



2022

CORPORATE SOCIAL RESPONSIBILITY REPORT

Contents

- 01 About This Report
- 03 President's Statement
- 05 About Rianlon
- 09 Annual Honors
- 10 Social Responsibility Management

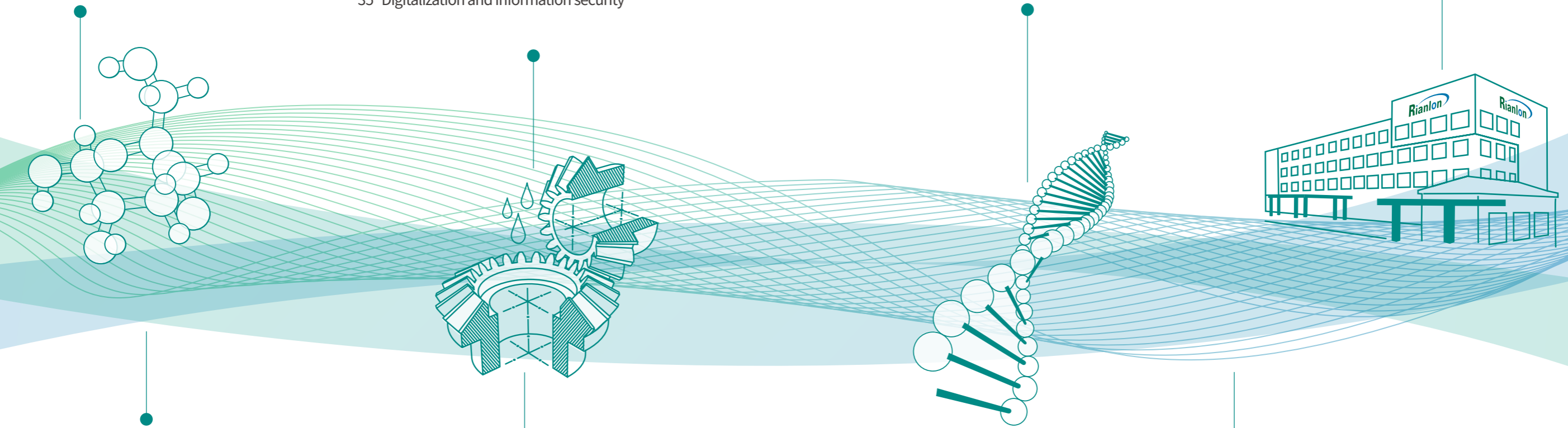
Steadily Advancing Industrial Layout with Innovation Taking the Leading Role

- 27 Product quality and safety
- 29 Scientific research and technological innovation
- 30 Customer relationship maintenance
- 32 Responsible supply chain
- 35 Digitalization and information security

People-oriented, creating a happy workplace with all efforts

- 49 Safeguarding employees' rights and interests
- 53 Supporting employee development
- 58 Focusing on occupational safety
- 60 Strengthening employee care

- 72 ESG Performance Table
- 79 Global Reporting Initiative (GRI) Content Index
- 85 Reader Feedback Form



Comprehensively Improving Governance Through Steady Operation

- 15 Deepening the leadership of Party building
- 17 Internal control for compliant operation
- 19 Comprehensive risk management
- 22 Focusing on clean employment
- 23 Investor relation management
- 24 Intellectual property right protection

Green Development, Active Response to the "Carbon Peaking and Carbon Neutrality" Goals

- 39 Implementation of "carbon peaking and carbon neutrality" management
- 40 Further management of three wastes
- 43 Rational utilization of resource
- 46 Addressing climate change

Repaying Society and Jointly Creating a Better, Harmonious Home

- 65 Facilitating common prosperity
- 66 Contributing to community welfare
- 68 Sharing development achievements

About This Report

This Report is the first corporate social responsibility (CSR) report that Rianlon Corporation has released disclosing the environmental, social, and governance (ESG) work and impacts of the listing corporation in 2022 and responding to the expectations and concerns of stakeholders.



Report Scope

Organizational Scope: Rianlon Corporation and its subsidiaries.
Time Frame: January 1, 2022 – December 31, 2022
Release Cycle: This is an annual report released yearly.

Report Data Description

The information and data disclosed in this Report are from the formal internal documents, statistical reports, and annual reports of Rianlon Corporation. The Board of Directors of the Corporation and all directors guarantee that this Report contains no false records, misleading statements, or major omissions, and they assume individual and joint liability for the authenticity, accuracy, and integrity of this Report. The financial data in this Report is in RMB, if there are any inconsistencies between the financial report and this Report, the financial report shall be taken as the authoritative source.

Preparation Standards

The Report has GRI Sustainability Reporting Standards (GRI Standards) for reference and benchmarks against the Sustainable Development Goals (SDGs) adopted by the UN.

Title Description

For convenience, Rianlon Corporation in this Report is referred to as "Rianlon", "the Corporation", or "we".
"Rianlon Zhongwei" refers to Rianlon (Zhongwei) New Material Co., Ltd.
"Rianlon Zhuhai" refers to Rianlon (Zhuhai) New Material Co., Ltd.
"Rianlon Kerun" refers to Rianlon Kerun (Zhejiang) New Material Co., Ltd.
"Rianlon Kaiya" refers to Rianlon Kaiya (Hebei) New Material Co., Ltd.
"Rianlon Chifeng" refers to Rianlon (Inner Mongolia) New Material Co., Ltd. and Inner Mongolia Unique Material Technology Co., Ltd.

"Rianlon Hong Kong" refers to Rianlon Technology Co., Ltd.
"Rianlon GMBH" refers to one of Rianlon's subsidiaries in Germany
"Rianlon Americas" refers to Rianlon Americas, INC.
"Rianlon Japan" refers to Rianlon Japan Co., Ltd.
"Rianlon Supply Chain" refers to Rianlon Supply Chain Management Co., Ltd.
"Jinzhou Kangtai" refers to Jinzhou Kangtai Lubricant Additives Co., Ltd.
"Aoruifu" refers to Tianjin Aoruifu Biomedicine Co., Ltd.

Languages

This Report is prepared in both Chinese and English. In case of any discrepancies, the Chinese version shall prevail.

Formats

This Report is released in both printed and electronic formats.

Access

This Report is available at Rianlon's website (<https://www.rianlon.com>) for reference and download.

President's Statement



Haiping Li
President, Rianlon Corporation

2022 is the first year we embarked on the second 100-billion-yuan business track and the fourth year we adopted Strategy 2.0. As stated in the Central Economic Work Conference, we stayed confident this year against the backdrop of "high winds and choppy waters." We seized the opportunity of the national strategy to make supply chains self-supporting and their risks controlled and upgraded our Strategy 2.0. We also formed three lifelines for sustainable development backed up by our New Material Business Division, Lubricant Business Division, and Bioscience Business Division. Under the leadership of the new Board of Directors, the

management carried on our mission of "creating a better life with chemistry and biology", fully implemented Strategy 2.0 via "major 3+1" and "minor 3+1", and completed our performance plan in 2022.

We have engaged in the field of polymer-material anti-aging additives for decades and continued to provide a complete product portfolio and build a global supply chain system. In this way, we gained an extensive brand reputation in the global market, which brought steady business growth to the New Material Business Division and laid a solid foundation for our sustainable development. Following the national strategy to make supply chains self-sufficient and their risks controlled, we expanded our business in lubricant additives and acquired China's second major lubricant additive company in May 2022. Since then, we have been on the critical track of the national strategy. A self-supporting and risk-controlled supply chain of lubricant additives has key influences on national economy and security as well as people's lives. This lubricant additive can be widely used in transportation by sea, land, and air, industrial equipment, metal processing environment, special operations, intelligent manufacturing, and other fields. After the acquisition and integration, the Lubricant Additive Division registered immense growth year-on-year in its performance, making a steady step forward in our second lifeline. When we were pursuing stable progress on the two 100-billion-yuan business tracks, we also took the initiative to build our third lifeline—the Bioscience Business Division. We set up a new business in fields such as biological building blocks and synthetic biology, oriented each of our projects to the cutting-edge international technologies in the field. The first set of biological building block devices from Orilife Biopharma Co., Ltd. that we invested in and established has been put into production, and the Bioscience Business Division has been under operation. In the past three years, our three tracks were developed in parallel on the same technology platform on the premise that we maintained the leading role of chemical and biological technologies.

In 2023, we will promote the healthy development of the three lifelines, and actively explore new markets and businesses. To satisfy the requirements of new business development, we will continuously optimize the organization through reforms to transition to the mode of "headquarters – divisions" in a smooth and steady manner. Moreover, we will keep our corporate philosophy of being "united, persistent, diligent and happy", and build Rianlon into a world-class enterprise with sustainable development that customers trust, employees are proud of, and society respects.

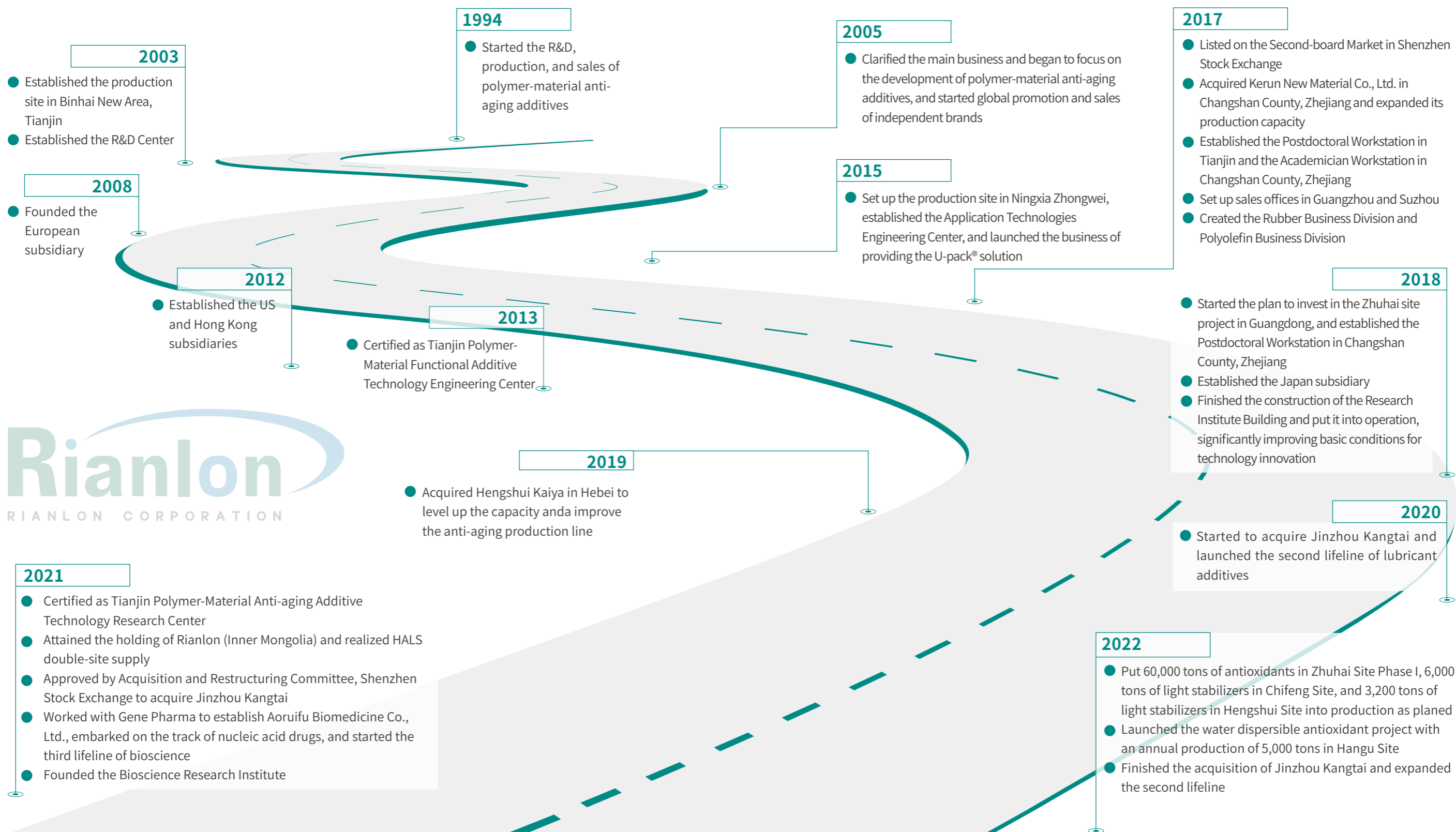
About Rianlon

Rianlon started its business in 1994, established production sites in 2003, and is now a world-leading provider of polymer-material anti-aging additive products and services. In more than 20 years, Rianlon has focused on technology innovation and set up six production sites in Tianjin Hangu, Ningxia Zhongwei, Zhejiang Changshan, Hebei Hengshui, Guangdong Zhuhai, and Inner Mongolia Chifeng. The Corporation also formed the capacity pattern of double sites for mutual supply of production lines of all products such as antioxidants, light stabilizers, and the overall solution U-pack®. In 2022, Rianlon opened the second lifeline of lubricant additives, acquired Jinzhou Kangtai, and took a proactive part in the self-supporting and risk-controlled project of China's lubricant supply chain. Our third lifeline of bioscience now has taken shape and reached the moment of going global after two years of accumulation. Developing for more than 30 years, Rianlon has taken the mission of "creating a better life with chemistry and biology", and established a professional, refined, and high-quality development path with characteristics.

We pay much attention to both our own technological abilities and our global service network. Centering on Hong Kong, China, we have founded three subsidiaries in Düsseldorf, Germany, New York, the US, and Tokyo, Japan, respectively. We have also set up distributors in Japan, South Korea, the US, Germany, Italy, Spain, the UK, Turkey, South Asia, and other countries and regions. To fulfill our unchanging commitment of "stable quality, steady supply and immediate response" to our customers, we built logistics warehouses in Antwerp, Europe, Ohio, the US, Singapore, Thailand, Japan, and Guangzhou, Shanghai, Ningxia, China. With these logistics warehouses, we can establish a 72-hour rapid response mechanism that provides convenient and quick localized services for our main customer groups around the world. We will stick to the mission of "creating a better life with chemistry and biology", and stay true to our original aspiration. We will strive to moving forward and take the lead in the strategy of making China a manufacturing powerhouse, and becoming a world-renowned provider for fine chemicals and biological products.



Rianlon's Development Timeline



Annual Honors

Awardees	Awarders	Awards
Rianlon Corporation	Capital Week	Top 10 Listed Companies of the Investor Relations Awards 2022
	Excellence IR	Best Capital Market Communication Award
	www.STOCKSTAR.com	2022 Most Valuable Investment Award
	China Association for Public Companies	2022 Outstanding Practice Case of Offices of Board of Directors of Listed Companies
	Kingfa Sci. & Tech. Co., Ltd.	Excellent Supplier
	Tianjin Development and Reform Commission	Tianjin Polymer-Material Anti-aging Additive Technology Research Center
	Tianjin Federation of Industry and Commerce	Top 100 Companies in Technological Innovation of Tianjin Private Enterprises "Healthy Growth Project" (No. 30)
	Tianjin Municipal Science and Technology Bureau	Leading Technological Enterprise in Tianjin
	Tianjin Enterprise Confederation, Tianjin Enterprise Directors Association	2022 Tianjin Top 100 Manufacturing Enterprises (No. 64)
Hengshui Site, Hebei	Hebei Development and Reform Commission	Hebei Enterprise Technology Center
	Ministry of Industry and Information Technology of the People's Republic of China	Specialized and Sophisticated "Little Giant" Firm (China's Fourth Batch)
	Hengshui Industrial and Information Technology Bureau, Hengshui Water Resource Bureau	Hengshui 2022 Water Saving Enterprise
Changshan Site, Zhejiang	Quzhou Federation of Trade Unions	Quzhou Enterprise with Harmonious Labor Relations
	Zhejiang Association for Science and Technology	Zhejiang Doctoral Innovation Station
Zhongwei Site, Ningxia	Ningxia Federation of Trade Unions	May Day Labor Award of Ningxia Hui Autonomous Region
Rianlon Supply Chain	Federation of Trade Unions of Binhai New Area, Tianjin	"Mommy's Home" Demonstration Site



2022 Outstanding Practice Case of Offices of Board of Directors of Listed Companies

Social Responsibility Management

Rianlon holds high the concept of sustainable development, and integrates ESG core theories and standards with corporate strategy and management to effectively manage ESG risks and identify corresponding opportunities for high-quality development. We fulfill responsibilities to all stakeholders and achieve a balance between business value and social value. We promise to support the ten principles advocated by the UN Global Compact in the fields of human rights, labor, environment, and anti-corruption, and fully implement them into our strategy, operation, and culture. We also promise to incorporate the UN Global Compact and its principles into the decision-making process of the top management, actively participate in partnerships and strive to achieve broader development goals.



The Ten Principles of the UN Global Compact



Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
Principle 2: make sure that they are not complicit in human rights abuses.

Labor

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
Principle 4: the elimination of all forms of forced and compulsory labor;
Principle 5: the effective abolition of child labor; and
Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;
Principle 8: undertake initiatives to promote greater environmental responsibility; and
Principle 9: encourage the development and diffusion of environmentally friendly technologies.

