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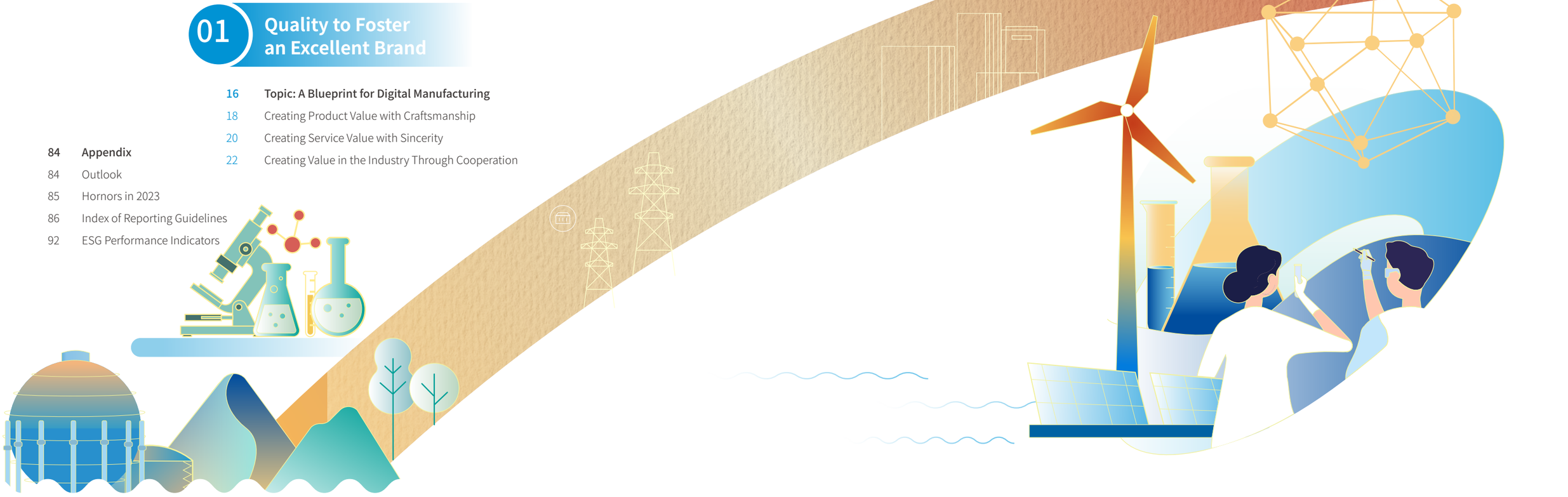
Satellite Chemical Co., Ltd.
Stock Code: 002648


# 2023 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

# Content





# About this report

## Description of the Report

This is the fourth annual Environmental, Social and Governance (ESG) Report of Satellite Chemical Co., Ltd. (hereinafter referred to as the "Report"). The Report provides a factual and objective account of Satellite Chemical Co., Ltd.'s sustainability activities in 2023, with a focus on its social, environmental, and governance performance.

## Boundaries

Temporal boundaries of the Report: January 1, 2023, to December 31, 2023 (hereinafter referred to as the "Reporting Period"). Some information may extend beyond the Reporting Period. The Report is the annual report. Organizational boundaries of the Report: The Report covers Satellite Chemical Co., Ltd. unless otherwise specified.

## Basis of Preparation

This report is prepared with reference to the *Shenzhen Stock Exchange Guide No.1 on Self-Regulation of Listed Companies: Standardized Operation of Companies Listed on the Main Board (December 2023 Revision)*, the *Shenzhen Stock Exchange Guideline No.1 on Self-Regulation of Listed Companies: Business Matters (Revised in December 2023)*, the *Shenzhen Stock Exchange Guide on the Environmental, Social and Governance Disclosure of Listed Companies (Consultation Paper)*, the *GRI Standards* issued by the Global Reporting Initiative (GRI), the *IFRS Sustainability Standards* issued by the International Sustainability Standards Board (ISSB), the United Nations Sustainable Development Goals (UN SDGs), and the Guidance on Climate-related Financial Disclosures released by the Task Force on Climate-related Financial Disclosures.

## Description of Designations

For ease of presentation and reading, the terms "the Company", "Satellite", "STL" and "we/us" in this report refer to "Satellite Chemical Co., Ltd." and its subsidiaries. Other definitions are as follows:

| | | |
|---|---|---|
| STL Technology | refers to | Zhejiang Satellite New Material Technology Co.,Ltd. |
| Youlian Chemistry | refers to | Zhejiang Youlian Chemistry Industry Co.,Ltd. |
| Pinghu Petro Chemical | refers to | Pinghu Petro Chemical Co., Ltd. |
| Satellite Energy | refers to | Zhejiang Satellite Energy Co., Ltd. |
| Hubei Satellite | refers to | Hubei Satellite New Materials Co., Ltd. |
| STL USA | refers to | Satellite Chemical USA Corp. |
| Lianyungang Petrochemical | refers to | Lianyungang Petrochemical Co., Ltd. |
| Jiahong New Material | refers to | Jiangsu Jiahong New Material Co., Ltd. |

## Information Sources

The information and data disclosed in the Report are from the Company's statistical information or official documents. The currency amounts involved are measured by the Renminbi (hereinafter referred to as the "RMB").

## Confirmation and Approval

The Report was prepared by STL's ESG report compilation team and approved by the Board of Directors for release on March 25, 2024, upon confirmation by the management.

## Disclaimer

The forward-looking statements in this report are those concerning the Company's anticipated or expected business activities, events or developments that may occur or are expected to occur in the future, other than statements of historical facts. Actual results or trends in the future may differ materially from these forward-looking statements as a result of a range of variables. The Company made the forward-looking statements contained in this report prior to March 25, 2024 and undertakes no obligation or duty to update them, unless otherwise required by regulatory authorities.

## Access and Feedback

The Report is available in both simplified Chinese and English. In case of discrepancies between the two versions, the simplified Chinese version shall prevail.

Your comments are valuable to us and will help us improve our ESG performance. Please feel free to contact us.

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# About STL

## Message from Our Chairman

STL has remained steadfast in its mission of "Chemicals Make A Better Life" and has embraced the responsibility of promoting green and low-carbon development. In 2023, aligning with national industrial development strategies and our business philosophy to "contribute STL quality products, create a better life", we achieved numerous significant technological and product innovations, as well as comprehensive, in-depth", and fundamental management innovations and transformations.

Throughout the year, STL has advanced towards a modernized industrial system, accelerating the integrated development of industrial chains in high-end polyolefins, electronic chemicals, new energy materials, and comprehensive utilization of hydrogen energy, among others. We have showcased a pioneering and innovative spirit, making significant breakthroughs in core technologies and bridging gaps in key fields in China. Concurrently, we have established a green and low-carbon industrial model that spans the entire industrial chain, with the aim of contributing to the country's ambitious "dual carbon" goal to peak carbon emissions by 2030 and achieve carbon neutrality by 2060, as well as to the realization of China's modernization.

With the increasing global focus on sustainable development and environmental conservation, ESG (Environmental, Social, and Governance) has become a pivotal aspect of corporate growth and reputation. STL wholeheartedly embraces this responsibility, understanding the need to proactively address ESG challenges, break away from limitations, and steadfastly progress towards a green, low-carbon, and sustainable future. We aim to lead by example within the petroleum and chemical industry, through initiatives such as strengthening green and intelligent manufacturing, championing low-carbon innovations, fulfilling social obligations, and enhancing corporate governance.

### Building a robust management system, striving for exceptional quality, and spearheading innovation in research and development

STL is dedicated to meticulously crafting an internal management framework, with a focus on production quality control as its cornerstone, and product innovation and R&D as its driving force, ensuring steadfast and superior product quality. Guided by the customer-centric approach, we continuously enhance our customer services to meet the diverse demands of the market. Through collaborative efforts with suppliers, we deepen management practices and optimize the supply chain system, ensuring a steady supply of high-quality raw materials. Simultaneously, we actively foster communication and collaboration within the industry, endeavoring to cultivate a positive and thriving industrial ecosystem that drives sustainable industry growth.

### Advancing green and low-carbon operations, and technological innovation for a sustainable ecosystem

STL adheres to the core principle of "green and low-carbon development, and technological innovation," actively participating in the country's "dual carbon" initiatives and placing environmental management at the forefront of its corporate strategy. We have set a target to to reduce more than 2 million tonnes of carbon dioxide by 2030 compared with that in 2020 and achieve carbon neutrality in our value chain by 2050. We are unwavering in our dedication to managing greenhouse gas emissions, prioritizing research and development of low-carbon products, and promoting green logistics practices. We shoulder our environmental responsibilities with fortitude by diligently tackling environmental issues, strengthening pollution prevention and control measures, and playing an active role in conserving natural resources and biodiversity. These efforts highlight our commitment to protecting the planet's green future through concrete actions.

### Working with employees and communities to make our dreams a reality

STL upholds the core value of "the company grows together with its employees and society," fostering a platform for common prosperity with our employees and society. We prioritize the personal development of our team members, providing opportunities for their growth and success within the STL community. Simultaneously, we actively participate in social development, making tangible contributions to society and fostering a collective vision for the future. Through collaborative efforts and unwavering commitment, we join forces with our employees and community partners to achieve the STL Dream and inject the STL Strength into the sustainable development of society. We firmly believe that through the mutual growth of individuals and the organization, combined with the harmonious progress of the enterprise and society, we can collectively build a brighter future.

### Laying the foundation for growth through robust operations while actively fulfilling social responsibility

STL firmly upholds the belief that robust operations form the bedrock of a company's sustainable growth. As we chart our course towards further development and value creation, we continuously strengthen our corporate governance and enhance our risk management capabilities to ensure steady progress in a dynamic market environment. Upholding business ethics and transparency, we maintain integrity in all our operations and foster unblocked communication with stakeholders. Furthermore, we integrate the ESG philosophy into our operation and governance practices, fulfilling our corporate social responsibility through tangible actions that contribute to a sustainable society. By cultivating a trustworthy corporate image, we aim to generate lasting value for shareholders, employees, customers, and society at large, thereby creating a remarkable chapter in STL's journey.

STL has embarked on its journey with perseverance and determination. At a new starting point in 2024, STL aims for qualitative changes, echoing the sentiment of a Chinese proverb: "In a boat race, those who row the hardest will win". In 2024, we will persist in pioneering a green, low-carbon, technology-driven, and intelligent development model for China's manufacturing sector, in alignment with the nation's ambitious "dual carbon" goal. We remain steadfast in our commitment to sustainable development, thereby making meaningful contributions towards addressing global climate and environmental challenges.

# Company Profile

Since its establishment, STL has always made new chemical materials deeply rooted in its development. Over the years, we have remained steadfast in our commitment to the mission of "Chemicals Make A Better Life", focusing on the real economy and our core strengths. To ensure the security of upstream raw material supply, we have demonstrated innovative thinking and a pioneering spirit by expanding into the upstream industry. Central to our development strategy is the integration of light hydrocarbons, as we endeavor to establish ourselves as a leading low-carbon chemical new materials technology company.

STL's business portfolio encompasses a diverse array of industries, including functional chemicals, new energy materials, and new polymer materials, and areas such as hydrogen energy and comprehensive utilization of carbon dioxide. Our products are extensively utilized in sectors such as aerospace, rail transportation, infrastructure engineering, electronic chips, and healthcare. Meanwhile, the Company focuses on the China's new energy vehicles, lithium-ion batteries, and solar batteries, to work on the research and development of related new chemical materials. Our diverse range of products plays a vital role in shaping a brighter future for all.

During the reporting period, STL achieved remarkable milestones in business development. The Company's operating income reached RMB **41.487** billion, with net profit exceeding RMB **4.789** billion. This notable growth was primarily attributed to its strategic focus on lightweight raw materials and the establishment of a robust science and technology innovation framework across four key domains: high-performance catalysts, new polymer materials, new energy materials, and process research and development. Notably, the successful commissioning of several pivotal installations such as (poly)styrene, ethanolamine, battery-grade DMC, and electronic-grade hydrogen peroxide manufacturing facilities further enhanced our technological innovation advantages in integrated industrial chain integration.

Moreover, STL has demonstrated an unwavering commitment to environmental conservation. The Company prioritizes pollution and emission management, with a strong sense of environmental responsibility, and steadfastly pursuing green and sustainable development. This dedication to environmental conservation is evident in both our routine operations and our investment decisions. For instance, we have signed the Comprehensive Alpha-olefin Utilization of High-End New Material Industrial Park project, with the aim of utilizing self-developed high-carbon alpha-olefin technology to expand our downstream segments into high-end areas such as high-end polyolefin, polyethylene elastomer, base oil of lubricants, ultra-high-molecular-weight polyethylene, and other new materials. This initiative is intended to achieve carbon reduction objectives and further strengthen our foundation for advancing functional chemicals, high-end new materials, and new energy materials.

Throughout its journey, STL has remained faithful to its initial aspirations, leveraging the advantages of industrial chain integration and consistently expanding into the realm of new low-carbon chemical materials. We aim to evolve into a new chemical material technological companythat consistently contributes to society through tax generation, benefits shareholders through profitability, and supports employees with sustainable incomes. Committed to our mission of "chemicals make a better life," we stand ready for a brighter future characterized by ongoing innovation and growth.

# Our 2023

## Milestones in 2023

### On January 3

Satellite Energy's over RMB 10 billion project kicked off, aiming to propel the integration, upscaling, and eco-friendly advancement of new materials industry clusters.

### On February 5

Jiahong New Material commenced full operations.

### On March 22

STL signed the *Memorandum of Understanding on Cooperation for the EAA Phase II Project* with SK Geo Centric. Both sides aim to leverage their respective strengths to develop and operate a new EAA facility project with an annual EEA production capacity of 50,000 metric tonnes and with a total investment of RMB 2.17 billion.


### On May 18

during the provincial conference aimed at expediting the establishment of a globally advanced manufacturing hub, Yi Lianhong, the Party Secretary of the Zhejiang Province, awarded the trophy of "National Manufacturing Individual Champion Demonstration Enterprise" to STL.

### On May 24

Fang Wei, the Vice Governor of Jiangsu Province, led a delegation from the governments at three levels to visit and study STL USA's ORBIT energy project. The visit was conducted to further deepen collaboration between STL and Energy Transfer in the realm of clean energy.

### On May 31

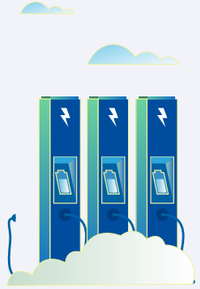
at the fourth "Spring in Nanhu" International Economic and Trade Fair, STL officially signed two significant projects: the functional polymer high-end new material intelligent manufacturing project with an annual output of 260,000 metric tonnes, and the new green acrylic production process for capacity expansion and carbon reduction technical reform project with an annual output of 90,000 metric tonnes.


### On June 17

the Sino-Korea Green New Material (JiangSu) Limited's EAA project officially kicked off to accelerate the integration of the upstream and downstream segments of the industrial chain and build a more complete, environmentally-friendly, and high value-added new material system.


### On June 17

the STL's Comprehensive Alpha-olefin Utilization of High-End New Material Industrial Park project was successfully signed.



## On August 27

Mackie McCrea, Co-Chief Executive Officer at Energy Transfer, visited STL with her delegation. Together with our distinguished guests, we were warmly received by Xu Kunlin, Governor of Jiangsu Province, and Ma Shiguang, Party Secretary of the Lianyungang City.

## On September 2

the "Hundred-Talent Plan in the One-Hundred-Year-Old STL" leadership initiative was formally initiated.



## On July 12

the Satellite Future Research and Development Center project was successfully signed, aimed at establishing a top-notch research and development headquarters with significant domestical and international influence.

## On September 17

the STL 1-octane pilot technology development project was recognized as an internationally leading project by an expert panel consisting of members of Chinese Academy of Sciences and the Chinese Academy of Engineering, marking it the second enterprise across the globe and the first in China to achieve independent research and development of selective oligomerization high-carbon alpha-olefin technology.

## By the end of September

the carbonate ester facility of the Green Chemistry New Materials Industrial Park project commenced full operations.

## On November 11

STL attended the 30th Asia-Pacific Economic Cooperation (APEC) Economic Leaders' Meeting held in California, USA, for the first time.



## On December

The project of "New Energy Development and Utilization—Battery Materials and Components" was selected as one of the major special projects of Zhejiang Province's "Leading Goose" R&D Program.

# Value Creation in 2023

**National Green Factory**
China's Ministry of Industry and Information Technology

**China's Niche-sector Leaders with High Market Share and Strong Innovation Capacity**
China's Ministry of Industry and Information Technology

**ESG Innovation Enterprise**
Forbes China

**TOP 50 Sustainable Development Industrial Enterprises**
Forbes China

**National Industrial Internet Pilot Demonstration 5G Factory**
China's Ministry of Industry and Information Technology

**Leading Enterprise in National Energy Efficiency**
China Petroleum and Chemical Industry Federation

**ESG Best Practices for Listed Companies**
China Association for Public Companies

**Outstanding ESG Case of Green and Low Carbon Technology Innovation of Golden Orchid Cup**
China Economic Information Service of Xinhua News Agency

**China's National High-tech Enterprise**
National High-tech Enterprise Recognition and Management Leading Group

**Key Enterprise Research Institute in Zhejiang Province**
Department of Science and Technology of Zhejiang Province

**AONA Awards -2023 Model of Responsible**
Manufacturing of the Year Organizing Committee of the Social Responsibility Conference

**Medal of Devotion from Red Cross Society of China**
Red Cross Society of China

**Fortune China 500**
Fortune Magazine

**Most Influential IoT Innovation List**
Fortune Magazine

**Pilot Entity of "Enhancing the Quality of Life of Employees and Shaping a Happy Living Environment" in Zhejiang Province**
Zhejiang Provincial Federation of Trade Unions

**China HR Venus Awards - Practice Excellence Award in Campus Recruitment Top 50**
Yonyou and Digital HR Association


# 01 Quality to Foster an Excellent Brand

- **Creating Product Value with Craftsmanship**
- **Creating Service Value with Sincerity**
- **Creating Value in the Industry Through Cooperation**

STL focuses on the establishment of its internal management system, production quality control and innovation in product development and research, making every effort to consolidate product quality. With a focus on customers, we constantly improve our customer service capability. Moreover, we continue to promote supplier management rules. Through initiatives such as the full-life cycle supplier management, and the development of a strict audit process, we seek to strengthen communication and collaboration within the industry, to jointly build a positive and healthy ecosystem.

# Theme:
# A Blueprint for Digital and Intelligent Manufacturing

As information technology advances, digital transformation has become an inevitable trend across all industries. Recognizing the evolving market landscape and industrial trends, STL has embarked on a journey towards digital transformation and upgrading. With the vision of leading digital transformation in the chemical industry, we are building a platform for comprehensive digitization across our industrial chain. This initiative aims to provide us with access to prompt and precise operational analysis data by integrating the flows of capital, business, and data. By leveraging this integration, we drive digital transformation to support high-quality and sustainable business growth, thereby enhancing our overall competitiveness.

Supported by a digital vision, we have accelerated comprehensive digital transformations aimed at enhancing operational, organizational, security and innovation capabilities. Our efforts have led to the development of a wide array of digital applications across ten key areas, including business and financial integration, collaborative office tools, highly effective processes, data capabilities, digital factories, data centers and industrial internet solutions.

Moreover, STL has harnessed the digital-twin technology, achieving plant modeling and analysis and refining its process parameters. Supported by the application of the industrial Internet of Things (IoT), 5G, and chemical production units in simulation and molecular simulation technologies in development and research, we have established digital design processes from initial planning stages to final product creation. This has resulted in increased accuracy and efficiency in process and engineering control. Additionally, we have leveraged these technologies to establish the "Nebula" five-in-one safety knowledge base. This innovative platform enables refined and real-time monitoring and early warning capabilities by leveraging AI analysis of personnel and operations in production areas, thereby bolstering employee work safety skills.

### STL receives the authoritative DCMM Certification for its digital intelligence upgrading

DCMM is China's first officially released national standard in the field of data management, providing directional guidance for the construction and development of domestic organizations' data management capabilities. Our Satellite Energy and Pinghu Petro Chemical have obtained the certifications of Data Management Capability Maturity Assessment Model (DCMM) Level 3 and Level 2, respectively. Notably, Satellite Energy stands as the second manufacturing (Party A) enterprise in Jiaxing City to receive this prestigious recognition. At a strategic level, STL has instilled a culture of data-centric thinking and awareness, and formulated a series of standardized processes at the organizational level to promote the standardization of data management, and to establish a team of data management and application professionals to continuously improve data management capabilities and promote digital transformation. The successful evaluation of our two subsidiaries represents authoritative recognition of our data management capabilities.

### Lianyungang Petrochemical built a 5G plant to foster competitive advantage in digital transformation

Lianyungang Petrochemical carries out intelligent operation and comprehensive management of its intranet based on the plant's 5G private network and equipment network transformation, realizing visualization of network operation and maintenance management, intelligent network and business collaboration, timely alarm processing, and network upgrading and connection. Through the construction of the 5G plant, the company utilized digital twins, AR, machine vision, pattern recognition and other technologies to realize application scenarios such as remote preparation and control and accurate collaborative equipment manufacturing, online diagnosis and prediction of equipment failures, intelligent logistics in the factory area and monitoring of logistics across the region, production energy efficiency control and virtual on-site services, making production more digitized and environmentally-friendly, promoting integration across the industrial chain, and encouraging the company to move towards intensive and high-quality development featuring "data integration, intelligent innovation, business synergy, optimization and efficiency". Lianyungang Petrochemical's green transition is digitally empowered and has been selected as one of the typical cases of digital, green and collaborative transformation development in Jiangsu Province in 2023.

## Security process for work safety

**Standardization** → **Modeling** → **Intelligence**

- Monitoring and early warning of the biggesthazards
- Full-process work safety

**Integration of large screens**

- Personnel on duty
- Risk zoning control

# Creating Product Value with Craftsmanship

At STL, we prioritize quality, creating products with craftsmanship, and steadfastly pursuing high-quality development. Our dedication to long-term success remains steadfast as we continually refine our product quality and safety management systems. Through internal and external product testing, we uphold rigorous quality control throughout the entire product delivery process. While ensuring compliance with laws and regulations and prioritizing quality and safety, we meticulously plan project schedules to optimize delivery efficiency and product quality. Our goal is to create healthy and safe products with craftsmanship. Additionally, we embrace the principle of "regarding science and technology as our primary productive force and innovation as our primary driver of growth". By leveraging scientific and technological innovation, we develop intelligent products that serve as a cornerstone for our long-term development.

**This chapter responds to the United Nations Sustainable Development Goals (UN SDGs):**


## Quality Assurance


STL's quality management system certificate

Adhering to the management philosophy of "putting customers and quality first, and practicing for long-term growth," STL continually enhances its product quality management system, and bolsters its overall quality management standards. We strictly adhere to the *Product Quality Law of the People's Republic of China* and the *Standardization Law of the People's Republic of China*. We have formulated internal policies such as the *Quality Management System*, the *Incident Management System*, the *Quality Management Regulations*, and the *Critical Activities and Key Quality Control Points*. These internal management documents specify our work assessment standards, fully mobilizing employees in optimizing product quality.

To ensure the effectiveness of our quality management efforts, we have established a quality management system characterized by "centralized leadership, hierarchical management, and clear division of responsibilities," outlining the managerial obligations of staff at all levels regarding safety and quality. Furthermore, we conduct monthly specialized inspections of our quality system to promptly address any identified issues. STL not only prioritizes excellence internally but also takes proactive steps to secure external product quality management system certifications, thereby enhancing its quality control standards from a forward-thinking perspective. During the reporting period, **100%** of STL's operation sites obtained the ISO9001 quality management system certificate.

