International continues to build upon and improve its employee remuneration and benefits system, provides market-competitive salary levels that comply with minimum wage standards in the locations where it operates, keeps abreast of employee dynamics and needs, provides the basic benefits required by law as well as further internal benefits, and creates a comfortable working environment for its employees. These welfare policies effectively support the health and lives of their employees and their family members.



The company cares about its employees' work-life balance, and organizes yoga, basketball and other group activities on a regular basis, as well as festival celebrations and cultural activities from time to time, to improve employees' sense of belonging and cohesion; we rely on the GROWTH learning and development platform to offer regular psychological counseling courses, and care for our employees' psychological health; we make every effort to help employees facing difficulties, and implement initiatives that improve employees' everyday lives, provide kindness and care to present and retired employees.

"Doing the Actual Deeds" Practical Activities





Employee team building



GROWTH Cup employee basketball league



"Amazing Women Winning Glamours" – an International Women's Day-themed event



Employee community building – children's playground



Health run in Xuwei New District, Lianyungang



Shanghai Pudong New Area directly-managed enterprise employee singing competition

2022
KPI

Investment to assist employees in difficult situations

756,200 yuan

Cultural and sports activities

591

Participating employees

18,630



Talents Development

Embodying the particularities of its industry, Sinochem International has established a matrix training system that is "tiered horizontally and classified vertically by expertise" in order to achieve full-range, all-round training for all, from new employees to senior professionals, from grassroots blue-collar workers through to key positions in the company, and thus provide employees with progressive career planning and empowerment.

The company has built a system with multiple incentives covering the entire life cycle of the business, and has introduced a range of incentives including innovation and equity incentives, inter alia. It links employee incentives closely with their responsibilities, skills and contributions, and continuously improves employees' development capabilities and enthusiasm for creating results.

Measures to Promote Employee Career Development in 2022

Improving the Promotion Management

- Formulated career plans for all employees that match the company's latest strategy and highlight an individual's value, and support employees to achieve step-by-step promotion
- Enhanced the horizontal and vertical exchange of talent, and accumulated their cross-profession, cross-business and cross-regional combination of practical experiences. A total of more than 500 employees have undergone rotation and exchange

Attracting Local Talents

- Hired executives locally, from the locations we operate in
- Cultivated in-depth relationships with local schools, and have built an exclusive recruitment platform and channels for production blue-collar workers, providing 296 workers to our Lianyungang, Zhongwei and other production bases

Providing Skills Training

- Provided targeted training and education to improve the specific skills of management personnel including mid-level backbone and front-line team leaders, totaling 2,294 class hours covering 272 person/times
- Drafted a *Five Understandings, Five Knowledges and Five Abilities Manual* and implemented rotation trainings for team leaders in our hazardous chemical businesses



Building a Team of Talents

- Management talent:** Built an advanced empowerment and training system, involving the establishment of two main axes, "on-the-job" and "reserve", to create a "new managers and new key positions" training system and four main subject classes, in order to ensure allocation by echelon and targeted training
- Sci-tech talent:** Promoted the implementation of sci-tech sequences, with the addition of 2 Sinochem T5 senior expert-rated individuals; established chief scientists in key subsidiaries; organize reviews of T3 scientific supervisors in certain subsidiaries
- Highly skilled talent:** Established 7 skills master studios, leveraging their demonstration and leadership role, to drive an increase in the ratio of technology/senior technicians and other highly skilled talent



Photosynthesis Plan

Sinochem International Selects High-quality, High-potential Reserve Talent



In 2022, Sinochem International aimed to enroll university graduates, young people with high potential less than 32 years of age and high-potential middle managers, using the Sunshine Talent Selection initiative to select and identify high-quality, high-potential and outstanding reserve talent at all levels, successively hold "Photosynthesis Plan" "Polymerization Plan" and "Brilliance Plan" trainings, covering a total of 150 individuals.

The Photosynthesis Plan

Providing cultural, strategy, systemic and HSE safety courses, professionalism, business etiquette and other trainings to outstanding fresh graduates, organizing team development training, and combine dialogue and Q&A formats to help new inductees gain a better understanding of the company

The Polymerization Plan

Using systematic training targeted at high-potential, high-performance young employees to improve their overall quality and ability to perform at consistently high levels, and creating a reserve team of young talent characterized by its high quality and high sense of belonging

The Brilliance Plan

Aimed at high-performing, high-potential middle managers, this plan focuses on leadership, operational excellence, strategic thought and other topics, and is intended to cultivate and improve their skills



Polymerization Plan

Investment in employee training

9.59 million yuan

Employee participation in training

373,517

Average hours of training completed per employee

37.72 hours

2022 KPI

Community Building

Sinochem International adheres to the public welfare concept of “from society we come, the society we serve”, maximizing its resource advantages, actively carried out activities such as rural revitalization and community care programs. The company exercises its corporate social responsibility with effective action and promotes positive interaction between its business and the community in order to build and share a harmonious society.

The company is actively responding to China’s rural revitalization strategy, and has fully implemented Sinochem’s various initiatives, using consumer and education assistance as major starting points, maintaining active links with, and sharing resources and results with areas receiving assistance in order to ensure the stability of poverty alleviation efforts and assist in rural revitalization.

Key Measures towards Rural Revitalization in 2022



We have removed obstacles in community communication channels, encourage both headquarters and subsidiaries to organize “Community Communication Week” activities, and invite stakeholders in our operating areas, such as government bodies, cooperation partners, customers, and the general public, inter alia, to visit the company for seminars, tours, awareness raising, popular science and various other communication events to introduce the company’s plans, activities and achievements in terms of sustainable development, disseminating information on safety, firefighting, energy conservation and environmental protection, etc., in order to enhance mutual understanding.



Huaian Junsheng invited cooperation partners to visit the plant for experience exchange



Community-themed painting event at Yangnong Ruixiang

Sinochem International Held “Community Communication Week” Events

Sinochem International has designated the first week of July as “Community Communication Week”, and encouraged subsidiaries to organize communication events in all shapes and sizes. During Community Communication Week, Sinochem New Materials (Hebei), a subsidiary of Sinochem International, used the introduction of the Sinochem FORUS system to provide training including firefighting safety knowledge and equipment usage to customer representatives, and tested the results of this training; they organized building fire emergency drills in which local police station and street office staff were invited to participate, enhancing the interaction between the company and the community in which it operates.



Sennics Anhui Organized Parent-children Open Day Event

On May 28, Sennics Anhui held a parent-child open day, inviting employees to bring their children to the plant and find out about green and smart development concepts for chemical plants, and feel the attraction of chemistry by visiting the exhibition area, taking part in interesting chemistry classes, and getting some hands-on experience with chemical experiments.



We are enthusiastic participants in charity and public welfare activities, and energetically promote the spirit of volunteerism. We are promoting the public interest, and creating a harmonious and aesthetically pleasing community environment through practical actions that effectively improve the level of medical care, education, environment, and cultural acumen of local residents.



Zero Compromise on Safety and Environment

Challenges

The contradiction between industrial development and the ecological environment is becoming ever starker, with the ongoing occurrence of chemical safety and environmental accidents, and increasing popular awareness of environmental protection and health and safety. Stakeholders' expectations in terms of HSE management have continued to increase, and ever higher proposals are made for the management of hazardous chemicals.

Risks and opportunities

The *Guiding Opinions on Promoting the High-quality Development of the Petrochemical and Chemical Industry during the 14th Five-Year Plan* once again emphasize a non-negotiable bottom line: safety, by improving intrinsic safety levels and actively promoting green, circular and low-carbon development within the chemical industry, requiring chemical enterprises to further establish and develop all-encompassing HSE management systems, and promoting the systemic construction of corporate responsibility care.

Management strategy

Sustaining efforts to improve the HSE management system, the improvement of the management and control of the whole process of safe production, ensuring the safety and health of our employees, promoting pollution prevention, energy savings, carbon emissions reduction and efficiency enhancements to realize green and sustainable development.

Substantive issues

- Chemical safety
- Occupational health and safety
- Environmental management
- Pollution prevention
- Water resource management
- Energy consumption
- Clean technology

In response to SDGs



HSE Management

Sinochem International has been fully implementing the Sinochem FORUS management system, building a global-standard HSE management system which incorporates Sinochem International's particular requirements, and establishing 578 HSE best practices using the "Four Standards" management system.

The company has formulated various regulatory mechanisms covering areas such as *Health, safety and environmental protection management regulations, HSE accountability management measures, and Life-saving instruction management measures*. The company has created a HSE Committee which is responsible for coordinating key events in HSE management as well as a Health, Safety and Environment Sub-Committee under the Sustainable Development Executive Committee which is responsible for promoting safety production, occupational health, and environmental protection. HSE committee meetings are held on a quarterly basis to resolve and decide upon HSE strategic decision-making and performance; monthly HSE reports follow up on the implementation of major HSE initiatives and key KPI indicators within the different business units; the HSE information platform and energy conservation and ecological environmental protection statistics system provide a dynamic grasp of operating conditions on a daily basis and triggers HSE risk warnings to ensure safety and control.

In 2022, the company successfully passed the "three-in-one" QMS-EMS-OHSAS review and achieved the "Four Zeroes" goal for six years in a row.