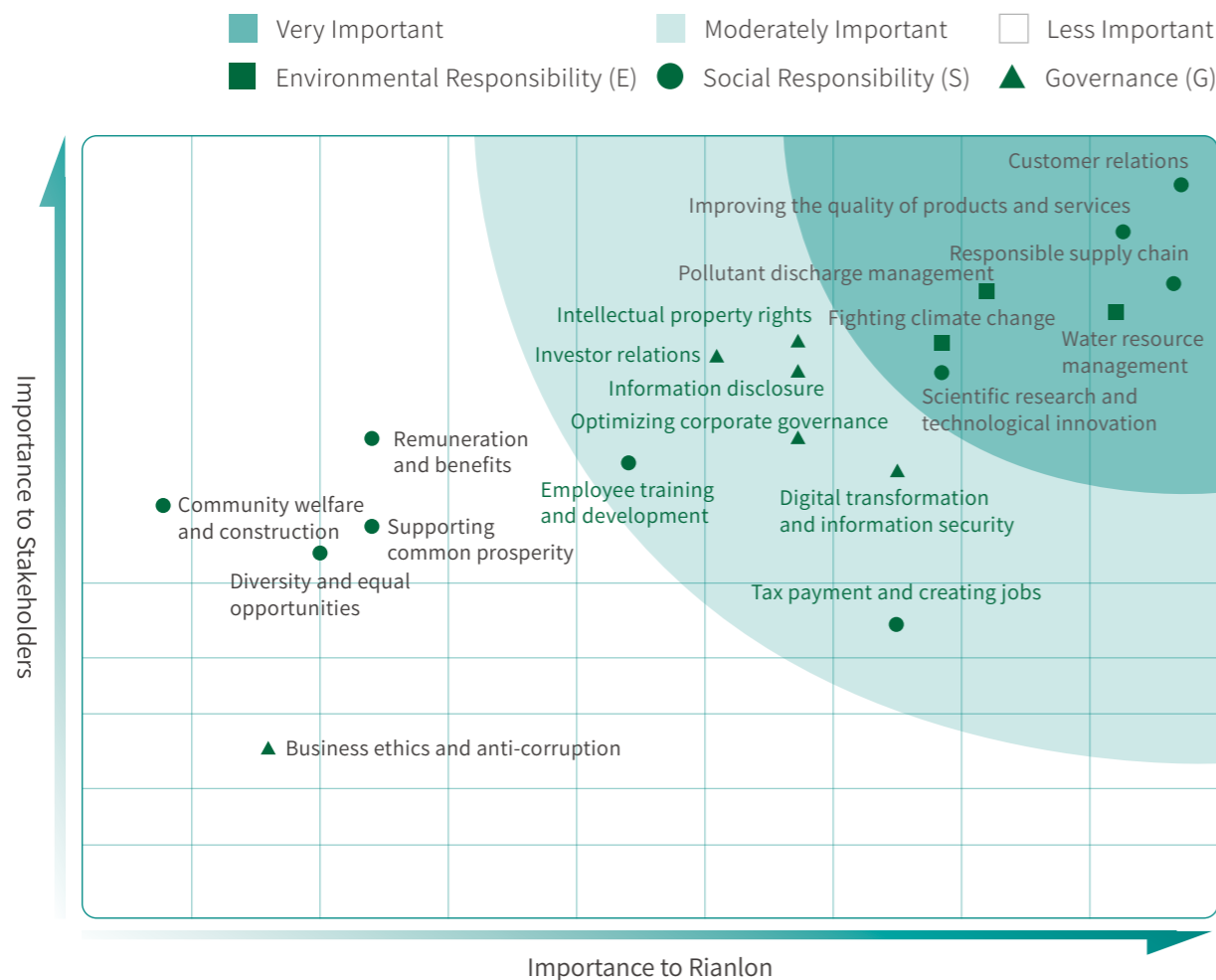
Anti-Corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Analysis of Material Topics

Rianlon drew information from national macro policy directions, social responsibility standard studies domestic and abroad, industrial benchmarks, stakeholder interviews and investigations, and other aspects. Based on that, Rianlon determined issues that have major impacts on the Corporation and the stakeholders, and formed a material proposition. In 2022, based on the "importance to the Corporation" and the "importance to stakeholders", Rianlon prepared a Questionnaire on Rianlon 2022 Social Responsibility Report Material Topics, and arranged ESG material issues in order of importance. Data collected from the process can help Rianlon set ESG macro objectives, specific goals, information disclosure, and constant communication with stakeholders.

Rianlon's Material Topics Matrix



Communication with Stakeholders

Rianlon takes proactive measures to manage relationships with customers, shareholders, government, investors, regulators, investment institutions, business communities, and other stakeholders. Stakeholders can be influenced by the Corporation's ESG performance, and their behaviors can also have an impact on the Corporation's value. Stakeholders can take part in the communication directly or indirectly. Interaction and communication with key and target stakeholders help to deepen mutual understanding and cooperation and lay the foundation for our sustainable development.

Stakeholder Identification	Key Stakeholders	Issues of Concern	Communication Channels
<p>Shareholders and institutional investors</p>	Corporate investors and institutional investors	<ul style="list-style-type: none"> About the shareholders' meetings Investor relation management Comprehensive risk management Internal control management Information disclosure Scientific and technological innovation Business ethics Intellectual property right protection Environment management 	<ul style="list-style-type: none"> Shareholders' meetings Briefings Media communication Internal communication and e-mails Webcast Official website Annual reports
<p>Governments and regulators</p>	National ministries and commissions, regulators of local governments, and market regulators	<ul style="list-style-type: none"> Carbon emission management Fighting climate change Anti-corruption Social welfare Information disclosure Internal control management 	<ul style="list-style-type: none"> Information disclosure Policy implementation News platforms Compliance platforms Webinars
<p>Customers</p>	Research institutions, upstream and downstream firms	<ul style="list-style-type: none"> Responsible marketing Technology research and development Industry cooperation Anti-corruption Intellectual property right protection 	<ul style="list-style-type: none"> Customer investigation Customer services Customer satisfaction management Official website Social media
<p>Partners</p>	Suppliers and business partners	<ul style="list-style-type: none"> Occupational safety Labor rights and interests Scientific and technological innovation Industry cooperation Information security Business ethics 	<ul style="list-style-type: none"> Exchanges and visits Supplier management Industrial forums Association exchanges Information disclosure
<p>Community and public</p>	Community, social organizations, public welfare organizations media, etc. that the Corporation is involved in	<ul style="list-style-type: none"> Environment management Fighting climate change Employees' rights and interests Anti-corruption Social welfare 	<ul style="list-style-type: none"> Public benefit activities Exchanges and interaction Official website
<p>Employees</p>	Staff	<ul style="list-style-type: none"> Employees' rights and interests Career development Remuneration and benefits Health and safety 	<ul style="list-style-type: none"> Labor contracts Reasonable proposals Democratic communication Letters and visits Official website

01

Comprehensively Improving Governance Through Steady Operation

Steady operation modes and sound corporate governance lay a solid foundation for enterprises' stable and sustainable development. We make continuous efforts to improve the corporate governance, adhere to the leadership of Party building, improve management mechanisms, and enhance compliance and internal control management, laying a foundation for modern and high-quality governance. In the meantime, we adopt a comprehensive risk management system at the operational level, focus on clean employment, strengthen investor relation management, and improve intellectual property right protection. Thus, we create a healthy and sustainable operating model to drive long-term and stable development.

[Deepening the leadership of Party building](#)

[Internal control for compliant operation](#)

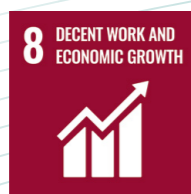
[Comprehensive risk management](#)

[Focusing on clean employment](#)

[Investor relation management](#)

[Intellectual property right protection](#)

Making contributions to UN Sustainable Development Goals (SDGs)



Deepening the leadership of Party building

Rianlon perseveres in the development guideline of "strengthening the foundation and carrying forward revolutionary traditions" to solidify the foundation of the grass-roots Party organization. Rianlon Party Committee has always focused on the construction of the grass-roots Party organization, and earnestly kept the leadership of the Party in all links and the whole process of primary level management, production and operation to promote the in-depth development of the Party building. Relying on the first lifeline of polymer-material anti-aging additives, we create benefits for all Rianlon people. Through expanding the business of lubricant additives, we draw a driving force to grow our projects under operation. We also engage in bioscience to pioneer blue ocean markets, thus realizing mutual support and advancement of blue business operations and revolutionary traditions, thus propelling high-quality development.

Creating a Party building brand

Rianlon vigorously strengthens the Party building and actively promotes the three-dimensional construction of "revolutionary traditions, blue ocean markets, and green development". We give full play to the leading role of the Party building, and deepen the integration of corporate culture and the Party building work to create a Party building brand with Rianlon's characteristics.



Carrying forward revolutionary traditions

Holding high the red Party flag to lead the development of Rianlon's first lifeline in a bid to stabilize the foundation, broaden development space, and provide benefits for all Rianlon people

Pioneering blue ocean markets

The color of blue represents blue ocean markets, which involves Rianlon's second lifeline of lubricant additives

Taking the lead for green development

The green 1 symbolizes Rianlon's philosophy of green and low-carbon development and making waters lucid and mountains lush. It also means the breakthrough Rianlon has made in bioscience from scratch and the efforts to open up the third lifeline.

Enhancing Party organization building

Revolving around the Party building framework of "2+N", Rianlon has constantly built up the leadership of the Party in the Corporation. We have reinforced the Party organization building through multiple measures such as solidifying Party branches, recruiting new Party members, and providing funds to give the Party building into important play in Rianlon's safe and healthy development. In 2022, there were 6 Party branches, 150 Party members, 13 probationary Party members and 74 active applicants for Party membership in the Corporation.



Figure: All members of Rianlon's Party branches are actively donating funds and other items

Studying and implementing the spirit of the 20th CPC National Congress

The 20th National Congress of the Communist Party of China (CPC) is a meeting of great importance. It takes place at a critical time as the entire Party and the Chinese people of all ethnic groups embark on a new journey to build China into a modern socialist country in all respects and advance toward the Second Centenary Goal. On October 16, 2022, to prepare for the 20th CPC National Congress, Rianlon organized its Party branches and Party members to watch the opening conference in diverse forms to study, publicize and implement the spirit of the 20th CPC National Congress. In this manner, we made sure that the objectives, tasks, and various decisions and arrangements can be carried out in the Corporation's development.



Figure: Rianlon's activities to prepare for the 20th CPC National Congress

Internal control for compliant operation

Rianlon strictly abides by laws and regulations such as the Company Law and the Securities Law of the People's Republic of China and constantly improves the corporate governance structure. Based on the Articles of Association, we formed a management architecture consisting of Shareholders' Meetings, Board of Directors, Board of Supervisors, and the Operation Management to protect lawful rights and interests of the Corporation and all shareholders. Also, we formulated the Rules of Procedure for Shareholders' Meetings, Rules of Procedure for Board of Directors, Rules of Procedure for Board of Supervisors, Detailed Rules for the Work of the Secretary of the Board of Directors, the President's Work Rules and other rules and regulations to clarify work responsibilities and requirements and protect shareholders' rights and interests.

Shareholders' Meetings

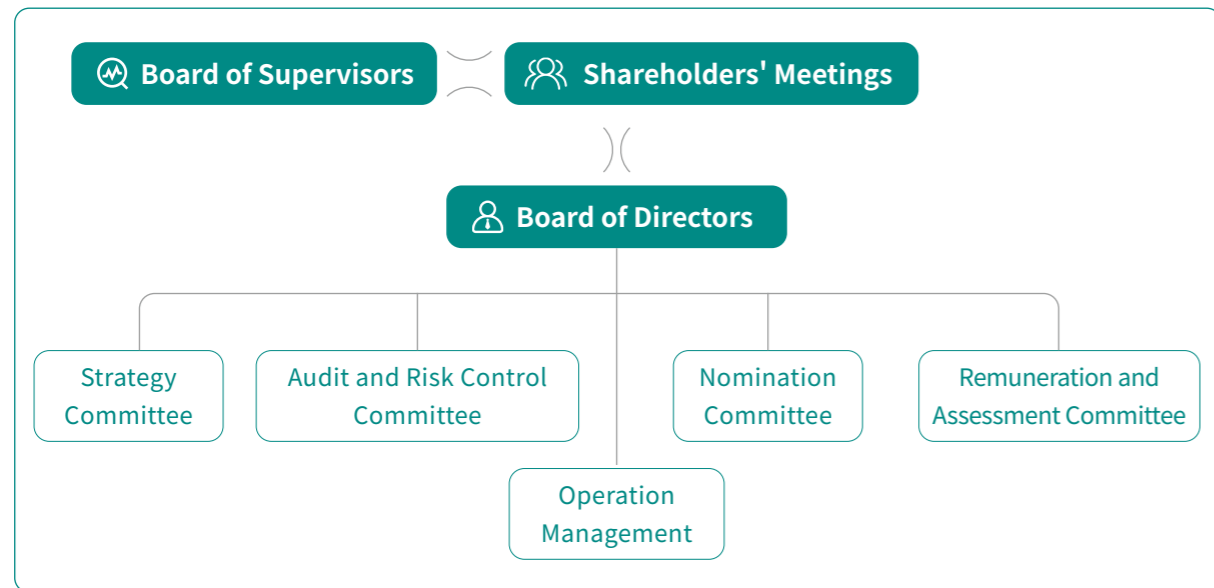
The Corporation shall hold Shareholders' Meetings in accordance with the laws and regulations. In 2022, we held 5 Shareholders' Meetings, and the convening, convening procedures, qualifications of attendees, and voting procedures were in line with relevant laws and regulations. In this way, we made sure that all shareholders, especially small and medium-sized shareholders enjoyed equal positions and fully exercised their rights.

Board of Directors

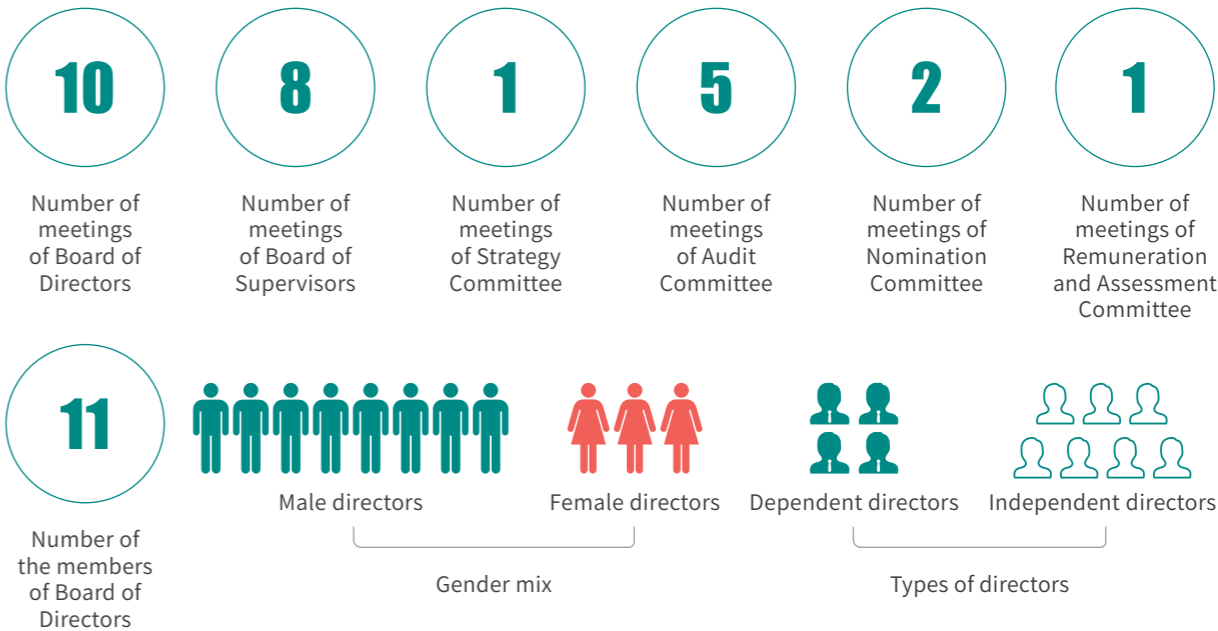
We are committed to create a diversified Board of Directors, which has 11 members, including 4 non-executive directors and 3 female directors. In 2022, we convened 10 meetings of the Board of Directors. We made clear the responsibilities of each committee under the Board of Directors, ensuring the effective operation of the Board of Directors and scientific decision-making. We ensured that independent non-executive directors can express independent opinions on relevant matters to protect the interests of the Corporation and small and medium-sized shareholders.

Board of Supervisors

The Board of Supervisors has 3 supervisors, including 1 employee representative supervisor. The number and composition of the Board of Supervisors meet the requirements of laws and regulations. The Board of Supervisors supervises the performance of the Board of Directors and the management, including reviewing regular reports prepared by the Board of Directors, inspecting the finances, and supervising connected transactions and the performance of directors and senior management personnel. In 2022, we had 8 meetings of the Board of Supervisors.



Quantitative Information of Rianlon's Governance in 2022



System construction

Rianlon adheres to the five principles of comprehensiveness, importance, balance, adaptability, and cost-effectiveness in building an internal control system, and establishes corresponding internal control centers at the headquarters of each subsidiary to strengthen compliance management capabilities. As of the end of December 2022, the Corporation and its business divisions have released 261 systems in total, including 51 basic systems of operation, 79 systems for inter-departmental assistance, and 131 departmental SOP systems. We took actions to continuously deepen the effectiveness of internal control systems, clarified specific measures, and ensured effective implementation.

Internal control management mechanism

Rianlon formulated the Basic Norms for Corporate Internal Control and listed a total of 21 kinds of business based on the division of departmental responsibilities. We also sorted out various management systems and business processes according to the involved business, and adjusted 63 processes according to the authorization manual. We have improved approval efficiency and avoided gray areas through hierarchical authorization. In 2022, Rianlon organized 6 activities to publicize and implement the internal control authorization manual, to raise the risk control awareness and increase the ability of management personnel.