In terms of quality management, STL continuously enhances its internal quality control through three key perspectives: process optimization, product marketing, and external collaboration. In terms of process optimization, we have established an unblocked complaint system and procedures based on the *Quality Complaint Management System* issued by the Production and Safety Environment Center. This ensures swift resolution of various issues identified through complaints and feedback from internal and external quality investigations, thus minimizing losses associated with claims. In terms of product marketing, we collaborate closely with our sales team to promote polyethylene (PE) products, successfully achieved a breakthrough with the introduction of low-pressure membrane series products in markets such as Henan Xiping and Shanghai. expanding the presence of low-pressure film series products in regions such as Xiping County, Henan Province, and Shanghai. In terms of external collaboration, we work with numerous universities for technical research and development initiatives, thereby contributing to our overall high-quality development.

In addition, we continued to improve the capability to ensure the quality assurance for our facilities. During the reporting period, the Lianyungang Petrochemical's Center Laboratory was accredited by the China National Accreditation Service for Conformity Assessment (CNAS). Through comprehensive quality management initiatives, STL has obtained a number of external value certifications.

| Certification Name | Certification Organization | Certified Entities |
|---|---|---|
| Polycarboxylic acid water reducing agent polyether certified by Jiangsu Select Product | Jiangsu Excellence International Certification Union | Lianyungang Petrochemical |
| Industrial refined acrylic acid certified by Made in Zhejiang | China Quality Certification Center | Pinghu Petro Chemical |
| Polypropylene resin powder certified by Made in Zhejiang | China Quality Certification Center | Zhejiang Satellite Energy Co., Ltd. |

### STL implements various initiatives to elevate product quality

To ensure product stringent quality control standards, STL has introduced clear inspection protocols during the reporting period. All manufactured products must undergo meticulous control measures, and any reworks or subcontracting of facilities must be subject to approval from the Quality Assurance (QA) Department, ensuring adherence to quality and stability standards. Additionally, a dedicated team was established to handle quality incidents and conduct root cause analysis (RCA). Thus continuously enhancing the standardization of product quality across production lines.

## Innovation-driven Research and Development

Innovation serves as the catalyst behind the continual progress of the petroleum and chemical industry. By exploring and implementing new technologies, enterprises can enhance production efficiency, improve product quality, reduce production costs, and ultimately achieve sustainable development. In line with this vision, STL remains steadfast in fostering product innovation through cutting-edge technology research and development (R&D) efforts. We adhere to the *Management Measures of the Research Institute for Polymer New Materials* as the overarching management rules, supplemented by a range of internal policies including the *Management Measures of the Establishment of R&D Projects*, the *Management Measures of the Recognition of Project Achievements*, the *Management Measures of Laboratory Safety*, and the *Management Measures of Environmental Protection*. These policies are meticulously designed to fortify our scientific and technological innovation system, promoting product innovation with advanced technology research and development to continuously meet market demands. Our goal is to enhance our core competitiveness and drive sustainable growth.

STL is continuously enhancing its key technology research capabilities, striving to improve R&D efficiency and quality across various fronts, including personnel management and digital empowerment. In terms of personnel management, we have implemented a dual-channel development model for R&D personnel, focusing on both "technology" and "management" to enhance their innovation capabilities and cultivate an internal culture of innovation. Regarding digital empowerment management, we have developed the "Nebula" industrial Internet platform, supported by 5G and industrial Internet technology. This platform integrates digital-twin technology, Internet of Things (IoT), big data, artificial intelligence (AI), and other cutting-edge technologies. It transforms our operations into a modern factory characterized by digital design, intelligent production and management, collaborative and green manufacturing, enhanced safety controls, and greater socio-economic benefits. This ensures product stability and reliability while driving efficiency and innovation throughout our processes.

STL places great emphasis on cultivating a talented team that drives innovation and development. We embrace the development philosophy of "prioritizing innovation and focusing on three qualities, "along with a talent philosophy of "valuing ability over education background and contributions over seniority". We have devised tailored management policies and development plans for core talents, emphasizing the principle of being specialized, professional, and international . These initiatives are designed to fully unleash the innovation potential within our talent pool.

Through our comprehensive management capabilities in R&D innovation, STL consistently pushes the boundaries of scientific and technological research, fostering momentum in our pursuit of innovation. As of the end of the reporting period, STL boasted a total of 320 patents, including 48 dedicated to clean technologies.

### STL's dedication to scientific and technological innovation for accelerated industry development

To accelerate the updating of the industry architecture, in September 2023, STL's independently developed high-carbon alpha-olefin technology passed a rigorous evaluation by an authoritative national expert panel, showcasing superior purity indices for 1-octene compared to similar products both domestically and internationally. By successfully developing this high-yield 1-octene technology, STL not only filled domestic technological gaps in this area but also became the first domestic enterprise, and the second across the globe, to achieve independent research and development of selective high-carbon alpha-olefin oligomers. This achievement underscores STL's dedication to scientific and technological innovation, promoting the industry's innovation and building new competitive advantages.

# Creating Service Value with Sincerity

STL remains steadfast in its customer-centric approach, continually refining its customer service system to deliver top-notch experiences. Through diligent efforts in customer service management and effective communication, we aim to enhance service quality and provide comprehensive support to unlock customer value.

**This chapter responds to the UN SDGs:**


## High-quality Services

STL rigorously adheres to relevant laws and regulations, including the *Law of the People's Republic of China on the Protection of Consumer Rights and Interests*, the *Civil Code of the People's Republic of China*, and the *Advertising Law of the People's Republic of China*. Based on the *Management Regulations on the Applied Technology Service of the Marketing Center*, the Company has developed internal protocols such as the *Sales Contract Management System*, the *Customer Management System*, and the *Logistic Management System*. These documents establish comprehensive standards and guidelines for the development of our service system.

STL constantly standardizes its customer service management and enhances our existing service system. This involves various aspects, including institutional systems, product quality criteria, and service skill protocols, among others. In terms of institutional system standardization, we implement regulations across customer service, contract signing, logistics, and payment settlement to ensure consistent operations. In terms of product quality standardization, we adhere to international and industry standards while also developing our corporate standards to continually enhance product quality. In terms of service standardization, we have summarized service skill manuals and provide staff training to improve the service capabilities of business personnel.

We continuously adopt new initiatives to further improve service quality based on the development of existing systems. During the reporting period, STL initiated the CRM[1] customer management system project. This initiative aims to create standardized sales business processes and management practices, thereby advancing our digitalization efforts and enhancing the organizational capabilities and mindset of our sales staff. Through these efforts, we are dedicated to continually enhancing our ability to serve customers.

To better address the diverse needs of various customer segments, we have devised a targeted marketing strategy grounded in the principle of "anticipating trends, making informed decisions, and mitigating risks". This approach enables us to better meet the unique requirements of various customer groups, maximizing the value of our products, enhancing our industry influence, and solidifying our position in the market.

[1] CRM：Customer Relationship Management.

## Efficient Communication

STL prioritizes customer feedback and consistently putsimproving customer satisfaction first. We have established a full-process customer service management system that prioritizes our consumers, ensuring efficient handling of customer complaints. Through various measures, we meticulously analyze customer needs and suggestions, using them as invaluable insights to raise our service standards and enhance the overall customer experience.

In terms of proactive communication with customers, we conduct regular customer satisfaction surveys to evaluate our services across all processes. These surveys are essential for improving our problem-solving abilities and professional services, continuously optimizing our internal management. Each year, we distribute a *Customer Satisfaction Survey* covering various aspects such as brand perception, sales services, integrity, technical support, logistics services, and expectations for future cooperation. These surveys provide us with valuable insights into our customers' actual challenges and expectations. Additionally, we regularly assess the performance of our sales team in customer service, allowing us to ensure targeted supervision to enhance customer satisfaction. During the reporting period, STL achieved a customer satisfaction rate of **100%**.

In responding to customer feedback, we have formulated the *Management System for Customer Complaint Handling* and established a robust mechanism to promptly address and resolve customer complaints. This enables us to make targeted improvements and enhancements to our customer services based on the feedback and issues received during customer communication and exchanges. During the reporting period, we further expanded our complaint channels to include telephone, fax, letters, visits, email, and other platforms. In addition, we prioritize customer feedback, with all departments and staff members readily available to receive and address customer complaints, meeting their needs in a timely manner. During the reporting period, the resolution rate of complaint incidents at STL was **100%**.

# Creating Value in the Industry Through Co-operation

STL is deeply committed to fostering win-win cooperation and driving the high-quality development of the industry, thereby injecting new vitality into industry progress. We actively expand the scope and depth of industry exchanges and collaborations, aiming to facilitate the exchange of resources and leverage each other's strengths. Our goal is to cultivate win-win ecosystems and promote synergistic development.

**This chapter responds to the UN SDGs:**


## Industry Co-building

As a leading player in the domestic light hydrocarbon industry, STL remains abreast of industry trends and actively participates in industry exchanges through seminars, associations, and forums to facilitate information sharing. Utilizing our expertise, we collaborate with industry partners from diverse sectors to enhance our cooperative efforts. Additionally, we consistently further collaboration among the industry, academia, and research institutes, and spearhead the establishment of industry standards. Together, we aim to drive the petroleum and chemical industry towards high-quality and robust development.

## Industry Exchanges

STL is steadfast in integrating into the industry's innovation ecosystem, with the goal of enhancing its scientific and technological innovation capabilities through an open-minded approach. We collaborate with domestic and international partners, sharing our innovation experiences and exploring sustainable, high-quality development paths through extensive industry exchanges. As a vital contributor, we actively participate in high-quality industry gatherings to facilitate knowledge sharing and foster business synergies, thereby bolstering the industry's high-quality and robust development.

### Singapore-based East Pacific Shipping (EPS) visited Satellite Group to actively explore the possibility of more cooperation opportunities

On May 5, 2023, Mr. Idan Ofer, the actual controller of Singapore-based East Pacific Shipping (EPS), along with his delegation, visited Satellite Group and spoke highly of STL's remarkable achievements. This marked the first face-to-face interaction between the core teams of both entities since their collaboration commenced. The discussions during the visit delved into carbon emission reduction within the shipping industry. Both parties actively explored cooperation opportunities to advance comprehensive decarbonization efforts in the shipping industry, particularly through the adoption of clean fuels. We are committed to contributing to global initiatives for carbon peak and neutrality.

### STL was invited to attend the China Petroleum & Chemical Private Economy High-Quality Development Conference and work with other parties to promote the high-quality development of the petroleum and chemical industry

From October 16 to18, 2023, China Petroleum & Chemical Private Economy High-Quality Development Conference was successfully held in Tianjing. Chairman of STL was invited to present and address the opportunities and challenges of establishing a modern petrochemical industrial system and to jointly promote the high-quality development of the petrochemical industry at the first High-Level Forum of China Petroleum & Chemical Central, State-Owned & Private Enterprises.


## Industry Cooperation and Co-building

STL continuously strengthens its global operation capability, steadfastly enhancing our partnerships with both domestic and international collaborators to increase our STL brand's global influence. To bolster our global operational prowess, we are strategically targeting markets in Southeast Asia, the United States, Central Asia, Africa, America, and Europe. Within these regions, we actively seek opportunities for collaboration in the clean energy sector and are dedicated to fostering a more comprehensive "ecosystem" of environmentally friendly and high-end new materials. Through these concerted efforts, we aim to share the beauty of chemistry with the world.

### STL accelerates the development of a green high-end new materials "ecosystem" and contributes to the development of high-end new materials

To advance our journey towards high-end development, on November 30, 2023, STL and Sino-Korea Green New Material (JiangSu) Limited entered into the *Supplementary Agreement on the EAA Phase II Project* in Shanghai. This agreement entails a capital injection of RMB 868 million to kickstart the EAA Phase II Project. This collaboration stands as a pivotal stride in our overarching strategy of "building a low-carbon chemical sci-tech company of new materials". It holds immense significance in expediting the establishment of a more comprehensive green, high-end new material "ecosystem", thus fortifying the resilience of China's high-end new material industry chain.


### STL promotes the deep integration of industry chain and innovation chain, and invigorates new opportunities in industrial development

To advance industrial integration and innovation, STL held a signing ceremony for the Comprehensive Alpha-olefin Utilization of High-End New Material Industrial Park project with Xu Wei New District on June 17, 2023. Leveraging our proprietary high-carbon alpha-olefin technology, the project aims to expand to the downstream segments by producing high-end new chemical materials, and promoting the resource utilization of the by-product hydrogen to achieve the project's carbon reduction objectives. This project holds paramount importance in enhancing and optimizing the core industrial structure of the park and enhancing the resilience and competitiveness of the Company's integrated light hydrocarbon industrial chain.

**STL is dedicated to embracing a future propelled by advancements in science and technology, and building an "ecosystem" in the field of new materials**

To propel industry advancement, STL and Jiaxing Economic Development Zone jointly held a signing ceremony for STL's Future Research and Development Center project on July 12, 2023. This initiative focuses on four key domains: catalysts, new energy materials, new polymer materials, and functional chemicals. Through this endeavor, STL aims to develop the center into an influential innovation platform in the Yangtze River Delta region, shaping the "new dynanism" of scientific and technological innovation, and accelerating the high-quality development.


## Industry-leading Innovation

STL proactively shoulders corporate social responsibility, spearheading industry innovation and delving deeply into the high-quality development of the integrated light hydrocarbon industry chain. Through active participation in industry associations and fostering collaboration among industry, academia, and research institutes, we contribute to raising industry standards and promoting the high-quality development of the industry.

**STL establishes an advanced model in green manufacturing and explores a new path for emission reduction of the whole industrial chain**

In the first issue of the column "Typical Model in Green Manufacturing within the Petroleum and Chemical Industry" by China *Chemical Industry News*, an article titled "STL: Exploring a Novel Approach to Emission Reduction across the Industrial Chain" was published. The article summarized STL's endeavors in reducing carbon emissions across the entire industrial chain. Through initiatives such as establishing a green supply chain management system and exploring measures like green power procurement and hydrogen storage. This proactive approach offers a new path for the industry to move towards green transition, positioning STL as a national demonstration enterprise for green supply chain management.

# Responsible Procurement

STL remains steadfast in integrating quality management throughout the production chain to ensure product quality with a responsible and high-quality supply chain. Aligned with our business growth needs, we foster equitable and close partnerships with suppliers to maintain the quality and stability of the supply chain. Moreover, prioritize the sustainable development of the supply chain, collaborating with suppliers to create long-term value for our customers.

## Supplier Management

STL adheres strictly to the laws and regulations such as the *Bidding Law of the People's Republic of China*, and the *Regulation on the Implementation of the Bidding Law of the People's Republic of China*. We have devised comprehensive policies such as the *Management System for Supplier Performance Assessments*, the *Management System for Supplier Acquirement and the Verification*, and the *Management Measures for Supplier Field Inspections*. These efforts bolster our suppliers' management capabilities and standardization levels across the board.

To bolster the quality of supply chain management and improve procurement efficiency, we have developed a smart procurement platform that enables full life cycle management of suppliers across all scenarios. Throughout the reporting period, we refined our SRM[2] procurement system, segmenting sourcing/supplier development and price negotiation. This ensured standardization and transparency in the procurement process through strengthened supervision and control mechanisms.

## High-quality Supply Chain

In our pursuit of a high-quality supply chain, we have implemented rigorous supplier management procedures to promote transparency and compliance throughout the bidding, procurement, acceptance, and payment stages. We thoroughly evaluate suppliers' overall quality to ensure the delivery of high-quality products and services.

During the supplier admission phase, we have established stringent audit and control procedures. These entail meticulous reviews of areas such as suppliers' quality management, work safety, and environmental management. We mandate that suppliers provide system certificates and other qualification documents within the SRM system during registration, ensuring the implementation of the supplier management framework.

We have implemented a comprehensive supplier performance evaluation system, conducting regular assessments to bolster normalized supplier management. Our evaluation criteria encompass areas such as product quality, service capability, cooperation, and delivery proficiency. For key suppliers, we conduct routine field inspections to ensure an accurate and objective understanding of their overall performance capabilities.

## Sustainable Supply Chain

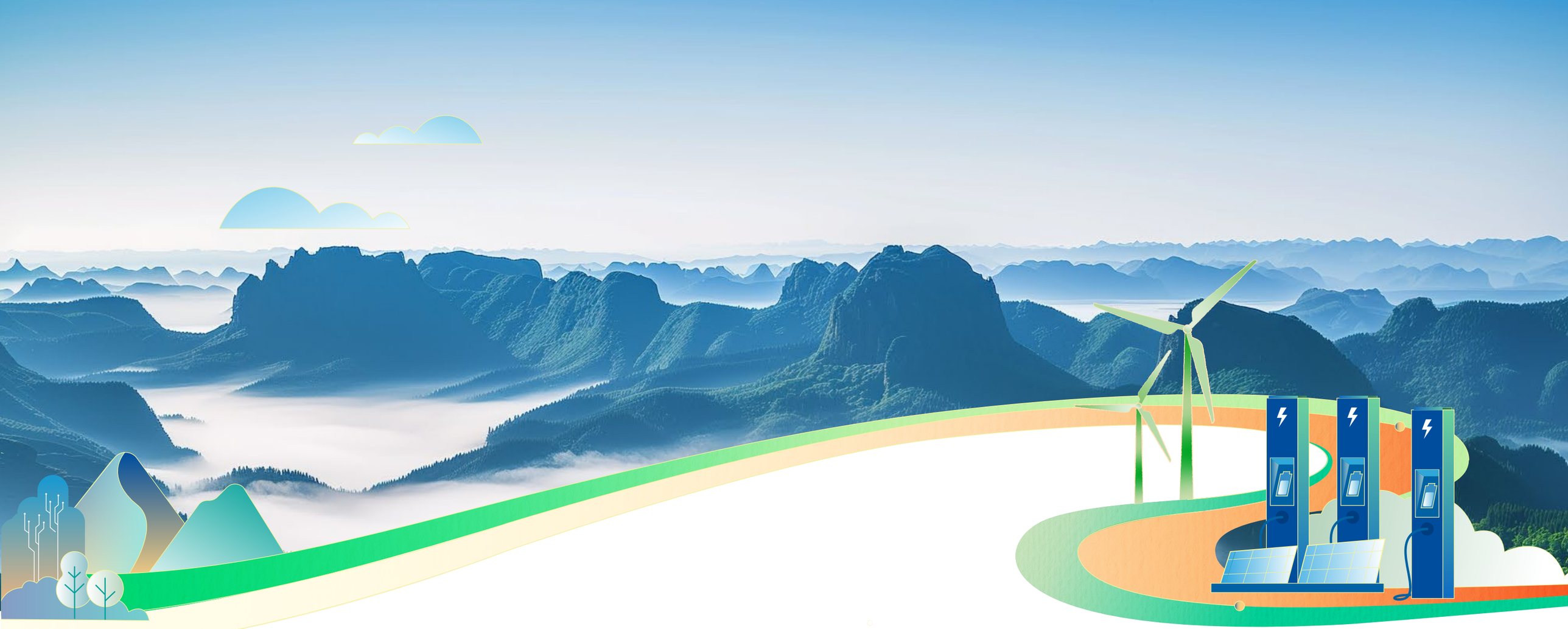
STL places significant emphasis on fostering integrity and compliance within its supply chain, ensuring transparency, fairness, and justice throughout supplier management processes. We have established robust management policies such as the *Management System for Supplier Performance Assessments*, the *Notice on Integrity Responsibility*, and the *Management Measures for Procurement Risk Prevention*. Additionally, we have signed the *Notice on Integrity Responsibility* with suppliers and organized promotional meetings for suppliers' code of conduct. Through these initiatives, we aim to emphasize our commitment to integrity, anti-corruption policies, and the fundamental principle of "Transparent Procurement" to all suppliers.

Moreover, we focus on the environmental and social impact of our supply chain, integrating the concept of sustainable development into our supplier management. Through the formulation and enhancement of the *Management Measures for Green Supplier Assessments*, we require our suppliers to strictly adhere to local laws and regulations and encourage them to adopt ESG standards to improve their sustainability capabilities. In supplier selection processes, we give preference to those with certifications for environmental management systems and occupational health and safety management systems. Additionally, we have implemented a one-vote veto policy for suppliers with safety and environmental protection issues.

During the reporting period, we introduced an annual assessment module within the SRM system, and incorporated ESG-related criteria and providing additional recognition for suppliers with AEO[3] certification. Furthermore, we have imposed requirements regarding environmental protection licenses, energy conservation, and carbon reduction for suppliers, prioritizing environmentally responsible green suppliers in our procurement endeavors.

[2] SRM: Supplier Relationship Management.

[3] AEO: Authorized Economic Operator, the World Customs Organization (WCO) certification for highly creditworthy companies.



02

# Ecological Co-building for Low-carbon Development

- Creating Environmental Value with Low-carbon Efforts
- Creating Ecological Value through Conservation Efforts

STL remains dedicated to the philosophy of "green and low-carbon technological innovation," actively aligning with China's "dual carbon" strategy. With environmental management at the forefront of our corporate development strategy, we diligently manage greenhouse gas emissions, prioritize the development of low-carbon products, and implement green logistics practices. We have firmly upheld our environmental responsibilities and strive to address environmental challenges by addressing pain points, enhancing pollution prevention and control measures, and actively participating in the management of natural resources and biodiversity conservation. In doing so, we contribute to the preservation of our planet.

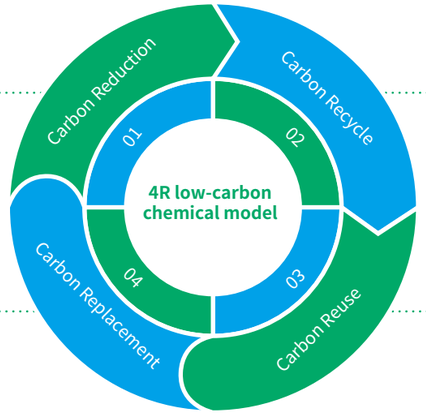
# Theme:
# A Blueprint for the Low-carbon Industry

With a steadfast belief in "sharing the beauty of chemistry with the world," we are dedicated to creating a better future for humanity. We firmly believe that fostering a green, low-carbon, and high-end petroleum and chemical industry offers sustainable solutions to global issues such as climate change and environmental degradation. We continuously develop a low-carbon chemical new material industry leveraging lightweight raw materials to produce olefins and strategically expand into downstream high-end chemical new material projects. These efforts allow us to extend, reinforce, and complement the industrial chain and lead the industry chain to high-end and green development.

Drawing on its leading efforts in the integration of light hydrocarbons, STL has developed a "4R" green and low-carbon industry model that spans the entire process from raw materials.

Compared with the coal chemical route, the STL's light hydrocarbon cracking process can reduce $CO_2$ ☒ emissions by **91,200** metric tonnes in producing 10,000 tonnes of ethylene and can reduce $CO_2$ ☒ emissions by **85,500** metric tonnes in producing 10,000 tonnes of propylene.

After the light hydrocarbon cracking facilities are fully put into operation, they can produce 400,000 tonnes of high-purity hydrogen every year, making STL the largest "green hydrogen" supplier in East China. Compared with "gray hydrogen", these facilities can reduce **1000** tonnes of $CO_2$ ☒ in the preparation process, and high-purity hydrogen, after replacing traditional energy, can reduce **4.6 million** tonnes of $CO_2$ ☒ .




Carbonic ester can effectively capture carbon, with 1,000 tonnes of carbonic ester consuming **600** tonnes of $CO_2$ ☒ . When carbonic ester facilities are fully put into operation, they will be able to recycle about **400,000** tonnes of $CO_2$ ☒ per year.

Leveraging the "4R" green and low-carbon industry model, STL continues to make efforts to manufacture low-carbon products, transferring these attributes to customers and end-user scenarios throughout the value chain, thus empowering a clean future.

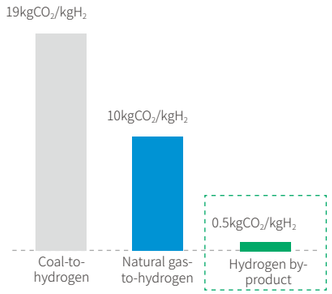
## Empowering Low-carbon Energy

### STL develops environmentally friendly high-performance polyethylene products, empowering low-carbon energy

Polyethylene (PE), being lightweight, corrosion-resistant, abrasion-resistant, waterproof, mildew-resistant, sound-insulating, and heat-insulating, is an environmentally friendly and recyclable green material. Based on the subsequent processing route, high-density polyethylene (HDPE), low-density polyethylene (LDPE), linear low-density polyethylene (LLDPE), metallocene polyethylene (mPE) and so on can be produced. These materials have a wide range of downstream applications and excellent performance, and can be widely used in high-end films, battery diaphragms, healthcare, aerospace and other areas.STL has worked on the development of high-performance polyethylene products and the production technology development of 1-butene to further improve the C2 industry chain. High-performance polyethylene products will effectively reduce production energy consumption, save raw materials and consume more recycled materials, as well as improve the durability of materials. Their fast-track mass production can improve processing performance and reduce energy consumption in production. High strength and high toughness can reduce the consumption and increase the recycling value of the product.