HSE Vision	Global HSE forerunner
HSE Concept	HSE always first
HSE Management Policy	Life first, Environmental priority, Loss and damage control, Keep improving
Safety Vision	To become a fine chemicals enterprise trusted by society, customers and employees by eliminating all safety accidents, creating great chemical products, and contributing to a green living environment
Safety Mission	To build our HSE core competitiveness and thus fulfil our social responsibility in terms of safety, environmental protection, and health and become a model for innovative and targeted safety management in the chemicals industry
HSE Objectives	Zero serious injury accidents, zero general environmental incidents, zero new occupational disease cases, and zero major negative public opinion incidents



Measures for Better HSE Management in 2022

Revision of System Procedures

- Improved, revised and added 95 HSE system items, while subsidiaries have revised and improved 1,325 HSE items
- Organized the participation of frontline employees in the revision of the Standard Operation Sheet (SOS) and the careful examination and organizing of our HSE system through the JCC (Job Cycle Check), as well as completed the sorting and revision of 876 SOPs for 362 positions

Building Professional Workforce

- 360-degree pre-appointment HSE assessment and safety disclosure for general manager candidates were carried out at subsidiaries, with unqualified candidates based on HSE assessment disqualified
- Appointed 138 Safety Managers covering all factors in HSE system at various levels, including 56 Senior Safety Managers
- Training program on the new *Work Safety Law*

Building up the "Five-Star" Program

- "Five-star Plant/PLUS" program has been carried out in combination with the introduction of HSE best practices, organized cross checks and "pulse-taking" checks, cross audit, exchange learning, and tutorship on 69 occasions
- Established 6 audit teams to conduct Five-Star Plant/PLUS audits/acceptance

Enhancing Operational Discipline

- Established various mechanisms designed to prevent violations, promoted OD (Operational Discipline) partnership events, and the unsafe behavior discovery rate decreased by 56.86%
- Organized subsidiaries to prepare a list of company-level typical "three violation" behavior, clarifying the list of OD red lines and general violations, and taken punitive measures against 223 employees who violated OD red lines
- Strengthened the enforcement of life-critical clauses, with a total of 2 staffs from subsidiaries, 42 contractors and 125 contractor employees dismissed or expelled breaching said clauses



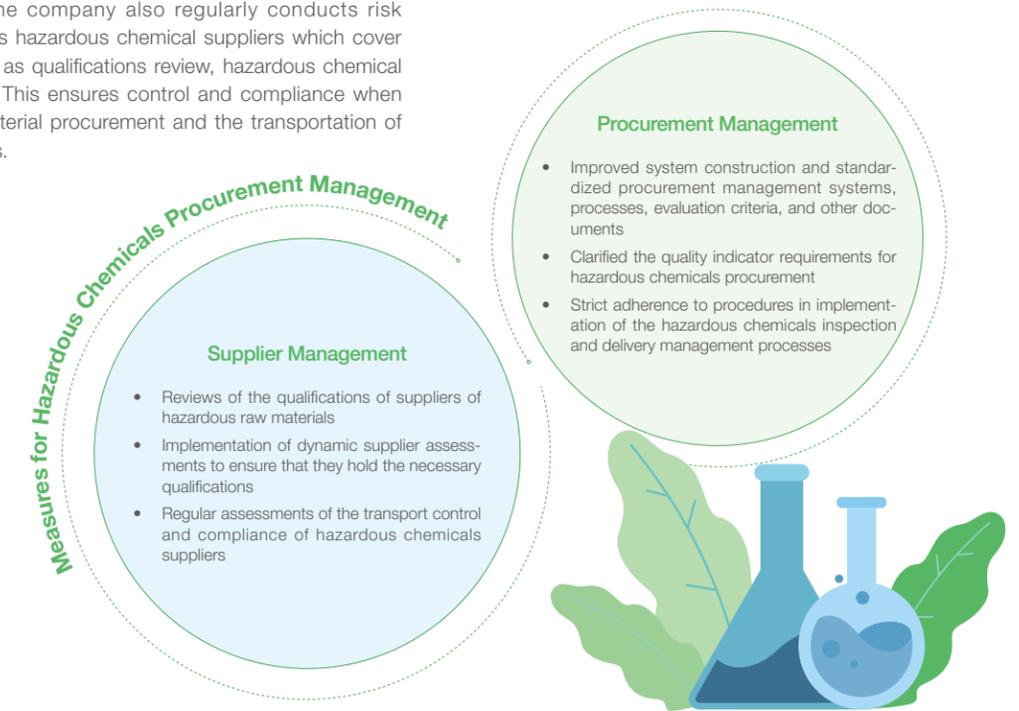
Chemicals Management

Sinochem International has adhere to the policy of "Safety First, Prevention Crucial, Integrated Management" and formulated *HSE Risk Management and Control Standards for Hazardous Chemicals*, *Risk Control Standards for Major Hazard Sources of Hazardous Chemicals* and other systems as well as a position safety responsibility mechanism. The company established a monitoring system for the entire process governing the procurement, loading and unloading, storage, transport, processing and disposal of hazardous chemicals.

Measures for Chemicals Management in 2022

Hazard Assessment of New Chemical Substances	Production and Storage of Hazardous Chemicals	Handling and Packaging of Hazardous Chemicals
<ul style="list-style-type: none"> Key new chemical substances are managed and controlled, including the setting up of online alarms and monitoring of areas dealing with new chemical substances; implemented monitoring of the water and soil, and also investigated and dealt with hidden dangers in soil and groundwater; relevant information is also disclosed 	<ul style="list-style-type: none"> Set up and regularly maintain appropriate safety measures and equipment at workplaces according to the types and risk characteristics of hazardous chemicals The monitoring, inspection and emergency response systems at workplaces are complete 	<ul style="list-style-type: none"> All required protective measures are taken depending on the characteristics and type of packaging of hazardous chemicals, standard operating procedures are established, and visual checks of labeling are carried out Regular assessment and inspection of hazardous chemicals handling, warehousing, and other areas Pre-use inspections are performed on reusable packaging and containers for hazardous chemicals, and safety hazards are eliminated in a timely manner
Equipment Involving Hazardous Chemical Processes	Treatment of Hazardous Waste	Employees Working with Hazardous Chemicals
<ul style="list-style-type: none"> Equipment which intrinsically involves hazardous chemical processes is auto-matically controlled, and all equipment is fitted with emergency stop functions No processes or equipment listed in the <i>Catalogue For Eliminating Outdated Safety Protection Techniques And Equipment</i> is used All equipment undergoes a complete reaction risk assessment, and new, modified or expanded equipment undergoes a HAZOP analysis during the design phase. Where a piece of equipment is changed, the HAZOP report is updated in a timely manner 	<ul style="list-style-type: none"> Packaging containers and packages must be labeled as hazardous waste, and be stored in a cool place Entrusted the reasonable disposal of hazardous waste to appropriately certified bodies Special sharps and other waste is collected and handed over to particular departments for processing 	<ul style="list-style-type: none"> Organized education on safety and legal themes, and training on the management of hazardous chemicals, and employees may only take up their positions once they have successfully completed an assessment Posts with qualification requirements are only open to employees who have obtained the corresponding legal qualifications Drafted a <i>Five Understandings, Five Knowledges and Five Abilities Manual</i> and provide specific training, and organized certification training for team leaders in hazardous chemical businesses
Laboratory Chemicals	Information Platforms	
<ul style="list-style-type: none"> With regard to laboratory chemicals, we encourage minimizing the use of laboratory reagents and samples, and the use of reagentless analysis technologies. We do not squander reagents, and do not destroy contaminated samples. The risks of pollution and leakage are prevented and reduced across the entire process 	<ul style="list-style-type: none"> Completed the digital construction of a dual prevention mechanism for hazardous chemicals enterprises as well as the construction of an "Industrial Internet + Hazardous Chemical Safety Production" focusing on the development of a personal positioning system, a smart inspection system and a specialized operation approval system platform and digital dual prevention platform, etc. 	

Based on the *Hazardous Chemicals Procurement Management Evaluation Plan*, the company also regularly conducts risk assessments with its hazardous chemical suppliers which cover core elements such as qualifications review, hazardous chemical transportation, etc. This ensures control and compliance when it comes to raw material procurement and the transportation of hazardous chemicals.

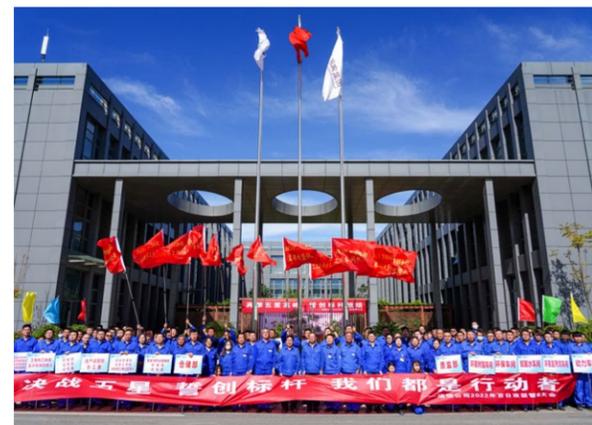


Intrinsic Safety

Sinochem International has increased investments in intrinsic safety by focusing on risk management and control. The company applies intrinsic safety to new, modified and expanded projects from the design stage onward, and performs work hazard analyses and reaction risk assessments on projects and equipment, as well as comprehensive investigations of factors contributing to occupational disease, improving employee safety protection levels, evaluating and improving the implementation of any proposal for improvement, in order to comprehensively improve the level of intrinsic safety.

Safety Production

The company has formulated the policy of *Management Measures for Safe Production, Work Permit Control Standards*, fully implemented safety production deployment and safety production responsibility. With increased investment in intrinsic safety, we enhanced risk management and investigation of hidden hazards, established red lines for safe production, and resolutely prevented major safety accidents.



Yangnong Ruiheng five-star standard-setting pledge meeting



Sinochem Hebei Xinbao incentive reward for hidden hazards investigation

Measures for Safety Production in 2022

Strict Control of Risks at Source

- Continued to implement chemical reaction risk assessments and make vigorous efforts to promote "automation to replace manpower, mechanization to reduce manpower"
- Implemented HSE risk control for new subsidiaries and M&A projects, developed intrinsic safety improvement plans, and made hazard analyses such as PHA, PSSR, JSA for relevant projects and equipment
- Organized the investigation and treatment of five key processes including nitrification, chlorination, fluoridation, diazotization and peroxidation, promoted the automation of four key process upstream and downstream ancillary equipment, including dichlorobenzene, dichloronitrobenzene, chlorobenzene, nitrobenzene

Enhancing Process Control

- Routine "pulse-taking" safety inspections, including unannounced inspection, day-to-day inspections, comprehensive inspections, special inspections, and holiday inspections, etc., to uncover and rectify safety hazards
- Project construction HSE management standards are applied to new, reconstructed and expanded projects, in which management gateways are moved forward, local personnel intervene in advance, and on-site operational risk is strictly managed and controlled
- Continued to carry out contractor HSE rectification for projects under construction with strictly controlled HSE access; 89 special inspections were carried out on key projects under construction at various locations, along with 109 special inspections on contractor management



Special Rectification

- Actively implemented a three-year plan specifically to rectify production safety, and have formulated 19 action plans involving a total of 1,168 rectification action items, for which the rectification completion rate reached 100%
- Regularly carried out the special campaigns such as "Red Ribbon", "Picking Out Iron Wire", and other special rectification activities as "Treatment of Repeated Hidden Hazards"

Safety Awareness Training

- Organized KOL Lectures, micro classrooms, "Production Safety Months", "Hundred Days of Safety in Action", knowledge contests, skills competitions and other events to improve the professional abilities of our HSE management teams and overall HSE awareness of all employees



Sinochem International's *Treatment of Repeated Hidden Hazards in the Advancement of Full Employee Participation in Safety Management* and Yangnong Group's *Construction and Implementation of Safety Production Smart Management Platforms* were awarded **first prize in the 15th National Petrochemical Enterprise Management Innovation Achievement Awards**

Sinochem International was named **Model Enterprise in the 14th National Petrochemical Enterprise Management Innovation Achievement Awards**

Occupational Health

Sinochem International has formulated the *Occupational Health Management Measures* and worked continually to improve its occupational health and safety management system. The company performs annual identifications and assessments of occupational disease risk factors, promotes the remediation of occupational disease hazards, and organizes a range of events including "Occupational Health Talent" and "Creating Healthy Enterprise" in order to eliminate all potential occupational health risks, and improve the occupational health to a higher level.