Comprehensive risk management

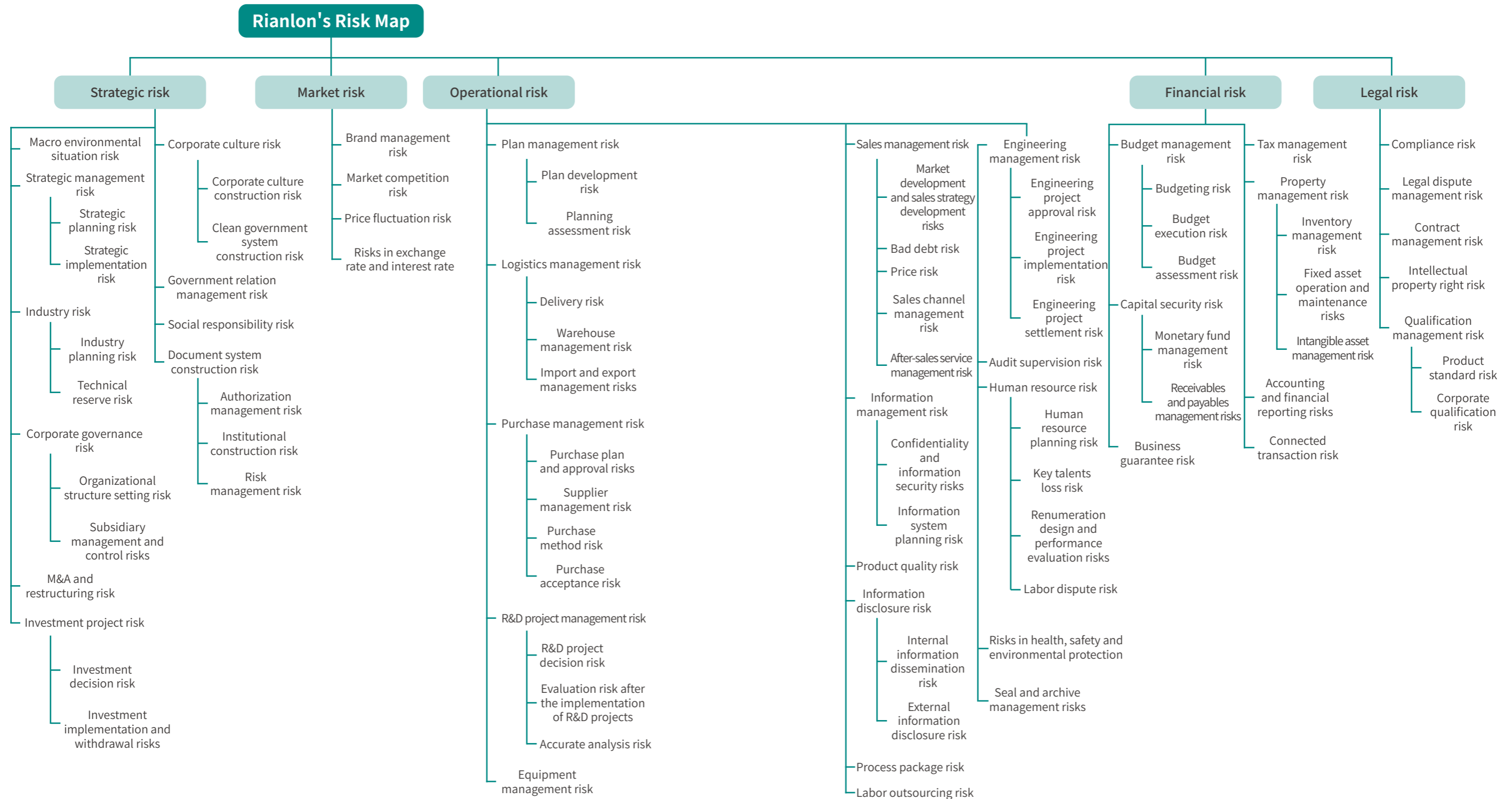


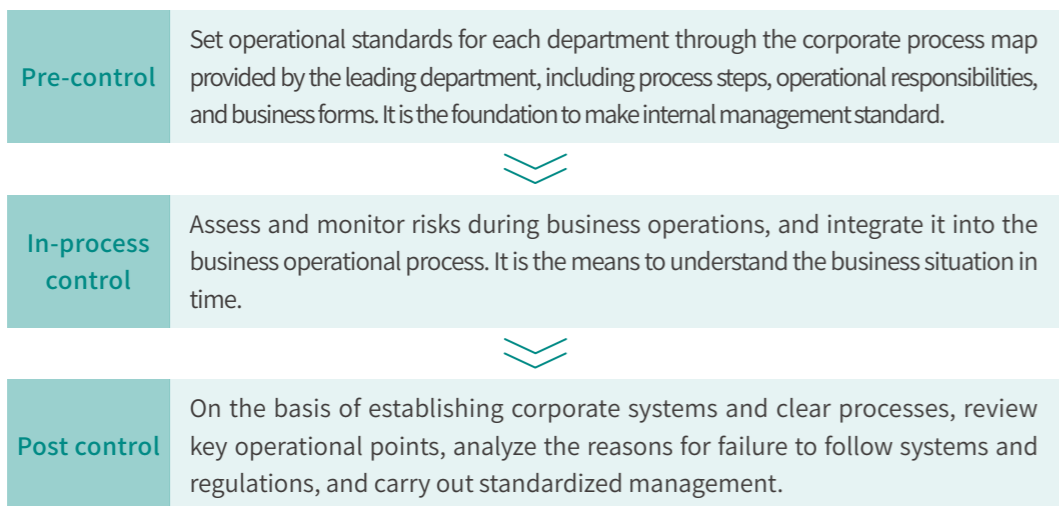
Figure: Rianlon's risk map

Risk management system

Rianlon constantly improves its risk management system, revises the Risk Manual on a regular basis, clear classification of the risks, specific risk items, proper scientific grading of the risk, and effective risk measures are the four key points to ensure risk reduction and control, included in this year's work highlights. Each department has established a comprehensive risk management structure based on risk management positions and established risk management institutions at corresponding levels. The Corporation conducts comprehensive risk management, including basic process design, risk control information system construction, risk management culture cultivation, risk assessment, and supervision, etc., to ensure that risk control has rules and laws to follow. In 2022, Rianlon carried out the training on the internal risk control manual once.

Risk management framework

Rianlon bases the risk management on "one foundation and three lines" and has developed a comprehensive risk control framework.



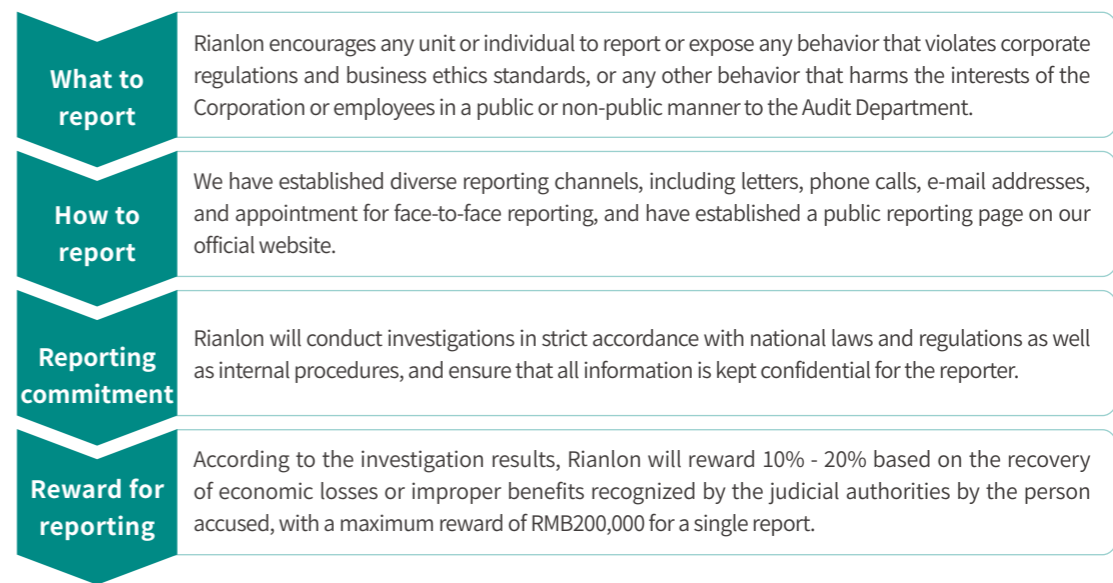
Risk management culture

Rianlon has performed relevant procedures through strictly conforming to corporate risk management regulations, stuck to the concept of comprehensive risk control in information systems, and established a corporate management system that is in line with the actual situation. The Corporation continues to increase its risk management training efforts, raise employees' awareness and improve their capabilities for risk management, continuously strengthens employees' internal risk control capabilities, prevents various risks, and makes risk management an important content of annual training.

Focusing on clean employment

Rianlon rigorously abides by the Rules of Integrity and Self-discipline of the Communist Party of China, the Regulations of the Communist Party of China on Disciplinary Actions, the Regulations of the Communist Party of China on Accountability and other provisions, and continues to strengthen the construction of the anti-corruption compliance system. We have formulated the Management System for Clean Employment and the Management System for Letters and Visits to enhance the anti-corruption awareness of all employees and improve their professional ethics with the Party building and clean employment as the guide.

Fraud reporting mechanism



Anti-corruption training

Rianlon has gradually improved its anti-corruption training system. In 2022, we organized anti-corruption training sessions for all employees, and produced videos and organized other special activities to prevent bureaucracy and formalism, so that employees can understand the importance and necessity of anti-corruption work. By the end of 2022, we convened 3 anti-corruption training sessions.

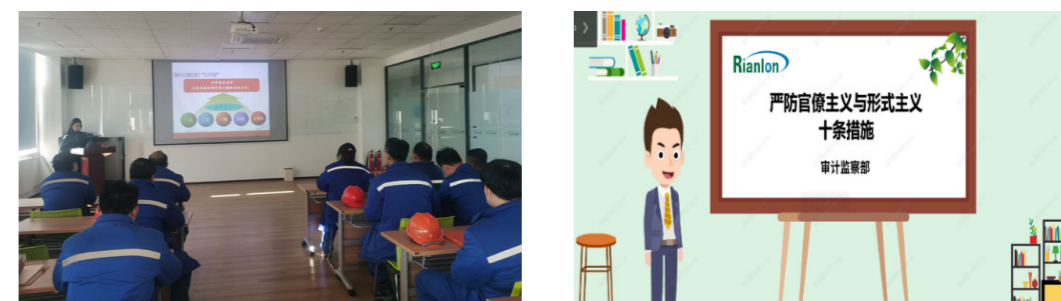


Figure: Anti-corruption training session and screenshot of the anti-bureaucracy video

Investor relation management

Rianlon is responsible for protecting the legitimate rights and interests of all investors. In 2022, we actively improved our investor management system and communication channels with all shareholders. We also won the Outstanding Lecturer Award in the first community grid-based investor teaching competition in Tianjin, establishing a good relationship with our shareholders.

We strictly comply with the requirements of the system and relevant laws and regulations to fulfill our information disclosure obligations. During the reporting period, we disclosed 127 announcements in total. In 2022, we updated the existing corporate information disclosure and investor relation management systems, and further clarified the six working principles in the management system and actual work:



Rianlon has established an investor relation management team led by the Secretary of the Board of Directors and securities affairs representatives. It holds analyst briefings, performance briefings, and other activities from time to time, receives consultation from analysts, investors, and media, and receives investor visits. We set up an investor interaction platform Easy Interaction to summarize and release information of investors' concerns. We also opened an official account on WeChat to regularly publicize industry knowledge and our recent situation for industry researchers and investors at home and abroad. Through these moves, we enable our investors to have a deeper understanding of our business situation and future development strategy, and firmly invest in our long-term value.

In 2022, Rianlon held

10⁺
strategy meetings for domestic and foreign securities firms

5
teleconferences

2
online performance briefings

7
investor protection promotions

Throughout the year, we answered

300⁺
inquiry calls from small and medium-sized shareholders

100
visits of investors for on-site investigation

50⁺ with a response rate of over **96%**
questions raised by investors online

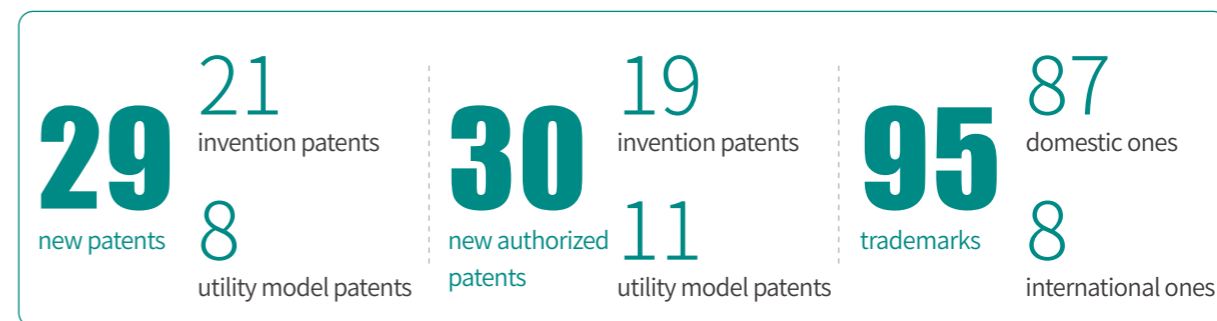
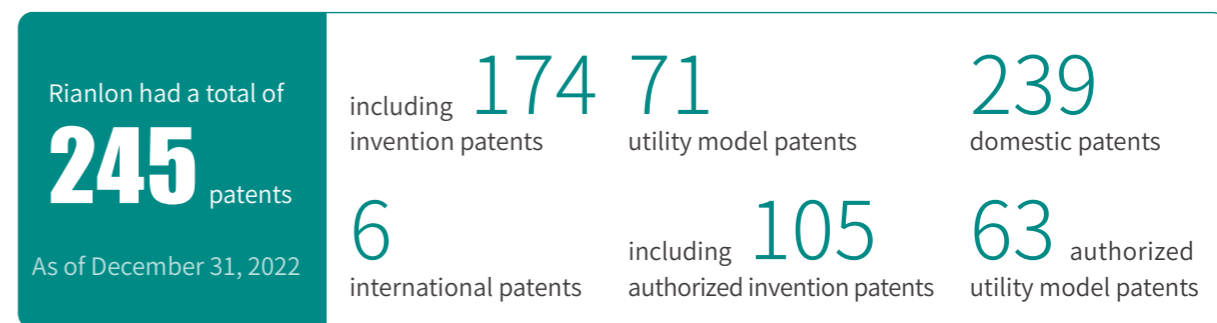
Quantitative Information of Investor Relations in 2022

Information disclosure



Intellectual property right protection

Rianlon rigorously follows relevant laws and regulations such as the Tort Law, the Patent Law, the Trademark Law, the Copyright Law, and the Anti-Unfair Competition Law of the People's Republic of China. We formulated internal management systems such as Rianlon Intellectual Property Right Management System, Incentive and Reward System for Independent Innovation of R&D Personnel, Patent Grading Management System, Quality Review Standards for Case Written by Agents, and Scoring Standards for Technical Disclosure. Moreover, we never stop our efforts to improve the intellectual property right protection system, increase employees' awareness year by year, vigorously carry out training for related personnel, and strengthen intellectual property right protection work overall.



02

Steadily Advancing Industrial Layout with Innovation Taking the Leading Role

Rianlon perseveres in the mission of creating value for customers, stands fast at independent innovation and optimizes industrial layout to provide high-quality products for customers. We always strictly control product quality, intensify scientific research and technological innovation, and devote ourselves to customer services. We also create a responsible supply chain, reinforce information security, and pursue high-quality development of the industry with innovation taking the leading role.

Product quality and safety

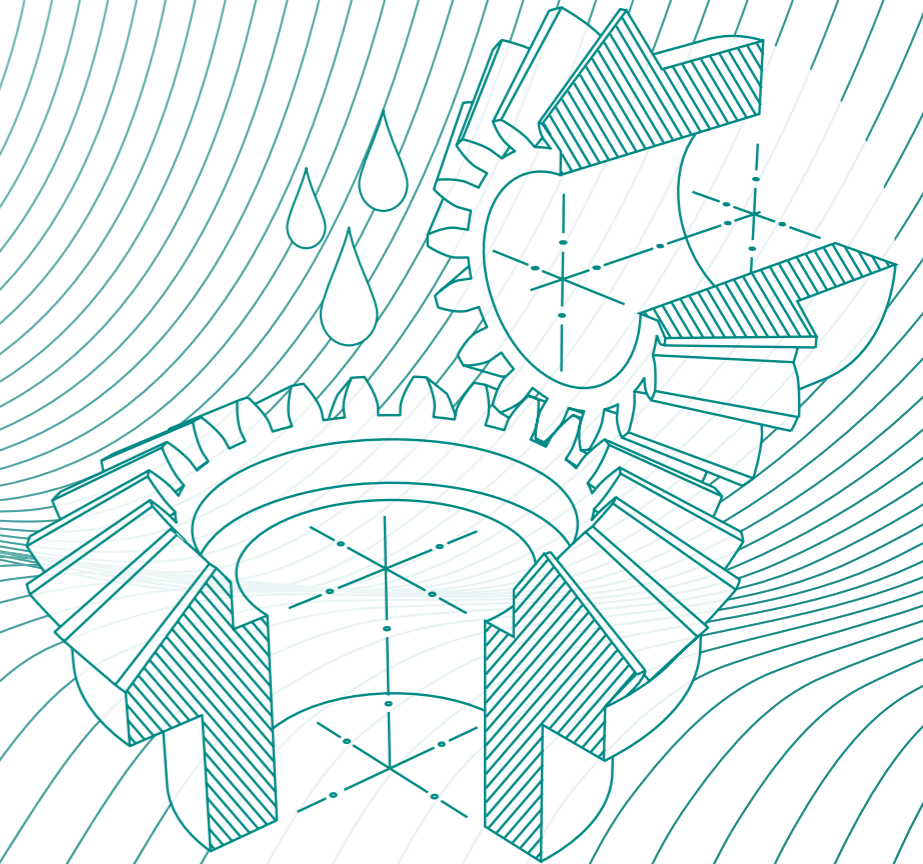
Scientific research and technological innovation

Customer relationship maintenance

Responsible supply chain

Digitalization and information security

Making contributions to UN Sustainable Development Goals (SDGs)