## Contributing to the Low-carbon Industry

Comparison of $CO_2$ emissions per kilogram of hydrogen produced through different technological routes



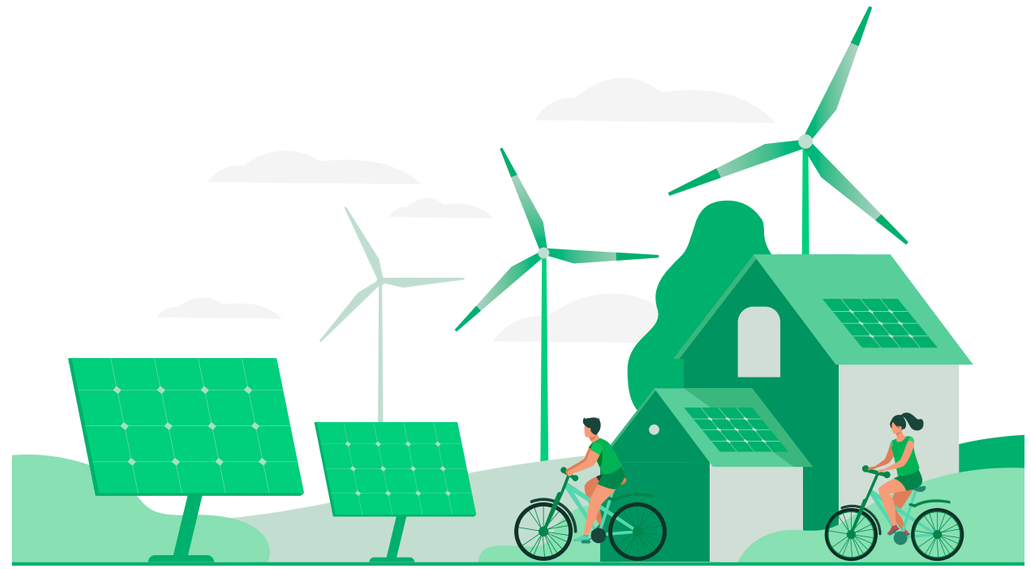

### STL enhances the environmentally friendly attributes of low-carbon hydrogen peroxide for the low-carbon industry

Hydrogen peroxide (HP) is an important inorganic chemical product widely used in textile, paper, chemical, light industry, medicine, electronics, food, environmental protection and other fields.

STL obtains more than 200,000 tonnes of by-produced hydrogen per year through propane dehydrogenation and ethane cracking facilities, and the carbon emission of the technology route used by the Company is only **0.5** kg $CO_2$/kg$H_2$ . According to data from the International Energy Agency (IEA), the carbon emission per unit of coal-to-hydrogen production is about 19 kg $CO_2$/kg$H_2$, and that per unit of natural gas-to-hydrogen production is about 10 kg $CO_2$/kg$H_2$ .

The Company uses part of the by-product hydrogen to produce hydrogen peroxide, reaching 1.82 million tonnes per year at present, which reduces carbon by more than **3.7 million** tonnes compared with that of other coal hydrogen production enterprises, and reduces carbon by more than **1.9 million** tonnes compared with hydrogen peroxide production of other natural gas hydrogen production enterprises.

In addition, the Company's by-production of hydrogen has diversified applications. In addition to a raw material for our downstream chemical production, the remaining portion is sold to chemical enterprises in the park and hydrogen refueling stations in the vicinity, to make full use of energy and help the park's chemical production get cleaner. In the future, with the further construction of Green and Low-carbon Development Demonstration Zones in Yancheng and other places, the Company will further utilize the by-product hydrogen as clean energy.



# Creating Environmental Value with Low-carbon Efforts

STL actively aligns with the country's "dual carbon" strategy. We leverage "green and low-carbon development" and "scientific and technological innovation" as the two engines to propel the Company towards high-quality development. With a strong focus on managing greenhouse gas emissions, we have established feasible carbon reduction targets. Through initiatives such as establishing a low-carbon value chain and adopting clean energy, we aim to transition towards a low-carbon and technology-driven chemical new material enterprise. Simultaneously, we prioritize low-carbon product development and embrace green and low-carbon logistics practices, thereby contributing to the realization of the "dual carbon" goal.

So far, STL has set a target to to reduce more than **2 million** tonnes of carbon dioxide by 2030 compared with that in 2020 and achieve carbon neutrality in our value chain by 2050. Our carbon reduction strategic plan includes the following four key areas:

**Use of Clean Energy**

Increase the use of renewable power (wind, solar, etc.), biomass, etc., and promote energy transition

**Low carbon technology innovation**

Actively invest in CCUS and other carbon-reducing technologies; and develop low-carbon products using recyclable and bio-based raw materials

**Production equipment and process optimization**

Enhance the efficiency of production operations through procedure optimization and process improvements

**Decarbonization supply chain establishment**

Build a decarbonized supply chain with partners in the value chain to create upstream and downstream synergies

During the reporting period, STL saved a total of **15.08 million** kWh of energy consumption and reduced steam consumption by about **20,000** tonnes through the implementation of the above-mentioned carbon reduction strategic plan. In 2024, we will further implement the carbon neutrality path, including carrying out carbon management system planning in carbon asset management, carbon neutrality and other areas, providing systematic training for the management decision-making level and technical execution level; identifying carbon neutrality development paths and proposals to formulate development strategies; and upgrading IT-based carbon management.

**This chapter responds to the UN SDGs:**


## Low-carbon Operations

Low-carbon operation is a crucial strategy in addressing global climate change, reducing resource consumption, fostering sustainable development, lowering operating costs for enterprises, and enhancing competitiveness. At STL, we prioritize energy management in our operations, striving to establish a comprehensive energy management system centered around low-carbon operations. Through various energy-saving and efficiency-enhancing measures, coupled with the adoption of clean energy, we have achieved significant reductions in carbon emissions resulting from production and operations. Moreover, we actively engage and encourage all employees to adopt green and low-carbon practices within their workspaces. We provide comprehensive training and awareness campaigns, laying a strong foundation to instill a culture of low-carbon operations across the organization.

### Energy Saving and Consumption Reduction


STL's energy management system certification

STL strictly adheres to the *Energy Conservation Law of the People's Republic of China*, the *Electric Power Law of the People's Republic of China*, Measures for the Standardized Management of Energy and other pertinent national energy-related regulations. We have established a robust energy management system to continually enhance our energy management capabilities. This includes developing and refining energy management systems and ledgers, as well as formulating management control indices and requirements in accordance with relevant laws and regulations. so as to develop and continuously improve internal protocols such as the *Control Procedures for Energy Management Programs* and the *Control Procedures for Energy Evaluation and Review.* These protocols are aimed at strengthening our energy management efforts and facilitating comprehensive and standardized energy-saving monitoring and management initiatives across our production and operational processes.

STL ensures that all production bases and business divisions are aligned with our energy management goals. Through initiatives such as upgrading the energy mix, replacing obsolete equipment, enhancing energy efficiency, and optimizing production processes, we aim to ensure more efficient energy use, ultimately leading to energy conservation and carbon reduction. During the reporting period, the ISO 50001 energy management system certification, STL's ISO 50001 energy management system certification, GB/T23331 and RB/T114 energy management system certification covered **100%** of the operation sites.

During the reporting period, STL significantly elevated its energy utilization capabilities through measures such as the recovery of waste heat in processes and utilizing by-product steam in reactions. Additionally, we introduced new high-efficiency machine pumps, improving energy conversion efficiency and energy recovery. To further minimize energy loss, we have installed highly efficient insulation materials for all heating equipment, refrigeration equipment, and associated pipelines.

- Build an energy management platform to track energy consumption and production data and analyze them to find the problematic areas and make adjustments
- Replace obsolete motors and chillers with energy-efficient ones that meet energy efficiency rating requirements
- Conduct LDAR testing as planned, complete repair timely, reduce leakage, and promote cost reduction and efficiency initiatives
- Optimize production process, and organize the technical reform of the hot water tank of liquid chlorine vaporizers and refrigeration machines, etc.
- Provide energy saving and low carbon training, hold cost reduction and efficiency promotion meetings, follow up projects implementation, and solve identified difficulties promptly
- Reasonably arrange the production plan, adjust the schedule of plant maintenance, and reduce unnecessary energy consumption

STL's energy management initiatives

**Jiaxing Base implemented its energy-saving renovation project for acrylic acid facility processes, taking the lead in reducing both pollution and carbon emissions**

During the reporting period, the energy-saving renovation project for acrylic acid facility processes at Jiaxing Base was honored to be selected as one of the second batch of leading projects in reducing both pollution and carbon emissions in Zhejiang Province. This project manages to maximize energy utilization efficiency and reduce energy loss as far as practicable, thus significantly contributing to both pollution reduction and carbon reduction efforts. It is estimated that the project will reduce carbon emissions by about **13,000** tonnes and save over **1.1** million kWh of electricity annually.

**Jiaxing Base implemented routine energy consumption management, empowering emission reduction management**

During the reporting period, Jiaxing Base diligently collects actual daily energy consumption and production data for thorough analysis. Based on this analysis, the base implemented a range of energy-saving technological renovations. As a result, the annual energy costs of both the acrylic acid facility at Jiaxing Base and Youlian Chemistry saw remarkable year-on-year decreases by **18.5%** and **10.5%**, respectively.

### Jahong New Material improved its pre-process technology for propylene oxide products and implementated green and low-carbon operation modes

During the reporting period, Jahong New Material optimized the commissioning process of its propylene oxide (PO) facilities. In May 2023, a special team was set up to optimize production modes through several schemes and program tests, supported by the simulation system. The team made all-out efforts to solve problems such as identifying the optimal ratio of methanol and propylene in PO facilities, and mapped out the optimal process conditions of each segment. Compared with the large-system distillation process adopted by excellent counterparts, this improvement managed to save about **24,000** tonnes of steam and 12 days of feeding time, ensuring the technical and economic indicators of hydrogen-peroxide-to-propylene-oxide (HPPO) facilities to lead the industry, taking the lead in the industry.

### Pinghu Base upgraded the energy efficiency of its PPAE facilities, practicing the concept of green design

During the reporting period, Pinghu Base regarded green design and energy conservation and consumption reduction as primary considerations for the approval of new projects, ensuring energy and resource conservation at the outset. In August 2023, the second phase of the PPAE facilities commenced full operation, remarkably reducing energy consumption by approximately **13.4%** per tonne compared to the first phase, and by about **10.2%** in energy consumption compared to its original design specifications. Simultaneously, the annual operational expenses of all facilities witnessed a significant reduction of over RMB 100 million.

## Clean Energy

STL always adheres to the concept of green development and actively responds to the *Cleaner Production Promotion Law of the People's Republic of China*, making cleaner production one of its key requirements and committing to become a leader in this area. Through ongoing adjustments to our energy mix, we actively facilitate the transition towards low-carbon energy and continuously explore opportunities in clean energy development, all aimed at fostering a better ecological environment.

STL continually explores the applicability of renewable energy sources for its operations. We are dedicated to fostering an energy mix led by renewable resources. Throughout the reporting period, both the Lianyungang Petrochemical Base, the Pinghu Base, and the Jiaxing Base initiated green electricity purchasing initiatives, collectively procuring a total of **100** million kWh of green electricity. Furthermore, our production bases and business divisions are ramping up efforts in the planning and development of photovoltaic (PV) systems. Among them, the Jiaxing Base is spearheading the rooftop PV project for Youlian Chemistry, diligently coordinating efforts to finalize the project's details and aiming to conclude construction by 2024.

### Zhejiang Technology actively develops and builds photovoltaic facilities, responding to the call for clean energy

To champion comprehensive energy control, conservation, and consumption reduction efforts, Zhejiang Technology has embraced photovoltaic power generation, harnessing this green energy source to achieve self-sufficiency in electricity production and consumption. This strategic move ensures the continuity of enterprise operations, particularly amid constraints in power resources. During the reporting period, Zhejiang Technology made comprehensive use of the roof space of its building structures at the factory for the installation of photovoltaic power stations. These installations cover an area of 20,000 square meters, and are expected to generate an annual power output of **1.55 million** kWh.



As a key area of clean energy development, hydrogen energy is regarded as the optimal choice for realizing large-scale and further decarbonization in sectors such as transportation, industry and construction. STL, as a leading light hydrocarbon industry player in China, leverages an integrated light hydrocarbon industry platform and uses a large amount of high-purity by-product hydrogen (99.999%) generated by the ethane cracking and propane dehydrogenation (PDH) process directly as hydrogen energy. Compared with traditional coal-to-hydrogen process, this process can reduce carbon emissions by about 5.4 million tonnes per year, truly realizing low-carbon hydrogen energy production. STL has combined with its own business advantages, actively laid out the field of hydrogen energy, grasped the trend of new energy industry, and formulated a detailed plan for the comprehensive utilization of hydrogen energy based on the trends in new energy industry,to contribute to the downstream segments of the industrial chain.

- Plan hydrogen energy utilization demonstration projects in the park, including hydrogen energy shuttles for employee commuting and hydrogen energy storage projects **01**
- Work to implement the circular economy and renewable energy utilization in the park, providing green hydrogen supply for enterprises, and reducing carbon emissions caused by hydrogen production **02**
- Plan the development of chemicals with hydrogen as a raw material to form the industrial chain synergy and create a green and low-carbon production demonstration base **03**

STL's green hydrogen energy utilization planning

### Pinghu Base started its hydrogen utilization project to boost the development of clean energy

At the Pinghu Base, the propane dehydrogenation facilities generate hydrogen resources as a by-product, driving an active expansion into the hydrogen resource industry. In recent years, the base has been dedicated to hydrogen purification and utilization initiatives, with a keen focus on the utilization of local renewable energy sources and exploring green power trading opportunities.

During the reporting period, the base completed its capacity expansion and transformations for its PSA facilities, culminating in the purification of 17,353,800 $Nm^3$ of high-purity hydrogen (99.999%) for external use, 1.46 times that before the renovation in 2021. Importantly, this enhancement has equipped the facilities with the capability to produce ultra-pure hydrogen.

Simultaneously, the Hydrogen Peroxide Phase II project at the base has been put into use in downstream hydrogen-consuming industries, including biomedicine and chip semiconductor industries.

## Raising Low-carbon Awareness

To bolster employee awareness and understanding of the country's "dual carbon" strategy, we have promoted the knowledge of carbon emission management based on the concept of low-carbon and green development. During the reporting period, the Company has conducted various educational campaigns and training sessions aimed at inspiring every employee to actively contribute to carbon reduction targets.

Utilizing various opportunities such as shift handover periods and the World Environment Day, STL has organized activities such as symposiums, team meetings, and general assemblies to educate employees on the "dual carbon" strategy. These training sessions emphasize the importance of emission reduction initiatives such as green production, transportation, and office practices, encouraging staff to take practical steps to mitigate global warming.

### Pinghu Base held EU carbon tariff-themed seminar to popularize low carbon knowledge

During the reporting period, Pinghu Base dispatched personnel to participate in enterprise training sessions on the potential impact of trade barriers resulting from Europe's Carbon Border Adjustment Mechanism (CBAM) carbon tariffs, organized at the Zhejiang province- and Jiaxing city-level. The training sessions covered topics such as the CBAM's intentions, countermeasures, domestic and international carbon emission accounting methodologies, etc.

## Green Office

As a responsible enterprise, STL actively integrates the concept of green sustainability with its routine operations and strives to create a sustainable green office scenarios. We have formulated policies such as the *Implementation Rules for Seven Basic Employee Behaviors*, and continuously improve the relevant systems and strengthen the green office management in our daily office life, and advocate all staff to practice green and low-carbon office practices.

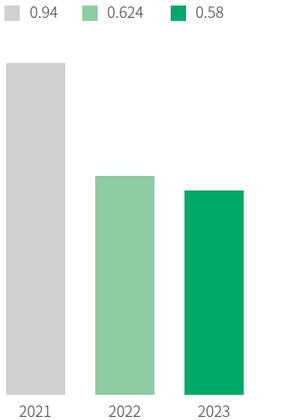
- Encourage double-sided printing to make full use of paper resources
- Strengthen water and electricity conservation efforts and promotion, raise our employees' awareness, and incorporate water and electricity conservation into their daily behavior assessment
- Air conditioners should not be kept lower than 26 degrees Celsius, and be shut down at a required time
- Implement waste classification and recycle and sell all kinds of paper products for secondary use
- Promote the paperless office initiative by adopting the OA approval system and OUTLOOK e-mail for daily communication in the office
- Using the Anyshare software for file sharing and dissemination, reducing servers' energy consumption
- Improve the electricity management system, such as the time to turn on the lights and ACs, and the time to turn on and off the equipment
- Install solar-powered street lights in non-explosion-proof areas across select production bases

STL's green office initiatives

### Greenhouse gas emissions $tCO_2e$


Total greenhouse gas ($CO_2$) emissions

### Greenhouse gas emissions $tCO_2e$ /metric tonne of products




Greenhouse gas ($CO_2$) emission intensity

### Major direct energy consumption

Natural gas

291million $m^3$

### Major indirect energy consumption

Purchased electricity

3,137million kWh

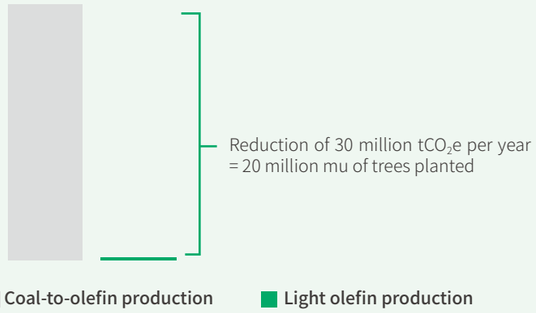
[4]The caliber of this data was adjusted during the reporting period and is hereby corrected.

## Low-carbon Value Chain

STL actively builds a low-carbon value chain, adopts advanced low-carbon processes, explores carbon capture, utilization and storage (CCUS) technologies, and devotes itself to the research, development and production of low-carbon products, thereby promoting the low-carbon development of the downstream segments of the industrial chain. In addition, we optimize the utilization of raw materials, implement green logistics, and reduce our carbon footprints across the board to achieve sustainable development and "carbon neutrality".

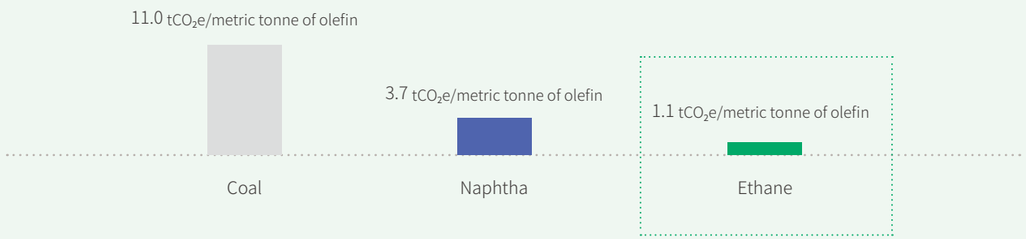
## Low-carbon Procurement

Low-carbon raw materials can reduce the need for energy consumption in the production stage at the source, reduce greenhouse gas emissions, and promote a circular economy, thereby establishing a low-carbon economy and propelling low-carbon development. In terms of raw material selection, STL adopts lightweight raw materials with lower production energy consumption to produce olefins. Each tonne of ethylene produced consumes only 342 kilograms of standard oil on average, far lower than the 590 kilograms of standard oil stipulated by the state. Compared with coal-to-olefin production process, the Company's two units of cracking of ethane to ethyleneequipment with an annual capacity of 1.25 million tonnes can reduce carbon emissions by about 22.8 million tonnes per year, compared with 7.7 million tonnes per year from other two propane dehydrogenation to propylene units with an annual capacity of 450,000 tonnes. In total, the annual $CO_2$ emissions can be reduced by more than **30** million tonnes, which is equivalent to planting more than **20** million mu of trees[5].




Reduced carbon emissions throughout the year with light olefin as raw materials

### Comparison of per tonne ethylene $CO_2$ emissions produced through different technical routes:




[5]The calculation is based on that each mu of forests can reduce 1.336 metric tonnes of carbon dioxide.

STL prioritizes the comprehensive utilization of raw materials, continually advancing the recycling of industrial materials through technological upgrades to enhance efficiency in raw material utilization. We integrate raw material input-output ratios into departmental performance assessments and employ a cost control incentive mechanism to encourage key personnel in relevant production departments to minimize raw material input-output ratios and promote efficient raw material utilization. Moreover, we have revised raw material acceptance standards, replacing suppliers delivering unstable product and servce quality, and ensuring the purity of main reactive monomers exceeds **99.5%** to optimize raw material utilization efficiency and curtail unnecessary consumption and waste.

### Jiaxing Base promoted the optimization of cracking process of acrylic acid heavy constituents to boost the reuse of raw materials

Jiaxing Base conducted in-depth research and improvement of the cracking process of acrylic acid heavy constituents through data collection and analysis of recovery rate of heavy constituents in previous years. In accordance with the principles of product and process design, we carried out pilot production after passing the small-scale, pilot and large-scale tests and process safety assessment. After process optimization, the recovery rate of acrylic acid heavy constituents increased from 31.1% in previous years to **48%**, a **16.9%** increase.

### Pinghu Base improved the catalytic reaction efficiency in the reaction system to reduce the consumption of raw materials

Each year, Pinghu Base sets KPI assessment indexes for raw material input-output ratios, which are included in the monthly and annual assessment plan of the facilities. Moreover, the base continuously seeks for measures to reduce the ratio. During the reporting period, the base launched the catalyst collector blowing away gas emission optimization project to optimize relevant process, avoiding waste gases from re-entering the reactor, reducing fuel consumption, further improving the efficiency of the catalytic reaction system, and enhancing the utilization efficiency of raw materials. In addition, the butyl acrylate wastewater recycling project was also put into operation to provide special treatment for the concentrated water with high salt content, to increase the recovery rate of acrylic acid and recycle sodium hydroxide to reduce procurement. The base renovated and expanded the hydrogen peroxide phase II project based on the first phase of the wastewater treatment facility, with reduced investment and land area, improving wastewater treatment capacity.

### Hubei Satellite launched the recovery program to drive raw material recycling

During the reporting period, Hubei Satellite successfully implemented strict recovery and reuse procedures. Its products and services meet the requirements of the Global Recycling Standard (GRS) in the textile industry and have obtained GRS certificate. The Company recycled a total of **7,130** tonnes of waste mineral water bottles, waste films and waste particles during the year, reducing environmental pollution and waste of resources, and generating economic benefits and competitive advantages for its sustainable development. Meanwhile, it reflects our commitment and contribution to social responsibility and environmental protection.