The company has signed *Collective Labor Contract* with the labor union that addresses issues such as employee occupational health and safety protection. The HSE Committee, which comprises the chairman of the labor union, frontline employees and worker representatives, makes decisions on health and safety-related issues on behalf of all employees and works to ensure that our employees' right to know and participate in decision-making are upheld.

Measures for Occupational Health Management in 2022

Identification of Occupational Disease Risk Factors

- Fully identified occupational disease risk factors, and investigated basic occupational disease hazard conditions
- Strengthened the control of occupational disease hazards at source, and implemented the management of hazardous projects and the detection of occupational disease risk factors. Conducted regular inspections of 1,869 occupational disease risk factor items, with a detection rate of 100%
- Performed special rectification measures on the problem of excessive noise in power workshop and water circulation work positions

Management Capability Assessment

- Arranged for a total of 79 employees of subsidiaries to undergo professional skills training and successfully complete assessments in occupational health management



Raising Awareness of Health Protection

- Multiple forms of publicity for greater awareness of the basics of occupational health hazards and protection. Organized various events, including the Occupational Disease Prevention Law Publicity Week, Occupational Health Expert, and the OHS Knowledge Contest
- Organized mental health training, promoted the use of the "mood board" etc., to help employees relieve work and life stress



Yangnong Ruiheng's internal training for registered safety engineer



The Occupational Diseases Law promotion week painting competition



The company has formulated and improved the *Emergency Plan for Production Safety Incidents* and *Emergency Response Plan for Public Health Emergencies* and other plans to consolidate the foundations for emergency protection. We arranged for all subsidiaries to organize systematic emergency capability assessments and on-site inspections, conducted unscripted drills to test the emergency response capabilities, thus enhancing the coordinated emergency rescue and emergency response capabilities at all levels during emergency situations.

Measures to Improve Emergency Management Capacity in 2022



- Revision of Emergency Response Plans**
- Led subsidiaries in the revision of the *Emergency Plan for Production Safety Incidents*
 - Involved all employees in the revision of 639 emergency card sets for various positions

- Unscripted Drills**
- Conducted 306 emergency drills such as fire rescue, emergency leakage, emergency evacuation, and personnel treatment drills
 - "Scenario Construction Technology and Emergency management" training has been rolled out, and 82 typical HSE accident scenarios have been established in combination with HSE risk characteristics

- Establishment of Joint Emergency Response Mechanisms**
- A company headquarters-division-plant tripartite drill mechanism has been established, and a Headquarters - Additives Division - Sennics Tai'an tripartite emergency drill launched
 - Led various plants in key industrial parks to establish a joint emergency response mechanism



Hazardous chemical leakage emergency drill of Sinochem High Performance Fiber Materials

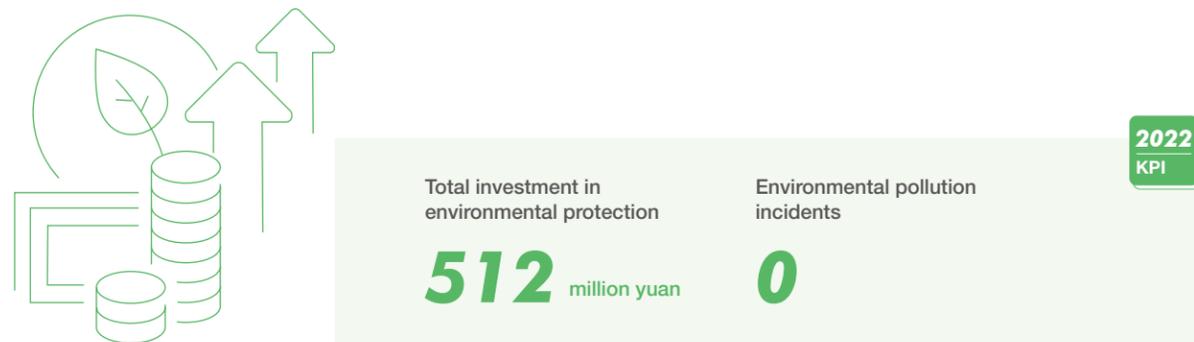


Firefighting robots adopted in Sennics Anhui



Environmental Protection

Sinochem International has formulated documents including an *Environmental Protection Management Measures*, *Environmental Protection Responsibility System* and *Clean Production Management Standard*, and has established an environmental management system covering all business units, set up a full-staff, full-process, full-position environmental risk detection, control and management mechanism. We performed environmental impact assessments on new, modified and expanded projects, and performed regular on-site environmental management monitoring and inspections as well as follow-ups of rectifications to hidden hazards. We are also taking "Creating Green Plant" as a key starting point and continuously promoting refined management of environmental protection.



Pollution Prevention

The company has formulated emission control standards for waste gas, wastewater, solid waste, soil pollution and other pollutants, and insists on a concept of environmental protection throughout the entire production life cycle. Green and clean production technologies are promoted at source, and close attention is paid to the implementation in the production process. With a moderate rise in investment in end treatment, we energetically promoted the development of end treatment capabilities, in order to ensure that waste water, waste gas and other discharges from subsidiaries are significantly below standard limits, and to prevent the occurrence of environmental pollution incidents.

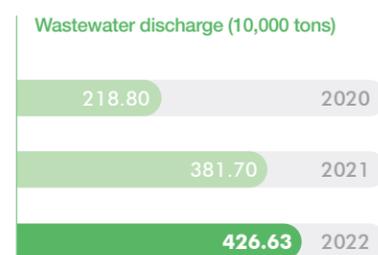
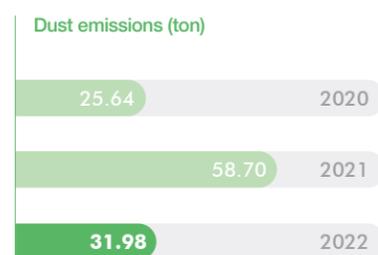
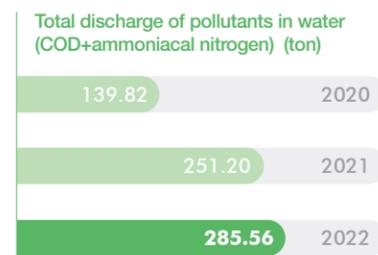
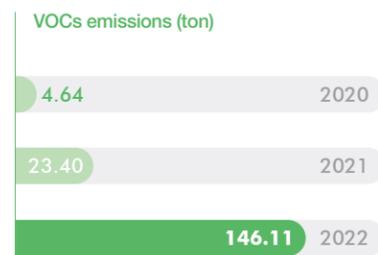
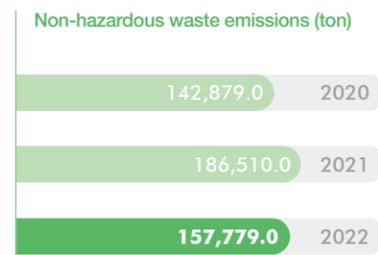
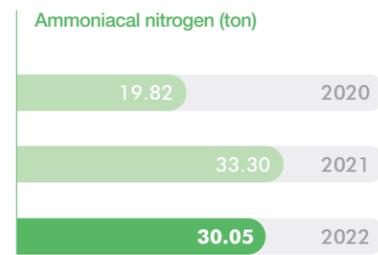
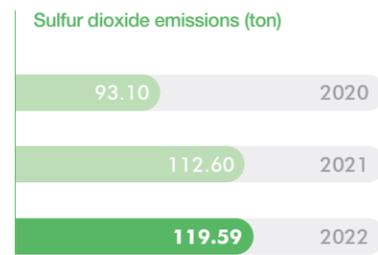
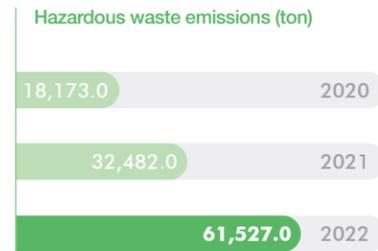
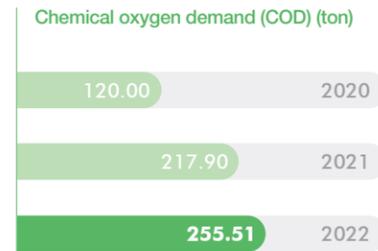
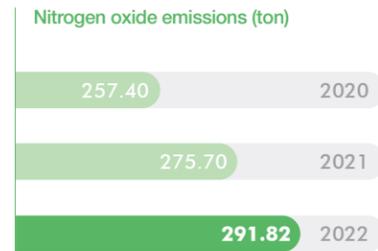
The company has been introducing new technologies, improving pollutant processing capabilities and measures, and continued to carry out special treatment of non-organized emissions in order to ensure that "three-waste" discharges comply with standard limits. Meanwhile, we carried out environmental credit evaluations and environmental protection verifications to promote good environmental protection practice, and continued to promote the sound operation of environmental protection management systems, and effectively control pollution risks.