Product quality and safety

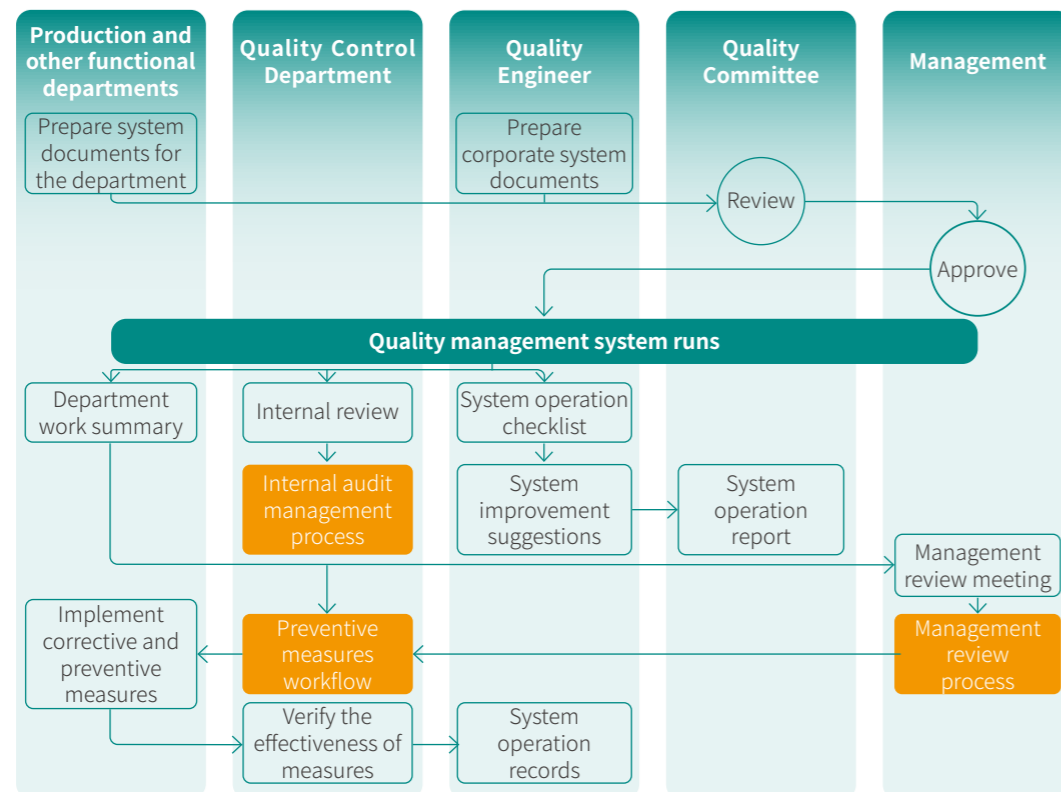
Rianlon sets the quality policy of "customer and quality first, compliance, law abiding and constant improvement", focuses on process management, follows ISO9001 quality management requirements, and conducts full process quality control. The Corporation ensures product quality through strict quality control procedures, monitors product indicators in real time, and adopts a series of internal control measures to make sure excellent product quality.

Establishing a quality management system

Following relevant standards, we carry out comprehensive quality management, and establish a scientific, rigorous, and efficient quality management system. We have formulated 25 procedural documents and departmental systems such as the Quality Manual, Production and Service Provision Control Procedures, Inspection Management Regulations, Quality Accident Management System, 4M Change Management System, and Defective Product Control Procedures. These documents and systems clarify the quality control, service standards, and relevant responsible personnel in all processes from R&D design, product delivery to after-sales services, ensuring full-process quality control management.

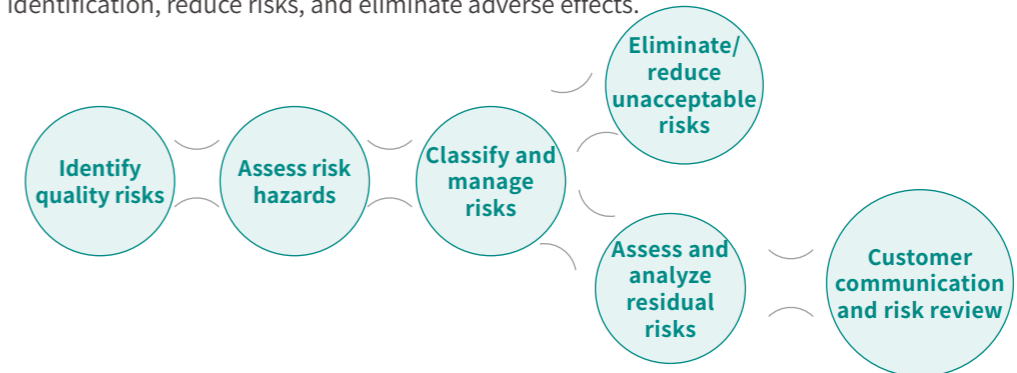
In 2022, Rianlon optimized the detailed requirements for product recall management and developed a simulation plan for the recall of defective products.

Product violations and recalls occurred in 2022: 0.



Improving quality risk management

We have attached great importance to the adverse consequences brought to customers due to product quality risks and formulated a quality risk management system to carry out risk identification, reduce risks, and eliminate adverse effects.



Advocating the quality concept

The Corporation raises the awareness of all employees for quality, broadens their quality knowledge, clarifies the value orientation of pursuing excellence and high quality, and improves the quality management level through quality culture construction and quality training.

- "Quality Month" activities** Since 2019, we have launched the "Quality Month" activities in the "China Quality Month" of September each year. Through a series of activities such as publicity, lecturing, skill improvement, sharing, competition, optimization, and total involvement, we aim to raise the quality awareness of all employees and improve their capabilities for quality improvement.
- Quality training** Rianlon highly values quality training and provides information on quality system standards, and quality management systems and tools through a combination of internal and external training. We set a quality experience classroom to have lectures every week for employees to consolidate their understanding of standard operating practices and learn about the latest quality concepts.

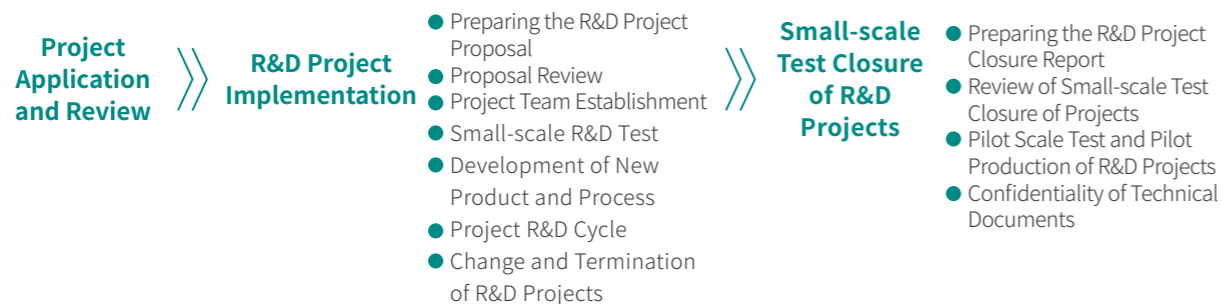
Sites	Class hours	Number of trainees	Total training hours (Number of trainees x Hours)
Hangu Site	163	5,934	452,628
Changshan Site	64	387	1,434
Zhongwei Site	731	3,118	191,522
Zuhai Site	244	4,221	591,744
Hengshui Site	30.5	1,191	1,895
Chifeng Site	68	847	7,006
Total	1,300.5	15,698	1,246,229

Table: Summary of Rianlon's Quality Training in 2022

Scientific research and technological innovation

Taking innovation-driven development as an important strategy, Rianlon sets strategic goals for future innovation and strives to become a global leader in the industry by 2028. The Corporation has established the Rianlon Research Institute to continuously enhance its technology R&D strength in the development of new structures, new process innovation and application technology ability. The Corporation has formulated the Project R&D Management System to standardize the process management of R&D projects from project initiation to project closure, so as to ensure the efficient, orderly and controllable progress of R&D projects.

Project R&D Management Process



Innovation platform construction

R&D departments: We have set up internal R&D departments for our research institute, such as U-Pack Department, UV Absorbent Research Institute, Light Stabilizer Research Institute, Antioxidant Research Institute, Engineering and Design Research Institute, Synthetic Biology Laboratory, Nucleic Acid Monomer R&D Laboratory, Pilot Industrial Base of Synthetic Biology, Single Agent Research Institute, Complexing Agent Research Institute, Analysis and Evaluation Center, etc.

Innovation platforms: We have built Tianjin Enterprise Technology Center, Engineering Technology Center for Functional Additives for Polymer Materials, Engineering Research Center for Anti-aging Additives for Polymer Materials, Postdoctoral Workstation, International Cooperation Base and other innovation platforms.

Innovation team: We have an innovation team of more than 300 people led by a number of PhDs in Chemistry, and employ industry-leading experts from the United States, Japan and Europe. We have made remarkable achievements in structure innovation and application technology innovation of anti-aging products. By the end of 2022, the research institute had 7 PhDs and 59 Masters.

Industry-university-research cooperation: We have established long-term cooperation with universities such as Tianjin University, Zhejiang University, Sichuan University, Tsinghua University and Beijing University of Chemical Technology, and have accumulated good interaction modes for industry-university-research cooperation in terms of project development and talent cultivation.

Green product technology R&D

We take full advantage of industrial innovation, develop green product technology, reduce the pollution of products to the environment, improve the recyclability rate of products, and reduce the impact of products on the environment in the full life cycle.

- **Ecological design concept for product R&D**
Develop and produce antioxidants and light stabilizers as anti-aging additives for polymer materials to extend the service life of materials, thus reducing scrap materials and environmental pollution.
- **Reduced use of hazardous chemicals**
 - Toxic and harmful substance substitution through technological innovation
 - Solvent recycling in the process
 - Dimethylamine solution replaces anhydrous dimethylamine to reduce safety risks
 - Optimization of concentrated wastewater process to replace the use of hydrogen peroxide

[Case] Improve product process to increase production and reduce consumption

Rianlon improves the production process of AO1098, solves the problem of excessive loss of hexamethylene diamine, increases the production capacity of AO1098, and reduces organic content in exhaust gas to reduce energy consumption and protect the environment.

Customer relationship maintenance

Adhering to the customer-centric concept, Rianlon attaches great importance to customer service and improves the customer management system. Based on the customer satisfaction survey, Rianlon carries out multi-directional customer demand response, satisfies diversified customer needs, provides quick feedback on customer complaints, timely solves customer problems, and continuously improves service accessibility to further increase customer satisfaction.

Enhance service accessibility

The Corporation places emphasis on the accessibility of customer service, always adheres to "doing what customer wants, thinking what customer cares", pays attention to the timeliness of product delivery, strictly follows the customers' delivery schedule, and improves customer satisfaction as much as possible. The Corporation has created a 72-hour quick response covering major customer groups around the world, and set up logistics warehouses in Antwerp in Europe, Ohio in America, Singapore, Thailand and Japan, as well as Guangzhou, Shanghai and Ningxia to provide convenient and quick localized services for customers around the world.



Figure: In 2022, Rianlon overcame external obstacles to deliver the goods to the customer in time and received a letter of thanks from the customer.

Optimize customer service management

The Corporation continuously optimizes customer service and effectively improves service quality and efficiency by strengthening system management, innovating customer communication methods, improving customer complaint management processes, and conducting customer satisfaction surveys.

- Strengthen system management**

The Corporation has formulated the Reception Management System to clarify the relevant process and system for receiving customers. In addition, the Corporation has developed targeted customer management methods based on the characteristics of customers in different sales module areas, to provide more accurate and effective customer services.
- Increase customer visits**

The Corporation has launched the "going global" project, which not only provides services by email and phone, but also expands customer contact methods. Through offline visits, the Corporation deepens the understanding of customers and forms a close relationship with customers.
- Improve the customer complaint management process**

The Corporation continuously improves the customer complaint management process, formulates the Customer Complaint Management System, standardizes complaint acceptance, timely reviews and provides feedback on complaint handling opinions, and develops an assessment and reward system to strengthen awareness of customer complaints and actively respond to customer complaints.
- Carry out customer satisfaction surveys**

The Corporation actively conducts customer satisfaction surveys to gain an in-depth understanding of customer needs and collect customer opinions. The Corporation also carries out customer complaint prevention and optimally addresses customer feedback and suggestions. In 2022, 394 customer satisfaction surveys were issued and 326 were collected, with a customer satisfaction score of 94.78, an increase from the previous year.

Strengthen responsible marketing

Rianlon insists on responsible marketing and complies with relevant laws and regulations such as the Consumer Protection Law. The Corporation has formulated the Marketing Center Industry Management System, which clarifies the downstream industry division of the Corporation's product application and the person in charge of each industry, and confirms the selection method, job responsibilities and corresponding incentive mechanism of the person in charge of the industry. Meanwhile, the Corporation has issued the Sales Management System of Anti-aging Division and Management System of Marketing Center of Anti-aging Division, which provide targeted standardized management for the marketing plan, product price, financial risk, contracts, samples, customers, bids and information. Besides, the Corporation has formulated the Packaging Management Process, Labeling Management Process and Sales and Logistic Fee Management Regulations for such links as packaging, labeling and logistics, so as to cover the whole process of responsible marketing.

Responsible supply chain

Rianlon always requires suppliers to observe the laws and regulations and relevant procurement guidelines, incorporates social responsibility requirements into supplier management, establishes a responsible procurement system and a sunshine procurement mechanism, and works with suppliers to create a sustainable supply chain.

Strengthen supplier management

The Corporation has established a complete and efficient supply chain management system, encouraged suppliers to sign the Supplier Code of Conduct, formulated the Supplier Management System, carried out comprehensive supplier evaluation and due diligence, and incorporated factors such as quality conditions, environmental and social responsibility fulfillment, and after-sales service into the supplier evaluation and audit standards.

- Conduct sunshine purchase management**

The Corporation has formulated the Sunshine Purchase Management System to strengthen prior and in-process control to ensure that all purchasing activities are open, fair, and equitable. Meanwhile, the Corporation further enhances the integrity and self-discipline awareness of internal purchasing staff and suppliers through the signing of Commitment Letter of Due Diligence and Integrity by purchasing staff and Fair Trade Agreement by suppliers, holding internal integrity symposiums and supplier conferences on the theme of sunshine purchase, etc.
- Create a sustainable supply chain**

The Corporation integrates sustainable development requirements into supply chain management and sets sustainable purchasing management targets for 2022 in accordance with the requirements of the Sustainable Purchasing Management Policy for Environmental and Social Responsibility. The Corporation conducts supplier sustainability evaluations and investigates and regulates the ability of suppliers, subcontractors, or partners to implement social responsibility to prevent adverse impacts on environmental protection and employees' occupational health and safety during procurement, storage, use, and disposal.
- Establish a supplier introduction and elimination mechanism**

The Corporation has formulated the New Supplier Introduction Mechanism, incorporating legal compliance and EHS into the supplier admission principles, deepening the management of supplier compliance and sustainability, and ensuring that the Corporation provides "responsible" products and services.

83%

Percentage of suppliers signing clauses containing environmental and labor requirements

100%

Percentage of new suppliers selected using environmental standards

100%

Percentage of new suppliers selected using social responsibility standards



Facilitate a win-win industry chain

Rianlon actively carries out social responsibility training for suppliers and organizes supplier exchange activities. In addition, the Corporation strengthens strategic cooperation and promotes the improvement of suppliers' sustainable awareness and capability to build a sustainable supply chain with industry chain partners.

50

Number of social responsibility (ESG) training for suppliers



[Case] Rianlon and BASF-YPC signed a strategic cooperation agreement

In November 2022, Rianlon and BASF-Yangzi Petrochemical Company (BASF-YPC) held a strategic cooperation meeting. The theme of the meeting was "Create opportunities, share outcomes, and assume the missions jointly". Based on the strategic cooperation framework, both parties will innovate business cooperation models, deepen strategic partnerships, jointly create opportunities, share outcomes, and assume the missions, and work closely together.



Figure: Rianlon and BASF-YPC signed a strategic cooperation agreement



[Case] The Corporation held the first supplier conference to create a sunshine supply ecosystem

Rianlon actively organized a supplier conference to create a good supply chain ecology. The Corporation proposed sunshine purchase guidelines, advocating to build a "Great Wall" of corruption prevention system with suppliers, and signed sunshine purchase commitments with each supplier to form a sunshine purchase mechanism. Participating suppliers will work together with Rianlon to deepen cooperation and jointly promote sustainable development cooperation.



Figure: Rianlon and its suppliers signed the commitment to honest cooperation on the banner of "Being Credible and Honest to Create the Future Together"

Digitalization and information security

Digital transformation

Rianlon actively carries out intelligent and digital transformation to enhance its core competitiveness and independent innovation capability, accelerate the digital transformation process, and promote the integration of intelligent and digital sustainable development.

Moder business management

- The Corporation actively integrates information management system into all aspects of company management and business development, such as "paperless digitalization", EHR human performance management, etc., to improve the integration of data-driven business management automation.

Intelligent manufacturing

- At the present stage, our equipment management platform has covered all production sites, which provides intelligent, digital real-time management of equipment.
- Some production sites have realized full coverage of digital and automated production and manufacturing modes, truly realizing the interoperability of logistics information and improving efficiency.

Digital product marketing

- Under the premise of continuously optimizing traditional marketing models, the Corporation actively adopts new trends such as new media, as digital marketing measures.

[Case] Construction of EHS digital system

Rianlon promotes the standardization of EHS, establishes an EHS system, and constructs dual prevention mechanisms, personnel positioning, change management, etc. to achieve the essential improvement of EHS digital management level and protect the safety in production.