Scope Certificate

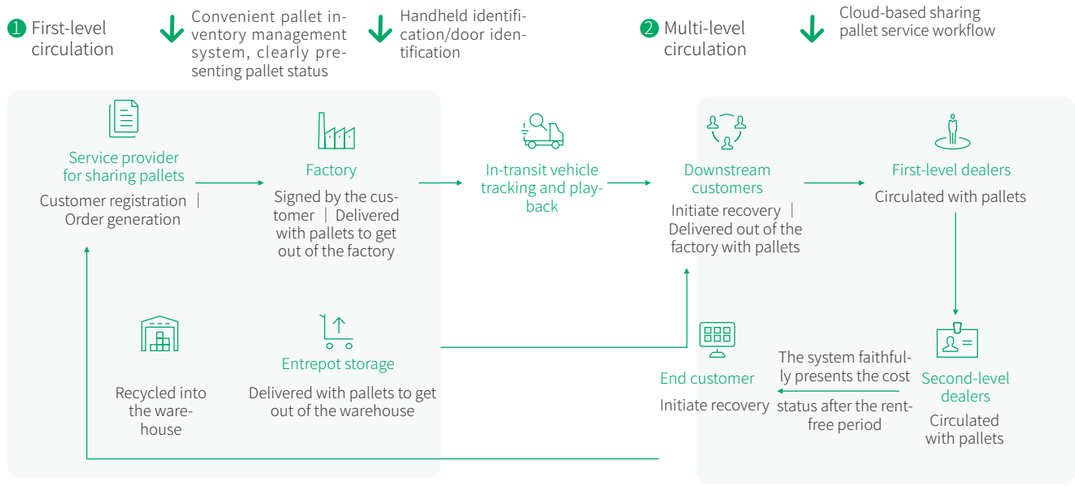
GRS Certificate

## Low-carbon Logistics

To further reduce the impact of the production and operation process on the environment, STL has implemented a series of initiatives to promote green logistics. Through the pallet sharing initiative, we have reduced the consumption of resources and carbon emissions generated in the logistics process, and improved the utilization rate of resources. During the reporting period, Lianyungang Petrochemical Base took the lead in the pallet sharing business and signed an annual framework agreement on pallet sharing with suppliers. By the end of the reporting period, the shared pallets had been cycled over **30,000** times, contributing to green and zero-carbon packaging initiatives. To further promote the application of low-carbon and green logistics, we plan to further expand the coverage of the pallet sharing initiative in 2024, thus maximizing carbon reduction in green logistics.

By the end of the reporting period, the sharedpallets had been cycled over

**30,000** times




The recovery and recycling of package sharing through cooperation within the industry chain

## Green Commuting

STL actively advocates green commuting among its employees, with the goal of reducing the reliance on private cars and consequently lowering greenhouse gas emissions for low-carbon travel. During the reporting period, we introduced shuttle bus services at our Pinghu, Jiaxing, and Lianyungang bases, facilitating employees' commuting needs and promoting green transportation practices. Simultaneously, we added an extra shuttle bus route at both Pinghu and Jiaxing bases to improve accessibility, while optimizing the shuttle bus routes by optimizing and reducing bus services at Lianyungang Base to increase both cost efficiency and service quality.

## Carbon Capture

**300,000 metric tonnes** of $CO_2$ can be recovered every year.

**90,000 metric tonnes** of $CO_2$ can be utilized every year.

As a key means to reduce carbon emissions, the carbon capture, utilization and storage (CCUS) technology is of great significance in addressing global climate change and promoting sustainable development. To further reduce greenhouse gas emissions, STL has been exploring the possibility of applying the CCUS technology in its production and operations based on its industrial characteristics.

During the reporting period, Lianyungang Petrochemical successfully commissioned its $CO_2$ purification facilities, enabling the capture and recovery of $CO_2$. This initiative allows for the recovery of 300,000 tonnes of $CO_2$ annually. Additionally, Lianyungang Petrochemical utilizes the captured $CO_2$ as a raw material in its dimethyl carbonate (DMC) facilities with an annual DMC output of 150,000 tonnes, with 90,000 tonnes of $CO_2$ being utilized annually. Furthermore, Lianyungang Petrochemical is equipped with food-grade $CO_2$ production facilities, utilizing recycled $CO_2$ from upstream by-products to reduce greenhouse gas emissions.

As an industry leader, STL is dedicated to spearheading the entire industry towards low-carbon development. To this end, we are actively exploring additional production processes that can facilitate $CO_2$ utilization. We have initiated laboratory development of a new solidification catalyst for vinyl carbonate. The synthesis of vinyl carbonate from $CO_2$ and ethylene oxide epitomizes a "green chemistry" reaction process with remarkable "atom economy" attributes. This method boasts advantages such as low production costs, high conversion rates, and exceptional selectivity, rendering it suitable for large-scale industrial production. The successful implementation of this technology would make significant contributions to $CO_2$ utilization within the petroleum and chemical industry.

# Response to Climate Change

STL actively responds to the national call for carbon peak and neutrality, steadfastly implementing the concept of green and low-carbon development, and advancing economic development without compromising the environment. During the reporting period, we consistently refined our internal management policies, standardized the management of greenhouse gas emissions, and engaged in various actions to mitigate and adapt to climate change. Referring to the *Recommendations of the Task Force on Climate-related Financial Disclosure (TCFD)*, we systematically identified risks and opportunities associated with climate change and devised response initiatives accordingly.

## Governance

To effectively respond to climate change risks and opportunities, STL has developed a comprehensive climate change-related governance system. At the governance level, the Board of Directors assumes collective and overarching responsibility for our climate change strategy. It delegates authority to the Strategy and ESG Committee to identify, assess, and manage climate-related risks while guiding the formulation of strategies and management protocols to tackle climate change. Additionally, it oversees the execution of climate-related risk and opportunity assessments.

## Strategy

STL employs a meticulous three-step process—identification, assessment, and monitoring—to identify various physical and transition risks, factoring in different climate change scenarios and the specific features of our business operations. We also conduct in-depth analyses of the associated impacts on our business. In order to improve the efficiency of climate change risk management, we have incorporated climate change risk management into our overall risk management system and integrated the climate change risk management process with our overall risk management process, actively assessed and managed the identified climate change risks, and quantified the risks by tracking the relevant performance indicators, so as to promote the effective control of climate change risks. Based on the identified risks and opportunities related to climate change, we have developed a range of response initiatives tailored to foster green transition across multiple perspectives, positioning ourselves as proactive contributors to mitigating climate change.

### Climate-related Risk Identification

| Category | | Risk | Description | Response |
|---|---|---|---|---|
| Physical risks | Acute risks | Increased severity and frequency of extreme weather events (e.g., typhoons, and floods) | Extreme weather events such as rainstorms, typhoons and floods may have a significant impact on the Company's production and operations, such as damage to production equipment, transportation and supply chain disruption, and work safety accidents, which may result in a decrease in the Company's production capacity and overall profitability, an increase in operating costs, and even a negative impact on the ecological environment. | We guide our employees in responding to extreme weather and minimize its impact on the safety of our assets and personnel.<br>Additionally, we develop contingency measures for logistics supplies to avoid delay in logistics transportation under such weather conditions. |
| | Chronic risks | Impacts such as changes in temperature and rainfall | Changes in temperature and rainfall may lead to prolonged construction period, accelerated wear and tear of equipment, and increased demand for cooling water for projects under construction, resulting in higher costs for the Company's infrastructure, equipment maintenance, production, and operations. | We conduct weather forecasting and report, and adjust on-site operational staffing, employee commuting policies, and logistics contingency measures in response to weather changes. |
| Transition risks | Policy and legal risks | Carbon tax/pricing | China's national carbon emissions trading market has been launched, with the carbon quota system being strictly enforced. Key carbon-intensive industries, such as petrochemicals, may be mandatorily included, which means that the carbon emissions compliance pressure on the Company will rise sharply. To meet the new emission standards, the Company may need to make large-scale investments in emission reduction technologies, purchase huge amounts of carbon allowances, and may even face difficulties such as production restrictions. This shift will greatly increase the cost of our carbon emissions compliance, and may also have far-reaching impacts on our strategic planning, operation mode and market competitiveness. | We launch energy saving and emission reduction initiatives across the board, and are committed to significantly reducing our Scope I, Scope II and Scope III emissions. |
| | | Requirements and regulation imposed on existing products and services | Against the backdrop of the "dual carbon" goals, the government is considering the introduction of more rigorous laws and regulations to limit or even reduce companies' carbon emissions. This initiative poses compliance risks for carbon-intensive and energy-intensive industries, leading to investment in energy-saving and emission reduction technological transformations. This will significantly increase our operational compliance costs. | Relying on our integrated light hydrocarbon industry platform, we have established a "4R" green and low-carbon industrial model that spans the entire industrial chain, and are committed to promoting the green and low-carbon development of the olefin industry. |
| | Market risks | Changes in customer behavior | As society focuses more on climate change and sustainable development, a growing number of consumers show a preference for green and low-carbon products and services, making it imperative for the Company to increase its investment in the research, development and application of green and low-carbon technologies. | Leveraging the low-carbon industrial model, we insist on promoting the R&D and production of low-carbon products, and transferring low-carbon attributes to customers and end-use scenarios in the value chain. |
| | Technology risks | Costs resulting from transition towards low-carbon technologies | To adapt to the transition towards low-carbon economy, the Company need to continuously ramp up its research and development efforts and investment in key areas such as renewable energy, energy-saving and emission reduction technologies, which means higher technological research and development costs. | We have established a sound mechanism for the application of low-carbon technologies and assessed such technologies through feasibility studies and cost analysis to reduce the transition costs. |
| | Reputation risks | Growing stakeholder concerns and negative feedback | Stakeholders increasingly focus on the Company's actions to address climate change, making it imperative for us to take relevant initiatives, otherwise our reputation will be affected. | We regularly summarize the requests and inquiries from various stakeholders, and actively address their concerns through channels such as our official website, announcements, visits and research. |

# Creating Ecological Value through Conservation Efforts

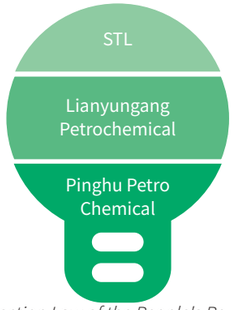
STL maintains a steadfast commitment to environmental conservation, regarding pollution emission management as a paramount concern. We recognize the integral connection between the sustainable development of enterprises, social prosperity, and environmental harmony. With a dedicated focus on addressing environmental challenges, we invest continually in pollution prevention and control measures, enhancing the effectiveness of pollutant treatment processes. Moreover, we actively engage in natural resource management and biodiversity conservation efforts, thereby contributing to the preservation of our planet.

**This chapter responds to the UN SDGs**


## Environmental Management

Environmental management serves as both a reflection of corporate social responsibility and a crucial element in advancing sustainable development. Through the establishment of a comprehensive environmental management system, STL diligently oversees wastewater and waste gases, handles solid and hazardous wastes responsibly, and effectively addresses soil and noise pollution. Our commitment to conserving the ecological environment underscores our dedication to fostering a future where humanity and nature coexist harmoniously. In recognition of our efforts, STL, Lianyungang Petrochemical, and Pinghu Petro Chemical were honored as national green factories during the reporting period. Moving forward, we remain steadfast in our commitment to environmental conservation.

Title of the National Green Factory




## Environmental Management System

STL rigorously adheres to national environmental laws and regulations, including the *Environmental Protection Law of the People's Republic of China*, the *Law of People's Republic of China on Environmental Impact Appraisal*, the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, the *Law of the People's Republic of China on the Prevention and Control of Water Pollution*, the *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste*, and the *Soil Pollution Prevention and Control Law of the People's Republic of China*. Moreover, we diligently uphold industry-specific standards such as the *Emission Standard of Pollutants for Petroleum Chemistry Industry* and the *Emission Standard of Pollutants for Synthetic Resin Industry*. Our daily production and operational activities are conducted in strict accordance with the stipulated standards applicable to our operating locations, including the *Ultra-low Emission Transformation (In-depth Treatment) Work Plan for Key Industries and Facilities in Lianyungang City*, the *Notice on Leakage Detection and Repair (LDAR)*, the *Emission Standards for Major Water Pollutants in the Chemical Industry*, the *Emission Standards for Volatile Organic Compounds the Chemical Industry in Jiangsu Province*, and other control requirements that are much more demanding than national standards. To ensure continual compliance, the Company conducts comprehensive evaluations of existing production and operational processes annually in alignment with relevant environmental protection laws and regulations. Additionally, we have established robust Health, Safety, and Environmental (HSE) systems, such as *the Environmental Protection Responsibility System* and the *Safety and Environmental Protection Facilities Management System*. These policies delineate the environmental protection responsibilities of personnel and organizations at all levels, facilitating standardized management across the entire spectrum of production and operations.

Furthermore, STL remains proactive in monitoring the development and issuance of new environmental policies. We consistently collect and analyze relevant environmental laws and regulations, ensuring our operations remain compliant over the long term. During the reporting period, we identified updates to regulations such as the *Technical Specification for Setting Identification Signs of Hazardous Waste*, the *Standard for Pollution Control on Hazardous Waste Storage*, and the *Technical Specification for Two-dimensional Code Identification of Pollutant Discharge Outlet of Pollutant Discharge Unit*. Subsequently, we organized our bases to promptly launch comprehensive upgrades and transformations, aligning with the latest regulations and our current operational needs.

STL is dedicated to harmonizing its development with environmental conservation, striving to achieve harmony between corporate growth and ecological conservation. We have progressively intensified our environmental management efforts and consistently fortified our environmental management system. The Strategy and ESG Committee, operating under the Company's Board of Directors, manages and guides matters related to environmental management such as strategic planning, environmental target setting, environmental policy formulation and implementation management, climate change-related risk assessment, environmental performance, and environmental information disclosure, and reporting to the Board of Directors. Furthermore, all the Company's production bases and business units have strengthened the mode in which everyone engages in management. They have both built an environmental management structure with the general manager fulfilling the overall responsibility under the management of the Safety and Environmental Committee through inter-departmental collaboration, and formed a thorough environmental management system with a clear division of labor and responsibility among all departments.

**STL's environmental management inputs**

| Indicators | Unit | 2022 | 2023 |
|---|---|---|---|
| Total investment in environmental treatment | RMB milion | 1,428.57 | 1,704.65 |
| Time invested in environmental treatment | hour | 62,130 | 74,400 |
| Environmental protection training hours | hour | 4,821 | 6,504 |
| Number of environmental protection training sessions | section | 1,826 | 499 |
| Number of environmental protection training participants | person time | 31,255 | 45,548 |
| Environmental punishment accidents | time | 0 | 0 |
| Environmental punishment payments | RMB | 0 | 0 |

## Environmental Management System Certification

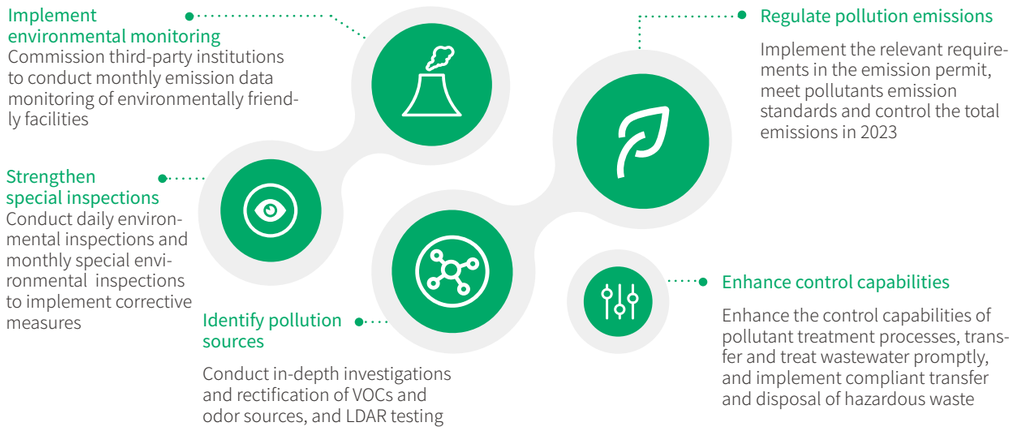
During the reporting period, STL rigorously mandated all production bases and business units to obtain the Pollutant Discharge Permit and Sewage Drainage Permit in strict accordance with legal requirements. Upholding the principles of "economic benefits, legal compliance, and environmental improvement," we continuously bolstered our environmental management capabilities. During the reporting period, the Company and all subsidiaries involved in manufacturing, including Youlian Chemistry, Pinghu Petro Chemical, Satellite Energy, Satellite Science & Technology, Hubei Satellite, Lianyungang Petrochemical and Jiahong New Material[7], have now obtained the ISO 14001 Environmental Management System Certification covering **100%** of their operating locations. Furthermore, we actively promote and conduct external third-party system certification and review. Our production bases and business units conduct internal audit and external review covering all operations annually, and a thorough external audit to renew the system certification every three years, ensuring the sustained effectiveness of our certification throughout operations. In addition, during the reporting period, we conducted several environmental audits covering **100%** of the operating sites, implemented corrective actions to address all findings that did not comply with STL's internal management standards, and organized internal tracking and review to ensure that the management improvement work was effectively completed.


STL's environmental management system certification

## Environmental Management Initiatives

To ensure the orderly implementation of environmental management practices, STL has developed specific initiatives aligned with environmental management requirements in our operations. Through strict adherence to environmental monitoring protocols, establishment of pollutant discharge standards, tracking of pollution sources, intensified inspections, and formulation of pollution prevention and control measures, we aim to mitigate the environmental impact of our operations, enhance our environmental management capabilities and contribute to our commitment to green development.

[7] Jahong New Material is a new subsidiary added in the reporting period. According to the regulations, it is still in the process of obtaining ISO 14001 Environmental Management System Certification. Please check the results on the company's official website.




STL's environmental management initiatives

## Wastewater Discharge Management

Adhering to the "zero and direct discharge of sewage" goal, STL continues to enhance its risk prevention and control measures against water pollution, thus reducing the environmental impact of wastewater discharge from its operations. During the reporting period, the Company comprehensively monitored wastewater discharge, implemented separation of rainwater and sewage, upgraded sewage treatment equipment, and installed reclaimed water recycling facilities to manage the entire wastewater production process, including generation, collection, reuse, and discharge. We work to reduce sewage discharge while ensuring minimal adverse effects on surrounding surface water and groundwater. With the sophisticated wastewater discharge management initiatives, we have **achieve well beyond** the total wastewater and pollutant reduction targets for 2023: exceeding the planned reduction of wastewater emissions by **400,000 tonnes**, with actual reduction amounting to **414,900 tonnes**.

| Indicators | Unit | 2022 年 | 2023 年 |
|---|---|---|---|
| Reduced wastewater discharge | million metric tonnes | 0.1112[8] | 0.4149 |

**Control at the Source**
- Conduct real-time monitoring of water pollutant discharge through online environmental monitoring devices to ensure real-time monitoring of all water quality data
- Optimize production process, strengthen process control, and reduce wastewater generation

**Classified collection**
- Collect wastewater, including production wastewater, clean wastewater, and rainwater, according to the principle of "separation of rain and sewage"
- Wastewater, after being effectively collected, is sent to the sewage station for centralized treatment

**Enhanced treatment**
- Adopt the "combination + blending + anaerobic + aerobic" biological process to treat acrylic acid wastewater
- Treat the wastewater through devices and then reuse it to reduce wastewater

**Compliance discharge**
- Improve the wastewater treatment capacity and closely monitor water quality indicators such as chemical oxygen demand, ammonia nitrogen, and total nitrogen of the treated wastewater to ensure the discharge up to standards

[8] The caliber of this data was adjusted during the reporting period and is hereby corrected.

### Production Base introduced reclaimed water reuse facilities to reduce wastewater discharge

Lianyungang Base employs a systematic approach to manage its wastewater generated in production, directing it to the park's centralized sewage treatment system for collective treatment, with **70%** of it being recycled after treatment. The rainwater that meets the required standards as recognized by the online monitoring system is continuously and reliably discharged.

Jiaxing Base has introduced reclaimed water reuse facilities to effectively address wastewater management. These facilities boast high desalination rates, exceptional anti-pollution capabilities, and substantial water production capacity. It enables the recycling of over **70%** of evaporative, cooling, and circulating water sewage, significantly reducing sewage discharge.

### Hubei Satellite upgraded wastewater treatment process to improve efficiency

During the reporting period, Hubei Satellite implemented highly efficient and top-quality wastewater treatment process. This comprehensive process encompasses three steps, namely, esterification wastewater treatment, comprehensive wastewater treatment, and sludge treatment, ensuring that the effluent quality surpasses national standards. The closed structure of the system incurs neither odors nor secondary pollution. Moreover, the highly automatic process harnesses microbial performance to tackle pollutants, reducing energy consumption and operational costs. It can also accommodate various site and scale requirements, with various flexible equipment options available.

With this wastewater treatment process, Hubei Satellite effectively manages production-generated wastewater, ensuring compliance with environmental standards before discharge. As technology and environmental demands evolve, the Company will remain committed to optimizing its wastewater treatment processes to enhance efficiency and promote sustainable development.

## Exhaust Gas Emission Management

The air pollutants generated from STL's production and operations mainly include volatile organic compounds (VOCs), sulfur dioxide ($SO_2$), nitrogen oxides ($NO_x$), and particulate matters. We are committed to reducing the emissions generated during our own operations, strictly enforcing air pollution prevention and enhancement efforts at all our operating sites. Through accurate monitoring, and efficient exhaust gas treatment devices, we take targeted initiatives to efficiently control the exhaust gases generated during the entire production process, to continuously reduce emissions and ensure complete compliance. During the reporting period, none of our production bases and business divisions had incidence of exhaust gas emissions not meeting the required standards.

**Fill exhaust gas to absorbent products**
- Adopt the "water-spraying +honeycomb carbon adsorption" collection andtreatment process

**Exhaust gas from the operational space of grease washing and packing positions**
- Collect and treat exhaust gases through honeycomb carbon adsorption devices

**Crack furnace flue gas**
- Treat the gas with SCR denitrification and remove dust with trap

**Exhaust gas from the operational space of the drum washing room**
- Adopt water spraying to emission standards

**Exhaust gas after incineration of waste liquid**
- Treat the gas with the "SNCR denitrification + heat waste recovery + cyclone dust removal + compound rapid cooling absorption + electrostatic dust removal"

**Exhaust gas from organic storage tanks and process**
- Incinerate the gas through RTO furnaces

**Odor and exhaust gas from wastewater treatment stations**
- Adopt "biofilter + acid spray + alkali spray + activated carbon adsorption (emergency)" treatment

STL's main exhaust gas treatment initiatives

### Pinghu Base disposed exhaust gases in compliance to ensure efficient management of pollutants

During the reporting period, Petro Chemical's acrylic acid and ester production facilities and hydrogen peroxide production facilities were put into operation one after another. The exhaust gases produced in the process of acrylic acid and ester production facilities mainly include pollutants such as acrylic acid, acrolein, butyl acrylate, formaldehyde, and acetone. Supported by two sets of catalytic incineration equipment, more than **97%** of emission factors are treated and removed through secondary catalytic incineration to meet GB31571-2015 requirements as stipulated in the *Emission Standard of Pollutants for Petroleum Chemistry Industry*. The exhaust gases produced in the process of hydrogen peroxide facilities include pollutants such as non-methane hydrocarbons. There are two emission outlets: hydrogenation emission outlet using "condensation + activated carbon fiber adsorption" process for treatment, and oxidation emission outlet using "condensation + expansion condensation + resin adsorption" process for treatment. After the treatment of the two outlets, emission factors can meet the requirements of the *Integrated Emission Standard of Air Pollut*ants GB16297-1996, ensuring efficient management of pollutant emissions.

The Company actively responds to the national emission reduction requirements for VOCs[9], and continuously strengthens the control of unorganized VOCs emissions. Through measures such as upgrading LDAR[10] testing, carrying out special inspections on a regular basis, and optimizing processes, we ensure that the emissions from our operations meet the required standards.

### Jiaxing Base carried out special actions to eliminate "leakage" and "unorganized VOCs leakage"

During the Hangzhou Asian Games, the HSE Management Department and the Production Management Department at Jiaxing Base established a special team to eliminate "leakage" and "unorganized VOCs leakage", aiming to reduce "leakage" in all facilities and improve the efficiency at Jiaxing Base. Team members actively conducted such inspections in each workshop and department, made inspection records, incorporated the results into appraisals, and evaluated and compared all teams' results. The establishment of the special team has enhanced the participation of all departments at the base in rectifying the incidents of "leakage" and "unorganized VOCs leakage".