Key Pollution-control Projects in 2022



Measures for Pollution Prevention and Control Management in 2022

Wastewater Pollution Prevention and Treatment	<ul style="list-style-type: none"> Implemented the separation of sewage from clean water and rainwater; process wastewater was transported through aboveground pipelines separately, and collected by different categories and treated by different characteristics Installed wastewater processing equipment, rainwater collection and other systems, and encouraged the purification of sewage Strict implementation of the record system for operation process indicators and equipment operation records at wastewater treatment facilities, with records including items such as substances added, and monitoring frequency, etc. Strictly applied national and local normative standards for the monitoring of wastewater to ensure the authenticity and accuracy of monitoring data
Air Pollution Prevention and Treatment	<ul style="list-style-type: none"> Enclosed storage facilities, wet operations, sprinkler equipment, dust suppression nets and other measures were adopted in construction projects to reduce dust and particulate matter emissions Regularly tracked and analyzed subsidiaries' waste gas emissions, detected waste gases and formulated relevant reports Establishment of the "One Plant, One Policy" plan for VOCs management; implemented in-depth VOCs management projects, promoted the use of fully sealed samplers, etc.; leak detection and repair (LDAR) has been carried out where VOCs may be an area of concern
Soil and Hazardous Waste Management	<ul style="list-style-type: none"> Establishing of a soil life-cycle monitoring mechanism with operational and newly established plants for the regular monitoring of soil and groundwater quality to prevent soil and groundwater pollution Entrusted appropriately certified third parties to treat different types of waste, and required constructors to treat waste generated during a project in a timely manner Built our own hazardous waste incineration facilities, enhanced our ability to process hazardous waste internally, and reduced the outsourced disposal of hazardous waste Introduced the comprehensive recycling and utilization of byproducts and other materials, to reduce waste discharges and maximize resource utilization Regularly provided all employees with training on waste discharge and triage, and guided and supervised employees to triage and recycle waste on the basis of waste flows
Noise and Odor Management	<ul style="list-style-type: none"> Performed regular noise testing, and maintained and replaced equipment that may generate noise Reduced noise by means of technology upgrades and the optimization of equipment, and reduced noise pollution over the course of a project through the use of sound insulating walls and replacing vacuum pumps, etc. Collected and treated non-organized gas emissions from storage tank areas, temporary hazardous waste storage areas, wastewater treatment plants and other areas, to prevent odors escaping from affected areas
Monitoring and Rectification of Pollution Sources	<ul style="list-style-type: none"> Plants with major sources of pollution have set up online monitoring systems for real-time monitoring, and are subject to supervision by local environmental protection bureaus 12 plants and 54 sets of online monitoring systems were connected to Sinochem Holding's environmental monitoring station, providing early warnings for various scenarios including zero value, lower than detection baseline value, continuous fixed value, exceeding standard value, etc.



Note: 1. The Yangnong Ruiheng Phase 1 project is being constructed in stages. In 2022, the ionic membrane, epichlorohydrin, epoxy resin and other equipment entered operation, while Fopia Chemicals was incorporated into the statistics from April 2022. Due to the aforementioned factors, waste gas, wastewater and other emissions were increased compared to 2021
 2. The data does not include overseas subsidiaries
 3. Please refer to the *Sinochem International 2022 Annual Report* for specific emission indicators for each subsidiary production enterprise
 4. The total waste recovery data for 2020 and 2021 were not counted

2022 KPI

Compliance rate of exhaust gas, wastewater discharge, and industrial enterprise noise: **100%**

Compliant solid industrial waste disposal rate: **100%**

Hazardous waste disposed of by contractors: **46,658 tons**

Major leak incidents on record: **0**

Energy Conservation and Emissions Reduction

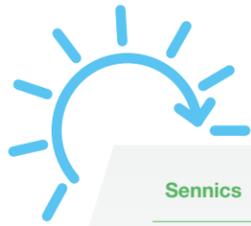
The company has formulated documents including *Energy Management and Climate Change Policy*, *Administrative Measures for Energy Conservation and Clean Production Management Standard*. We have improved process-wide energy conservation management covering clean energy use, process equipment upgrades, clean technology innovation and other areas. We also have promoted resource recycling and greater energy efficiency by means of energy conservation assessments, energy audits, energy balance testing and other measures.

2022 KPI

Total investment in energy conservation: **89.65 million yuan**

Outstanding Energy Conservation and Carbon Reduction Projects in 2022 (some projects were completed in 2021)

Project	Description	Annual Carbon Reduction (unit: tons of CO ₂ equivalent)	
Yangnong Ruiheng	Nitrochlorobenzene plant low-carbon project	Adopted advanced air cooling systems to cool down hot water; measures such as high-performance waste heat boilers and recycling and reuse of steam condensate to reduce system water supply and steam consumption	50,000
Yangnong Ruixiang	Energy structure optimization and upgrade project	Newly added a circulating water system with a new high-efficiency plate condensers to use circulating water as a condensing medium in place of 7°C water; converted steam into electricity	19,693
Yangnong Ruitai	Low-carbon project	Newly added a 15,000 tons/year hazardous waste incineration carbon emission reduction equipment, used waste heat to generate a steam by product	11,575
Sennics Tai'an	Product solvent recovery and impurity removal project	Solvent recovery and impurity removal and process optimization to purify and recover solvents, and reduce steam consumption	3,400
Sennics Shandong	Granulator head transformation project	Modified the original granulator head to improve the uniformity of the material granules; modified the heating method on the head to reduce damage to the crystallinity of the material, reduce sieve residue and large particles, reduce cost and unit consumption, and increase yields	1,200
Sinochem Hebei Xinbao	Vacuum system technical transformation project	Optimized the selection of equipment based on processing conditions and the operating environment, ensuring the operational stability of the system and equipment utilization, improving product quality, reducing energy consumption, enabling the reasonable reuse of heat, and reducing the waste of resources	1,086



Clean Energy Use in 2022

Sennics

Signed power supply contracts with green electricity providers, purchasing a total of **4,400** MWh of green electricity in 2022

Signed photovoltaic power generation projects with external specialist companies

Yangnong Ruitai

Purchased **75,800** MWh of green electricity in 2022

Sinochem (Ningbo) RO Memtech

Signed a 1,200 KWP rooftop distributed photovoltaic power generation project with external specialist companies. Once the project comes online, it will enable an annual reduction in carbon dioxide emissions of **1,037.4** tons of CO₂ equivalent

Sinochem (Ningxia) Lithium Battery Materials

Purchased **19,787** MWh of green electricity in 2022

Energy consumption (industrial) (ton standard coal equivalent)

484,386.71	2020
712,698.04	2021
888,628.77	2022

Power consumption (10,000 KW/h)

91,714.56	2020
86,517.36	2021
165,539.66	2022

Gas consumption (1,000 m³)

16,028.94	2020
30,497.02	2021
50,879.60	2022

Coal consumption (ton standard coal equivalent)

347,803.81	2020
429,227.11	2021
436,171.15	2022

Steam consumption (MkJ)

2,022,518.02	2020
3,323,869.81	2021
6,927,195.30	2022

Energy consumption/ton of product (tons of standard coal equivalent/ton of product)

0.40	2020
0.38	2021
0.39	2022

Notes: 1. The Yangnong Ruiheng Phase 1 project is being constructed in stages. In 2022, the ionic membrane, epichlorohydrin, epoxy resin and other equipment entered operation; the Yangnong Ruitai PA66 project started production; Sinochem High Performance Fiber Materials increased output in 2022; Sennics Shandong adjusted its energy structure in 2022, switching to outsourced steam. Due to the aforementioned factors, energy consumption in 2022 was increased compared to 2021
2. The data does not include overseas subsidiaries

Water Resource Management

The company has formulated a *Water Resource Management Policy* and continued to promote water management. We implemented efficiency enhancing initiatives focusing on key water-using enterprises and carried out regular analyses and audits of rational water use to continuously improve the recycling rate of water resources and reduce the consumption of fresh water through new technology. All the company's water resources are derived from the municipal water supply, and neither water intake nor sewage discharge has had a significant impact on the water source.

Key Water Management Measures in 2022

Water Conservation

- Implementation of cleaner production, optimizing of production processes, and the introduction of energy-saving and water-saving technologies

Water Recycling

- Refrigeration unit upgrades and waste heat utilization projects have helped to reduce the amount of steam used in production processes
- Use of steam condensate in the water circulation system, evaporative cooling, and superheated steam to replenish water and heating water
- Purchased and adopted water-saving equipment, and water recycling and cooling systems, inter alia, to reduce water resource consumption

Yangnong Ruixiang

A reclaimed water reuse and environmental protection upgrade and transformation project have achieved the reuse of **560,000** tons/year of reclaimed water

Yangnong Ruiheng

A large-scale water-saving fog dissipation cooling tower project has achieved water savings of **556,002** tons

Yangnong Ruixiang

A sewage purification and environmental protection transformation and upgrade project has achieved an annual saving of **650,000** tons of fresh water

Sennics Shandong

A steam condensate water recycling project provided annual water savings of **537,035** m³