Figure: Rianlon's EHS digital system

Information privacy security

Rianlon attaches great importance to information security management. The Corporation has formulated the Network Information Security Management System and Information Security and Confidentiality Management System to strengthen information security management in terms of hardware, software and personnel. Meanwhile, the Corporation attaches great importance to the protection of customer information and trade secrets, and protects customer privacy through a series of management measures:

- Rianlon has formulated the Confidentiality Management System classifying commercial secrets related to business management information according to their importance, and has formulated the corresponding authority control, protection mechanism and approval process.
- Rianlon signs confidentiality agreements with all employees or establishes confidentiality clauses in employment contracts, specifying confidentiality requirements, confidentiality periods, liability for breach of contract, etc. Meanwhile, confidential employees are educated on the legal system and knowledge of confidentiality before starting work, and all employees are regularly educated on confidentiality to improve the awareness of confidentiality.
- The Corporation continuously promotes information construction and strengthens information security control through a series of management measures such as computer equipment security management, network security management, system change and operation control, authority control, password management, etc., to avoid information security risks.
- The Corporation signs confidentiality agreements with all customers or stipulates confidentiality clauses in contracts, and strictly implements them. The disclosure of customer information is also explicitly prohibited in employee manuals and labor contracts.

In 2022, the Corporation carried out a total of

2

information security audits

the information security management system construction covered

65%

of its business scope.

03

Green Development, Active Response to the "Carbon Peaking and Carbon Neutrality" Goals

The ecological environment is a necessary condition for human survival and development, and an important part of ecological civilization construction. Rianlon adheres to the concept of green development throughout the entire process of product research and development, production, and operation, striving to become a practitioner of environmental management, a promoter of ecological civilization, and a builder of beautiful China. The Corporation continues to strengthen pollutant emission management, vigorously promote the rational use of resources, strengthen its own ability to tackle climate change and make "Rianlon" a core competitor for the sustainable development of China's chemical industry economy. Rianlon Hengshui Site was awarded the 2022 water-saving enterprise, Rianlon Zhongwei Site was awarded the 2022 Green Project of Ningxia Hui Autonomous Region, and Rianlon Hangu Site, Hengshui Site, and Zhongwei Site were awarded the 2022 National Green Factory.

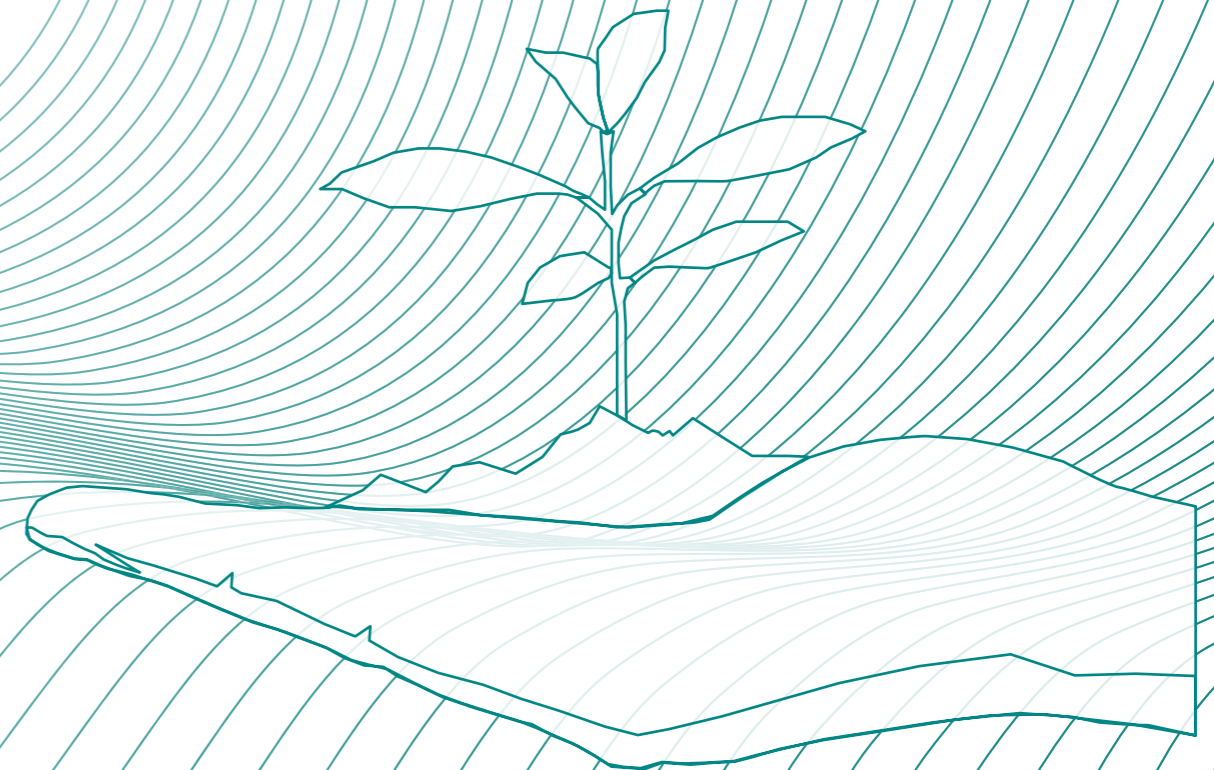
Implementation of "carbon peaking and carbon neutrality" management

Further management of three wastes

Rational utilization of resource

Addressing climate change

Making contributions to UN Sustainable Development Goals (SDGs)



Implementation of "carbon peaking and carbon neutrality" management

In response to the national "carbon peaking and carbon neutrality" policy, Rianlon formulated the Carbon Emission Management Systems in 2022 to clarify the carbon emission management policy and objectives, establish carbon emission management organization and guide the implementation of carbon emission operation and management.

3+1 Plan for Institutional and Information System Construction

- 2023**
 - Optimize internal audit process and system for energy management;
 - Publish manuals on energy conservation and low carbon production
- 2024**
 - Optimize energy management software
 - Publish manuals on energy conservation and low carbon in non-production sectors
- 2025**
 - Optimize carbon emission management software
 - Integrate internal audit system of energy and release internal audit process and system for carbon emission management

Rianlon has established a carbon peaking and carbon neutrality management team as the management organization for its carbon emission efforts. The carbon peaking and carbon neutrality management team is responsible for the Corporation's carbon peaking and carbon neutrality management goals, and each subsidiary is responsible for its own carbon peaking and carbon neutrality management goals. Each subsidiary carries out various carbon emission reduction work under the guidance of the carbon peaking and carbon neutrality management team, and regularly reports the work progress, plan, and accepts the supervision and inspection of the carbon peaking and carbon neutrality management team.

Optimize process to reduce emissions

In 2022, Rianlon sites successively achieved efficient use of energy and efficient operation of products in the production process by improving management level, optimizing process equipment and using advanced energy-saving technologies, thus realizing the reduction of carbon emissions. In 2022, a total of 2,562tCO₂e of carbon emissions was reduced.

Measures	Carbon emission reduction (tCO ₂ e)
Improve refined operation level and reduce energy consumption	843
Improve waste heat utilization level	1,246
Use energy-saving equipment or technology	473
Total	2,562

Future commitments

Rianlon promises to continue to enhance the utilization of energy and resources, reduce carbon emissions, and reduce environmental impact by improving technology and promoting green production mode in 2023. Rianlon promises to reduce energy consumption by 3.1% in 2023.

Further management of three wastes

Rianlon strictly abides by national environmental protection laws and regulations and local government regulations, and has a special EHS management department and full-time environmental management personnel. Each production site has an environmental safety department and full-time environmental management personnel responsible for the management of the environmental protection system. The Corporation's production sites are equipped with facilities for treating wastewater and exhaust pollutants and the facilities are operating normally. The Corporation has excellent pollutant treatment effect, with emissions far below national and local emission standards. The Corporation monitors the discharge of water and gas pollutants online in real time and reports the data to the local environmental protection regulatory authorities. Hazardous solid waste is stored in designated locations that meet the requirements and entrusted to legal disposal companies for harmless disposal.

Solid waste management

Rianlon has issued the Implementation Measures for Standardized Management of Solid Waste and Implementation Measures for Standardized Management of By-products to strengthen the standardized management of solid waste and by-products. Hazardous solid waste is stored in designated locations that meet the requirements and entrusted to legal disposal companies for harmless disposal. The Corporation ensures that solid wastes and by-products are stored, disposed of and utilized in accordance with relevant national regulations, and actively implements the national requirements for the reduction, recycling and hazard-free treatment of solid waste.

The Corporation takes targeted measures to deal with the three types of solid waste including domestic waste, general solid waste, and hazardous waste as shown in the following table:

Types of solid waste	Treatment measures	Disposal measures
General solid waste	Boiler slag and ash undergo compliant ash treatment	Disposed of by qualified disposal companies that have signed
Domestic waste	Clarify waste	
Hazardous waste	Strictly follow the GB-18597-2001 Standard for Pollution Control on Hazardous Waste Storage to design and build new hazardous waste storerooms to store hazardous waste in a more standardized manner	

[Case]

In 2022, Rianlon's Zhongwei Site and Changshan Site added a set of sludge drying equipment for treating sewage and sludge (hazardous waste) and aluminum hydroxide (co-products) dehydration respectively to further realize solid waste reduction.

Waste Management	Unit	2020	2021	2022
Total recyclable waste	Ton	79.49	92.87	266.70
Total general solid waste	Ton	16,848.96	34,553.27	12,350.74
Total general solid waste landfilled	Ton	15,301.22	20,391.34	0
Total general solid waste incinerated	Ton	25.30	16.05	96.50
Total general solid waste recycled	Ton	0	9,446.60	9,944.60
Other total general solid waste	Ton	1,522.44	4,699.28	2,309.64
Total hazardous waste	Ton	1,907.81	2,185.53	3,403.82
Total hazardous waste incinerated	Ton	1,907.81	2,185.53	3,403.82



Waste gas management

In view of all kinds of waste gas emitted, Rianlon takes multiple measures to strengthen the treatment and emission reduction of waste gas, contributing to the protection and improvement of atmospheric environment. Among them:

- Tail gas from boiler** The tail gas from the fluidized bed boiler is emitted after being treated with "bag dust removal + lime - limestone desulfurization + SNCR denitration" and being up to the standard.
- Tail gas from production process** The tail gas from the production process mainly comes from each production workshop. The exhaust gas from the workshops is emitted after "condensation recovery + water spraying (alkali spraying)" into the RTO device for thermal decomposition treatment. The Corporation seals and collects waste gas from sewage stations and sewage tanks, and uses regenerative thermal oxidizer or biological method to effectively treat pollution factors such as odor and VOCs emitted, effectively solving the odor problem generated during normal operation. The Corporation is now further reducing the emissions of VOCs on the basis of meeting the emission standards. The RTO treatment efficiency can reach 99%, further reducing the emissions of VOCs.

Waste gas management	Unit	2020	2021	2022
Total exhaust emissions	10,000 cubic meters	232,965.80	190,524.54	301,779.84
Particulate matter	Ton	22.51	15.17	18.99
Non-methane hydrocarbon	Ton	9.98	7.09	17.74
Nitrogen oxides	Ton	109.26	88.09	166.22
Sulfur oxides	Ton	28.85	12.97	20.23
VOC emissions	Ton	17.14	8.21	4.04
Sulfuric acid mist emissions	Ton	1.45	0.85	1.06
Hydrogen chloride emissions	Ton	0.51	0.27	1.44



Wastewater management

Rianlon places emphasis on wastewater treatment and is committed to reducing the impact of wastewater on the environment. The Corporation's wastewater mainly comes from wastewater produced during the production of UV absorbers and antioxidants, discharge of the boiler water and domestic sewage.

The Corporation uses technologies such as acid-base neutralization treatment, multi effect evaporation, hydrolysis acidification, anaerobic treatment (such as UASB and IC), and aerobic treatment (such as CASS and contact oxidation) for wastewater treatment. After the wastewater is treated by the Corporation's internal wastewater treatment station and reaches the prescribed standard, it will be discharged by the park's sewage treatment plant. **The total COD removal efficiency can reach 97% in the wastewater treatment process.**

Wastewater management	Unit	2020	2021	2022
Total wastewater discharge	Cubic meters	675,452.00	816,367.00	766,053.60
Chemical oxygen demand (COD)	Ton	117.06	152.63	139.03

Wastewater management	Unit	2020	2021	2022
Five-day biochemical oxygen demand (BOD5)	Ton	4.81	11.39	12.14
Suspended matter	Ton	15.80	9.34	7.75
Ammonia nitrogen	Ton	4.74	15.71	8.74
Total phosphorus	Ton	0.22	0.39	0.12

Rational utilization of resource



Water resource management

Efficient and responsible water resource management is an important element in the sustainable development of Rianlon. The Corporation is committed to improving production processes, strengthening technological research, and striving to reduce water demand in order to improve water resource utilization efficiency so that the Corporation can increase production without increasing water use, reduce water costs and protect the environment.

Water resource use	Unit	2020	2021	2022
Municipal water purchasing amount	Cubic meters	1,040,189	1,256,843	1,391,136



Energy management

Rianlon attaches importance to energy management and has promulgated the Energy-Saving Accounting and Energy-Saving Incentive Management System to strengthen energy-saving incentives and formulate corresponding incentives for each production site. By setting up complete assessment standards and strengthening target-oriented responsibility system, the energy-saving targets are decomposed into each business line, and remarkable energy-saving effects have been achieved.

Rianlon has formulated energy-saving technical specifications such as the Energy-saving Standards for the Operation of Heat Transfer Oil Systems, Energy-saving Standards for the Operation of Water Circulation Systems, and Energy-saving Standards for the Operation of Power Supply, Distribution, and Motor Systems, which provide detailed requirements for energy-saving targets, energy measurement management, and energy-saving project management. Each production site of the Corporation conducts system optimization according to standards, continuously improving energy utilization efficiency.

Energy consumption	Unit	2020	2021	2022
Natural gas	Cubic meters	4,654,078	6,363,915	9,139,202
Steam	Ton	142,473	163,569	259,675
Raw coal	Ton	40,619	51,375	47,111
Gasoline	Liter	65,833	82,098	129,586
Diesel oil	Liter	54,680	133,622	156,589
Purchased electricity	Kilowatt-hour	105,044,326	126,327,992	134,645,939
Renewable energy	Ton	27,380	56,344	49,778

Addressing climate change

Fully aware of the challenges and risks brought by global environmental change, Rianlon regards climate change as an important part of ESG management. The Corporation evaluates major climate-related issues that have or are likely to have an impact on business operations and defines management responsibilities and actions related to climate risk governance.

[Case] Efficient water circulating pumps

In 2022, the Corporation purchased efficient water circulating pumps through contracted energy management for professional flow design of impellers to remarkably improve efficiency. It's expected that the project can save electricity of 360,000 kWh/a, equivalent to standard coal of 44 tce/a.

[Case] Steam modification program

In 2022, the Corporation selected a workshop to pilot steam modification for energy saving in a bid to better utilize the surplus heat of steam condensate and reduce heat loss. It's expected to save steam of 2,500 t/a, equivalent to standard coal of 232 tce/a.

[Case] Changing the water circulating cooling fans from electric-motor-driven to water-turbine-driven

In 2022, the Corporation transformed the water circulating cooling fans from electric-motor-driven to water-turbine-driven, which uses the pressure of returning water to drive the water turbine. It's expected to save 127,000 kWh/a, equivalent to standard coal of 15.63 tce/a.



Impact Factor	Impact Analysis	Related Actions
Impact of carbon accounting and carbon trading	With the expansion of the carbon trading industry scale, the Corporation's production sites are facing the situation of being included in the carbon emission trading system. If carbon emissions exceed the quota, achieving compliance by purchasing emission rights will increase operating costs.	Establish a carbon peaking and carbon neutrality management organization; Develop carbon management policy objectives and management systems; Actively carry out energy-saving work; Carry out carbon emission and product carbon footprint accounting of legal entities to find potential points of carbon reduction.
Impact of the EU's "carbon tax" on imported chemicals	The EU's carbon border adjustment mechanism will cover all industries by 2030. After the "carbon tax" comes into effect, the requirement for carbon footprint tracking and management will increase significantly, and the "carbon tax" will increase the cost of sales and squeeze profit margins.	
Impact of carbon emissions included in emission permits	In 2022, carbon emissions were included in emission permits in some domestic provinces and cities, and are expected to gradually be implemented nationwide. At that time, carbon emissions will be required to be legal and compliant, and the pressure to reduce carbon will significantly increase, leading to an increase in operational costs for technology management investment.	
Impact of global "plastic restriction"	Various "plastic restriction" activities such as eliminating white pollution and reducing the use of disposable plastic products will reduce the use of polymer materials, or at least cause a trend of decreasing plastic consumption. Anti-aging additives for plastic are one of our main product series, so a decrease in plastic consumption will affect product sales, thereby affecting our business.	

04

People-oriented, creating a happy workplace with all efforts

Rianlon always believes that employees are its most precious wealth and resources. The Corporation resolutely safeguards the rights and interests of employees, highly values the growth of employees, focuses on the occupational safety of employees, implements employee care, and strives to create an equal, fair, harmonious, and amicable working environment, to realize the dream of enterprise development and employee development together.