### Lianyungang Petrochemical enforces full process control of production-generated exhaust gases to promote high-quality and cleaner production

To actively fulfill its commitment to ultra-low emissions, Lianyungang Petrochemical has continuously promoted air pollutant emission reduction and leakage prevention management through initiatives such as technology optimization and enhanced management, focusing on emission sources, strengthening the control across the production process, and monitoring exhaust gas emissions in real time. In terms of project design, the Company has selected mature and advanced process technologies at home and abroad, which are in line with cleaner production and can achieve the goal of high-value, clean, and intelligent plant development.

| Clean raw materials | Process optimization | Real-time monitoring |
|---|---|---|
| • Use ethane with little sulfur as raw material which is clean and has a high recovery rate in cracking units, simple process flow, and low comprehensive energy consumption. Ethane crackers have lower sulfur emissions and less environmental impact and are more advanced compared to other similar pollutant emission projects | • The cracking furnace and boiler facility have implemented a low-NOx combustion + SCR decommissioning process, utilizing imported catalysts to ensure that the NOx emissions in the flue gas are maintained below 40 mg/Nm$^3$ (compared to the national standard of 100 mg/Nm$^3$). This adjustment ensures compliance with petrochemical pollutant emission standards and achieves ultra-low emission concentration levels. Additionally, volatile gases generated by the facility are collected via pipelines and directed to the RTO regenerative incinerator for treatment, ensuring they meet required standards before being discharged | • Actively use LDAR testing and repair tools for production facilities, and complete leak testing for operational facilities on a quarterly basis. A total of over 140,000 points have been registered and a total of four LDAR tests and retests have been conducted throughout the year |

[9] Volatile organic compound
[10] Leak detection and repair

### Pinghu Base conducted LDAR encrypted detection to reduce unorganized VOCs emissions

In addition to commissioning a third party to conduct quarterly comprehensive external LDAR testing of the base's dynamic and static sealing points involving VOCs in accordance with national norms, Pinghu Base implemented LDAR encrypted testing of 15% of the total points in areas prone to VOC leakage (such as tank areas and loading platforms) between September and October. This initiative aims to ensure rigorous control and management over VOCs.

Furthermore, Pinghu Base organized self-testing in the production area, tank area, and loading platform area using its LDAR testing devices. Special personnel were assigned to conduct special inspections of tank roof breather valves to ensure their normal operation.

## Solid Waste Discharge Management

Adhering to the principle of "Reduce, Reuse and Recycle" in solid waste management, STL has formulated the *Management Regulations on Solid Waste* to strengthen the management of solid waste. We are committed to the standardized solid waste disposal, and continuously promote the reduction and recycling of solid waste. We strictly insist on the full process solid waste control from generation, collection, storage, transportation to disposal and utilization. We have established an IT-based solid waste platform to conduct real-time monitoring and management of hazardous waste, and carried out regular and rigorous on-site audits on hazardous waste disposal entities, resolutely eliminating non-compliant ones, to ensure the compliant waste disposal. In addition, we continue to improve the recycling efficiency of solid waste and are committed to reducing the amount of solid waste discharged into the environment by more than 50,000 tonnes by 2030 through the comprehensive utilization of solid waste. During the reporting period, the Company managed solid waste according to the Pollutant Discharge Permit's management requirements, and there were no solid waste disposal violations.

| Indicators | Unit | 2023 |
|---|---|---|
| Rate of pollutant process treatment meeting standards | % | 100 |

#### General solid waste

- Set up special warehouses to collect solid wastes, and conduct anti-corrosion and anti-permeation treatment on the warehouse floor to prevent waste leaks from contaminating soil and groundwater
- Actively reduce solid waste, dry the sludge, and reduce the water content of the sludge
- Uniformly arrange special vehicles to transport waste to landfills or hand it over to qualified entities for disposal on a regular basis

#### Hazardous waste

- Set up temporary storage warehouses for hazardous waste to ensure that the hazardous waste is collected by type and source according to the requirements of hazardous waste management
- Contact qualified professional waste disposal entities for waste transfer in accordance with relevant national solid waste transfer regulations
- Install waste liquid incinerators to dispose of heavy alcohols, tar, and other hazardous wastes, and WAO devices to dispose of wastelve

**Jiaxing Base established its solid waste disposal model to realize resource recycling**

Jiaxing Base adopts suitable methods by type for solid waste disposal. General solid waste is prioritized for self-cycling within the Company, and the rest is recovered by qualified organizations for comprehensive utilization; hazardous waste is safely disposed of by qualified organizations. The Company's disposal safety rate of industrial solid waste is **100%**, and the recycling rate of recyclable industrial waste is also **100%**.

## Soil and Noise Management

Every year, STL prepares an annual environmental monitoring program in accordance with the requirements of the Pollutant Discharge and project environmental assessment, and pertinent technical specifications such as *the Guidelines on the Identification of Potential Soil Pollution Hazards in Key Supervision Entities (for Trial Implementation)* and the *Technical Guidelines of Soil and Groundwater Self-monitoring for Industrial Enterprises.* We have also hired qualified third-party environmental testing companies to keep an eye on the soil and groundwater. Moreover, we implement full-stage control of pollutants from the generation, infiltration, diffusion and emergency response, to avoid soil and groundwater pollution caused by leaks. During the reporting period, **100%** of STL's tested characteristic pollutants in soil and groundwater met the required standards.

| Control at the source | Pollution monitoring | Control at the end | Emergency response |
|---|---|---|---|
| • Take appropriate measures to prevent and reduce pollutant leakage in the process, pipelines, equipment, sewage storage, and treatment structures; and lay pipelines as visually as possible. This means that pipelines should be installed on the ground as far as possible so that pollutants can be detected and addressed as early as possible | • Implement a groundwater pollution monitoring system covering the production area, including establishing a comprehensive monitoring system, installing advanced detection instruments and equipment, and building scientifically and reasonably designed groundwater pollution monitoring wells to ensure timely pollution detection and control | • Implement impermeable treatment on the ground in the polluted area to prevent spilled pollutants from seeping into the ground, and collect the pollutants left on the ground and transfer them to the sewage treatment station for treatment; impermeable treatment is conducted by area type in exercising control at the end | • Once the groundwater pollution accident occurs, immediately start the emergency plan, and take emergency measures to control groundwater pollution so that pollution can be treated well |

STL's soil and groundwater pollution prevention and control measures

Additionally, STL strictly adheres to *the Law of the People's Republic of China on the Prevention and Control of Pollution from Environmental Noise*, focuses on the identification, analysis and evaluation of noise hazards, and enforces noise pollution control from noise sources, transmission channels, and noise receptors in all aspects. During the reporting period, the Company conducted regular noise monitoring at the plant boundary, and its bases and business units meet the standard limit value of a third-class zone in *the Emission Standard for Industrial Enterprises Noise at Boundary* (GB 12348-2008), and the sound environment quality can also meet the requirements of the daytime and night time standards of a third-class zone of *the Environment Quality Standard for Noise* (GB 3096-2008), with no impact on the surrounding environment.

The Company has considered noise control during its plant planning and design, and arranged production devices in zones according to their noise intensity if the process allows, with noisier devices placed built as far as possible on the side away from noise sensitive areas outside the plant or buildings without sound sources (such as auxiliary plants, warehouses, large facilities such as towers, tanks and containers that do not produce noise, and green belts) as barriers to separate them from noise sensitive areas. Noise-intensive machinery and equipment, such as large machine pumps and molding and packaging machinery, are installed within the plant workshops and the machine base is damped to reduce the noise impact on the environment inside and outside the plant.

| Indicator | | Unit | 2022 | 2023 |
|---|---|---|---|---|
| Waste | Total solid waste | 10,000 metric tonnes | 9.42 | 14.02 |
| | Solid waste generated per unit of product | metric ton/metric ton | 0.02 | 0.01 |
| Emission gases | Emissions of nitrogen oxides (NOx) | metric tonne/10,000 metric tonne products | 0.76 | 0.55 |
| | Emissions of sulfur dioxide ($SO_2$) | metric tonne/10,000 metric tonne products | 0.10 | 0.11 |
| | Emissions of volatile organic compounds (VOCs) | metric tonne /10,000 metric tonne products | 0.25 | 0.26 |
| | Emissions of particulate matter (PM) | metric tonne /10,000 metric tonne products | 0.06 | 0.05 |
| Wastewater discharge | Chemical oxygen demand (COD) emissions | metric tonne/10,000 metric tonne products | 2.02 | 2.08 |
| | Ammonia nitrogen emissions | metric tonne/10,000 metric tonne products | 0.01 | 0.02 |
| | Total organic carbon (TOC) emissions | metric tonne/10,000 metric tonne products | 0.12 | 0.10 |

# Ecological Co-building

Ecological co-building is a necessary way to safeguard our planet's natural habitat. STL strengthens the management and conservation of water resources through targeted measures, ensures that every drop of water is fully and reasonably utilized, and devotes itself to reducing the consumption of water sources. Additionally, we are engaging in the preservation and restoration of biodiversity, fostering the harmonious coexistence of ecosystems.

## Water Resources Management

As water is a fundamental natural resource and a strategic economic asset for corporate development, STL places great emphasis on the management of water resources, strictly complies with the *Water Law of the People's Republic of China* and other pertinent laws and regulations. On these basis, we have formulated internal policies such as the *Energy Management System* and the *Water Quality Management System*. During the reporting period, our production bases and business units primarily relied on third-party water supply, reclaimed water reuse, and process condensate water. We installed water metering instruments that exceed national standards and conducted regular water balance tests to assess consumption status and identify potential leaks in water facilities. By implementing measures like equipment maintenance, upgrades, and technological innovations, we have effectively conserved this vital resource. During the reporting period, STL saved a total of **7.907 million** tonnes of water resources by adopting the following water resources management measures.

STL adopts light hydrocarbon cracking to produce ethylene. Its water consumption is only 1.7 tonnes of water per tonne of ethylene, compared with 22 metric tonnes of water consumption per tonne of ethylene and 3.5-4.5 tonnes of water consumption per tonne of ethylene in coal chemical and naphtha cracking processes respectively. The reduction of water consumption of light hydrocarbon cracking is more than **90%**[13].

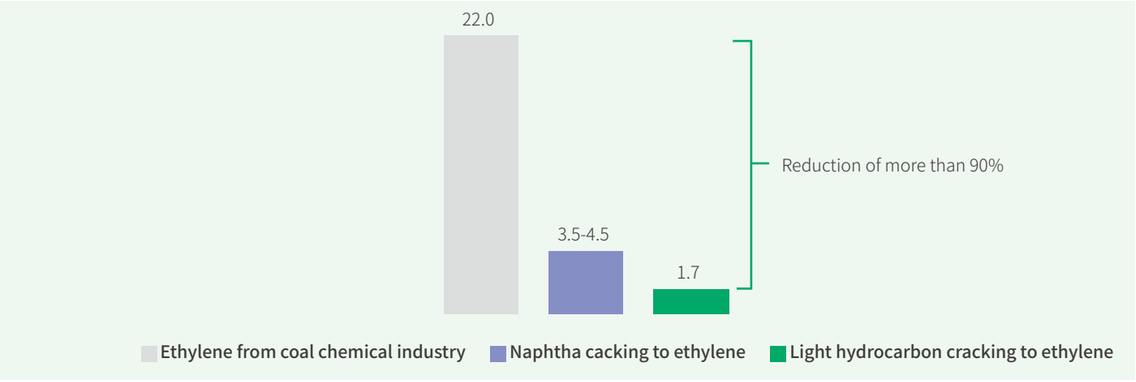
At present, the Company's ethylene production capacity is 2.5 million tonnes. It saves **50.75 million** tonnes and **4.5-7 million** tonnes of water compared with coal chemical process and naphtha cracking process.

[11] The calibre of the data in this category was adjusted during the reporting period and is hereby corrected.

[12] The caliber of data in this category was adjusted during during the reporing period and is hereby corrected.

[13] The source of the relevant data is the research report of Huaan Securities, "Analysis of the Path of Green and Low Carbon Development of the Petroleum and Chemical Industry under the Carbon Neutrality Goal".

| Water recycling | Process upgrade | Equipment optimization | Improve water efficiency |
|---|---|---|---|
| • Enhance the recovery of steam condensate and conductive heat flow to achieve recycling<br>• Collect rainwater around the fire fighting pool, pump it to the water treatment station, and then use it for replenishing the fire fighting pool | • Strengthen the pelletization process control and reduce the frequency of pelletizing water replacement<br>• Use of surface evaporative air cooler and circulating cooling water air for cooling device in the circulating cooling technology | • Replace outdated bypass filters with energy-saving ones<br>• Strengthen the inspection of various water supply pipelines in plants, and conduct prompt maintenance to avoid leakage | • Use backwash water for pharmaceutical dilution to improve the water recycling rate<br>• Use phosphorus-free/low phosphorus water treatment chemicals for circulating cooling water treatment technology, which can make the circulating water system reach a **7-time** concentration and achieve a water-saving rate of **12.5%** |




Water consumption of light hydrocarbon cracking compared to other processes for ethylene production (metric tonne of water/metric tonne of ethylene)

### Jiaxing Base adopts centrifugal extraction technology, significantly reducing water consumption in the process

During the reporting period, the Jiaxing Base introduced centrifugal extractant technology at its 2B oil workshop to replace the previous intermittent rinsing method. This technology enables continuous and stable operations while reducing water consumption in the process by up to **50%**. Additionally, the base introduced advanced reclaimed water reuse facilities, which enhances the industrial water reuse rate to **70%** through pre-treatment, one-stage reverse osmosis system, and system operation control.

| | Indicator | Unit | 2022 | 2023 |
|---|---|---|---|---|
| Water consumption | Total water consumption | million tonnes | 32.12 | 33.12 |
| | Water consumption per unit of product | metric tonne/metric tonne | 5.24 | 3.49 |

## Biodiversity Conservation

As a leading company in the petroleum and chemical industry, STL pays attention to the impact of its operations on natural resources and biodiversity, keeps the relevant impact as minimal as possible, and actively carries out public welfare activities for biodiversity conservation to fulfill its corporate social responsibility. We strictly adhere to national ecological protection related requirements, consider ecological protection during the initial project construction assessment, production, and operations, resolutely reject projects in ecologically vulnerable areas. Additionally, the Company continuously improves the monitoring mechanism of ecological protection and restoration protection, implements effective measures to mitigate the impact on biodiversity throughout the entire process of production to conserve biodiversity. As of the end of the reporting period, the projects of our production bases and business units had adhered to the ecological environment control programs, the main functional area plan and the general land use plan, and had not crossed the ecological protection red line. The Company had no significant incidents that harmed biodiversity during the reporting period.

- Make active soil and water conservation efforts in construction projects, prepare soil and water conservation reports, and report for the record
- Use APEOS-free auxiliaries to ensure that the products are non-biotoxic and meet environmental requirements
- Develop aldehyde-free products with formaldehyde content lower than 16mg/kg to meet the requirements of Class A textile applications

STL's biodiversity conservation initiatives

### Jiaxing Base implemented dust control at construction sites to reduce impact on vegetation

All operations of Jiaxing Base rigorously abide by the requirements of the project environmental assessment in their new projects. During the construction period, they require the construction entities to act in compliance and reduce unnecessary soil erosion. The bases set up safety notification and dust control signs in front of the gates of the construction projects. During the construction period, two fog cannons are configured at each intersection to be used on-demand, and dust monitors, fences, barriers, sprinklers, car washing pools in front of the gates are also installed, and bare soil is covered in place. Moreover, the base implemented hardening and greening initiatives at factories' production sites and roads near the gates, to reduce the impact of dust generated by road transport on the surrounding vegetation.

### Lianyungang Base works to conserve biodiversity and maintain the beauty of ecological balance

Lianyungang Base rigorously upholds biodiversity conservation, comprehensively engaging in soil and water conservation efforts in its construction projects while participating in marine environmental protection. The base takes an active role in marine ecological environmental protection initiatives, with an investment of over RMB **10 million**. This initiative focuses on enhancing the coastline environment, fostering breeding and release programs, and building ecological monitoring systems to track marine environmental dynamics in real-time, thereby providing technical support for ecological conservation efforts.

During the reporting period, Lianyungang Base organized dedicated personnel to conduct public welfare beach cleaning activities along the coastline in Xu Wei New District. The cleaning and disposal of coastal waste contributed to significant improvements in local marine ecological environment and biodiversity. Concurrently, the base conducted diverse public education campaigns on marine ecological civilization, intensifying efforts to raise awareness. Furthermore, the base also carried out artificial breeding and release activities to bolster marine organism populations in surrounding waters and facilitate the restoration of fishery resources. Over **2 million** fish fries and more than **16,000 million** Chinese shrimps were released as part of these initiatives.

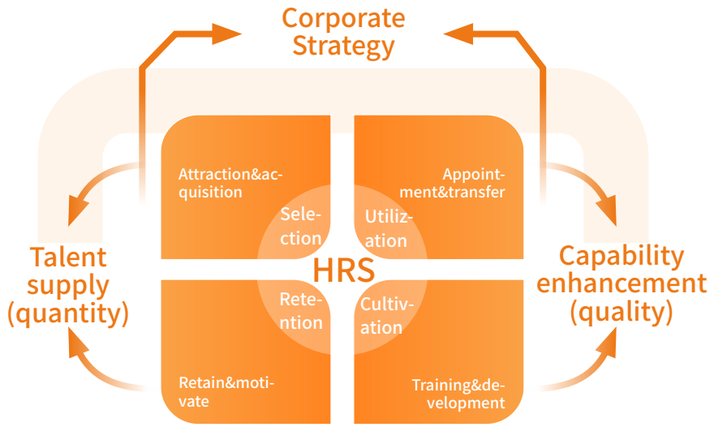
# 03 People-Centricity to Build a Harmonious Society

- Creating Talent Value by Empowerment
- Creating Harmony with Love and Responsibility

STL adheres to the guiding principle that "the company grows together with its employees and society". Firmly committed to creating a platform for mutual advancement with employees and the community, we endeavor to nurture employee growth while contributing to community welfare, uniting efforts to engage in practical actions and realize the collective "STL Dream".

# Theme:
# A Blueprint for Talent Development

Guided by the culture of "harmony," STL enthusiastically champions the ethos of "sincerely caring for the enterprise and working hard," realizing the collective "STL Dream" through collective efforts. Aligned with our development strategy, we have instituted a holistic talent development framework covering four perspectives: "selection," "utilization," "retention," and "cultivation". Through talent acquisition and incentive mechanisms, we ensure a steady talent pipeline, while leveraging appointment and development strategies to enhance talent capabilities across the board. This ensures a robust supply of talent, both in quantity and quality, necessary for our high-quality development.




STL's human resources system blueprint

STL attaches importance to talent training, creating "management" and "professional" career development paths that both provide vertical and horizontal career opportunities, so that employees can give full play to their strengths and abilities, to achieve their personal career goals through various development paths, and to maximize the value of themselves and the Company.

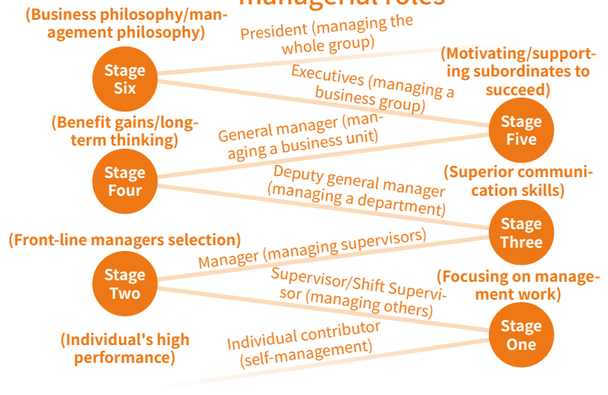
"Management" and "professional" career development paths


STL's two career development paths

## Paths for Managerial Roles

STL provides a zigzag-shaped development path for managerial roles. From new hires to senior management, we have formulated personal training programs for employees at all stages of their careers from three perspectives: leadership skills, time management, and work philosophy. We have encouraged employees to improve their management and leadership capabilities through a comprehensive promotion system, providing a steady stream of high-quality strategic talent reserve for the Company's development.

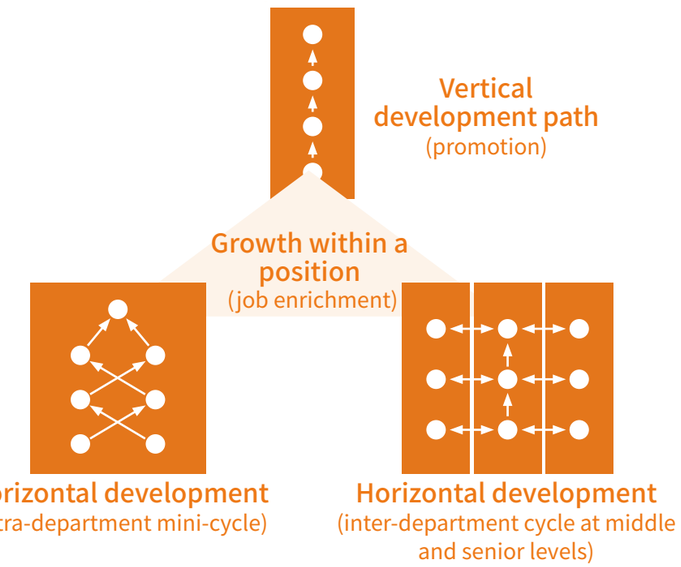
Zigzag-shaped development path for managerial roles




## Paths for Professional Roles

STL has offered development paths for professional roles which provides "vertical and horizontal" opportunities to establish an effective talent mobility mechanism. This involves the flexible combination of vertical promotion and horizontal job rotation opportunities for employees, improve professional skills, enhance professional competence, and full mobilize employees' work enthusiasm. To motivate technical staff in improving their professional abilities, we have organized a range of skills competitions for warehousing, instrumentation and other operational positions. These competitions assess employees' skills, fostering vitality and encouraging continuous progress among the staff.

"Vertical" and "horizontal" development paths for professional roles



# Creating Talent Value by Empowerment

STL views talent as the most valuable asset of an enterprise. We uphold a people-oriented development philosophy, and respect and protect the legitimate rights and interests of all employees. We are committed to creating a diverse and equitable working environment, stimulating employees' creativity and potential, and collaborating with them to achieve both personal growth and the Company's development goals.

**This chapter responds to the UN SDGs:**

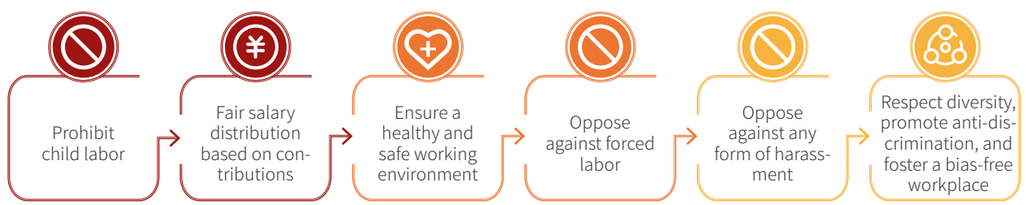

## Talent Attraction

STL upholds a talent concept centered on ability and contribution rather than education and seniority. We continuously increase investment in talent attraction, strengthen talent development planning, optimize talent management modes, and enhance the efficiency of talent resource management. Our goal is to gather diverse and outstanding talents, fostering sustainable development with our employees.


## Compliance Employment

STL strictly adheres to relevant laws and regulations such as the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Social Insurance Law of the People's Republic of China*, and the *Provisions on the Prohibition of Using Child Labor*. We vehemently oppose discrimination, forced labor, illegal labor, harassment, and abuse. We prohibit the use of child labor, and fully safeguard employees' legitimate rights and interests. During the reporting period, we revised and improved the *Attendance and Vacation Management System*, refining regulations regarding employees' working hours, national statutory holidays, paid vacations, and overtime wage payment to further safeguard their basic rights and interests.

We actively fulfill our corporate social responsibility by advocating employee diversity and treating them on on an equal footing, regardless of their nationalities, ethnicity, genders, religious beliefs and cultural backgrounds. During the reporting period, we had 137 employees of different ethnic minorities and countries, including 18 ethnic minorities such as Manchus and Mongols, and different nationalities such as Americans and Koreans. In addition, we effectively safeguard the rights and interests of female employees, ensuring that they are entitled to marriage leave, maternity leave, and special protection initiatives during pregnancy, childbirth and breastfeeding in accordance with the law.