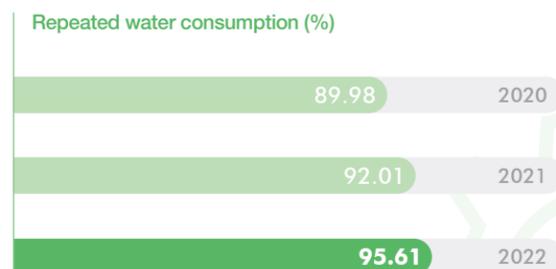
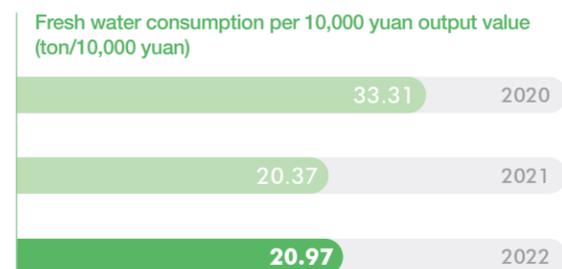
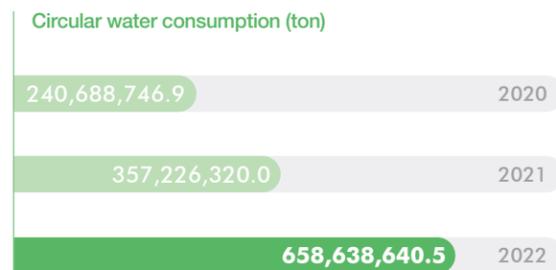
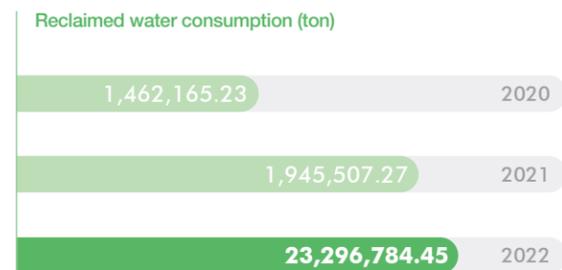
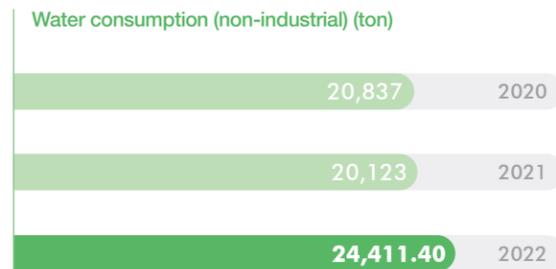
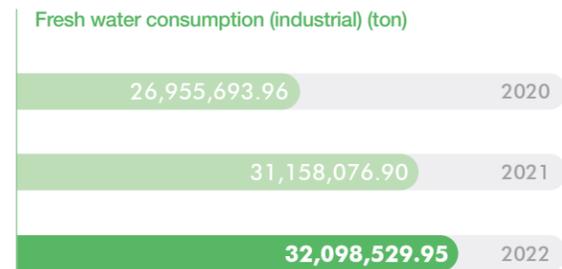
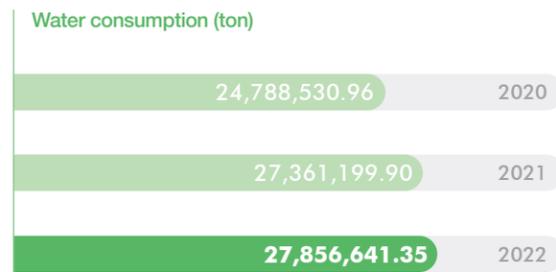
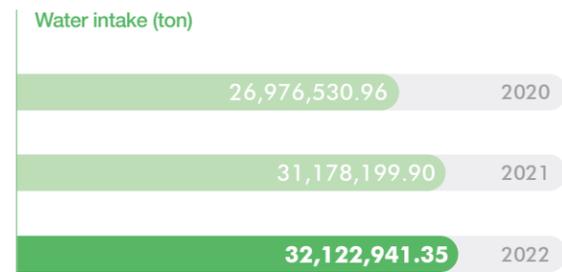
Sinochem High Performance Fiber

An ultrafiltration concentrated water recycling project provided daily water savings of **58** tons

A polymerization mother liquid membrane filtration wastewater discharge reduction project provided daily water savings of **40** tons

Key Water Conservation Technology Projects in 2022





Note: 1. How the reuse rate is calculated: $(\text{Circulating water consumption} + \text{Reclaimed water consumption}) / (\text{Circulating water consumption} + \text{Reclaimed water consumption} + \text{Fresh water consumption (industrial)} + \text{Water consumption (non-industrial)})$
 2. Water consumption = water intake - discharges
 3. The data does not include overseas subsidiaries
 4. During the reporting period, there was no water stress in the regions where our subordinate plants were located

Environmental Advocacy

The company continues to develop green plants and upgrade its existing green plants, and to promote green innovation along the entire production process from equipment and raw material procurement to packaging and production with the goal of building an efficient, clean, low-carbon, and circular green manufacturing system, and closely and carefully integrates environmental management into the entire production process.

The company attaches great importance to biodiversity conservation and has carried out EIAs and biodiversity impact studies in the project pre-feasibility study stage and plant site selection stage to fundamentally eliminate and reduce its impact on the ecosystem. All of the company's plants and projects are located far away from biological reserves, and all production and manufacturing processes have had no significant impact on the ecological environment.

2022 KPI

As of end-2022, we have built green plants by the standards of the Ministry of Industry and Information Technology	Green plants by the standards of the China Petroleum and Chemical Industry Federation	Green plants according to provincial standards	Ratio of operations with local community participation, impact assessments and development plans
5	10	4	100 %



Sinochem Hebei Xinbao and Yangnong Ruitai won
“Green Plant” title from the Ministry of Industry and Information Technology in 2022

Sinochem Hebei Xinbao, Sinochem Hebei Fuheng, and Sinochem (Ningxia) Lithium Battery Materials won
“Green Plant” title from the China Petroleum and Chemical Industry Federation in 2022



The company encourages the use of green processes, reductions in raw material consumption, and promotes the recycling of raw materials and packaging materials. We achieve the recycling and reuse of input materials by optimizing processes and technologies, we use environmentally friendly raw materials, and reduce the resource and energy consumption of products and materials; we encourage the replacement of hazardous or toxic raw materials with less hazardous or toxic alternatives, and use clean production models to reduce the production of hazardous waste and toxic substances.

Sinochem International Developed a Fine Chemical Byproduct Salt Resource Recycling Project



Sinochem International's Yangnong Ruitai byproduct salt resource recycling project can effectively remove organic matter in salt-containing wastewater first by using wet oxidation and evaporation processes, then by further removing the organic matter in the waste salt using a conveyor furnace + smelting furnace high-temperature oxidization process, to obtain an industrial-standard salt, which is then reused in our ion-membrane caustic soda systems. The project has processed a total of 150,000 t/a of high-saline content wastewater, and 21,766.78 t/a of industrial salt is obtained following further processing in a high-temperature oxidization furnace. This not only saved salt resources, but also effectively alleviated the problem of treating high-salt content wastewater, finally achieving the comprehensive reuse of waste saltwater resources.

Sinochem International Built a Green Circular Integrated Industry Chain



Sinochem Lianyungang Circular Economy Industry Park C3 project covers the entire industry chain, from upstream raw materials to key intermediates, high-end products and end applications, and uses innovative green low-carbon circular processes and technologies to achieve the high-efficiency circular added-value use of the "hydrogen" resource of byproduct hydrogen, as well as full recycling of the "sodium" resources of byproduct salts, achieving new breakthroughs in areas such as extending the circular economy product chain and achieving reductions and reuse of resources, inter alia.



Sinochem Hebei Xinbao Won 2022 "Green Plant" Title from the Ministry of Industry and Information Technology



In recent years, Sinochem Hebei Xinbao has maintained a "green manufacturing" development path, steadily promoted Sinochem Holding's FORUS and operational excellence systems, and achieved remarkable results in clean production, energy savings and environmental governance, inter alia. This year's "Green Plant" nomination by the Ministry of Industry and Information Technology follows similar nominations including "Hebei Province Green Plant" and "China Petrochemical Federation Green Plant", and is further recognition of its process of promoting green development.

As an advocate of sustainable consumption, the company utilizes recyclable packaging materials, etc., for its product packaging; works to reduce resource and energy consumption for products and materials in storage, transportation, and other process links; has worked to establish a packaging recycling management system; realizes packaging recycling monitoring along its entire production process; and minimized packaging pollution.

In 2022, the company formulated a *Recyclable Packaging Plan* to promote the introduction of recyclable packaging materials both at home and with its suppliers. Using dimensional statistics ranging from reducing the use of packaging materials, the preferred use of packaging containers made from reusable materials, and the recycling of packaging containers, inter alia, we identified project cases on promoting carbon emission reductions using packaging recycling methods by itself and its suppliers. As of the end of 2022, a total of 14 recycled packaging material projects had been implemented, in which 4 projects were implemented by suppliers, generating economic benefits exceeding 50 million yuan.



Appendix

List of ESG Policies

Theme	Topic	Laws and Regulations to be Complied with	Internal Policies Formulated
Business Ethics	Anti-corruption	<i>Company Law of the People's Republic of China</i> <i>Anti-Money Laundering Law of the People's Republic of China</i>	<i>Anti-corruption System Management Measures</i> <i>Administrative Measures for the Management of Official Gifts Received by Employees</i>
	Anti-unfair Competition	<i>Anti-unfair Competition Law of the People's Republic of China</i> <i>Anti-Monopoly Law of the People's Republic of China</i>	<i>Integrity and Compliance Handbook</i>
	Information Security	<i>Cybersecurity Law of the People's Republic of China</i> <i>Personal Information Protection Law of the People's Republic of China</i>	<i>Confidentiality Management Measures</i> <i>Digital Infrastructure Management Measures</i> <i>Network Security Management Rules</i> <i>Emergency Plan for Network Security Incidents</i> <i>Information Security Management Measures</i> <i>Information Security Risk Assessment Management Rules</i> <i>Information System Vulnerability and Defect Management Rules</i>
Sustainable Supply Chain	Supplier Management	<i>Bidding Law of the People's Republic of China</i> <i>Regulation on the Implementation of the Bidding Law of the People's Republic of China</i>	<i>Labor Employment Management Measures</i> <i>Contractor HSE Risk Management and Control Standard</i> <i>Supplier HSE Risk Management and Control Standard</i> <i>Sustainable Purchasing Management Measures</i> <i>Supplier Code of Conduct</i>
Labor Rights	Employee Rights Protection	<i>Labor Law of the People's Republic of China</i> <i>Labor Contract Law of the People's Republic of China</i> <i>Regulations on the Prohibition of Child Labor</i> <i>Special Regulations on the Labor Protection of Female Employees</i>	<i>Employee Recruitment Management Measures</i> <i>Labor Employment Management Measures</i>
	Decent Working Conditions	<i>Social Insurance Law of the People's Republic of China</i> <i>Minimum Wage Regulations</i>	<i>Compensation and benefits Management Measures</i> <i>Leave Management Measures</i>
	Democratic Management and Communication	<i>Trade Union Law of the People's Republic of China</i>	<i>Labor Union Work Management Regulations</i>
	Career Development and Training		<i>Employee Performance Management Measures</i> <i>Training Management Measures</i>