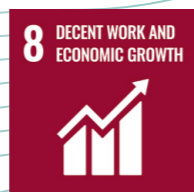
Safeguarding employees' rights and interests

Supporting employee development

Focusing on occupational safety

Strengthening employee care

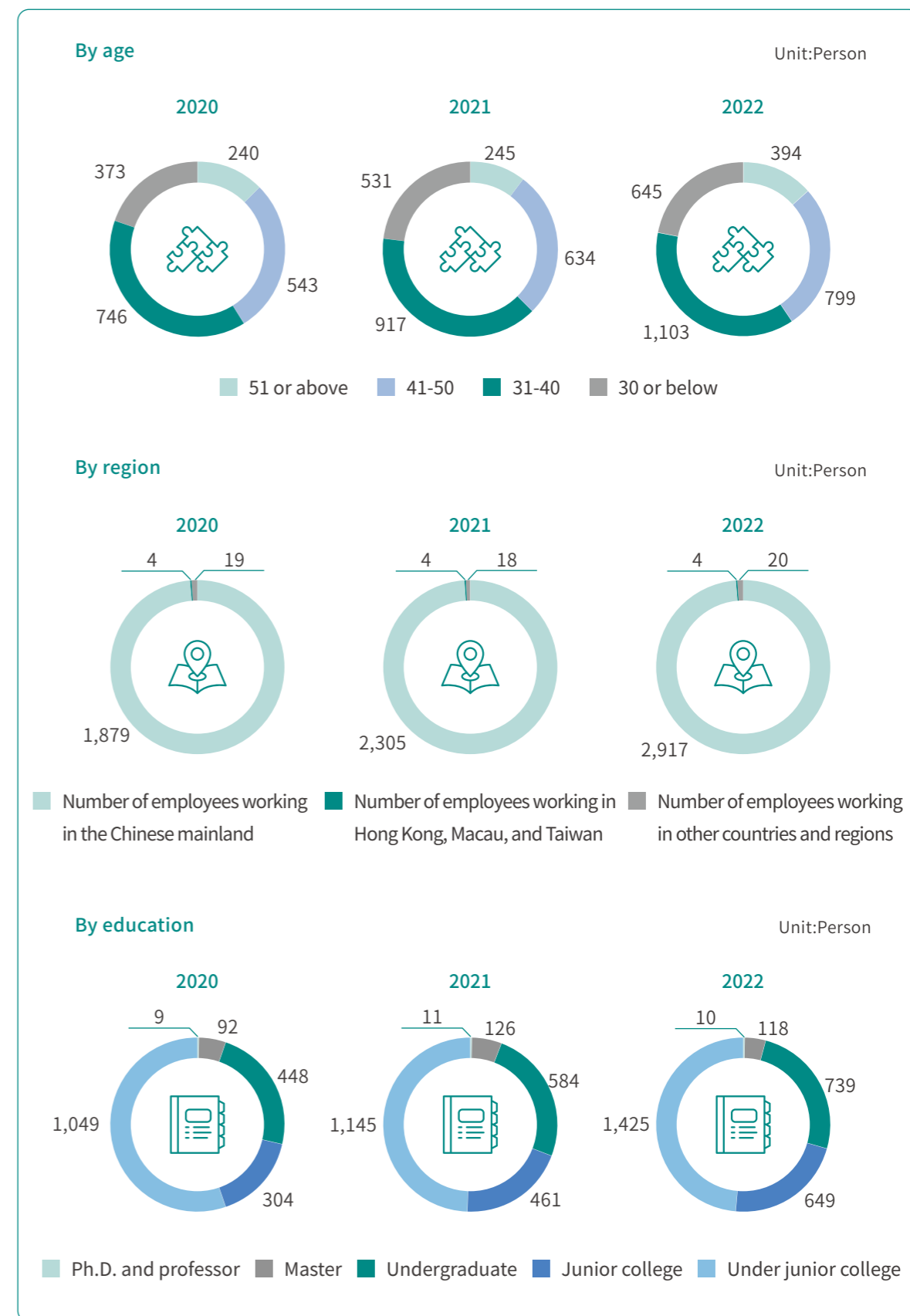
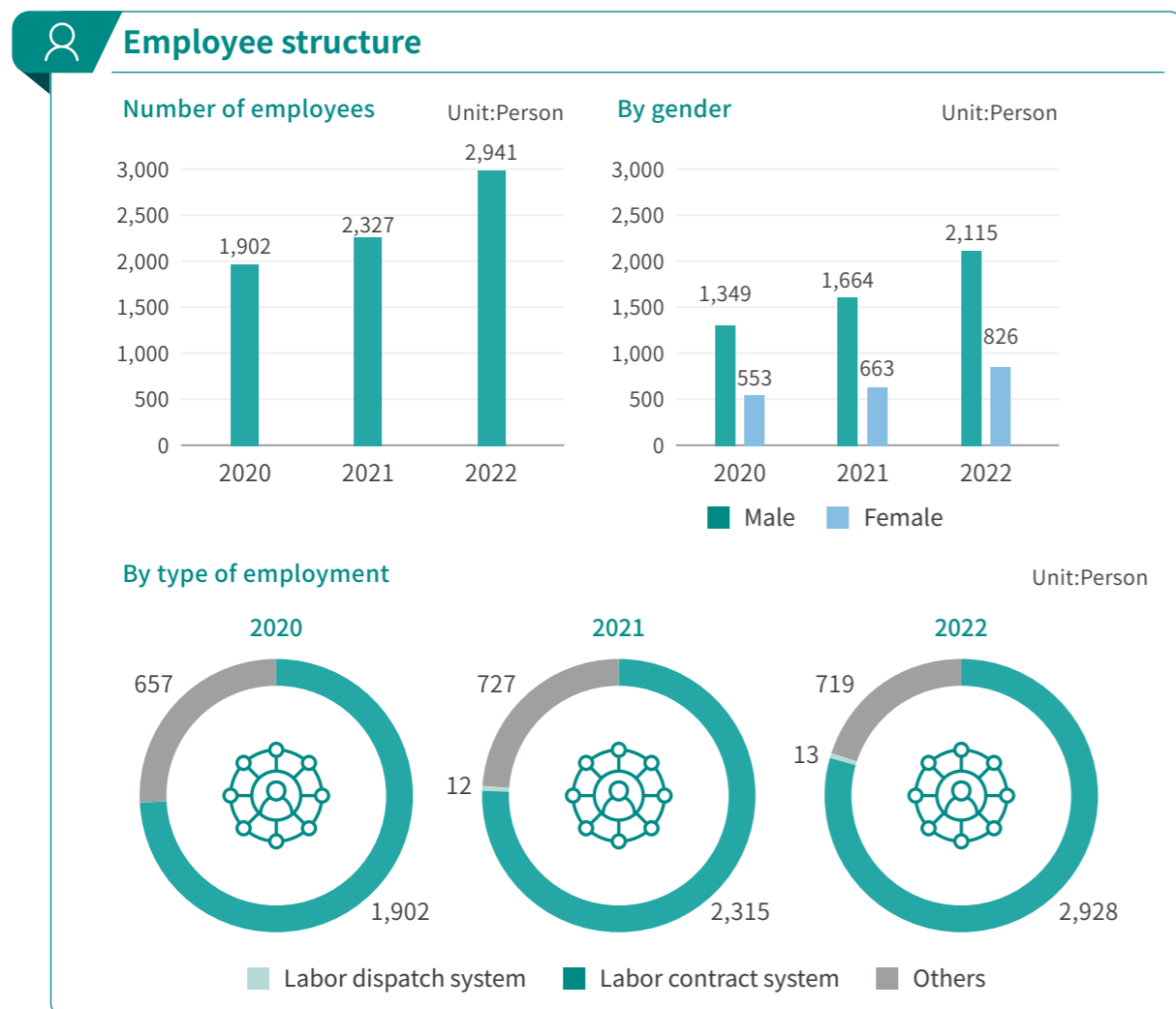
UN Sustainable Development Goals (SDGs)



Safeguarding employees' rights and interests

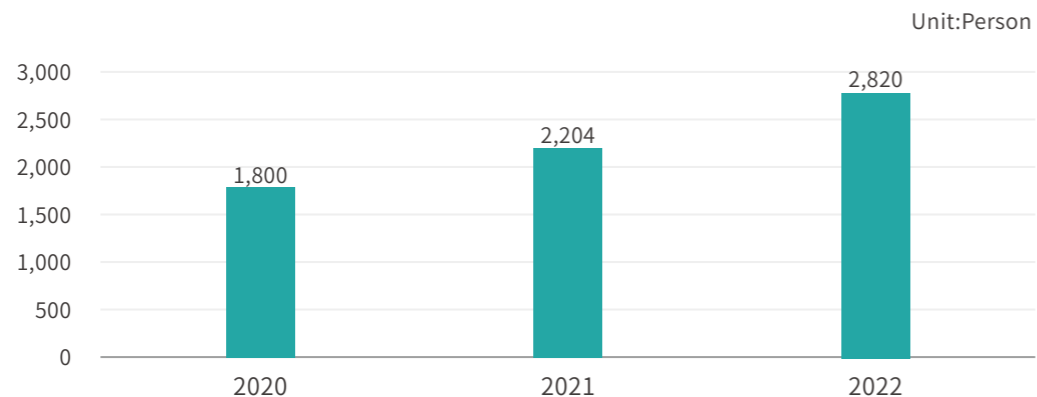
Rianlon strictly abides by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, and other laws and regulations, prohibiting the employment of child labor, forced labor, restriction of employee freedom, and other illegal employing actions. The Corporation prohibits any discrimination based on race, sex, religion, age, social origin, and other factors. At the same time, the Corporation published the Labor Relations Management System and the Recruitment, Onboarding, Probation, and Departure Management System, establishing a complete labor contract and employment management system. The Corporation pays five social-insurance and housing provident funds according to law, provides statutory leave and paid annual leave, and arranges employees' working hours according to the labor law, effectively protecting the legitimate rights and interests of employees.

Upholding the management philosophy of "rank by post, salary by rank, and person-post matching", Rianlon has established a scientific, reasonable, and dynamic remuneration management system, and issued the Joint-stock Company Remuneration Management System, forming a salary strategy oriented by post, individual ability, and performance evaluation. With the help of senior consultants hired, the Corporation has optimized and iterated the existing incentive system of remuneration, benefits, and performance to ensure that employees effectively get rewards and incentives in a timely way.

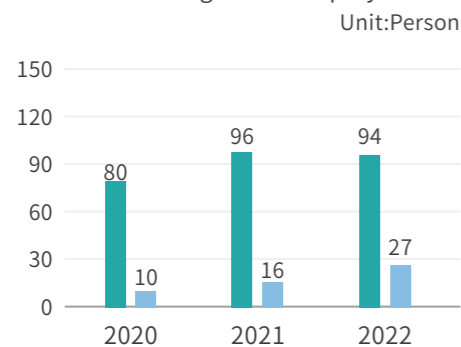


Type of employees

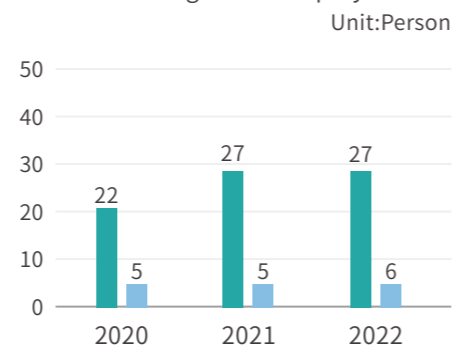
Number of primary-level employees



Middle management employees

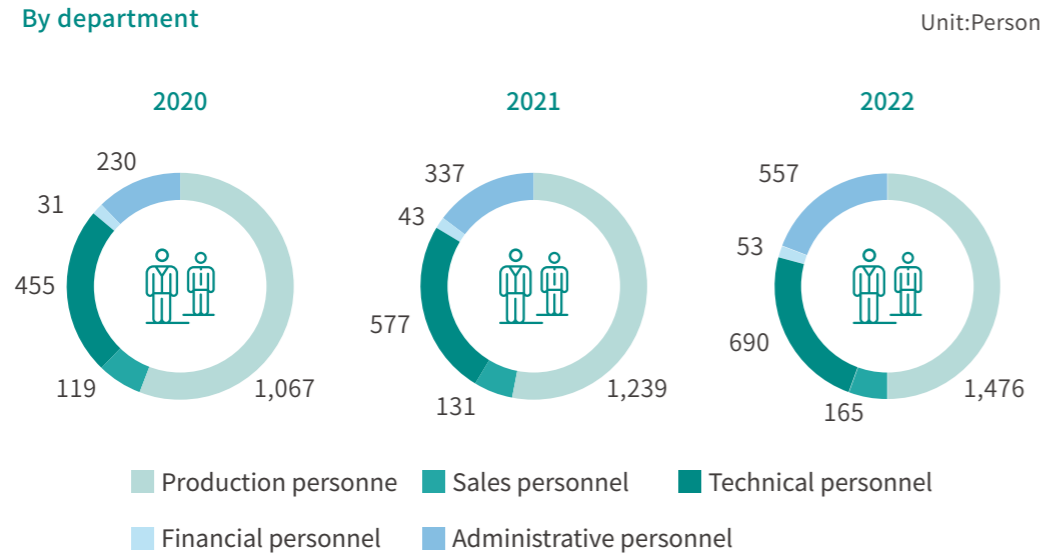


Senior management employees

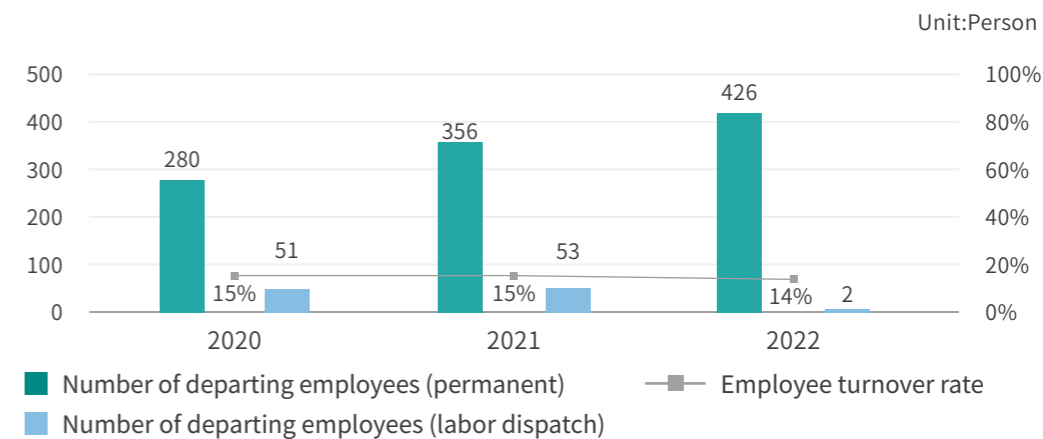


- Number of middle management employees
- Number of middle management female employees
- Number of senior management employees
- Number of senior management female employees

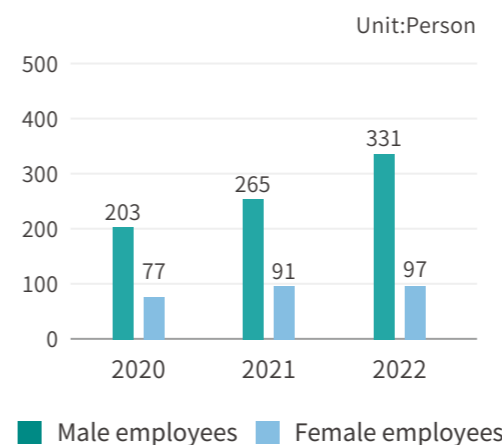
By department



Employee turnover



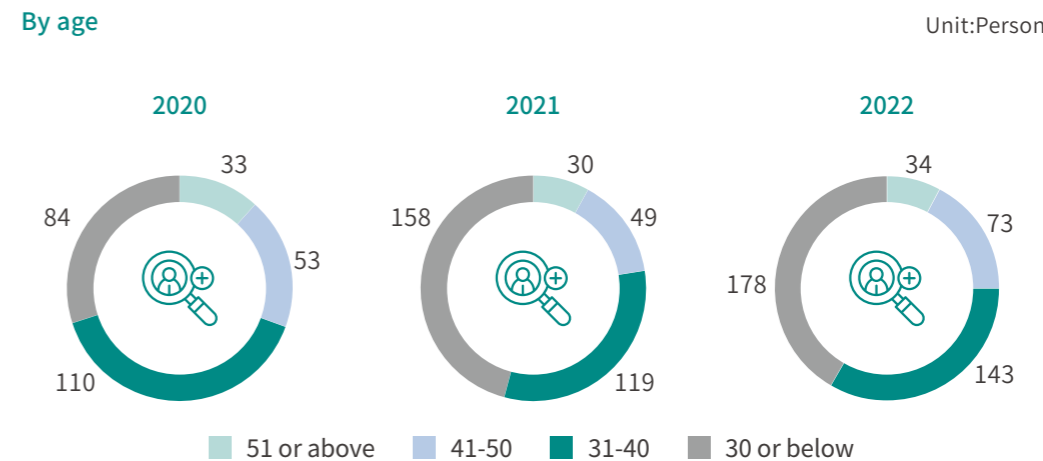
By gender



By region



By age

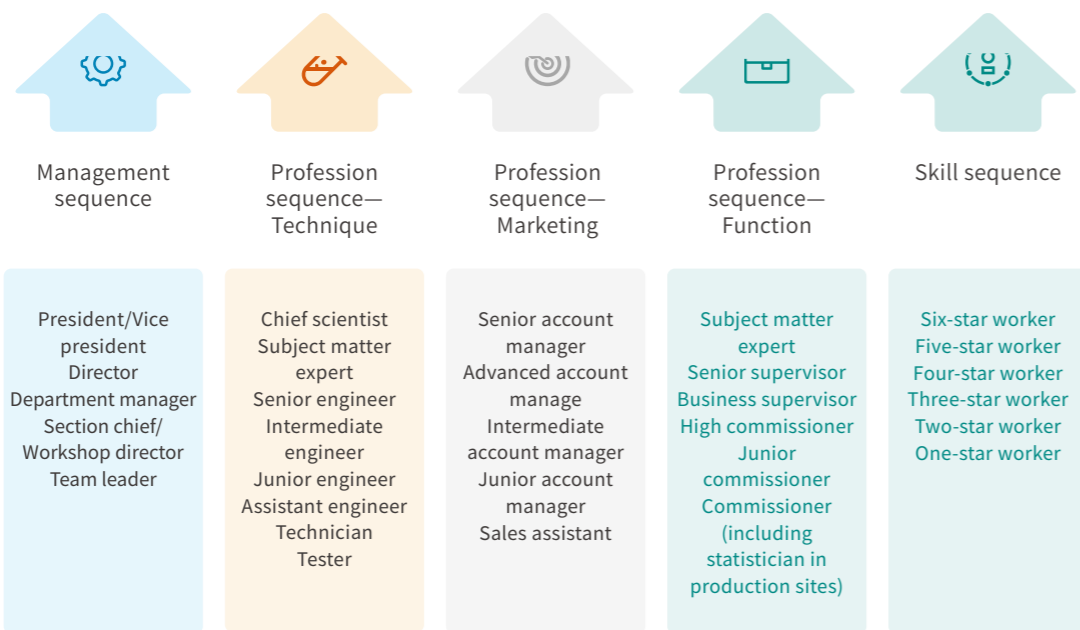


Supporting employee development

Rianlon adheres to the concept of "respecting the development direction selected by employees and assisting them in their development". The Corporation actively builds the career development system and expands the career development paths of talents to improve the professional ability of employees and guide them to form the awareness of independent learning and development, engaging in creating a talent team with refined structure, high quality, and reasonable results.