STL's employee rights and interests protection measures

| Indicators | Unit | 2023 |
|---|---|---|
| Rate of labor contract signing | % | 100 |
| Social insurance coverage | % | 100 |

## Employee Recruitment

With corporate operations and developmental strategy in mind, STL actively expands its talent acquisition channels and enriches its selection methods to continuously strengthen talent acquisition. This aims to provide the necessary talent strategy for the Group's business development, establishing a long-term competitive edge and a robust foundation for talent reserves.

While education and qualifications are important considerations in talent assessment, they are not the sole criteria. STL emphasizes the importance of integrity and skills in its recruits, assessing candidates based on their capabilities. In the recruitment process, we endeavor to create a fair, equitable, and diverse environment, attracting outstanding talents and ensuring a strong match between job requirements and candidate skills. Through diversified recruitment channels, we work to promote strategic talent development initiatives.

### Recruitment for experienced candidates

Actively expand talent attraction channels: Establish channels for the introduction of overseas experts and continuously recruit high-level talents from abroad.

Establish dedicated recruitment positions for high-end talent: Focus on industry-leading talents and top-tier management professionals from leading enterprises, to meet our needs for talent at various development stages, and create strategic talent reserves.

Strengthen collaboration with various platforms: Participate in on-site talent exchange events and leverage online recruitment platforms for live broadcasting, to disseminate recruitment information to more candidates, and intensify talent introduction efforts. The Company has created its WeChat official recruitment account and released the "Satellite Recruitment" mini-application. We encourage external and internal talent recommendation through rewards to revitalize the talent pool and the willingness of People Officers to recommend talent.

Establish unlocked internal talent recommendation channels: Create internal talent recommendation platforms and other channel-based operational mechanisms, establishing a shared internal talent pool, and ensuring efficient and sustainable recruitment.

### Campus Recruitment

Implement a differentiated recruitment strategy: Analyzing recruitment strategies, salary structures, and benefits offered by peer companies domestically and internationally, STL has developed a differentiated approach to campus recruitment. This strategy focuses on 10 "Project-985" universities, 14 leading universities in petrochemistry, and general universities in regions where the Company operates, ensuring effective campus recruitment efforts.

Enhance recruitment team's capabilities: Conduct training on interviewer empowerment and campus recruitment team process, and provide standardized interview manuals and toolkits to ensure orderly campus recruitment practices.

Strengthen collaboration with universities and enterprises: Boost partnerships with key universities and enterprises, and establish collaborative engagement frameworks with them to lay a solid foundation for subsequent targeted talent development.

During the reporting period, STL advanced its transition towards digital intelligence recruitment by integrating a third-party digital intelligence talent management platform. This platform combines digital technologies with recruitment management, harnessing tools such as artificial intelligence and big data to expedite talent acquisition, enhance operational efficiency, and improve candidates' experience. This initiative aims to achieve the Company's objectives for strategic talent reserves.

**Optimize and upgrade the recruitment system**

With the assistance of third-party recruitment systems, we have significantly elevated our recruitment operations. These systems enables comprehensive data recording throughout the recruitment process, allowing us to adjust our recruitment strategy promptly in response to changing operating conditions. By effectively deploying talent resources, we have established an internal talent sharing resource base.

**Introduce video job description function**

We piloted video job description for six types of positions in campus recruitment. These videos feature character introduction and work scenes, providing candidates with insights into the job roles and enhancing the effectiveness of recruitment efforts.

**Expand external and internal recommendation channels**

STL continues to bolster cooperation with multiple platforms, expanding recruitment information dissemination channels to support talent acquisition initiatives.

**Combine traditional face-to-face interviews with digital intelligence interviews**

We have implemented a cloud-based recruitment system, facilitating one-click notifications to candidates and interviewers. This streamlined approach reduces the costs associated with offline phone calls and SMS notifications while enhancing information dissemination efficiency. Additionally, we leverage online platforms such as WeChat Channels and Tencent Meeting for livestreaming recruitment, laying a solid foundation for our talent introduction.

STL's digital and intelligent recruitment model

In terms of the innovation awards in China's digital intelligence recruitment and talent management, STL was honored to be on the Top 50 list for the 2023 China HR Venus Awards - Practice Excellence Award in Campus Recruitment. This accolade reflects the widespread recognition of our recruitment efforts across various sectors.

# Talent Development

Guided by the culture of "harmony", STL seeks to enhance its competitiveness by building an excellent team of employees. We insist on providing training in an orderly manner, promoting the standardization of our training efforts, and implementing the management mode of unified planning and execution by type. To support employees' career development, we always adhere to the principle of putting our employees first, providing targeted training programs for various groups. We develop tailored training plans, management strategies and incentive programs to empower individual growth across the board.

## Employee Training

STL has introduced the core talent training concept of the "One Hundred Talent Development Plan for Future STL". We have established a comprehensive training mechanism aimed at empowering every employee to acquire essential knowledge and skills for their careers while gaining valuable experience in tandem with the Company's growth. We prioritize multi-level, highly efficient, and tailored training initiatives, with each employee benefiting from targeted training plans. Our training programs, including Star Class, Sailing Class, and Marketing Elite Training, cater to different employee groups, fostering a high-level talent pipeline within the organization.

During the reporting period, we revised and improved the *Training Management System* and the *Management Measures for Internal Lecturers*. Additionally, we have optimized support systems to facilitate employees' self-improvement through participation in training activities. We have meticulously curated the Group's internal training instructor pool and internal course resource library, comprising 77 internal training lectures and 101 internal course resources. This initiative aims to bolster our internal employee training and knowledge management system.

| Training Planning | Training Management | Training Implementation | Training Evaluation |
|---|---|---|---|
| Develop annual training plans for all departments at the beginning of each year and issue them to the departments for implementation after being approved by the President of the Company | The HR Center places training attendance, disciplines, and files under centralized management. It makes an overview of training in the Company's based on monthly training information provided by departments | Training sessions are delivered as per to the annual training plan. In the process of implementation, the plan may be revised according to actual needs | Training effects are evaluated at the levels of reaction, learning, behaviors, and results |

STL's employee training management model

Meanwhile, we actively carry out the work of integration of industry and education. Through exploring the new mode of university-enterprise cooperation, we cultivate innovative, complex and high-quality technical and skilled talents for petrochemical enterprises, and contribute to the development of the industry's talent pool.

**Leadership development empowerment**

To enact the core talent development concept, STL has launched a workshop to identify and raise senior management's role awareness. Additionally, we have devised and promoted our leadership empowerment program at all management levels in 2024, laying the groundwork for the "One Hundred Talent Development Plan".

**HSE specialized capability enhancement projects**

To systematize its HSE (Health, Safety, and Environment) professional knowledge and provide systematic empowerment, STL has launched HSE special competence enhancement programs at all its bases and business units. These initiatives comprise 9 professional courses, benefiting over **1,300** employees across the Group. We also conducted knowledge and skill assessments, and issued certificates of completion.

**Skill competitions for employees in operational roles**

To elevate production-specific skills, STL's bases and business units organized skill competitions, embracing the ethos of "promoting practice by and learning through competition". These events, including special training projects for key frontline technical staff, equipment skills competition, and the "Shining Star River" Chanllenge Competition, were attended by over 1,700 participants.

**Standardized training system for new employees**

To facilitate the seamless integration of new employees, STL conducted various activities such as "Star Class" intensive training, integration plan tracking, evaluations for new hires to be accepted as regular staff, and thematic events on Teachers' Day. These endeavors aim to foster role transition and cultural assimilation among new graduate hires in line with the principles of "Satelliteization, professionalization, and internationalization".

At the same time, we actively carry out the work of integration of industry and education, through exploring a new school-enterprise cooperation model, to train innovative, compound high-quality technical talents for petrochemical enterprises, for the construction industry to make contributions to the talent echelon.

### Lianyungang Petrochemical builds a community of industry-education integration to cultivate future industry talents

On February 9, 2023, the Signing and Unveiling Ceremony of Lianyungang Technical College and Lianyungang Petrochemical for the Co-establishment of Lianyungang Petrochemical Industry College was held. Zhu Xiaodong, General Manager of Lianyungang Petrochemical, attended the event and pointed out that Lianyungang Petro Chemical, as a domestic leader in comprehensive utilization of light hydrocarbons, believe that we can't develop without knowledge and talents in the future, and the cooperation between the two sides can offer more wisdom and talents and help high-quality development in the region's economy. The formation of this community of industry-education integration strongly promotes the in-depth integration of universites and enterprises, which is of great significance in highlighting the function of vocational education, promoting regional integration, and accurately cultivating talents. Through this project, both parties will explore a new mode of university-enterprise cooperation and cultivate innovative, complex and high-quality technical and skilled talents for petrochemical enterprises.

| Indicators | Unit | 2023 |
|---|---|---|
| Coverage of employee training | % | 100 |
| Total attendance to employee training | person time | 198,518 |
| Total hours of employee training | hour | 456,659 |

## Employee Incentives and Promotion

STL recognizes all employees' contributions and creation, actively harnessing their enthusiasm through a comprehensive salary system and incentives. This approach fosters mutual development and benefits for both the Company and its employees. We have devised an employee incentive framework encompassing three perspectives, namely, short-term rewards (such as premium incentives and overselling rewards), medium-term incentives (virtual equity), and long-term incentives (shareholding as business partners). These measures are designed to stimulate continuous employee development through targeted value incentive plans.

To further galvanize employee motivation and initiative, we refined the *Remuneration Management Measures* during the reporting period. This involved enhancing the management of overtime wage payments, ensuring that employees' personal value is maximized, and leveraging the motivating power of the remuneration system on talent.

- A differentiated compensation system is in place, with the range determined by position value and the level determined by personal value.
- Compensation surveys on the market, the industry, the region, and competitors are regularly conducted to ensure that the Company's compensation is competitive and in the leading position in the industry.
- The rank is aligned with the compensation level based on position value, ability, competency, performance, and results. The principles of distribution according to work, efficiency first, and fair and sustainable development are upheld and a sound compensation broadband system is in place.
- Compensation is given play to as incentives and guidance. More pay for more work is advocated. No cap is put on compensation incentives.

STL's compensation system

To support our employees in achieving their personal career aspirations, we offer ample development opportunities and promotion clear paths, complemented by various promotion initiatives aimed at motivating and supporting their long-term growth. We have established diverse career development paths for management, professional, and operational staff, ensuring each employee has the opportunity to carve out their own trajectory within the Company. During the reporting period, we refined the management and professional career development frameworks, fine-tuned promotion paths and assessment methods, and embraced advanced management approaches to identify and nurture talented individuals within the organization.

## Talent Guarantee

STL is deeply committed to a people-centric philosophy, prioritizing work safety and employee health as paramount for its sustainable development. Upholding the principle that "safety is more important than profit", we place a strong emphasis on safeguarding the well-being of our employees and continually enhance our safety assurance systems. As a leading chemical company, we also place importance on chemical safety management, proactively mitigating potential risks in our production and operational processes.

# Health and Safety

## Prevention of Occupational Diseases


STL's ISO 45001 Occupational Health and Safety Management System Certification

STL prioritizes the health and safety of our employees above all else. We strictly adhere to national laws such as the *Work Safety Law of the People's Republic of China* and the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*. We have created and improved internal occupational health and safety policies and systems, employing science-based and advanced methods to assess and mitigate the risks of occupational diseases. During the reporting period, STL's ISO 45001 Occupational Health and Safety Management System Certification covered 100% of its operating sites.

We organize health check-ups and specialized occupational health assessments regularly for all employees, and establish comprehensive occupational health monitoring files to proactively prevent occupational diseases and related ailments. During the reporting period, we bolstered management in human resources and employee relations and promoted electronic personal health files to safeguard employees' health and safety.

| Indicators | Unit | 2023 |
|---|---|---|
| Percentage of occupational physical examinations | % | 100 |

## Work Safety

In terms of work safety, STL upholds the principles of "putting safety first, and focusing on prevention, integrated control, and all engaged". We strictly adhere to laws and regulations such as the *Work Safety Law of the People's Republic of China* and the *Interim Measures for the Screening, Identification, and Control of Work Safety Accident Hazards*. We have developed a *Work Safety Accountability System* for all employees, established reputable organizations and institutions for safety management, and consistently implemented various national laws and regulations on work safety, continuously promoting the implementation of safety control measures. At the end of the reporting period, all of our production bases and business units held the Level 2 Provincial Certificate of Work Safety Standardization for Enterprises.

In terms of safety management, we have firmly instilled the concept of safety-based development, enhancing employees' safety awareness, and enforcing "zero-tolerance management" for safety issues. We enforce comprehensive, multi-disciplinary, and thorough work safety management.

### Establish a sound governance structure

- STL has established its Work Safety Committee, with the Chairperson of the Board serving as the director, to coordinate and promote various work safety initiatives. We have engaged all employees to sign the Safety Objective Responsibility Letter, strictly implementing the work safety responsibility system across the board. We have also established and improved various work safety management systems, continuously promoting standardization in this area. Additionally, we have compiled and issued the *Safety Culture Manual to* instill safety consciousness throughout the Company.

### Effective investment in safety

- In strict accordance with relevant management methods, we have established and improved the internal management system for work safety expenses. This ensures the allocation of funds for safety equipment and facilities, incentives for hazard investigation, and funds for other work safety measures, providing a solid financial foundation for our safety management.

### Risk identification and hidden hazard investigation

- We regularly conduct risk identification across all production aspects, rigorously standardizing safety risk management and hazard investigation. This proactive approach effectively prevents and reduces the occurrence of work safety accidents, with a 99% completion rate for risk rectification since 2021.

### Empower work safety with digital technology

- We  monitor information on areas such as personnel presence, major hazard sources, flammable and toxic gases, integrated energy consumption, and the entire production process on the "Five-in-One" platform, leveraging technologies to achieve closed-loop management of hazards and the IT-based risk management and control, and empowering our modern work safety management.

### Establish a sound system

- To enhance employee safety, we establish training bases and provide specialized training sessions led by internal and external experts. We also organize regular emergency drills to improve the team's emergency response capabilities effectively.

### STL organized National Work Safety Month activities to strengthen work safety management capability

STL recognizes that human life is of paramount importance. We prioritize both development and safety, and uphold the principles of "putting safety first, and focusing on prevention, integrated control, and all engaged". With the red-line safety awareness deeply ingrained in mind, we promote the implementation of the responsibility of work safety, effectively improve the quality of risk and hidden hazard investigation and rectification, and effectively incentive the strong willingness and ability to identify and solve problems.

**HSE culture training:** We vigorously promote safety across the organization. Through a three-dimensional mode combining visual, acoustical and physical experience,we provide physical safety education that can be felt and operated, and a series of activities such as various online and offline competitions on safety knowledge, work safety video filming competitions, and safety culture essay competitions;

**Safety accident analogous inspection:** We focus on special investigation and rectification, requiring those in responsible to take the lead in five areas and diligently implement work safety initiatives with a strong sense of responsibility;

**Emergency drills:** We organize regular emergency drills covering all positions, to enhance their capabilities for disaster and risk prevention, self-rescue and mutual rescue, build a firm line of defense for work safety, and promote all stuff "to stay safe, understand how to stay safe, have a comprehensive understanding of safety".

| Indicators | Unit | 2023 |
|---|---|---|
| Number of safety emergency drills conducted | time | 789 |
| Cumulative number of participants in emergency drills | person | 17,412 |
| Employees participating in emergency skills training | person time | 17,528 |
| Number of environmental monitoring activities rganized | time | 116 |

## Chemical Safety

STL is dedicated to identifying, managing, and minimizing environmental, health, and safety impacts throughout the chemical's lifecycle, to safeguard the health and safety of our employees.

## Chemical Regulation

We strictly adhere to relevant laws and regulations, including the *Work Safety Law of the People's Republic of China*, the *Regulations on the Safety Management of Hazardous Chemicals,* the *Regulation on the Administration of Precursor Chemicals,* the *Measures for the Public Security Management of Explosives Precursors,* the REACH[14] Regulation, the POPs[15] Regulation, and the CLP[16] Regulation.

We have established a long-term objective for chemical management: ensuring that all chemicals utilized are **100%** compliant. To this end, we have implemented a comprehensive chemical management system. Grounded in external regulatory mandates and industry benchmarks, this system involves thorough compliance assessment and risk management for all chemicals procured, stored, transported, and utilized throughout our operations.

STL remains steadfast in its commitment to enhancing the compliance, safety, and sustainability of its products. We strive to minimize chemical hazards to manageable levels and mitigate their impact on health and the environment. Our approach includes conducting comprehensive chemical hazard assessments covering all products, collecting the Material Safety Data Sheets (MSDS) for all chemicals and summarizing essential information on their physical and chemical properties, toxicity, environmental hazards, and potential health risks to users. This ensures a thorough identification of both existing and potential compliance and health and safety risks associated with each chemical. We only conduct risk assessments for existing products but also integrate this process into all stages of new products' research and development, project creation, and production, fully safeguarding product health and work safety.

Based on our risk assessment results, we have created the *List of Restricted and Banned Substances* to rigorously control the selection of chemicals and substances in both new product development and the manufacturing of existing products. Furthermore, we have implemented a transparent mechanism to publicly disclose the registration and usage of all chemicals involved in our business operations. We provide information on these chemicals, including *Safety Data Sheets (SDS)* and labels, to stakeholders such as end users, ensuring compliance with external regulatory requirements.

To effectively implement these measures, we are dedicated to reducing chemical safety risks to manageable levels and conducting total lifecycle management. This includes organizing regular learning sessions on hazardous properties of chemicals, emergency response measures, and other related knowledge.

[14] REACH：Registration，Evaluation，Authorisation and Restriction of Chemicals. REACH is also know as Regulation (EC) No. 1907/2006.
[15] POPs：Persistent Organic Pollutants. POPs are also know as Regulation (EC) No.2019/1021.
[16] CLP：Classification, Labeling and Packaging of substances and mixtures. CLP Regulation is also know as Regulation (EC) No. 1272/2008.

### Procurement

- Ensure stable product quality and ban hazardous or restricted substances during the procurement process by rigorously auditing supplier qualifications
- When introducing new raw materials or considering new suppliers, we adhere to the certification standards outlined in the *Chemical Management System* and the *Management Measures for Hazardous and Restricted Substances*

### Warehousing

- For precursor chemicals, explosives precursors, highly toxic chemicals, we have upgraded storage facilities in accordance with the *GB15603 General Rules for the Hazardous Chemical Warehouse Storag*e, and adopted face recognition technology to enhance storage by category and emergency responses

### Transportation

- Ensure proper product management, control and labeling during transportation according to the guidelines outlined in the *Recommendations on the Transport of Dangerous Goods*
- Utilize appropriate transportation vehicles that comply with relevant safety regulations to guarantee chemical safety during transit

### Use

- Enforce stringent process requirements in the production process and avoid procedures that pose safety risks
- Enhance control measures and implement robust management for fire and explosion prevention, anti-static precautions, and anti-poisoning management

### Lianyungang Petrochemical strengthened hazardous chemical management to fully ensure chemical safety and security

To bolster the management of hazardous chemicals, Lianyungang Petrochemical has compiled a contraindication table for the material reaction matrix of the liquid loading and unloading station, updated checklists for vehicle loading and unloading hazardous chemicals, and instituted a comprehensive log and signature system for all products. Furthermore, it has standardized the temporary storage of chemicals on-site by conducting nightly inspections and implementing the "86" operation method for liquid loading and unloading.

We have mobilized internal professionals to refine inspection indices covering various aspects such as process safety, hazardous chemical storage, anti-leakage measures, safety instrumentation, equipment integrity, education and training, operational safety, operating procedures, change management, and emergency response. We have also formulated pecialized checklists and guidebooks for the investigation of hidden hazards.

### Jiahong New Material made chemical risk identification and assessment efforts to reduce the risk of hazardous chemicals

In September 2023, Jiahong New Material conducted a thorough risk identification and assessment of their production and storage facilities. This initiative, conducted under the framework of dual prevention (risk identification + hidden danger investigation), addressed potential hazards such as hazardous chemical leakage accidents during operational activities and equipment malfunctions. Specific control measures have been devised across four key areas: engineering and technical measures, maintenance protocols, personnel operation guidelines, and emergency responses. These measures have effectively mitigated the occurrence of hazardous chemical leakage accidents.

## Chemical Phase-out and Replacement

STL prioritizes control at the source in chemical management, implementing proactive measures to phase out and replace chemicals from a forward-looking perspective. Our chemical phase-out list aligns with national and local compliance requirements such as the *Catalog of Backward Work Safety Production Processes, Technologies, and Equipment of Hazardous Chemicals to Be Phased Out (First Batch)* and the *Catalog of Toxic Chemicals Prohibited or Strictly Restricted in China* and incorporates hazard assessments conducted by STL itself. Chemicals on this list were expected to be phased out within one year to minimize compliance and safety risks. Currently, we have successfully phased out all chemicals on our phase-out list. Moving forward, we will regularly update the list in line with regulatory requirements and developments to enhance chemical safety oversight. Furthermore, we are actively working on chemical replacement processes, considering safe chemical alternatives and exploring the adoption of biologics or green raw materials. We are compiling a *Positive List of Chemicals* following the U.S. Environmental Protection Agency's *Safer Chemical Ingredient List* and promoting its integration into our business processes.

### STL replaced toxic solvents to minimize the potential risk of hazardous chemicals

To reduce the use of toxic and hazardous chemicals and minimize occupational health and safety risks, STL is implementing process modifications using the new green DEP[14] technique for four sets of acrylic acid equipment in the workshop.

Upon completion of the process modifications, DEP will fully replace toluene, a known occupational disease hazard. DEP, the new material, poses no occupational disease hazards, effectively reducing the types of hazards employees are exposed to and lowering potential risks to occupational health.

### STL adopts new technology route to produce hydrogen peroxide and propylene oxide to enhance safety and environmental attributes

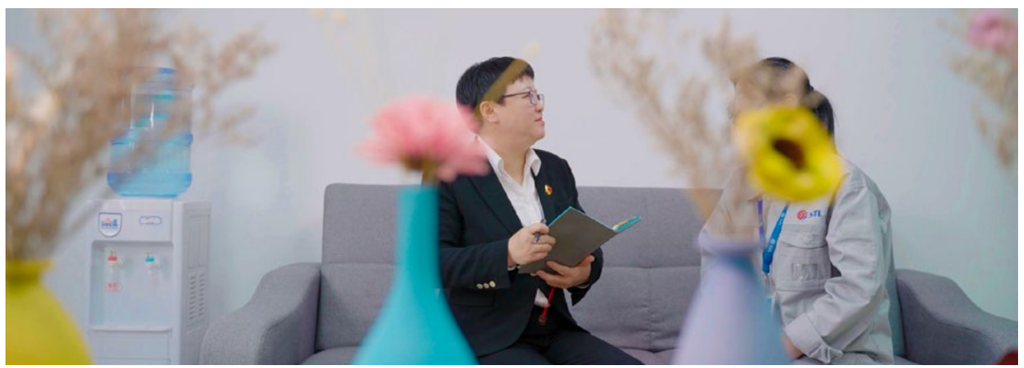
The mainstream hydrogen peroxide production process in China is the acid-base alternating fixed-bed method, which was listed in the *Catalog for Elimination of Outdated Hazardous Chemical Safety Production Technology and Equipment (Second Batch)* as a prohibited category by the Ministry of Emergency Management of the People's Republic of China on March 12, 2024 due to safety issues. It is banned for new (expansion) projects and is required to be transformed within five years for existing projects. Chlorohydrin method is the traditional technology route for producing propylene oxide in China. Due to intense pollution from this technology route, it has been listed as a prohibited category of *Guidance Catalog for Industrial Structure Adjustmen*t in the past, and no approval will be given to new projects.

At present, STL adopts the world's leading hydrogen - hydrogen peroxide - propylene oxide production process, with a total production capacity of **1.82 million** metric tonnes of hydrogen peroxide and **0.4 million** metric tonnes of propylene oxide, which is safer and less polluting while fully utilizing the raw materials, and is in line with the concept of green and low-carbon development.