Theme	Topic	Laws and Regulations to be Complied with	Internal Policies Formulated
Customer Health and Safety	Customer Health and Safety	<i>Product Quality Law of the People's Republic of China</i>	<i>Customer Health and Safety Protection Management Measures</i>
		<i>Law of the People's Republic of China on the Protection of Consumer Rights and Interests</i>	<i>Production Enterprise Quality Management Measures</i>
Health, Safety Environment	Occupational Health and Safety	<i>Labor Law of the People's Republic of China</i> <i>Law of the People's Republic of China on Prevention and Control of Occupational Diseases</i> <i>Work Safety Law of the People's Republic of China</i> <i>Fire Prevention Law of the People's Republic of China</i> <i>Emergency Response Law of the People's Republic of China</i> <i>Occupational Disease Classification and Catalog</i>	<i>Health & Safety and Environmental Protection Management Regulations</i> <i>Occupational Health Management Measures</i> <i>Standard for the Daily Monitoring and Control of Occupational Disease Risk Factors</i> <i>Safety Production Management Measures</i> <i>HSE Risk Prevention and Control Management Standard</i> <i>Personal Protection Equipment Management and Control Standard</i> <i>Emergency Response Plan for HSE Accident</i> <i>HSE Training Management Measures</i>
		Chemical Management	<i>Hazardous Chemical Safety Management Regulations</i> <i>Hazardous Chemical Catalog</i>
Pollution Prevention		<i>Environmental Protection Law of the People's Republic of China</i> <i>Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution</i> <i>Law of the People's Republic of China on the Prevention and Control of Water Pollution</i> <i>Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste</i> <i>Law of the People's Republic of China on Prevention and Control of Pollution From Environmental Noise</i> <i>National Hazardous Waste Catalogue</i>	<i>Environmental Protection Management Measures</i> <i>Clean Production Management Standard</i> <i>Emergency Plan for Environmental Emergencies</i> <i>Atmospheric Pollution Prevention and Control Standard</i> <i>Wastewater Pollution Prevention and Control Standard</i> <i>Solid Waste Prevention and Control Standard</i> <i>Noise Pollution Prevention and Control Standard</i> <i>Soil Pollution Risk Management Measures</i> <i>Management and Control Standard for the Classification of Waste</i>
Energy Consumption		<i>Energy Conservation Law of the People's Republic of China</i>	<i>Environmental Protection Management Measures</i> <i>Energy Conservation Management Measures</i>
Water Resource Management		<i>Water Law of the People's Republic of China</i>	<i>Wastewater Pollution Prevention and Control Standard</i>
Climate Change and Carbon Management			<i>Energy Conservation Low-carbon Management Measures of Sinochem Holdings</i> <i>Energy Conservation Low-carbon Management Measures</i>

Key Performance Indicators

Theme	Key indicators	Unit	Year 2022	Explanation
Business Ethics	Percentage of employees training on business ethics issues (e.g., e-learning)	%	85	
	Number of corruption incidents recognized		0	I.e., litigation relating to corruption and bribery
	Number of recognized information security incidents		0	I.e., complaints and leaks arising from violations of customer privacy
	Percentage of business locations that performed internal audits / risk assessments for business ethics issues	%	100	
	Percentage of business locations with ISO 27000 (or other equivalent or similar standard) certified information security management systems (ISMS)	%	100	All network servers at Sinochem International and its subsidiaries are managed in a uniform manner by the headquarters, which is ISO 27001 certified, and its subsidiaries do not independently carry out information security management system certification
Sustainable Supply Chain	Percentage of targeted suppliers who have signed supplier code of conduct	%	100	Targeted suppliers are core suppliers. Core supplier refers to suppliers whose materials and services are core materials for the enterprise's production and operations, and suppliers whose quality, price and supply sustainability have a significant impact on the production and operations of the enterprise
	Percentage of targeted suppliers who have undergone a CSR assessment (e.g., in the form of a questionnaire)	%	75.81	
	Percentage of targeted suppliers who have undergone an on-site CSR audit	%	61.54	
	Percentage of suppliers who have signed contracts that include clauses on environmental, labor and human rights requirements	%	17.07	
	Percentage of buyers in all regions who have undergone sustainable purchasing training	%	100	
	Number of audited/assessed suppliers participating in improvement initiatives or capacity building		41	
	Labor Rights	Percentage of employees in all locations who have received diversity, discrimination and/or harassment training	%	
	Percentage of workplaces that have undergone human rights audits or impact assessments	%	85	
	Percentage of employees from minority and/or disadvantaged groups	%	0.66	
	Percentage of employees from minority and/or disadvantaged groups in senior management positions (excluding the Board of Directors)	%	2.75	
	Percentage of women in the company's total workforce	%	24.66	
	Percentage of women in senior management positions (excluding the Board of Directors)	%	18.35	

Theme	Key indicators	Unit	Year 2022	Explanation
Labor Rights	Average hours of employee training	hours	37.72	
	Percentage of employees in all regions who have received vocational or skill-related training	%	100	
	Percentage of employees in all regions who have received regular performance and career development assessments	%	100	
	Percentage of employees in all regions covered by a formally elected employee representative	%	100	
	Percentage of employees in all regions covered by a formal collective agreement governing working conditions	%	100	
Health & Safety and Environment	Percentage of employees represented by formal joint management-worker health and safety committees	%	100	
	Percentage of workplaces that have undergone employee health and safety risk assessments	%	100	Excluding enterprises that have only entered operation for a relatively short period of time
	Percentage of subsidiaries that have received occupational health and safety management system certification	%	100	
	Lost-time accident rate for the directly employed workforce	-	0.0011	
	Lost-time serious accident rate for the directly employed workforce	-	0	
	Percentage of employees who have received training on environmental issues	%	100	
	Percentage of workplaces with environmental risk assessments	%	100	Excluding enterprises that have only entered operation for a relatively short period of time
	Percentage of subsidiaries that have received environmental management system certification	%	100	
	Total energy consumption	MWh	7,230,502.64	Total energy consumption includes electricity, natural gas, coal, steam, fuel and others
	Total renewable energy consumption	MWh	99,987.0	
	Water consumption	liter	27,856,641,350.0	
	Total discharges of pollutants in water	ton	285.56	Pollutants in water include COD and ammonia nitrogen
	Hazardous waste discharges	ton	61,527.0	
Non-hazardous waste discharges	ton	157,779.0		
Total waste recovery	ton	201,870.0		
Direct (Scope 1) greenhouse gas emissions	tons of CO ₂ equivalent	1,544,578		
Indirect (Scope 2) greenhouse gas emissions	tons of CO ₂ equivalent	1,723,777		

SDGs Actions and Performance

Sustainable Development Goals	Our Framework for Action	Section
	<ul style="list-style-type: none"> Increase poverty alleviation assistance, make efforts in industrial assistance, consumption assistance, and education assistance, consolidate and expand the achievements of poverty alleviation, and effectively connect with rural revitalization 	Community Building
	<ul style="list-style-type: none"> Carry out a series of assistance measures to help rural masses obtain a satisfactory income and reliable social security 	Community Building
	<ul style="list-style-type: none"> Establish an improve a sound occupational health and safety management system for employees, identify occupational health risk factors and regularly organize physical examinations for employees, actively prevent occupational diseases Organize various cultural and sports activities, mental health training, etc. to help employees work happily and live a healthy life 	Employee Rights Intrinsic Safety
	<ul style="list-style-type: none"> Create a comprehensive horizontal and vertical employee training system to help employees continuously improve their professional value and capabilities Make supporting education an important action in the field of social responsibility to help improve education quality and opportunities 	Talents Development Community Building
	<ul style="list-style-type: none"> Adhere to gender equality, provide equal pay for equal work, strictly prohibit discrimination and harassment incidents, and provide employees with a fair, just, and diverse working environment Set up a female employee committee, establish a "mommy huts", mother and child room, while strictly implementing the regulations on women's maternity and breastfeeding leave, and providing support for female employees 	Employee Rights
	<ul style="list-style-type: none"> Continuously optimize production processes, technical processes, and water circulation system, to continuously improve the recycling rate of water resources 	Environmental Protection
	<ul style="list-style-type: none"> Actively develop new energy business, and deploy energy industry chains Improve energy efficiency and reduce energy consumption through R&D and technological improvement Purchase and use clean energy, gradually increasing the proportion of renewable energy 	Environmental Protection
	<ul style="list-style-type: none"> Comply with international human rights and domestic employment laws and regulations; protect the basic human rights of internal and external employees including the supply chain, and establish channels for complaints and reports about violations of workers' human rights Provide employees with stable job opportunities, a good working environment, competitive salary, and benefits Establish a multi-incentive mechanism covering the short-, medium- and long-term to achieve simultaneous growth of employee income and enterprise development 	Employee Rights Talents Development
	<ul style="list-style-type: none"> Adhere to the strategy of driving scientific and technological innovation, build an integrated scientific and technological innovation system, and focus on the construction of scientific and technological innovation capabilities and the construction of scientific and technological talent teams Continue to increase investment in scientific research, and promote continuous technological progress and accelerated product replacement 	Technological Innovation

Sustainable Development Goals	Our Framework for Action	Section
	<ul style="list-style-type: none"> Prohibit any form of discrimination such as gender, region, religion, nationality, etc. Prohibit child labor and forced labor Improve employee diversity in terms of gender, ethnicity and other attributes, guarantee equal opportunities for employees in all aspects of recruitment and promotion 	Employee Rights
	<ul style="list-style-type: none"> Carry out in-depth investigation and management of hazardous chemicals and related factories and parks for potential safety hazards, troubleshoot and address hidden hazards at each link of the supply chain, and do our utmost to reduce impacts on surrounding communities Have employees share information about ecological protection with the community 	Intrinsic Safety Environmental Protection
	<ul style="list-style-type: none"> Enhance chemical and waste management and the environmentally sound management of chemicals and waste throughout their life cycle to reduce adverse impacts on community and the environment Implement a sustainable production model, strictly enforce national and local pollutant discharge standards, and continuously strengthen the HSE management system to ensure safe production, occupational health and environmental protection standards 	Chemicals Management Environmental Protection
	<ul style="list-style-type: none"> Identify and manage climate risks in accordance with the TCFD framework, and establish a sound climate risk response mechanism Set scientific carbon reduction targets, prepare carbon peak and carbon neutral action plans, and comprehensively deploy low-carbon development plans 	Topic: Responding to Climate Change
	<ul style="list-style-type: none"> Monitor the quality of waste water, increase waste water recycling, and ensure that discharge complies with standards Protect the marine ecological environment and biodiversity, and take action to reduce plastic waste 	Environmental Protection
	<ul style="list-style-type: none"> All projects must carry out environmental impact assessments as required, to avoid carrying out projects in areas that would affect biodiversity, and take targeted ecological protection and restoration measures to protect biodiversity 	Environmental Protection
	<ul style="list-style-type: none"> Abide by business ethics, strengthen the publicity and implementation of business ethics among employees and suppliers, keep under strict supervision, and prevent corruption Adhere to the rule of law and compliant operation, and build an authoritative and efficient audit and supervision system Strictly abide by relevant laws and regulations, and participate fairly in market competition 	Compliance Management Business Ethics
	<ul style="list-style-type: none"> Support international initiatives such as the United Nations Global Compact, actively participate in international organizations and industry associations, and promote cooperation to jointly promote sustainable development with partners Integrate environmental and human rights requirements into supplier management, carry out capacity improvement, and build a sustainable supply chain with suppliers 	Highlights of the Year for ESG Governance Responsible Procurement