Employee promotion path

Rianlon designs career development paths in different directions. According to the nature of posts, requirements of experience and skills, and responsibilities, the Corporation sets up a clear promotion path for employees in different posts to facilitate their growth and increase opportunities for their growth. The Corporation encourages employees to press forward and work hard for their career development goals.



Rank adjustment in the same post

According to their performance, the rank and corresponding remuneration of employees in the post of the sequence will be adjusted.

Post adjustment

Employees who meet the Corporation's requirements and press forward have the opportunity to get jobs in other posts. Post adjustment includes job rotation and job reshuffle.

Employee training

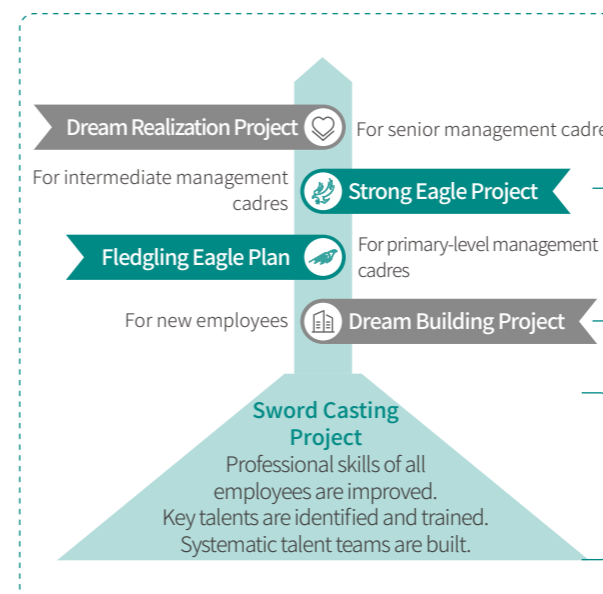
Rianlon has established a sound training system and carried out training activities with abundant content and various forms. The Corporation has designed a "1+4" training plan according to the profession and rank. According to different levels and types of the post, the training was conducted for employees in management, profession, and skill sequence, as well as new employees hired through campus recruitment, respectively.

Dream Realization Project, Strong Eagle Project, and Fledgling Eagle Project are designed in line with post levels in management sequence, with the aim to broaden the vision of senior management cadres and improve the executive ability of middle management cadres, so as to help them become the main force of the Corporation's operation.

Sword Casting Project contains all training for employees in profession and skill sequence, including engineering technology ability certification program, business ability certification program, functional personnel ability certification program, and excellent team construction program.

Dream Building Project is designed to provide intensive training on multiple aspects such as corporate culture and business understanding for employees hired through campus recruitment. At the same time, the Project helps the Corporation explore and specially cultivate talents in innovation, management, and operation domains.

Training system



Key training programs in 2022

- General name
- Program of building strong business operation capabilities
- Capability enhancing program
- Engineering technology ability certification program (Production technology, application technology)
- Business ability certification program
- Functional personnel ability certification program
- Excellent team construction program

[Case] Setting sail at Rianlon Program helps new employees build their dreams through

In July 2022, Rianlon officially launched the Dream Building Project - Setting Sail at Rianlon. This special training is divided into three stages including online course learning, military training, and centralized training at headquarters. The training significantly enhances the professional quality and work skills of new employees and helps them complete the change of awareness and identity from a student on campus to an employee at the workplace.



[Case] Team leader training

As a cell of the Corporation, the team is the basic unit in the organizational chain. The team conducts all production and operation activities so it has been a foothold where the Corporation's decisions are implemented, all measures are adopted, and various tasks are completed. The team construction directly concerns the management effectiveness. In order to improve the management ability of team leaders and respond to the requirements of the Mobilization Order for the construction of Strong Business Operation Capabilities issued by the president, the Corporation specially invited external experts to design the "Rianlon Team Leader Training" course in 2022.



Employee growth

Rianlon focuses on the development of employees and encourages them to improve professional quality through educational qualification upgrades and professional and vocational certifications. The Corporation carries out the work of educational qualification upgrades for employees in profession, management, and skill sequence as well as senior executives, to ensure the improvement of the Corporation's overall quality through the employees' upgrade in their professional capabilities.

Support for the qualification upgrade of profession employees

Rianlon encourages chemical personnel with bachelor's degree to apply for the major of Lanzhou University's Chemical Engineering and Technology. The Corporation provides subsidies for employees who get academic certificates.

Support for the qualification upgrade of management employees

Rianlon encourages middle and senior management to apply for part-time MBA.

Support for the qualification upgrade of workers

Rianlon encourages workers to upgrade their personal ability and education, and gives them corresponding subsidies.

Support for the qualification upgrade of senior executives

Rianlon encourages senior executives to participate in seminars on learning or programs held by the government and social organizations.



Employee training		Unit	2020	2021	2022
Total number of employees covered by training		Person	1,902	2,327	2,941
By gender	Number of male employees covered by training	Person	1,349	1,664	2,115
	Number of female employees attending training	Person	553	663	826
By types of employees	Number of primary-level employees covered by training	Person	1,800	2,204	2,762
	Number of middle management employees covered by training	Person	80	96	144
	Number of senior management employees covered by training	Person	22	27	35
Total hours of training for employees		Hour(s)	45,648	69,810	102,935
Average hours of training for employees		Hour(s)	24	30	35
By gender	Average hours of training for male employees	Hour(s)	33,648	51,810	74,935
	Average hours of training for female employees	Hour(s)	12,000	18,000	28,000
By types of employees	Average hours of training for primary-level employees	Hour(s)	43,615	63,030	95,035
	Average hours of training for middle management employees	Hour(s)	1,732	6,240	7,200
	Average hours of training for senior management employees	Hour(s)	301	540	700

Focusing on occupational safety

Upholding the policy of "safety, prevention, people first, and continuous improvement" on occupational health and safety management, we provide employees with a safer working environment. In 2022, according to actual production features and relevant emergency rescue provisions. Such drills strengthen the occupational safety awareness of all departments and improve our holistic response capability and management level to emergencies.

15

company-level
emergency drills

292

emergency drills about on-
site management plans

1,055

emergency drills about
hazardous posts

The Corporation pays attention to the occupational health of employees through multiple supporting measures such as providing regular physical examinations, necessary labor protection supplies, the infirmary, and the fitness and cultural activity center, to care about the occupational health and safety of employees in different dimensions.

[Case] Zhuhai Site carried out leak and fire drill

In order to enhance the employees' management, coordination, and communication ability in response to hazardous chemical emergencies, the Zhuhai Site organized the "2022 Hazardous Chemical Leak, Poisoning, and Fire Emergency Drill". Jointly participated by all departments in the production site, the drill simulated dangerous emergencies such as chemical leaks, personnel poisoning, and fire. The activity implemented the work safety policy mentioned above and enhanced the employees' ability to respond to safety accidents to minimize casualties and property losses.



[Case] Zhongwei Site organized safety publicity activity

In June 2022, during National Work Safety Month, the Zhongwei Site organized a publicity contest with the theme of "Abide by the Law on Work Safety and be the First Responsible Person". A total of 13 employees participated in the publicity contest, from the Production Department, Safety and Environmental Protection Department, Quality Control Department, Enterprise Management Department, and General Control Room. The activity made employees deeply realize that work safety not only guarantees personal occupational safety but also is an important lifeline for the development of the Corporation.



Occupational health and safety		Unit	2020	2021	2022
Safety accidents and personnel	Number of employees caused by work-related injuries	Person	22	11	22
	Number of accidents caused by work-related injuries	Times	20	10	21
Employee health and safety	Number of work-related employee death	Person	0	0	0
	Number of employees in positions with risks of occupational diseases	Person	1,658	1,640	2,318
	Number of employees attending occupational disease examinations	Person	1,658	1,640	2,318
	Number of employees suffering occupational diseases	Person	0	0	0
Investment in health and safety	Investment in occupational health and safety of employees	RMB 10,000	384.84	507.30	526.78
	Investment in work safety	RMB 10,000	2,981.25	5,857.81	6,795.94

Strengthening employee care

Rianlon always values employee care and has developed the Employee Basic Welfare Management System and the Employee Retirement and Rehiring Management System. The Corporation pays close attention to the living conditions of employees and listens to their opinions carefully. The Corporation carries out various forms of employee care activities to help employees achieve work-life balance and takes practical actions to care about employees to enhance the sense of belonging and identity to the Corporation. The Corporation is concerned about and helps special groups and groups with difficulties, and launches multiple barrier-free measures, including accessible passage and toilets in the park, to ensure the secure, convenient work and life of employees with disabilities. By the end of 2022, the Corporation has employed 20 employees with disabilities.

At the same time, Rianlon is committed to providing employees with a sound, diversified environment for cultural and sports activities, encouraging employees to strengthen physical exercise and cultivate personal interests after work. The Corporation actively organizes various culture and sports activities, such as team building, concerts, sports competitions, etc., to relieve the professional pressure of employees and enrich their spare time life, encouraging employees to work happily.

[Case] Zhongwei Site cares employees with difficulties activity

During New Year's Day in 2022, the Trade Union representatives, members of the Party Branch Committee, and members of the Trade Union of the Zhongwei Site visited the employees with difficulties and sent them holiday greetings, condolence payments, and condolence gifts, narrowing the distance between employees with difficulties and the Corporation.



[Case] Changshan Site offered employees' children gifts on Children's Day

On June 1, 2022, the Changshan Site sent 108 employees' children exquisite gifts and festive greetings on Children's Day, making them feel the deep love of their parents and the Corporation.



[Case] Hengshui Site carried out activities on Women's Day

In March 2022, the Hengshui Site launched a series of activities on Women's Day, fully demonstrating the positive, united, and fighting spirit of women in the new era.



[Case] The Corporation held an employee tug-of-war competition

In June 2022, the Corporation held the first employee tug-of-war competition. The activity not only intensified the competitors' bodies but also spurred the vitality of all employees, enhancing the employee relationship.



[Case] "Home for caring about mommy demonstration site"

Based on safeguarding the rights and interests of employees, to improve their happiness and sense of gain, Rianlon has been actively responding to the instructions of expanding the care for female employees issued by the Dongjiang Port Federation of Trade Unions, safeguarding the special rights and interests of female employees. The Corporation upgraded the baby care room into a unique "home for caring about mommy", which was highly recognized by the Tianjin Binhai New Area Federation of Trade Unions and the Dongjiang Port Federation of Trade Unions. In January 2022, the Trade Union of Rianlon supply chain was awarded the medal of honor of "Home for Caring About Mommy Demonstration Site".



05

Repaying Society and Jointly Creating a Better, Harmonious Home

Rianlon firmly implements the national policy of common prosperity to facilitate the construction of public welfare and has established a social contribution system to improve people's livelihood. After years of development, our social contribution system is increasingly complete, forming a multi-level responsibility management system across the board including employment, tax, technological innovation, and industrial investment. The Corporation engages in various public welfare and charitable undertakings to promote the common development of the Corporation and society and repays the school by establishing Tianjin University Innovation and Entrepreneurship Scholarship. At the same time, the Corporation also attaches great importance to sharing and cooperating with other industries, closely seizing new opportunities for industrial development.

[Facilitating common prosperity](#)

[Contributing to community welfare](#)

[Sharing development achievements](#)

Making contributions to UN Sustainable Development Goals (SDGs)



Facilitating common prosperity

Rianlon actively responds to national policies and fully implements the strategic plan for rural revitalization and common prosperity. The Corporation fully leverages its advantages to actively implement common prosperity projects and participates in local rural revitalization work to facilitate local economic development. According to the actual situation of different regions, the Corporation conducts various kinds of projects to benefit the people within its capacity to further narrow the relationship between the Corporation and local towns, improving the brand image and contributing to local economic construction.

Data on common prosperity/rural revitalization	Unit	2020	2021	2022
Values of rural revitalization supplies	RMB 10,000	25.85	9.92	2.4
Amount of investment in rural students	RMB 10,000	1.8	2.3	1.7
Number of students funded in rural areas	Person	6	10	7

[Case] Rianlon Kerun constructed a village-enterprise common prosperity demonstration site

To fully implement the rural revitalization strategy, the Corporation plans the harmonious development of enterprises and surrounding villages to create a demonstration site for the common prosperity of villages and enterprises. In 2022, Rianlon Kerun (Zhejiang) New Materials Co., LTD., conducted a condolence activity of sending cooling equipment to Shuinan Village, Qingshi Town, Changshan County and Donggang Village, Tianma Subdistrict and discussed with the two committees on the "construction of village-enterprise common prosperity demonstration site".



Contributing to community welfare

Rianlon believes that supporting public welfare and repaying society with practical actions is an important window for showing its social responsibility, and is also an integral part of Rianlon corporate culture. In 2022, Rianlon production sites practiced a series of public welfare activities, such as financial assistance for students, visiting lonely elderly people, voluntary services, and environmental protection, further strengthening the harmonious relationship between the Corporation and society. The Corporation supported charitable undertakings through practical actions, mirroring the responsibility and accountability of private enterprises.

Data on public welfare	Unit	2020	2021	2022
Amount of investment in public welfare	RMB 10,000	219.05	240.95	237.16
Amount of investment in financial assistance for students	RMB 10,000	210	210	230
Amount of investment in lonely elderly people	RMB 10,000	6.45	6.48	6.71
Number of employees attending voluntary activities	Person	80	110	166
Average hours of employees attending voluntary activities	Hour(s)	4	2.4	3.1

Financial assistance for students

[Case] Changshan Site provided financial assistance for bright students

Over the years, Rianlon Kerun has been providing financial assistance for bright students and regarding it as a crucial job of village-enterprise construction. In the past five years, Rianlon Kerun has helped more than 30 students in two villages. The Site hopes students cherish the time to pursue dreams and more importantly, seize every possible opportunity to study hard because the university is not a foothold but a starting point. The Site also expects them to return home after graduation to repay society, their hometown, and their parents. In 2022, the Changshan Site held the "Financial Assistance to Help Students Set Sail in Golden Autumn" activity in Shuinan and Donggang Village and awarded prizes to excellent college students in the two villages.



Care services for the elderly

[Case] Hengshui Site carried out Spring Festival visits to the elderly

The Corporation is committed to delivering warmth, caring for the elderly, promoting harmony, and boosting employment. Caring for the elderly is an important way to fulfill our social responsibility, which is conducive to establishing a good social image and forming harmonious community relations. Before the Spring Festival in 2022, in order to provide the elderly living in the surrounding villages and towns with a more warm and peaceful festival, the Hengshui Site organized employees to send New Year gifts and regards to the elderly over 60 years old in the Youjiadian and Xizhangzhuang Village, making them feel the warmth and blessing from Rianlon.



Voluntary blood donation

[Case] Hengshui Site organized voluntary blood donation

In order to relieve the shortage of local bloodstock and demonstrate the selfless dedication of the Chinese nation, the Hengshui Site called on all employees to donate blood voluntarily in April 2022. A total of 155 employees took part in the activity, with a blood donation of 55,800ml, devoting love via practical actions.



Green public welfare

[Case] Zhongwei Site conducted voluntary tree-planting campaign

In 2022, the Zhongwei Site organized a voluntary spring tree-planting campaign to build a "beautiful ecological park". By voluntarily planting more than 140 trees, the Site practiced the ecological awareness of "planting and protecting trees to expand green area" and enhanced the awareness of environmental protection. The campaign fostered the team spirit of cooperation and intensified the concept of being enthusiastic about work. The responsibility for adding green to our homeland bolstered employees to contribute to environmental protection, promoting the green, high-quality development of enterprises in the park.



Sharing development achievements

Industry communication

Rianlon attaches great importance to sharing development achievements and actively takes part in industry activities to exchange with peer companies on the issues such as technological innovation, green development, and industry opportunities. The Corporation takes initiative to join the industry associations and is widely recognized, promoting the harmony and stability of industry development and creating a good external environment for the development of the Corporation. At the same time, in order to enhance the competitiveness of enterprise products in domestic and foreign markets and promote the industry development, the Corporation takes an active part in and organizes technical exchange activities within the industry to strengthen the exchanges with relevant enterprises and research institutes at home and abroad. By the end of 2022, the Corporation has joined 18 well-known domestic and foreign associations regarding the domains such as engineering plastics, auto and electronic appliance, agriculture and construction, polyester, rubber and elastomer, oil, as well as coating and adhesive.

Association	Industry	Membership
China Plastic Additive Association of CPPIA	Engineering plastics	Deputy director unit
China Synthetic Resin Association	Engineering plastics	Vice president unit
Modification Plastics Branch of China Synthetic Resin Association	Engineering plastics	Director unit
Color Master Batch Professional Committee of China Plastics Dyestuff Industry Association	Engineering plastics	Member unit
China Auto Lightweight Non-metal Materials Industrial Alliance	Auto and electronic appliances	Member unit
China Agricultural Film Association of CPPIA	Agriculture and construction	Member unit
China Plastics-wood Composite Products Association of CPPIA	Agriculture and construction	Member unit
Polycarbonate Branch of China Synthetic Resin Association	Polyester	Member unit
China Polyurethane Industry Association	Polyester	Member unit
ABS Branch of China Synthetic Resin Association	Polyester	Member unit
China Synthetic Rubber Industry Association	Rubber and elastomer	Vice president unit
TPE Branch of China Synthetic Rubber Industry Association	Rubber and elastomer	Vice president unit
Synthetic Latex Branch of China Synthetic Rubber Industry Association	Rubber and elastomer	Director unit
Polyolefin Branch of China Synthetic Resin Association	Polyolefin	Member unit
Chinese Society for Internal Combustion Engines	Oil	Member unit
Oil and Clean Fuel Branch of Chinese Society for Internal Combustion Engines	Oil	Member unit
China National Coatings Industry Association	Coating and adhesive	Member unit
China Adhesives and Tape Industry Association	Coating and adhesive	Non-member unit

Industry communication

[Case] Rianlon "K-Show" journey

In October 2022, the world's largest Trade Fair for Plastics and Rubber (K-Show for short) opened in Dusseldorf, Germany. Three years later, Rianlon embarked on the journey of K-Show again, with a series of heavyweight, efficient, and innovative antioxidants and light stabilizers, to show Rianlon's development results in the plastics and rubber industry to the world.