## Communication with Employees

STL places great emphasis on communication and exchanges with employees, valuing their opinions and suggestions, and striving to cultivate an environment featuring equality, harmony, and effective communication. We actively listen to our employees' voices and provide platforms such as employee symposiums, the Chairperson's Mailbox, and the employee supervision and suggestion hotline to address their concerns and resolve their work and life-related issues.

During the reporting period, we organized the Employee Representatives' Conference to set up sub-trade unions at the headquarters and all bases. These efforts aim to further enhance our mechanisms for employee care and empowerment. We are committed to improving grid-based management of employee relations, both online and offline, to better understand employee needs and sentiments, and to alleviate their pressures in work and life.



[14] DEP: Diethyl phthalate.

### Hold regular employee representatives' conferences to listen to employees

- The organizational function of the trade union is given full play. Employee representatives' conferences are held regularly to let employee representatives' opinions be heard and to deliberate major decisions such as adjustments to the Company's compensation, benefits and labor discipline system.

### Collect employees' needs in employee interviews

- Executives communicate with employees to enhance their sense of integration and belonging.
- A regular communication mechanism between executives and employees is in place. Employees' needs at work are collected at new employees' probationary interviews and monthly and annual performance interviews, where assistance and counseling are provided.

We continue to advance our tracking and follow-up mechanism for new hires, ensuring their swift integration through cultural interpretation, tailored solutions for their needs in the working and living environments, and access to psychological counseling when needed. Moreover, we prioritize heeding the concerns of those facing difficulties, offering support initiatives and organizing fundraising efforts for those who are seriously ill.

## Employee Welfare and Activities

At STL, we deeply value the contributions made by every employee and strive to provide them with attractive benefits and care to enhance their work-life balance, happiness, and sense of belonging. Understanding the diverse needs of our workforce, we have developed a comprehensive employee welfare system covering health, housing, commuting, medical support, and other aspects of life.

Safety and health benefits: Employees are provided with physical examinations for occupational diseases, health checkups safety allowances, health care allowances, and high temperature allowances.

Medical insurance benefits for all employees : Employees enjoy contributions to the five statutory insurances and one housing fund, and additional commercial insurance according to different occupational categories.

Work-related benefits: Employees are provided with free bus services, night shift and duty allowances, food subsidies , and full attendance bonus.

Holidays and care benefits: Employees enjoy the national festival benefits, various special benefits and bonus, and birthday gifts.

Housing benefits: Employees are provided with rental subsidies, interest-free housing loans, and free employee apartments.

Travel benefits: All employees enjoy paid travel.

Family visit benefits: Employees enjoy family visits after working for a year.

Tuition subsidy benefits: After working for one year, employees can get various kinds of education upgrading and training subsidies.

We deliver considerate humanistic care to our employees by regularly organizing employee activities to enrich their spare time, so that they can feel the warmth and care at STL, and enhance their sense of happiness and belonging. Meanwhile, from enhancing the quality of dishes and service in the canteen to conducting heartfelt care delivering activities, we are dedicated to improving their happiness through tangible actions.

To cultivate a positive corporate culture, STL's US subsidiary hosted several group activities for employees in 2023, including the Houston Livestock Show and Rodeo and the Houston Mayor's Family Day. Additionally, during holidays, we provided an array of gifts and organized festive activities.

# Creating Harmony with Love and Responsibility

With its mission and responsibilities deeply in mind, STL has maintained a steadfast dedication to the welfare of society, working to contribute to the well-being of the people with gratitude. Over decades, we have fervently engaged in public welfare endeavors, leveraging our unique strengths and corporate features to actively assume social responsibility, practicing the mission of "chemicals make a better life" with practical actions, delivering the warmth and hope to the people in need, and conveying the "STL Temperature".

**This chapter responds to the UN SDGs:**


## Social Welfare

STL has remained steadfast in its commitment to giving back to society, continuously exploring new paths for public welfare initiatives. Through endeavors such as aiding the vulnerable, supporting education, and disaster relief efforts, we have made a significant impact on society. As of December 31, 2023, we have donated over RMB **40 million** and organized more than 500 public welfare activities, benefiting nearly 50,000 individuals. We have been honored with prestigious accolades such as the the "Model Entity in Zhejiang Province" and "Medal of Dedication from the Red Cross Society of China" .

### STL "Yang mother public welfare line" carried out a series of public welfare activities, spreading our warmth and care

STL's Mother Yang Charity initiated various charity activities in Kashgar, Xinjiang. It donated **185** sets of brand-new desks, chairs, and desk lamps to local students, aiming to improve local teaching facilities and create a better learning environment.

## STL supports education and social welfare initiatives

During the reporting period, the Satellite Public Welfare Fund extended support to students in financial difficulties at Xiuzhou Middle School in Jiaxing City, offering scholarships, stationery, daily necessities and other assistance, and encouragement. Additionally, we built a book bar at the school, serving as a space for reading, learning and activities such as Red Pomegranate Party branch activities. Up to now, nearly **200** students at Xiuzhou Middle School (including the Xinjiang Campus) have benefited from the Satellite Public Welfare Fund's initiatives, showcasing our dedication to and determination in educational causes.

-On December 21, 2023, 53 students in need from the Second Middle School of Shaya County, Xinjiang, received donations from the Satellite Public Welfare Fund. These donations, including schoolbags, winter clothing, thermal cups and notebooks, were exactly what students needed, making them feel the care from thousands of miles away. This also contributed to national unity.

During the reporting period, the STL Group Common Wealth Public Welfare Fund, the first fund with our name in title, was officially launched to make donations for flood relief in Zhuozhou City and to the Lianyungang Charity Federation. It also implemented programs like the "Granting of Fishing" (literally meaning Skills Teaching) initiative for students in need in Xinjiang and Sichuan Province and built multi-functional libraries for key high schools.



Looking ahead, STL remains dedicated to social welfare initiatives, aiming to provide continued support and assistance to students in need, enabling them to realize their aspirations.

## STL provided support for the disaster area to overcome the difficulties

The earthquake in Jieshishan County, Linxia Prefecture, Gansu Province raised the concerns among people across the country. STL, as a listed enterprise located in Jiaxing City, the origin of China's revolution, immediately extended a helping hand to the earthquake-stricken area. We donated RMB **0.2 million** to the Charity Federation of Nanhu District, Jiaxing City on December 22, 2023. Together with donations from the rest of the district, our support was delivered to Jieshishan, Gansu, to aid the area in overcoming this challenge.

In the wake of the "Typhoon Doksuri", Zhuozhou City in Hebei Province faced severe flooding and significant losses to lives and properties. In times of trouble, solidarity emerges. The Satellite Public Welfare Fund donated RMB **0.2 million** on August 9, 2023 to assist the affected people in rebuilding their homes and navigating through the difficulties. Together with compassionate individuals and groups nationwide.



# Bringing Hearts Together

At STL, we believe that our commitment to volunteer activities stems from our original aspirations and is demonstrated through tangible actions. It may not make us the Saviour, but will deliver warmth and light to others. We actively embrace our social responsibility, encouraging our employees to engage in charity activities and championing the spirit of compassion inherent in "Satellite People" through the exemplary actions among our employees.

| Indicators | Unit | 2023 |
|---|---|---|
| The number of people donating blood since 2012 | person time | 1,304 |
| Cumulative blood donated since 2012 | ml | 412,300 |

## STL carried out voluntary service activities to spread positive energy

During the reporting period, Ms. Yang Yuying, Secretary of the Party Committee and Vice Chairperson of STL, led various groups including our Party Committee, Labor Union, the Youth League, and Women's Union, in over **60** voluntary service initiatives. These efforts spanned assistance to students, the elderly, the disabled, and other marginalized groups, aiming to spread positive energy and inspire more individuals to engage in mutual help through practical deeds.

These STL's groups provided advocacy volunteer services in the South Lake Scenic Area and Yuehe Street to promote the development of civilized cities. Volunteers demonstrated unwavering commitment, working tirelessly to improve environmental hygiene in the area. While enhancing the environment, they also promoted the spirit of volunteerism and ecological progress, fostering public enthusiasm for environmental protection and contributing to the city's image. This aligns with our commitment as a provincial civilized entity to make Jiaxing a more beautiful place.

## STL promoted the "Brisk Walking" thematic activity, contributing to the building of green homeland

STL is dedicated to the concept of green and low-carbon development. Based on our strength in light hydrocarbon production, we advocate for eco-friendly lifestyles by promoting the "Brisk Walking " initiative. In this activity, we used walking steps in exchange for public welfare funds to assist families in need and contribute to the building of green homeland and the happiness of families in our community.

# 04 Governance to Seek Long-Term Steady Growth

- Creating Corporate Value through Compliance
- Creating Sustainable Value with Responsibility

STL recognizes that robust operations are fundamental to its sustainable growth. As we advance our development and strive to generate value, we are committed to enhancing our corporate governance standards and risk management and control capabilities, upholding ethical business conduct, and enhancing operational transparency. Additionally, we are integrating ESG concept into our operational governance, continually fulfilling our corporate social responsibilities, and cultivating a trustworthy corporate image.

# Theme:
# A Blueprint for Rural Revitalization

In pursuit of building a modern socialist nation across the board and achieving the great rejuvenation of the Chinese nation, we acknowledge that the most formidable and critical challenges lie in rural areas, so does the strongest foundation in this endeavor. Therefore, STL steadfastly aligns with the rural revitalization strategy outlined by the CPC Central Committee. We work to strengthen and enhance the leadership of the Party, leveraging high-quality Party building to spearhead the rural revitalization initiatives. Through these efforts, we aim to contribute to the ongoing historical journey towards socialist modernization and the revitalization of the Chinese nation.

STL remains steadfast in advancing rural revitalization through Party building, with a focus on strengthening community-level organizational systems. The Party Committee of STL has two general party branches and nine party branches, continuously bolstering the talent pool and reinforcing the community-level Party building foundation. This effort aims to cultivate a robust, targeted, and outstanding talent pool for rural revitalization, effectively leveraging the political leadership role of community-level party organizations. As of the end of the reporting period, we had a total of 493 party members, with 78 individuals submitting applications for party membership, 93 party activists, and 23 reserve members.

Embracing the initiative of "targeted assistance", STL seeks to facilitate prosperity through Party building, leverage skills to create wealth, and provide assistance for common prosperity, promoting rural revitalization efforts across the board. Zhejiang Technology provides 920 employment opportunities through its Common Prosperity Plant Workshop and Common Prosperity Workshop, including 174 for employees in Sichuan and Gansu provinces, with over 100 surplus laborers from neighboring areas finding employment. Similarly, the establishment of the Common Prosperity Plant Workshop and Common Wealth Workshop has benefited various stakeholders as villages have increased their incomes, enterprises enhanced efficiency, and villiages gained greater wealth. As a result, the average per capita monthly salary reached over RMB 7,000 in 2023, thereby contributing to common wealth.

By the end of reporting period

There were

**493**

CPC members in total

The Common Prosperity Plant Workshop and Common Prosperity Workshop provided

**920**

employment opportunities

The average monthly salary per person was more than

**RMB 7,000**

in 2023

## Pinghu Base created the Village-Enterprise Party Building Alliance, leading the way towards rural revitalization

To further enhance the synergy of party building and accelerate the establishment of a new model of village-enterprise party building partnership, STL is committed to forging a path of rural revitalization guided by Party building featuring "accelerated corporate development, greater individuals' gains, and rural transformation." In this pursuit, the Pinghu Base donated RMB 1 million to jointly implement the "Delivering Warmth Together" program in the Gongting and Xinghua communities in Pinghu City. This initiative aims to expand public spaces for community activities.

Donated RMB

**100 million**

Gongting and Xinghua communities in Pinghu City

**STL will continue to advance its rural revitalization efforts, leveraging community-level governance effectiveness to enhance rural governance modernization. We remain dedicated to meeting the diverse needs of rural communities and integrating Party leadership with community-level self-governance to modernize agriculture and rural areas, thus contributing to rural revitalization.**

# Creating Corporate Value through Compliance

STL is unwavering in its commitment to enhancing its corporate governance structure and combating corruption. Through the establishment of robust compliance management, risk management, and business ethics governance systems, we endeavor to bolster compliance awareness and risk prevention capabilities, continuously enhancing our development quality and efficiency.

**This chapter responds to the UN SDGs:**


## Corporate Governance

STL places a strong emphasis on the effectiveness and transparency of corporate governance. We adhere strictly to the *Company Law of the People's Republic of China*, the *Code of Corporate Governance of Listed Companies*, and other pertinent laws and regulations. We continuously refine our governance structure, which consists of the General Meeting of Shareholders, the Board of Directors and its special committees, the Board of Supervisors, and the senior management, to ensure stable operations and robust protection of shareholders' rights and interests.

Under the Board of Directors, there are four special committees: the Audit Committee, the Remuneration and Appraisal Committee, the Nomination Committee, and the Strategy Committee. Each committee's duties and workflow have been clearly delineated to effectively oversee the management of the Company's affairs, facilitate informed decision-making, and maximize shareholders' interests. Throughout the reporting period, the Company convened a total of eight Board of Directors meetings, with a 100% attendance rate among directors.

The Company has fully considered factors such as gender, age, professional knowledge and industry experience of the Board members to ensure a diversified composition while meeting its business needs. By the end of the reporting period, the Board of Directors comprised a total of seven members, including two executive directors and three independent non-executive directors. Our independent directors, hailing from diverse professional backgrounds encompassing finance, law, and the chemical industry, boast extensive industry experience and bringing diverse experience and expertise. Moreover, the Board of Directors has appointed two female independent non-executive directors, underscoring our emphasis on female leadership and the ongoing pursuit of Board independence and diversity.

Furthermore, while steadfastly safeguarding shareholder interests and ensuring sustainable returns, we meticulously adhere to the provisions outlined in the *Measures for the Administration of Information Disclosure by Listed Companies* to ensure comprehensive disclosure. We conduct regular training sessions for our directors, supervisors, and senior management to effectively enhance the quality of our information disclosures. Throughout the reporting period, emails, phone calls, Shenzhen Stock Exchange's IRM platform, the WeChat official account, annual performance roadshow and on-site surveys were all ways we communicate with institutional and individual investors. Additionally, we consistently disseminated our latest updates promptly through our WeChat official account and have established an investor relations column on our official website to further enrich the channels through which investors can access information.

The Company held

**8 times**

Meetings of the Board of Directors

**100%**

attendance rate

## Compliance Guarantee

Robust corporate governance based on integrity remains deeply ingrained in STL's DNA. We uphold a steadfast commitment to integrity, continuously enhancing our risk management system and fortifying information security management. Our dedication to maintaining high-standard corporate governance underscores our commitment to compliant development.

### Risk Management

STL has established a risk management and internal control system with clear authority and responsibility and well-designed functions. The Board of Directors, the leading and decision-making body of our risk management, is responsible for coordinating the development of our risk management and internal control system. For functional departments, the Business Departments, Corporate Management Department, and the Audit and Supervision Department are responsible for implementing measures to guard against major risks. To ensure the effectiveness of the risk management and internal control system, we have established the "three lines of defense" for risk management, effectively preventing business risks and improving risk management capabilities.


The internal control management system

**Business Departments**

- Evaluate and identify key points and difficulties in business
- Optimize operational and process standards and prepare management regulation drafts or raise system construction needs
- Report to the Corporate Management Department to prepare and review documents

**Corporate Management Department**

- Prepare and review system texts submitted by business units
- Request business departments to prepare relevant system documents according to meet the system development needs
- Collect data on KPIs every six months to analyze and evaluate the effectiveness of the system

**Audit and Supervision Department**

- Audit business activities whose results do not meet expectations
- Assess the implementation of existing systems and their deficiencies
- Appraise the performance of business operators and make rational suggestions for the Company to modify the system process

The three "lines of defense" for internal control

The Company has developed comprehensive risk prevention and response strategies that encompass its entire business, bolstering its ability to prevent and address risks across the board. Throughout the reporting period, we devised the checklists for risk identification and rectification that span areas such as information security, work safety, raw material procurement, product sales, and foreign investments. This approach ensures ongoing enhancement of our risk management efforts and reinforces the effectiveness of our risk management practices.

### Checklist for Risk Identification and Rectification

| Information Security Risk | Work Safety Risk | Risk of Raw Material Price Fluctuations | Risk of Market Price Fluctuations | Outward Investment Risk |
|---|---|---|---|---|
| All system administrators must log in to the system through the bastion host and files are encrypted with software to ensure information safety | In the production area, monitoring hardware and software are installed, and security thresholds are set in the software system, with the automatic alarm mode on. Regular inspections are carried out by dedicated personnel to timely screen and identify safety hazards | Collective decision-making is adopted to reduce the risk of misjudging market trends. Hedging futures trading is conducted for major bulk raw materials | The marketing management team conducts weekly collective discussions based on market conditions and sets weekly standard sales prices for products | A tiered decision-making system is implemented. Investments are tracked after being made and the results are sent to the Company's management on a regular basis |

## Business Ethics

STL is steadfast in upholding its code of conduct characterized by principles of "integrity, transparency, fairness, and honesty." We have developed the *Management System for Anti-Corruption and Anti-Commercial Bribery*, and the *Management Measures for Reports and Complaints*, underscoring our unwavering stance of "zero-tolerance" towards corruption. The Audit Committee at the Board level, serving as the highest authority on matters related to business ethics, conducts regular supervision and reviews, and leads our business ethics audits every three years. Currently, our business ethics audits cover all operational locations.

We have established the Working Group of the Corruption Punishment and Prevention System (CPPS Group), which is in charge of the Company's anti-corruption and integrity promotion efforts. This group assesses the management practices and strengthens supervision. We conduct anti-corruption audits annually across major business segments such as procurement, sales, logistics, warehousing, quality inspection, and engineering construction. In the reporting period, we conducted 26 anti-corruption audit projects, covering construction project audits, sales, accounts receivable, logistics, and procurement, and we had no instances of anti-corruption-related litigation.

All of our suppliers must sign the *Notice on Integrity Responsibility*, with relevant clauses integrated into contracts mandating strict compliance with anti-corruption standards. Additionally, an annual integrity survey questionnaire was administered to all suppliers, with 30% signing the *Notice on Integrity Responsibility* during the reporting period.

To raise awareness of anti-corruption and foster a culture of integrity, the Company organizes various forms of business ethics training and publicity activities for members of the Board of Directors and all employees (including outsourced employees, part-time employees, and interns) to ensure that all members reach a common understanding of the Company's business ethics standards.

| Audit projects related to anti-corruption | Anti-corruption related litigation the Company involved in | Proportion of suppliers who signed the *Notice on Integrity Responsibility* |
|---|---|---|
| 26 | 0 | 100% |

### STL organizes integrity training to build a strong ideological defense among employees

STL conducted integrity training sessions for its engineering managers, wherein participants viewed short films on integrity education and promotion. The sessions delved into the Company's integrity culture and specific policies, featuring discussions on past corruption cases to underscore the impact on individuals, families, and the organization. The training was aimed at highlighting importance of adhering to integrity standards.

### STL provided integrity training for marketing staff to raise their awareness


In September 2023, nearly 200 marketing personnel participated in integrity training organized by STL. The training focused on management requirements concerning conflict of interest, transfer of benefits, commercial bribery, job misappropriation, unfair competition, confidentiality of information, and professional ethics, as well as the Company's real-life cases. This training was aimed to continuously standardize the professional ethics of marketing personnel, and actively create a fair competition, corruption-free and self-disciplined practice environment.

### STL conducts onboarding training for new hires to help consciously abide by professional ethics

STL has provided integrity system requirements training for all new hires, and introduced on-line STL business school platform to ensure that employees to commit to integrity.


STL strictly enforces penalties for any behavior that violates the code of business ethics. We have developed and rigorously adhere to the *Management Measures for Reports and Complaints* to standardize the channels and procedures for whistleblowing, ensuring that complaints and whistleblowing incidents are addressed promptly and effectively. We actively encourage employees, suppliers, users, and other stakeholders to report any improper behavior that breaches business ethics. To facilitate this, we have established open and diversified anti-corruption reporting channels, including email, mailbox, and telephone. Upon receiving a report, we promptly formulate an investigation plan, conduct thorough investigations, and, upon confirming the facts of the violation, take serious action.

| | |
|---|---|
| Reporting Telephone Number | 0573-82058220 |
| Reporting E-mail | Compliance@weixing.com.cn |
| Reporting Mailbox | • Reporting mails should be sent to the CPPS Group; the address is No. 196 Fuqiang Road, Nanhu District, Jiaxing, Zhejiang Province, China.<br>• In the headquarter building and the office buildings of subsidiaries, production bases, and business units, there are reporting mailboxes, which is managed by the CPPS Group.<br>• The Company's internal network work platform has a Chairperson's Mailbox and a supervision and reporting mailbox. |

STL's reporting channels


To safeguard the fundamental rights and interests of whistle-blowers, the Company adheres to the relevant provisions of the *Management Measures for Reports and Complaint* within the framework permitted by laws and regulations. We ensure strict confidentiality of the whistle-blowers personal information and the content of the report, prohibiting any form of retaliation against whistleblowers. During the reporting period, STL had no corruption litigation.

**Retaliation prevention and corrective measures:**

- The reporting website and hotline do not mandate whistleblowers to provide identity-related information;
- During the investigation of reported incidents, all exchanges and communications between the Company and the whistleblower are conducted privately. The whistleblower's personal information and the information reported are strictly confidential. Without necessary reasons related to the investigation, the investigator is prohibited from divulging the report to any other unrelated personnel;
- After completing the investigation, the Company checks whether the whistleblower has been subjected to any form of retaliation. If it is verified that the whistleblower faced retaliation, the Company will take legal action against the individuals involved.

Furthermore, we have established a monitoring and accountability system to address behaviors that neglect duties or result in economic losses to the Company. We adhere to a hierarchical accountability mechanism, with the President's Office overseeing the entire process to enforce accountability to implement it authority to hold management departments accountable. Upholding the principles of fairness, justice, equality, and openness, we ensure that every employee has the right to supervise and report to superior leadership, corporate leadership, the Disciplinary Committee, and the Audit and Supervision department.

## Information Security

STL strictly complies with the *Cybersecurity Law of the People's Republic of China* and other laws and regulations, formulates internal documents such as the *Management Measures for Cyber and System Security*, the *Management Measures for Media and Data Security*, and the *Management Measures for Security Incident and Emergency Response*. During the reporting period, we released the *Information Security Management System*, the *Information System Emergency Response Plan*, and the *Management Measures for Portable Computers and Removable Media*, to strengthen the management of internal commercial information and data security and avoid the occurrence of information security incidents.

Regarding information security management, we have continuously enhanced our network security system and introduced a range of technical and human defense mechanisms to bolster information security operations. In the reporting period, STL successfully completed the filing of classified protection of information system security.

**Technical Initiatives**

- Introduce online situational awareness and firewalls, and complete annual routine cyber attack and defense drills to enhance the awareness of information security prevention among all employees
- Minimize all employees' access to the system

**Human Initiatives**

- Servers and backend management can only be logged in to via the bastion host, and the login log is regularly reviewed
- Every important password is divided and kept by two people. The two people must enter the password simultaneously to enter the system backend
- Sign confidentiality agreements with external third parties, encrypting and recording information through VPNs and bastion machines

To continuously enhance the information security awareness among our staff, we conduct simulated cyber attack and defense drills in collaboration with professional third-party companies. These drills simulate real-world scenarios from the perspective of potential attackers, helping us fortify our defenses and prevent data breaches. Additionally, we organize various information security training sessions covering topics such as behavior management on the internet, cloud desktop, data encryption, document watermarking, and personal information security precautions. These training sessions are provided to all employees, as well as our contractors and part-time staff, ensuring that the entire workforce is equipped with enhanced information security awareness and fostering a security-conscious culture where every individual takes responsibility for information security.