GRI Content Index

Statement of use	Sinochem International has reported the information for the period from January 1, 2022 to December 31, 2022 in accordance with the GRI Standards.		
GRI 1 used	GRI 1: Foundation 2021		
GRI Standard	Disclosure	Page(s)	Notes
GRI 2: General Disclosures 2021			
2-1	Organizational details	7-9	
2-2	Entities included in the organization's sustainability reporting	3	
2-3	Reporting period, frequency and contact point	3	
2-4	Restatements of information	No applicable	No information restated during the reporting period
2-5	External assurance	105-106	
2-6	Activities, value chain and other business relationships	7-9, 49	
2-7	Employees	63	
2-8	Workers who are not employees	63	
2-9	Governance structure and composition	31-32	
2-10	Nomination and selection of the highest governance body	32	
2-11	Chair of the highest governance body	4	
2-12	Role of the highest governance body in overseeing the management of impacts	4, 31	
2-13	Delegation of responsibility for managing impacts	4	
2-14	Role of the highest governance body in sustainability reporting	4	
2-15	Conflicts of interest	Refer to our <i>2022 Annual Report</i> , PDF 136, 139-142	
2-16	Communication of critical concerns	4, 32-33	
2-17	Collective knowledge of the highest governance body	5-6	
2-18	Evaluation of the performance of the highest governance body	14	
2-19	Remuneration policies	14	
2-20	Process to determine remuneration	32	
2-21	Annual total compensation ratio	Confidentiality constraints	Disclosure omitted due to commercial confidentiality restrictions
2-22	Statement on sustainable development strategy	4	
2-23	Policy commitments	15, 37, 63, 93-94	

GRI Standard	Disclosure	Page(s)	Notes
2-24	Embedding policy commitments	14	
2-25	Processes to remediate negative impacts	64	
2-26	Mechanisms for seeking advice and raising concerns	37, 64	
2-27	Compliance with laws and regulations	93-94	
2-28	Membership associations	15	
2-29	Approach to stakeholder engagement	18	
2-30	Collective bargaining agreements	64, 80	
GRI 3: Material Topics 2021			
3-1	Process to determine material topics	17	
3-2	List of material topics	17	
Economy			
GRI: 201 Economy 2016			
3-3	Management of material topics	25, 66	
201-1	Direct economic value generated and distributed	8	
201-2	Financial implications and other risks and opportunities due to climate change	27	
201-3	Defined benefit plan obligations and other retirement plans	66	
201-4	Financial assistance received from government	Refer to our <i>2022 Annual Report</i> , PDF 283	
GRI: 202 Market Presence 2016			
3-3	Management of material topics	66	
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	66	
202-2	Proportion of senior management hired from the local community	69	
GRI: 204 Procurement Practices 2016			
3-3	Management of material topics	48	
204-1	Proportion of spending on local suppliers	49	
GRI: 205 Anti-corruption 2016			
3-3	Management of material topics	37	

GRI Standard	Disclosure	Page(s)	Notes
205-1	Operations assessed for risks related to corruption	95	
205-2	Communication and training about anticorruption policies and procedures	37-38	
205-3	Confirmed incidents of corruption and actions taken	37-38	
GRI: 206 Anti-competitive Behavior 2016			
3-3	Management of material topics	39	
206-1	Legal actions for anti-competitive behavior, antitrust, and monopoly practices	39	
GRI: 207 Tax 2019			
3-3	Management of material topics	36	
207-1	Approach to tax	36	
207-2	Tax governance, control, and risk management	36	
207-3	Stakeholder engagement and management of concerns related to tax	36	
207-4	Country-by-country reporting	Refer to our 2022 Annual Report, PDF 178, 191	
Environment			
GRI: 301 Materials 2016			
3-3	Management of material topics	90	
301-1	Materials used by weight or volume	90-92	
301-2	Recycled input materials used	90-92	
301-3	Reclaimed products and their packaging materials	90-92	
GRI: 302 Energy 2016			
3-3	Management of material topics	86	
302-1	Energy consumption within the organization	87	
302-2	Energy consumption outside of the organization	Information unavailable / incomplete	Not yet counted, gradually improving
302-3	Energy intensity	87	
302-4	Reduction of energy consumption	86-87	
302-5	Reductions in energy requirements of products and services	26, 91	
GRI: 303 Water and Effluents 2018			
3-3	Management of material topics	83, 88	
303-1	Interactions with water as a shared resource	88	

GRI Standard	Disclosure	Page(s)	Notes
303-2	Management of water discharge-related impacts	83-85	
303-3	Water withdrawal	88-89	
303-4	Water discharge	85, 88	
303-5	Water consumption	89	
GRI: 305 Emissions 2016			
3-3	Management of material topics	25	
305-1	Direct (Scope 1) GHG emissions	28	
305-2	Energy indirect (Scope 2) GHG emissions	28	
305-3	Other indirect (Scope 3) GHG emissions	Information unavailable / incomplete	Not yet counted, gradually improving
305-4	GHG emissions intensity	28	
305-5	Reduction of GHG emissions	28, 86	
305-6	Emissions of ozone-depleting substances (ODS)	Not applicable	No ODS emissions during company operations and production processes
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	85	
GRI: 306 Waste 2020			
3-3	Management of material topics	83	
306-1	Waste generation and significant waste-related impacts	83-86	
306-2	Management of significant waste-related impacts	83-86, 90-92	
306-3	Waste generated	85	
306-4	Waste diverted from disposal	86, 96	
306-5	Waste directed to disposal	85-86	
GRI: 308 Supplier Environmental Assessment 2016			
3-3	Management of material topics	48	
308-1	New suppliers that were screened using environmental criteria	49	
308-2	Negative environmental impacts in the supply chain and actions taken	48	
Society			
GRI: 401 Employment 2016			
3-3	Management of material topics	63-64	

GRI Standard	Disclosure	Page(s)	Notes
401-1	New employee hires and employee turnover	63	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	66	
401-3	Parental leave	66	
GRI: 402 Labor/ Management Relations 2016			
3-3	Management of material topics	64	
402-1	Minimum notice periods regarding operational changes	64	
GRI: 403 Occupational Health and Safety 2018			
3-3	Management of material topics	80	
403-1	Occupational health and safety management system	80	
403-2	Hazard identification, risk assessment, and incident investigation	80-81	
403-3	Occupational health services	80-81	
403-4	Worker participation, consultation, and communication on occupational health and safety	75, 80-81	
403-5	Worker training on occupational health and safety	79-82	
403-6	Promotion of worker health	79-82	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	77-78, 80-82	
403-8	Workers covered by an occupational health and safety management system	80-81	
403-9	Work-related injuries	81, 96	
403-10	Work-related ill health	80-81	
GRI: 404 Training and Education 2016			
3-3	Management of material topics	68	
404-1	Average hours of training per year per employee	70, 96	
404-2	Programs for upgrading employee skills and transition assistance programs	69-70	
404-3	Percentage of employees receiving regular performance and career development reviews	96	
GRI: 405 Diversity and Equal Opportunity 2016			
3-3	Management of material topics	63-64	
405-1	Diversity of governance bodies and employees	63-65	
405-2	Ratio of basic salary and remuneration of women to men	Confidentiality constraints	The company adheres to the principle of "equal pay for equal work" and is committed to creating an equal and diverse workplace. Due to information confidentiality requirements, disclosure is omitted

GRI Standard	Disclosure	Page(s)	Notes
GRI: 406 Non-Discrimination 2016			
3-3	Management of material topics	64	
406-1	Incidents of discrimination and corrective actions taken	64	
GRI: 407 Freedom of Association and Collective Bargaining 2016			
3-3	Management of material topics	65	
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	65	
GRI: 408 Child Labor 2016			
3-3	Management of material topics	64	
408-1	Operations and suppliers at significant risk for incidents of child labor	65	
GRI: 409 Forced or Compulsory Labor 2016			
3-3	Management of material topics	64	
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	65	
GRI: 414 Supplier Social Assessment 2016			
3-3	Management of material topics	48	
414-1	New suppliers that were screened using social criteria	49	
414-2	Negative social impacts in the supply chain and actions taken	48	
GRI: 416 Customer Health and Safety 2016			
3-3	Management of material topics	53	
416-1	Assessment of the health and safety impacts of product and service categories	53, 59	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	53	
GRI: 417 Marketing and Labeling 2016			
3-3	Management of material topics	53	
417-1	Requirements for product and service information and labeling	53	
417-2	Incidents of non-compliance concerning product and service information and labeling	53	
417-3	Incidents of non-compliance concerning marketing communications	53	
GRI: 418 Customer Privacy 2016			
3-3	Management of material topics	39	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	40	

Third Party Assurance



Independent Assurance Statement

Introduction

TÜV Rheinland (Guangdong) Ltd., member of TÜV Rheinland Group, Germany (hereinafter "TÜV", "We") has been entrusted by Sinochem International Corporation (hereinafter "Sinochem International", "the Company") to conduct independent assurance of Sinochem International 2022 Sustainability Report (hereinafter "the Report"). All contractual contents for this assurance engagement rest entirely within the responsibility of Sinochem International. Our task was to give a fair and adequate judgment on the Report.