[Case] China Synthetic Rubber Industry Development Conference

In August 2022, China Synthetic Rubber Industry Development Conference was held in Jinan City, Shandong Province. Rianlon was invited to attend this conference and made a wonderful report Rianlon Anti-aging Additives for Green and Low-carbon Development of the Industry. Upholding the corporate mission of "creating a better life with chemistry and biology", Rianlon constantly develops green, environmentally friendly anti-aging additives products and technologies to strive to become a global leader in polymer materials anti-aging technology, contributing to the anti-aging technology progress of the rubber industry.



Industry-university-research cooperation

In the process of rapid development, we focus on the technological innovation and commercialization of technological achievements, and actively promote cooperation between industries, universities, and research institutes as well as the commercialization of technological achievements. We have established cooperative relations with Tianjin University, Zhejiang University of Technology, other domestic colleges, universities, research institutes, and carried out many school-enterprise cooperative research projects. The joint development between industries, universities, and research institutes has achieved remarkable results, providing strong technical support for our rapid development. In 2019, the Corporation set up an education development fund of 10 million RMB at Tianjin University to support innovation and entrepreneurship work and established Rianlon Innovation and Entrepreneurship Scholarship at Tianjin University. The Corporation builds the brand of "excellent employer" in headquarters and production sites and encourages the local employment strategy of school-enterprise cooperation in the place where each production site operates, creating thousands of local jobs and helping the region to shake off poverty together with the agricultural assistance plan.

Data on cooperation between industries, universities, and research institutes in 2022

Number of cooperative schools	8
Number of cooperative projects	12

Cooperative school	Descriptions of cooperation
Tianjin University	Development of salidroside fermentation technology
Zhejiang University	Development of new products and processes of polymer functional additives
Changchun University of Technology	Development of nano-scale water-based antioxidant preparation technology
Tianjin University of Science and Technology	Process development and equipment design of light stabilizers
Quzhou University	Optimization of synthesis technology of UV absorbent UV-P
Zhejiang University of Technology	Development and design of distillation equipment
Zhejiang University of Technology	Development of green synthesis technology for light stabilizer
Zhejiang University of Technology	Development of green synthesis technology of light stabilizer and catalyst
Liaoning Petrochemical College	Joint efforts, etc
Liaoning Petrochemical College	Project of Salicylate analysis methods
Liaoning Petrochemical College	Methods for analysis of lubricating oil additives
School of Chemical & Environmental Engineering, Liaoning University of Technology	Construction of the joint training base for graduates

ESG Performance Table

Waste Management	Unit	2020	2021	2022
Total recyclable waste	Ton	79.49	92.87	266.70
Total general solid waste	Ton	16,848.96	34,553.27	12,350.74
Total general solid waste landfilled	Ton	15,301.22	20,391.34	0
Total general solid waste incinerated	Ton	25.30	16.05	96.50
Total general solid waste recycled	Ton	0	9,446.60	9,944.60
Other total general solid waste	Ton	1,522.44	4,699.28	2,309.64
Total hazardous waste	Ton	1,907.81	2,185.53	3,403.82
Total hazardous waste incinerated	Ton	1,907.81	2,185.53	3,403.82

Waste gas management	Unit	2020	2021	2022
Total exhaust emissions	10,000 cubic meters	232,965.80	190,524.54	301,779.84
Particulate matter	Ton	22.51	15.17	18.99
Non-methane hydrocarbon	Ton	9.98	7.09	17.74
Nitrogen oxides	Ton	109.26	88.09	166.22
Sulfur oxides	Ton	28.85	12.97	20.23
VOC emissions	Ton	17.14	8.21	4.04
Sulfuric acid mist emissions	Ton	1.45	0.85	1.06
Hydrogen chloride emissions	Ton	0.51	0.27	1.44

Wastewater management	Unit	2020	2021	2022
Total wastewater discharge	Cubic meters	675,452.00	816,367.00	766,053.60
Chemical oxygen demand (COD)	Ton	117.06	152.63	139.03
Five-day biochemical oxygen demand (BOD5)	Ton	4.81	11.39	12.14

Wastewater management	Unit	2020	2021	2022
Suspended matter	Ton	15.80	9.34	7.75
Ammonia nitrogen	Ton	4.74	15.71	8.74
Total phosphorus	Ton	0.22	0.39	0.12

Water resource use	Unit	2020	2021	2022
Municipal water purchasing amount	Cubic meters	1,040,189	1,256,843	1,391,136

Energy consumption	Unit	2020	2021	2022
Natural gas	Cubic meters	4,654,078	6,363,915	9,139,202
Steam	Ton	142,473	163,569	259,675
Raw coal	Ton	40,619	51,375	47,111
Gasoline	Liter	65,833	82,098	129,586
Diesel oil	Liter	54,680	133,622	156,589
Purchased electricity	Kilowatt-hour	105,044,326	126,327,992	134,645,939
Renewable energy	Ton	27,380	56,344	49,778

Transportation	Unit	2020	2021	2022
Total kilometers of transportation	kilometer	764,827	906,538	1,516,494
Number of private fuel vehicles	-	14	23	60
Kilometers of private fuel vehicles	kilometer	476,407	535,873	1,144,022
Number of electric trucks	-	5	23	51
Kilometers of electric trucks	kilometer	140,805	198,540	175,340
Number of fuel trucks	-	10	10	14
Kilometers of fuel trucks	kilometer	147,615	172,125	197,132

Packaging consumable	Unit	2020	2021	2022
Total	Ton	5,608	8,233	9,597
Wood	Ton	2,006	2,828	2,961
Plastics	Ton	685	1,404	2,024
Paper	Ton	1,789	2,516	2,404
Metal	Ton	1,129	1,485	2,208

Employee structure		Unit	2020	2021	2022
Number of employees		Person	1,902	2,327	2,941
By gender	Male	Person	1,349	1,664	2,115
	Female	Person	553	663	826
By type of employment	Labor contract system	Person	1,902	2,315	2,928
	Labor dispatch system	Person	0	12	13
	Others	Person	657	727	719
By age	51 or above	Person	240	245	394
	41-50	Person	543	634	799
	31-40	Person	746	917	1,103
	30 or below	Person	373	531	645
By region	Number of employees working in the Chinese mainland	Person	1,879	2,305	2,917
	Number of employees working in Hong Kong, Macau, and Taiwan	Person	4	4	4
	Number of employees working in other countries and regions	Person	19	18	20
By education	Ph.D. and professor	Person	9	11	10
	Master	Person	92	126	118
	Undergraduate	Person	448	584	739
	Junior college	Person	304	461	649
	Under junior college	Person	1,049	1,145	1,425

Employee structure		Unit	2020	2021	2022
Type of employees	Number of primary-level employees	Person	1,800	2,204	2,820
	Number of middle management employees	Person	80	96	94
	Number of middle management female employees	Person	10	16	27
	Number of senior management employees	Person	22	27	27
	Number of senior management female employees	Person	5	5	6
By department	Production personnel	Person	1,067	1,239	1,476
	Sales personnel	Person	119	131	165
	Technical personnel	Person	455	577	690
	Financial personnel	Person	31	43	53
	Administrative personnel	Person	230	337	557

Employee turnover		Unit	2020	2021	2022
Number of departing employees (permanent)		Person	280	356	426
Number of departing employees (labor dispatch)		Person	51	53	2
Employee turnover rate		%	15	15	14
By gender	Male employees	Person	203	265	331
	Female employees	Person	77	91	97
By age	51 or above	Person	33	30	34
	41-50	Person	53	49	73
	31-40	Person	110	119	143
	30 or below	Person	84	158	178

Employee turnover		Unit	2020	2021	2022
By region	Number of departing employees working in the Chinese mainland	Person	280	355	426
	Number of departing employees working in other countries and regions	Person	0	1	2

Employee training		Unit	2020	2021	2022
Total number of employees covered by training		Person	1,902	2,327	2,941
By gender	Number of male employees covered by training	Person	1,349	1,664	2,115
	Number of female employees attending training	Person	553	663	826
By types of employees	Number of primary-level employees covered by training	Person	1,800	2,204	2,762
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	Number of senior management employees covered by training	Person	22	27	35
Total hours of training for employees		Hour(s)	45,648	69,810	102,935
Average hours of training for employees		Hour(s)	24	30	35
By gender	Average hours of training for male employees	Hour(s)	33,648	51,810	74,935
	Average hours of training for female employees	Hour(s)	12,000	18,000	28,000
By types of employees	Average hours of training for primary-level employees	Hour(s)	43,615	63,030	95,035
	Average hours of training for middle management employees	Hour(s)	1,732	6,240	7,200
	Average hours of training for senior management employees	Hour(s)	301	540	700

Occupational health and safety		Unit	2020	2021	2022
Safety accidents and personnel	Number of employees caused by work-related injuries	Person	22	11	22
	Number of accidents caused by work-related injuries	Times	20	10	21
Employee health and safety	Number of employees who died due to work	Person	0	0	0
	Number of employees in positions risking occupational diseases	Person	1,658	1,640	2,318
	Number of employees having occupational disease examinations	Person	1,658	1,640	2,318
	Number of employees suffering occupational diseases	Person	0	0	0
Investment in health and safety	Investment in occupational health and safety of employees	RMB 10,000	384.84	507.30	526.78
	Investment in work safety	RMB 10,000	2,981.25	5,857.81	6,795.94

Common prosperity/Rural revitalization		Unit	2020	2021	2022
Values of rural revitalization supplies		RMB 10,000	25.85	9.92	2.4
Amount of investment in rural students		RMB 10,000	1.8	2.3	1.7
Number of students funded in rural areas		Person	6	10	7

Social welfare		Unit	2020	2021	2022
Amount of investment in public welfare		RMB 10,000	219.05	240.95	237.16
Amount of investment in financial assistance for students		RMB 10,000	210	210	230
Amount of investment in lonely elderly people		RMB 10,000	6.45	6.48	6.71

Social welfare		Unit	2020	2021	2022
Number of employees attending voluntary activities		Person	80	110	166
Average hours of employees attending voluntary activities		Hour(s)	4	2.4	3.1

Supply chain		Unit	2020	2021	2022
Total number of suppliers		-	265	308	420
Chinese mainland suppliers		-	243	280	391
Hong Kong, Macao, Taiwan, and overseas suppliers		-	22	28	29
Percentage of suppliers that have signed the Code of Conduct		%	26%	32%	45%
Percentage of suppliers signing clauses containing environmental and labor requirements		%	75%	81%	83%
Number of suppliers that have conducted social impact assessments		-	200	250	350
Number of suppliers that have conducted environmental impact assessments		-	200	250	350
Percentage of new suppliers selected using environmental standards		%	50%	90%	100%
Percentage of new suppliers screened using social criteria		%	50%	90%	100%
Percentage of internal purchasers who have participated in sustainable purchasing training		%	100%	100%	100%

Global Reporting Initiative (GRI) Content Index

Rianlon has reported the information cited in this GRI content index for the period from January 1, 2022 to December 31, 2022 in accordance with GRI standards.

GRI standard	Disclosure item	Location
GRI 2: General Disclosures 2021	2-1 Organizational details	About This Report
	2-2 Entities included in the organization's sustainability reporting	About This Report
	2-3 Reporting period, frequency and contact point	About This Report
	2-4 Restatements of information	About This Report
	2-5 External assurance	/
	2-6 Activities, value chain and other business relationships	Strengthening supplier management
	2-7 Employees	Fully Creating a Happy Workplace by Putting People First
	2-8 Workers who are not employees	Safeguarding employee rights and interests
	2-9 Governance structure and composition	Internal control and compliance operation
	2-10 Nomination and selection of the highest governance body	Internal control and compliance operation
	2-11 Chair of the highest governance body	Internal control and compliance operation
	2-12 Role of the highest governance body in overseeing the management of impacts	Internal control and compliance operation
	2-13 Delegation of responsibility for managing impacts	Internal control and compliance operation
	2-14 Role of the highest governance body in sustainability reporting	Social responsibility management
	2-15 Conflicts of interest	Internal control and compliance operation
	2-16 Communication of critical concerns	Social responsibility management

GRI 2: General Disclosures 2021	2-17 Collective knowledge of the highest governance body	Social responsibility management
	2-19 Remuneration policies	Safeguarding employee rights and interests
	2-20 Process to determine remuneration	Safeguarding employee rights and interests
	2-22 Statement on sustainable development strategy	Social responsibility management
	2-23 Policy commitments	Social responsibility management
	2-24 Embedding policy commitments	Social responsibility management
	2-27 Compliance with laws and regulations	Internal control and compliance operation
	2-28 Membership associations	Industry communication
	2-29 Approach to stakeholder engagement	Social responsibility management
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Social responsibility management
	3-2 List of material topics	Social responsibility management
	3-3 Management of material topics	Social responsibility management
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	Fighting climate change
	201-3 Defined benefit plan obligations and other retirement plans	Safeguarding employee rights and interests
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Supporting common prosperity
	203-2 Significant indirect economic impacts	Contributing to community welfare

GRI 205: Anti-Corruption 2016	205-1 Operations assessed for risks related to corruption	Paying close attention to be clean and honest
	205-2 Communication and training about anti-corruption policies and procedures	Paying close attention to be clean and honest
	205-3 Confirmed incidents of corruption and actions taken	Paying close attention to be clean and honest
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Rational use of resources
	301-2 Recycled input materials used	Rational use of resources
	301-3 Reclaimed products and their packaging materials	Rational use of resources
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Rational use of resources
	302-2 Energy consumption outside of the organization	Rational use of resources
	302-3 Energy intensity	Rational use of resources
	302-4 Reduction of energy consumption	Rational use of resources
	302-5 Reductions in energy requirements of products and services	Rational use of resources
GRI 303: Water and Effluent 2018	303-1 Interactions with water as a shared resource	Rational use of resources
	303-2 Management of water discharge-related impacts	Further management of industrial wastewater, waste gases, and residues
	303-3 Water withdrawal	Rational use of resources
	303-4 Water discharge	Further management of industrial wastewater, waste gases, and residues
	303-5 Water consumption	Rational use of resources

GRI 305: Emissions 2016	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Further management of industrial wastewater, waste gases, and residues
GRI 306: Waste 2020	306-1 Waste generation and significant waste related impacts	Further management of industrial wastewater, waste gases, and residues
	306-2 Management of significant waste related impacts	Further management of industrial wastewater, waste gases, and residues
	306-3 Waste generated	Further management of industrial wastewater, waste gases, and residues
	306-4 Waste diverted from disposal	Further management of industrial wastewater, waste gases, and residues
	306-5 Waste directed to disposal	Further management of industrial wastewater, waste gases, and residues
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Responsible supply chain
	308-2 Negative environmental impacts in the supply chain and actions taken	Responsible supply chain
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Safeguarding employee rights and interests
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Safeguarding employee rights and interests
	401-3 Parental leave	Safeguarding employee rights and interests

GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Safeguarding employee rights and interests
	403-2 Hazard identification, risk assessment, and incident investigation	Safeguarding employee rights and interests
	403-3 Occupational health services	Safeguarding employee rights and interests
	403-4 Worker participation, consultation, and communication on occupational health and safety	Safeguarding employee rights and interests
	403-5 Worker training on occupational health and safety	Safeguarding employee rights and interests
	403-6 Promotion of worker health	Safeguarding employee rights and interests
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Safeguarding employee rights and interests
	403-8 Workers covered by an occupational health and safety management system	Safeguarding employee rights and interests
	403-9 Work-related injuries	Safeguarding employee rights and interests
	403-10 Work-related ill health	Safeguarding employee rights and interests
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Supporting employee development
	404-2 Programs for upgrading employee skills and transition assistance programs	Supporting employee development
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Safeguarding employee rights and interests

GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Community welfare construction
	413-2 Operations with significant actual and potential negative impacts on local communities	Community welfare construction
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Responsible supply chain
	414-2 Negative social impacts in the supply chain and actions taken	Responsible supply chain
GRI 415: Public Policy 2016	415-1 Political contributions	Supporting common prosperity
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Product quality and safety
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	Customer relationship maintenance
	417-2 Incidents of non-compliance concerning product and service information and labeling	Customer relationship maintenance
	417-3 Incidents of non-compliance concerning marketing communications	Customer relationship maintenance



Reader Feedback Form

Dear readers,

Thank you for taking the time to read this Report. In order to provide you and other stakeholders with more complete, more professional and more valuable information on the development of environment, society, and governance (ESG), and to enhance the quality of our social responsibility reports, we sincerely invite you to assist in completing the questions in the feedback form. Please do not hesitate to give us your comments.

1. Are you satisfied with this Report in general?

Yes Fair No

2. Do you think this Report reflects the significant impact of Rianlon on social responsibility?

Yes Fair No

3. Do you think the analysis of the stakeholders identified in this Report and their relationship with Rianlon is accurate and comprehensive?

Yes Fair No

4. Do you think the information provided in this Report is comprehensive?

Yes Fair No

5. Do you think the information provided in this Report is readable?

Yes Fair No

6. Are you satisfied with the overall design of this Report?

Yes Fair No

7. Your comments and recommendations on the Corporate Social Responsibility Report of Rianlon 2022 are welcome.

You can inform us of your valuable comments by:

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