The certificate of STL's classified protection of information system security

In addition, STL has strengthened data convergence and integration by developing and introducing a series of digitalized production, operation and management systems, continuously improving the management capabilities and work efficiency, and actively exploring new modes of data governance. During the reporting period, with excellent digital transformation results and integration of digitalization and intelligence, STL was awarded the honors of Chief Data Officer Pilot Enterprise in Zhejiang Province, DCMM Data Management Capability Maturity Pilot Enterprise, and Digitalization Leader Enterprise; Hubei Satellite was awarded the honors of National-level Excellent Scenario of Intelligent Manufacturing, and the honor of Grade A of the Standardization Certification of Integration of Two-Chemicals Management System; Lianyungang Petrochemicals was awarded the honor of Grade AA of the National Integration of Digitalization and Intelligence Management System; Lianyungang Petrochemical was awarded AA level of the National Digitalization and Intelligence Integration Management System Certification, marking that the company's data governance work was recognized by authoritative institutions.

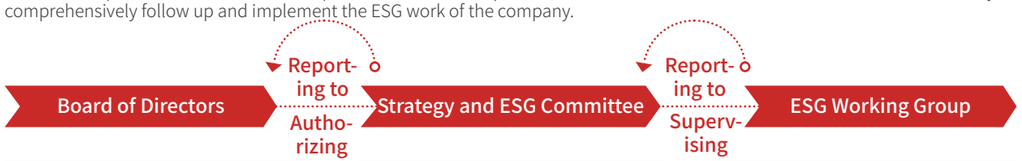
# Creating Sustainable Value with Responsibility

STL is deeply committed to integrating the concept of sustainable development into its daily management and business operations. We consistently advance the development of our ESG management system, leveraging our influence to foster the healthy development of both the industry and society. We place significant emphasis on communication and engagement with stakeholders, conducting materiality analysis and responding to stakeholder demands in alignment with our business growth and stakeholder priorities.

**This chapter responds to the UN SDGs:**


## ESG Governance Structure

To ensure the effective formulation and implementation of its sustainable development strategy, STL has established a comprehensive top-down ESG governance structure, led by the Board of Directors. This structure comprises the Board of Directors, the Strategy and ESG Committee, and the ESG Working Group. The Board of Directors, serving as the highest decision-making body in ESG governance matters, is responsible for comprehensively reviewing and supervising the Company's ESG-related matters. It authorizes the Strategy and ESG Committee to guide and supervise ESG governance, identify and assess significant ESG risks and opportunities, identify and approve major investments and expense budgets for ESG matters, and participate in recommending ESG strategies to ensure the balance and effectiveness of the Company's ESG decision-making.The ESG Working Group, comprised of various departments across the headquarters, subsidiaries, production bases, and business units, acts as an executive body to comprehensively follow up and implement the ESG work of the company.




**Coordinating, overseeing, and deciding on ESG matters:**

- Deciding on and examining the Company's sustainable development strategies and goals
- Monitoring and reviewing the progress of ESG related policies and objectives
- Approving ESG reports and relevant information disclosure
- Deliberating and confirming the risks and significance of ESG-related risks of the Company

**Managing, supervising, and progressing ESG matters:**

- Involved in advising on the Company's ESG strategy
- Identifying and assessing substantial ESG risks and opportunities
- Approving budgets for major investments and expenses in ESG matters.
- Developing ESG target evaluation system
- Reviewing and advising on the Company's ESG reports

**Coordinating and implementing ESG matters:**

- Coordinating and progressing ESG work across the Company
- Managing ESG risks in day-to-day operations
- Preparing ESG reports
- Completing other ESG-related matters

STL's ESG governance structure

To ensure the effectiveness of its ESG governance, STL has integrated ESG indicators into the performance appraisal of senior management. These indicators encompass various aspects such as work safety (including safety penalties and the number of safety accidents), energy conservation environmental protection (covering greenhouse gas emissions, pollutant emissions, energy efficiency management, and environmental penalties), and labor rights and interests. We set the weighting for each key indicator, then determine the appropriate grade based on the performance appraisal score, and ultimately calculate the appropriate performance-based remuneration based on the score and grade. The results of the ESG performance appraisal directly impact the remuneration of senior management directly responsible for ESG work. For those failing to complete the assessment objectives, the Company will deduct points in the corresponding assessment items, up to a maximum of 35% of the performance appraisal points; in addition, if there is any occurrence of "zero-tolerance accidents" "one-vote veto" system will be implemented, thereby fostering a comprehensive awareness of ESG management from top to bottom within the organization.

## Communication with Stakeholders

The Company consistently prioritizes and heeds the demands of its internal and external stakeholders. We continually enhance our regularized and multi-channel communication mechanism, promptly and efficiently addressing stakeholders' expectations and opinions. By striving to meet the diverse needs of stakeholders, we endeavor to achieve mutually beneficial outcomes for all parties involved.

| Stakeholders | Key Topics | Communication |
|---|---|---|
| Shareholders and investors | Corporate governance<br>Risk management<br>Business ethics<br>Circular economy | General Meeting of Shareholders<br>☒Company announcements<br>☒Investor surveys<br>☒Earnings communication conferences<br>☒Hotline<br>☒E-mail |
| Customers | Product safety and quality<br>Innovation and R&D<br>Customer relationship management<br>Privacy and information security<br>Digital transformation | ☒Hotline<br>☒Email<br>☒WeChat official account<br>☒Company's official website<br>☒Visits to customers<br>☒Satisfaction surveys<br>☒Customers' complaints |
| Governments and regulators | Corporate governance<br>Boosting industry development<br>Energy management<br>Clean technology development<br>Responding to climate change | ☒Information disclosure<br>☒Press releases<br>☒Company's official website<br>☒Regular communication |
| Employees | Employee rights and benefits<br>Employee training and development<br>Occupational health and safety | ☒Employees' Conference<br>☒Chairperson's Mailbox<br>☒Employees' events<br>☒Talks with employees<br>☒Employee engagement surveys<br>☒Employees' seminars<br>☒Hotline for employees' supervision and suggestions<br>☒Bulletin boards<br>☒Employees' Suggestion Box |
| Suppliers | Business ethics<br>Supply chain management<br>Boosting industry development<br>Protection of intellectual property rights | ☒Suppliers' conferences<br>☒Company's official website<br>☒Hotline<br>☒WeChat official account<br>☒Regular visits<br>☒Integrity reports |
| The public | Public welfare<br>Responding to climate change<br>Energy management | ☒Public welfare campaigns<br>☒News coverage<br>☒Open days |

Meanwhile, the Company understands that feedback and suggestions from diverse stakeholders can have a significant impact on its development. During the reporting period, we systematically sorted out and adjusted the materiality topics and then mapped out the materiality matrix for 2023. The steps of materiality assessment are as follows:

### Identifying potential topics

- Through peer benchmarking analyses, external policy research, and industry trend surveys, and based on our own business development strategy and corporate characteristics, we identify potentially material topics that reflect the impact of our business on the internal and external environment.

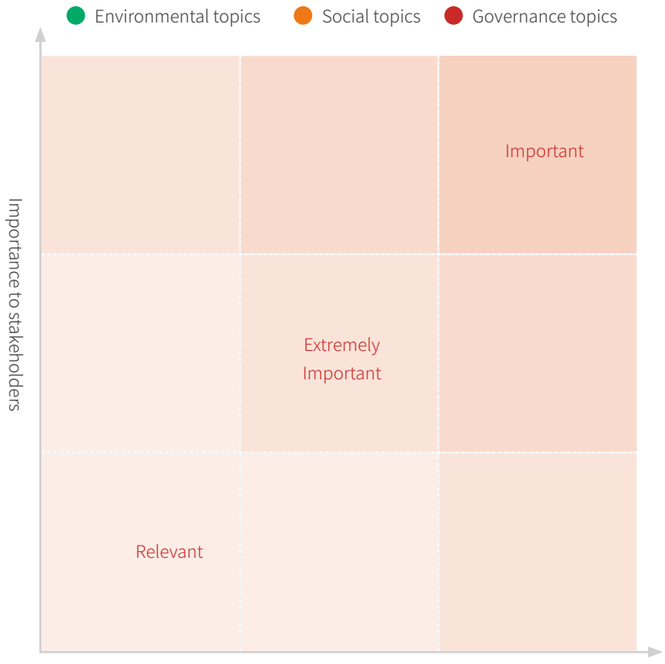
### Assessing priority topics

- Taking into account of factors such as peer practices, stakeholders' concerns, and the Company's business development direction, we comprehensively analyze the key areas of the Company's ESG undertakings, assess priority topics, and draw up a materiality matrix.

### Reporting material topics

- We verify and confirm the materiality matrix based on the Company's strategic plan and submit it to the Board of Directors for review and approval. In addition, we disclose the Company's performance on the topics in our reports.

Process of the material topic analysis




**Important**

- Corporate governance
- Circular economy
- Business ethics
- Product safety and quality
- Customer relationship management
- Digital transformation
- Innovation and R&D
- Safety management of chemicals
- Waste management
- Responding to climate change

**Extremely Important**

- Clean energy development
- Energy management
- Water management
- Employees rights and interests
- Protection of intellectual property rights
- Occupational health and safety
- Supply chain management
- Sustainable operations
- Promoting the industry
- Public welfare
- Employee training and development
- Privacy and information security
- Risk management

STL's materiality matrix

# Appendix

## Outlook

When we look back at our development journey, it is evident that each step we made has been marked by resilience and determination. At a new starting point in 2023, STL will work to achieve qualitative changes, just as a Chinese proverb goes, "In a boat race, those who row the hardest will win." In 2024, we will continue to pioneer a green, low-carbon, and technology-driven development model for China's manufacturing sector, aligning with the nation's ambitious "dual carbon" goal of peaking carbon emissions by 2030 and realizing carbon neutrality by 2060. We are committed to fostering our own sustainable growth and also actively contributing to global climate and environmental initiatives. We will continue to make innovations and changes, and strive to become a leader in the industry, contributing more wisdom and strength to global sustainable development.

## Hornors in 2023

| Awards and Honors | Level | Awarded by |
|---|---|---|
| General | | |
| China's Top 500 Enterprises | List | China Enterprise Confederation, etc. |
| China's Top 500 Petroleum and Chemical Enterprises | List | China Petroleum and Chemical Industry Federation |
| China's Top 500 List Companies | List | Fortune Magazine |
| China's Top 500 Private Enterprises | List | All-China Federation of Industry and Commerce |
| Top 500 New Economy Enterprises in China | List | China Enterprise Evaluation Association |
| Scientific and Technological Innovation | | |
| Pilot Demonstration 5G Factory of Industrial Internet | National | Ministry of Industry and Information Technology of China |
| Zhejiang Province Science and Technology Little Giant Enterprise | Provincial | Department of Science and Technology of Zhejiang Province |
| "Leading Goose" R&D Program of Zhejiang Province | Provincial | Department of Science and Technology of Zhejiang Province |
| Enterprise Technology Center of Jiangsu Province | Provincial | Jiangsu Provincial Department of Industry and Information Technology, etc. |
| First Prize of Jiangsu Province Enterprise Management Modernization Innovation Achievement | Provincial | Jiangsu Province Enterprise Management Modernization Innovation Achievement Nan Ding Committee |
| The second batch of Cloud-based Enterprises in Zhejiang Province | Provincial | Zhejiang Province Economy Information Department |
| ESG | | |
| The Second Batch of Pollution and Carbon Reduction Synergy Benchmarks in Zhejiang Province | List | Zhejiang Provincial Joint Conference Office for Responding to Climate Change and Energy Conservation and Emission Reduction Work |
| Golden Bee CSR·China Honor Roll | List | GoldenBee Think Tank and Sustainable Development Economy Magazine |
| Impact·Leadership Enterprise | List | British Chamber of Commerce Shanghai |
| ESG China Green Supply Chain Outstanding Finalist | List | CSR China Education List Organizing Committee |
| Best Responsible Corporate Brand | List | *Wall Street Journal* |
| Environmental Protection Innovation Cases of "0 Carbon Future·ESG Innovation Experiment List" | List | General Office of All-China Federation of Trade Unions |
| All-China Federation of Trade Unions (ACFTU) Leading Comrades' Community-level Contact Points | National | Publicity Department of Zhejiang Provincial Committee of the CPC, etc. |
| The First Batch of "Enterprise Culture Centers" in Zhejiang Province | Provincial | Social Construction Committee of Zhejiang Provincial Party Committee |
| List of Common Wealth Practice Observation Points | Provincial | Zhejiang Provincial Joint Conference Office for Responding to Climate Change and Energy Conservation and Emission Reduction Work |

# Index of Reporting Guidelines

## Index of TCFD Recommendations

| TCFD Core Elements | Disclosure Recommendation | Chapter |
|---|---|---|
| Governance | a) Describe the Board's oversight of climate-related risks and opportunities | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |
| | b) Describe management's role in assessing and managing climate-related risks and opportunities | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |
| Strategy | a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |
| | b) Describe the impact of the climate-related risks and opportunities on the organization's businesses, strategy, and financial planning | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |
| | c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2☒°C or lower scenario | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |
| Risk Management | a) Describe the organization's processes for identifying and assessing climate-related risks | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |
| | b) Describe the organization's processes for managing climate-related risks | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |
| | c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change<br>Creating Corporate Value through Compliance: Compliance Guarantee |
| Metrics and targets | a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process | Creating Environmental Value with Low-carbon Efforts: Low-carbon Value Chain<br>Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |
| | b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions, and the related risks | Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change<br>Creating Environmental Value with Low-carbon Efforts: Low-carbon Operations |
| | c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets | Creating Environmental Value with Low-carbon Efforts<br>Creating Environmental Value with Low-carbon Efforts: Low-carbon Operations<br>Creating Environmental Value with Low-carbon Efforts: Low-carbon Value Chain<br>Creating Environmental Value with Low-carbon Efforts: Addressing Climate Change |

## Index of UN SDGs

| Relevant SDGs | Corresponding Chapter | Relevant SDGs | Corresponding Chapter |
|---|---|---|---|
| 1 NO POVERTY | Creating Harmony with Love and Responsibility<br>Creating Corporate Value through Compliance | 10 REDUCED INEQUALITIES | Creating Value in the Industry Through Cooperation<br>Creating Talent Value by Empowerment<br>Creating Harmony with Love and Responsibility |
| 2 ZERO HUNGER | Creating Harmony with Love and Responsibility | 11 SUSTAINABLE CITIES AND COMMUNITIES | Creating Product Value with Craftsmanship<br>Creating Service Value with Sincerity |
| 3 GOOD HEALTH AND WELL-BEING | Creating Talent Value by Empowerment<br>Creating Harmony with Love and Responsibility | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | Creating Product Value with Craftsmanship<br>Creating Service Value with Sincerity<br>Creating Environmental Value with Low-carbon Efforts<br>Creating Ecological Value through Conservation Efforts |
| 4 QUALITY EDUCATION | Creating Talent Value by Empowerment<br>Creating Harmony with Love and Responsibility | 13 CLIMATE ACTION | Creating Environmental Value with Low-carbon Efforts |
| 5 GENDER EQUALITY | Creating Talent Value by Empowerment | 14 LIFE BELOW WATER | Creating Ecological Value through Conservation Efforts |
| 6 CLEAN WATER AND SANITATION | Creating Ecological Value through Conservation Efforts | 15 LIFE ON LAND | Creating Ecological Value through Conservation Efforts |
| 7 AFFORDABLE AND CLEAN ENERGY | Creating Environmental Value with Low-carbon Efforts | 16 PEACE, JUSTICE AND STRONG INSTITUTIONS | Creating Corporate Value through Compliance<br>Creating Sustainable Value with Responsibility |
| 8 DECENT WORK AND ECONOMIC GROWTH | Creating Talent Value by Empowerment | 17 PARTNERSHIPS FOR THE GOALS | Creating Service Value with Sincerity<br>Creating Value in the Industry Through Cooperation<br>Creating Harmony with Love and Responsibility |
| 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | Creating Product Value with Craftsmanship<br>Creating Value in the Industry Through Cooperation | | |

## Index of GRI Indicators

| Disclosure issue/item | Title of Disclosure Item | Chapter Index |
|---|---|---|
| General standards | | |
| GRI 1: Foudation 2021 | | |
| GRI 2: General Disclosures 2021 | | |
| The organization and its reporting practices | | |
| 2-1 | Organizational details | About STL |
| 2-2 | Entities included in the organization's sustainability reporting | Message from Our Chairman |
| 2-3 | Reporting period, frequency and contact point | Message from Our Chairman |
| 2-5 | External assurance | NA |
| Activities and workers | | |
| 2-6 | Activities, value chain and other business relationships | Communication with Stakeholders |
| 2-7 | Employees | People-Centricity to Build a Harmonious Society |
| Governance | | |
| 2-9 | Governance structure and composition | Corporate Governance |
| 2-12 | Role of the highest governance body in overseeing the management of impacts | Corporate Governance |
| 2-13 | Delegation of responsibility for managing impacts | Corporate Governance |
| 2-14 | Role of the highest governance body in sustainability reporting | ESG Governance Structure |
| 2-15 | Conflicts of interest | Communication with Stakeholders |
| 2-16 | Communication of critical concerns | Communication with Stakeholders |
| 2-17 | Collective knowledge of the highest governance body | ESG Governance Structure |
| Strategy, policies and practices | | |
| 2-22 | Statement on sustainable development strategy | ESG Governance Structure |
| Stakeholder engagement | | |
| 2-29 | Approach to stakeholder engagement | Communication with Stakeholders |
| GRI3: General Disclosures 2021 | | |
| 3-1 | Process to determine material topics | Communication with Stakeholders |
| 3-2 | List of material topics | Communication with Stakeholders |
| 3-3 | Management of material topics | Communication with Stakeholders |
| GRI 201: Economic Performance 2016 | | |
| 201-1 | Direct economic value generated and distributed | Corporate Profile |
| GRI 205: Anti-corruption 2016 | | |
| 205-1 | Operations assessed for risks related to corruption | Corporate Governance |
| 205-2 | Communication and training about anti-corruption policies and procedures | Corporate Governance |
| 205-3 | Confirmed incidents of corruption and actions taken | Corporate Governance |
| **Environmental** | | |
| GRI 302: Energy 2016 | | |
| 302-1 | Energy consumption within the organization | Low-carbon Operations |
| 302-3 | Energy intensity | Low-carbon Operations |
| 302-4 | Reduction of energy consumption | Low-carbon Operations |
| GRI 303: Water and Effluents 2018 | | |
| 303-1 | Interactions with water as a shared resource | Ecological Co-building |
| 303-2 | Management of water discharge-related impacts | Ecological Co-building |
| 303-3 | Water withdrawal | Ecological Co-building |
| 303-4 | Water discharge | Ecological Co-building |
| 303-5 | Water consumption | Ecological Co-building |
| GRI 305: Emissions 2016 | | |
| 305-1 | Direct (Scope 1) GHG emissions | Low-carbon Operations |
| 305-2 | Energy indirect (Scope 2) GHG emissions | Low-carbon Operations |
| 305-4 | Other indirect (Scope 3) GHG emissions | Low-carbon Operations |
| 305-5 | Reduction of GHG emissions | Low-carbon Operations |

| Disclosure issue/item | Title of Disclosure Item | Chapter Index |
|---|---|---|
| 305-7 | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions | Environmental Management |
| GRI 306: Waste 2020 | | |
| 306-1 | Waste generation and significant waste-related impacts | Environmental Management |
| 306-2 | Management of significant waste-related impacts | Environmental Management |
| 306-3 | Waste diverted from disposal | Environmental Management |
| 306-5 | Waste directed to disposal | Environmental Management |
| **Social** | | |
| GRI 401: Employment 2016 | | |
| 401-1 | New employee hires and employee turnover | Talent Attraction |
| 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | Talent Guarantee |
| GRI 403: Occupational Health and Safety 2018 | | |
| 403-1 | Occupational health and safety management system | Talent Guarantee |
| 403-2 | Hazard identification, risk assessment, and incident investigation | Talent Guarantee |
| 403-3 | Occupational health services | Talent Guarantee |
| 403-5 | Worker training on occupational health and safety | Talent Guarantee |
| 403-6 | Promotion of worker health | Talent Guarantee |
| 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | Talent Guarantee |
| 403-8 | Workers covered by an occupational health and safety | Talent Guarantee |
| 403-9 | Work-related injuries | Talent Guarantee |
| 403-10 | Work-related ill health | Talent Guarantee |
| GRI 404: Training and Education 2016 | | |
| 404-1 | Average hours of training per year per employee | Talent Development |
| 404-2 | Programs for upgrading employee skills and transition assistance programs | Talent Development |

| Disclosure issue/item | Title of Disclosure Item | Chapter Index |
|---|---|---|
| GRI 405: Diversity and Equal Opportunity | | |
| 405-1 | Diversity of governance bodies and employees | Talent Attraction |
| GRI 406: Non-discrimination 2016 | | |
| 406-1 | Incidents of discrimination and corrective actions taken | Talent Attraction |
| GRI 408: Child Labor 2016 | | |
| 408-1 | Operations and suppliers at significant risk for incidents of child labor | Talent Attraction |
| GRI 409: Forced or Compulsory Labor 2016 | | |
| 409-1 | Operations and suppliers at significant risk for incidents of forced or compulsory labor | Talent Attraction |
| GRI 414: Supplier Social Assessment 2016 | | |
| 414-1 | New suppliers that were screened using social criteria | Responsible Procurement |
| GRI 418: Customer Privacy 2016 | | |
| 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | Compliance Guarantee |

# ESG Performance Indicators

## Governance Performance

| Disclosure Indicator | Unit | 2023 |
|---|---|---|
| Operating income | RMB billion | 41.487 |
| Year-on-year growth in operating income | % | 12.00 |
| Total profit | RMB billion | 5.368 |
| Net profit attributable to listed company shareholders | RMB billion | 4.789 |
| Total assets | RMB billion | 64.582 |
| Net assets attributable to the parent company | RMB billion | 25.465 |
| Number of R&D personnel | person | 1271 |
| Percentage of R&D personnel | % | 25.05 |
| R&D investment | RMB billion | 1.626 |
| Year-on-year growth of R&D investment | % | 31.05 |
| Percentage of R&D investment to operating income | % | 3.92 |
| General Meeting of Shareholders | time | 5 |
| Meetings of the Board of Directors | time | 8 |
| Meetings of the Board of Supervisors | time | 7 |
| Special audits | section | 26 |

## Social Performance

| Disclosure Indicator | Unit | 2023 |
|---|---|---|
| Coverage of employee training | % | 100 |
| Total attendance to employee training | person time | 198,518 |
| Total hours of employee training | hour | 456,659 |
| Percentage of occupational physical examinations | % | 100 |
| Patents filed | section | 75 |
| Patents granted | section | 97 |
| Customer satisfaction | % | 100 |
| The number of people donating blood since 2012 | person time | 1,304 |
| Cumulative amount of blood donated since 2012 | ml | 412,300 |

## Environmental Performance

| Disclosure Indicator | Unit | 2023 |
|---|---|---|
| Total investment in environmental treatment | RMB million | 1,704.65 |
| Time spent in environmental treatment | hour | 74,400 |
| Attendance to environmental training | person time | 45,548 |
| Total solid waste | million tonnes | 0.14 |
| Emissions of nitrogen oxides (NOx) | metric tonne/10,000 metric tonne products | 0.55 |
| Emissions of sulfur dioxide ($SO_2$) | metric tonne/10,000 metric tonne products | 0.11 |
| Emissions of volatile organic compounds (VOCs) | metric tonne /10,000 metric tonne products | 0.26 |
| Emissions of particulate matter (PM) | metric tonne /10,000 metric tonne products | 0.05 |
| Chemical oxygen demand (COD) emissions | metric tonne/10,000 metric tonne products | 2.08 |
| Ammonia nitrogen emissions | metric tonne/10,000 metric tonne products | 0.02 |
| Total organic carbon (TOC) emissions | metric tonne/10,000 metric tonne products | 0.10 |
| Total greenhouse gas ($CO_2$) emissions | $tCO_2e$ | 5,417,875 |
| Greenhouse gas ($CO_2$) emission intensity | $tCO_2e$ /tonne of products | 0.58 |
| Natural Gas | million $m^3$ | 291 |
| Purchased electricity | million kWh | 313,700 |
| Total Water Consumption | million tonne | 33.12 |
| Water saved through reuse of reclaimed water | million tonne | 7.91 |
| Wastewater discharge reduced | million tonne | 0.41 |
| Cumulative number of participants in emergency drills | person | 17,412 |
| Environmental monitoring | time | 116 |