The intended users of this assurance statement are stakeholders who have relevance to the Sinochem International overall Sustainability Performance and impacts of its business activities during year 2022 (1 January 2022 ~ 31 December 2022).

TÜV Rheinland is a global service provider of Corporate Social Responsibility (CSR) & Sustainability Services in over 65 countries, having qualified professionals in the field of Corporate Sustainability Assurance, Environment, Social and Stakeholder Engagement. We have maintained complete impartiality and independence during the assurance engagement, and not been involved in the preparation of the Report contents.

Assurance Standard

This assurance engagement was performed in accordance with the AA1000 Assurance Standard (AA1000AS v3), and adherence to the AA1000 AccountAbility Principles of Inclusivity, Materiality, Responsiveness and Impact.

Scope & Type of Assurance:

Our assurance engagement covers the following:

- In accordance with the GRI Sustainability Reporting Standards 2021 (GRI Standards 2021), and information and data related to economics, environment & social, and material topics and sustainability performance disclosed in the Report within reporting boundaries.
- Shanghai Stock Exchange's *Corporate Social Responsibility Report guidelines*.
- With reference to United Nations Sustainable Development Goals.
- Evaluation of disclosed information and data in the Report as per the Assurance Standards.
- Type-1, Moderate Assurance Level as per the AA1000AS v3.

Limitations

The assurance was conducted based on a moderate level of assurance under the AA1000AS for engagement. Information and performance data subject to assurance is limited to the contents of the Report.

Assurance Methodology

TÜV has reviewed the Report contents supported by documentary evidence and management representations, and assessed the processes undertaken by Sinochem International from source to aggregation in disclosure of information and data pertaining to sustainability performance. Our judgment is made based on the objective review of reported information against the assurance criteria and the AA1000 Assurance Standards, including AA1000 AccountAbility Principles of inclusivity, materiality, responsiveness, and impact.

Analytical methods and the performance of interviews as well as data verification were used on a sample basis, to verify and validate the correctness of reported data and contents in light of contractual agreement and the factual Sinochem International sustainability strategy, governance, stakeholder engagement, risk assessment, and material topics determination process as mentioned in the Report. Our work covered interviews with representatives from Sinochem International, including senior management at executive and functional levels, and relevant employees who are responsible for collection, analysis, internal review and reporting the disclosures, to assess the effectiveness of processes practiced. The approach deemed to be appropriate for the purpose of assurance of the Report since all data therein could be verified through original proofs and/or verified database entries.

The assurance was performed by our multidisciplinary team of experienced professionals in the field of Corporate Sustainability, Environment, Social and Stakeholder Engagement. We are of the opinion that our work offers a sufficient and substantiated basis to enable us to come to a conclusion mentioned below and based on the content of our contract.



Adherence to the AA1000 AccountAbility Principles

Inclusivity: Sinochem International has identified its stakeholders, including government and supervision authorities, shareholders and investors, customers, suppliers, employees, communities, industrial associations and cooperative partners, etc., and established communication mechanism to share information about quo status of sustainable development, concerns and future expectation with stakeholders. In 2022, the company has updated a pool of ESG topics based on the results of questionnaire survey with its key stakeholders, to promote effective management of sustainability topics and associated risks.

Materiality: Sinochem International has studied and analyzed national strategy and policies, policy trends in chemical industry, relevant standards and latest development strategy on a basis of stakeholder communication, and has identified 26 material topics from two dimensions with analysis in both quantitative and qualitative manner, and then determined the importance of impacts of these topics on corporate operations and stakeholders, by considering results of stakeholder survey and recommendations from experts. The company disclosed material topics in the Report and the key topics included pollution prevention, compliance with national laws and regulations, chemical safety, occupational health and safety, energy consumption, climate change and carbon management, water resources, legal compliance and risk management.

Responsiveness: Sinochem International has a process to implement periodical two-way communications with its stakeholders via multiple channels, including engagement of policy research, investor conference, customer service platform, compliant mechanism, trainings, meetings and forums. The company has assessed governance system, material topics, and sustainable development goals and annual status, and is responsive to stakeholders in a persistent and timely manner.

Sinochem International disclosed significant risk identification and control measures associated with chemical safety, responsible procurement, technology innovation, energy saving and emissions reduction, and key performance data in the Report as well. The company emphasized internal control system and enhancement of corporate governance and compliance management. In 2022, the company has launched sustainable supply chain white paper and integrate compliance handbook, and established a work group of carbon dioxide emission and carbon neutrality, and set up low-carbon development programme and implementation plan to boost green manufacturing system.

Impact: Sinochem International paid constant attention to policies, environmental risks, and societal change, to identify significant risk factors in a systemic way, and focused those risks on climate change, environment and energy, marketing, procurement in supply chain, compliance governance, and carried out specific control measures to manage potential impacts on corporate business and operation. Its sustainability committee has periodically discuss and review sustainable development risks and opportunities, to ensure effective implementation of risk management and internal control process. Sinochem International has integrated management of material topics, goals, and key sustainability performance to routine operations, and took into account its internal control mechanism during corporate operations, business processes, and information system management, and could assess compliance management system in the high risk areas of environment and safety, labor rights, information security, anti-bribery, and anti-competence.

Conclusion

In conclusion, we can mention that no instances or information came to our attention that would be to the contrary of the statement made below:

- Sinochem International 2022 Sustainability Report meets the requirements of Type-1, Moderate Assurance Level according to the AA1000AS v3, and follows the GRI Sustainability Reporting Standards.
- The Report includes statements and claims that can reflect Sinochem International sustainability achievements and challenges supported by documentary evidence and internal records.
- The performance data we found in the Report are collected, aggregated, and analyzed in a systematic and professional manner, which are assessed by supporting evidence.
- TÜV Rheinland shall not bear any liability or responsibility to a third party for perception and decision about Sinochem International based on this Assurance Statement.



Daniel Pan
Corporate Sustainability Service Technical Manager
TÜV Rheinland (Guangdong) Ltd.
2 June 2023, Shanghai, China

Expert Assessment

The 2022 Sinochem International Sustainability Report is the 19th sustainability report released by Sinochem International. The report centered on elevating core ESG metrics, deepening ESG reporting disclosure logic, and raising the depth and professionalism in overall ESG compliance, towards a virtuous mechanism whereby the report steers governance, and demonstrated the company's implementation in sustainability concept and social responsibility.

State-Owned Enterprises Responsibility in Response to Social Concerns

The report presented two special topics: "Paying Tribute to the 20th CPC National Congress" and "Responding to Climate Change", underscoring Sinochem International's adoption and implementation of the spirit of the 20th CPC National Congress, as well as the company's resolve and actual results in the push to achieve "dual carbon" targets. The main chapters have been augmented to respond to the series of principles and policies enacted by the state in 2022, including compliance and ESG management, demonstrating Sinochem International's confidence and resolve in implementing the nation's strategic deployment.

Optimizing the Reporting Framework to Improve ESG Communication

Adjustments have been made to the reporting framework from previous years, including the addition of a statement from the Board of Directors, further highlighting the pivotal role of the Board of Directors in ESG governance. The report has also been optimized in terms of structure and composition to better highlight the chemical industry attributes as well as the enterprise characteristics, with a special focus on implementation and results in the effort to meet the sustainability goals over the 14th Five-Year Plan, in response to concerns from stakeholders including shareholders, business partners, clients, employees, government, and regulatory bodies. Another new addition to the report is the "ESG Policy List", which systematically delineated the major laws and regulations observed in each topic, so that the ESG rating agency can easily capture all pertinent information.

Drilling Down on Disclosure Logic to Enhance the Granularity and Professionalism in Reporting

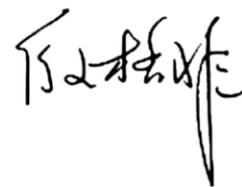
Following up on the disclosure on management approach (DMA) in last year's report, Sinochem International has dived deeper into ESG topic management logic, bringing together several different reporting disclosure standards and ESG ratings management logic. The report also fleshed out risk management content, adding a section on ESG risk identification disclosure to the chapter "Sustainability Strategy and Management", which also disclosed the company's progress in the effort to achieve the sustainability goals over the 14th Five-Year Plan, followed by a complete analysis and review of said effort, as well as a detail of the targets set for next year, in effect allowing the report to steer governance. Based on the disclosure logic "Major Challenges - Opportunity / Risk Analysis - Resolution Strategy - Management Initiative - Practical Cases - Phased Results", the main chapters optimized management practice disclosure, raising the degree of professionalism, substantiality and granularity in disclosure and reporting.

The year 2023 marks our full-throttle launch into a completely new endeavor of building a socialist modern country on all fronts and the march towards the second centenary goal. It is also a critical year for the implementation of the 14th Five-Year Plan. Guided by the spirit of the 20th CPC National Congress, it is expected that Sinochem International will continue to steadily advance the "dual carbon" initiatives while striving for the sustainability goals over the 14th Five-Year Plan, creating new value in the integration of economy, society, and the environment while constantly striving for greater competitive strength in the area of corporate responsibility, as well as greater thrust to sustainable development in the new chemical materials industry of China.

YIN Gefei

Founder and Chief Expert of GoldenBee

Deputy Secretary-General, ISO 26000 Global Stakeholders Network



Feedback Form

Thank you for reading the 2022 Sustainability Report for Sinochem International. We value and look forward to hearing your feedback on the company's sustainability efforts and this Sustainability Report. Your opinions and suggestions help us continuously improve the disclosure standards of corporate social responsibility and promote corporate social responsibility management and practices. You could fill out the form below and send us feedback by post or email. We welcome and sincerely appreciate your valuable comments!

Your overall impression of this report

Very Good Good Average Slightly Poor Poor

Do you think this report had a reasonable structure?

Very Reasonable Reasonable Average Slightly Unreasonable Unreasonable

Do you think this report is readable?

Very Reasonable Reasonable Average Slightly Unreasonable Unreasonable

How well is the information you are concerned about disclosed in this report?

Fully Disclosed Mostly Disclosed Disclosed Partially Disclosed Not disclosed

Information you are concerned about that is not reflected in this report:

Your suggestions on our sustainability effort or on this sustainability report:

Contact us:

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