

2023

ENVIRONMENTAL, SOCIAL  
& GOVERNANCE REPORT



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## About this Report

This is the eighth consecutive Environmental, Social and Governance Report (ESG Report) published by China BlueChemical Ltd. It covers the environmental, social, and governance (ESG) measures and achievements of China BlueChemical Ltd. and its subsidiaries in 2023.

### Reporting time

The time frame for this report is from 1 January 2023 to 31 December 2023. In order to maintain the continuity of the information, some of the contents are appropriately backdated to historical data.

### Scope of the report

This report covers China BlueChemical Ltd. and its subsidiaries. The financial data covered in the report and the scope of coverage is in line with the Annual Report of China BlueChemical Ltd. for the year 2023.

### Description of title

For clarity, this report uses "China BlueChemical", "the Company", "we", and "us" interchangeably to refer to China BlueChemical Ltd.

### Note of the report

The information and data in this report come from official China BlueChemical documents, statistical and financial reports, and corporate social responsibility information compiled, summarized, and reviewed by the Company. This report is published in English and Chinese. In case of any discrepancy, the Chinese version shall prevail.

### Basis of preparation

This report is prepared with reference to Appendix C2 *Environmental, Social and Governance Reporting Guide* (the Guide) of the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited*. This report complies with all the mandatory disclosure requirements and the "comply or explain" provisions set out in the Guide.

### Access to reports

The report is published in both printed and electronic form. The electronic version can be downloaded from the Company's official website (<https://www.chinabluechem.com.cn/col/col44561/index.html>).

### Contact details

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## Statement of the Board

In accordance with Appendix C2 *Environmental, Social and Governance Reporting Guide* (the "ESG Reporting Guide") of the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited*, China BlueChemical is pleased to present the Environmental, Social and Governance Report for the year ending 31 December 2023.

We have prepared, assessed and presented the information in this report with reference to the ESG Reporting Guide. The following principles outlined in the ESG Reporting Guide have been incorporated into this report.

1. **Materiality:** The Company identified the material factors through the Board's review and consideration procedures according to the selection criteria at which ESG issues have material impacts on investors and other stakeholders, and authorized the management to identify significant stakeholders and which entities and scope of business are included in this report.



2. Quantitative: The ESG targets identified by the Company should be measurable to facilitate the comparison against those in previous years, competitors, and industry standards. Emissions are calculated pursuant to the *Guidelines for Accounting and Reporting Greenhouse Gas Emissions for China Chemical Production Enterprises (Trial)*; and energy consumption is calculated pursuant to the *General Rules for Calculation of the Comprehensive Energy Consumption (GB/T 2589-2020)*, the *Norm of Energy Consumption per Unit Product of Synthetic Ammonia (GB 21344-2015)*, the *Norm of Energy Consumption per Unit Product of Urea (GB 32035-2015)* and the *Norm of Energy Consumption per Unit Product of Methanol – Part 2: Natural Gas to Methanol (GB 29436.2-2015)*.

3. Balance: The information set out in this report provides an unbiased picture of the Company's ESG performance and should avoid any selections, omissions or presentation formats that may inappropriately mislead stakeholders in their decision-making or judgment process.

4. Consistency: The assumptions and calculation methods adopted in any key performance indicator should be consistent with those adopted in previous years to ensure effective comparisons of the relevant data. If there is any change of the relevant assumptions or calculation methods, clear disclosure should be made to stakeholders.



## CEO's Statement



Thank you for your continued interest and support of China BlueChemical!

In 2023, China has comprehensively promoted rural revitalization, accelerated the development of a strong agriculture-focused nation, and achieved record-high grain output. China BlueChemical remains committed to its position as a high-quality "plant nutrition solution provider". Through the effective integration and synergy of a new "production, supply, marketing, and research" model, we deliver high-quality fertilizers, scientific solutions, and comprehensive services directly to the agricultural frontlines where farmers need them most. This approach contributes to the in-depth implementation of the "storing grain in the land and storing grain in technology" strategy, ultimately supporting the construction of a strong agriculture-focused nation and promoting comprehensive rural revitalization.

### **Innovation-driven to ensure fertilizer supply**

China BlueChemical has always taken innovation and development as the soul of the enterprise, stimulating business vitality with scientific and technological innovation. This focus ensures a steady supply of fertilizers with perfect product quality and safety control, consolidating the foundation of food security in an all-round way. In 2023, we pursued three major research directions: Source, Chain extension, and Green. We also optimized the development of three fields: carbon-rich gas, new materials, and value-added fertilizers. These efforts included establishing the Carbon-Rich Natural Gas Chemical Engineering and Technology Center and forming the first scientific and technological innovation alliance, the Carbon-Neutral and National Food Security Cross-Innovation Joint Laboratory. These initiatives further enhance our innovation and R&D capability. We firmly maintained an exceptional safety record throughout the year, with zero production and safety accidents of any kind. For two consecutive years, we achieved zero environmental protection and pollution incidents. This represents the best production safety performance since the Company's establishment, ensuring a safe and secure "food bowl" for farmers and contributing to increased farmer income.



## Low-carbon transformation to build a green chemical enterprise

China BlueChemical remains committed to green and low-carbon development. We actively practice the national strategy of "Carbon Peak and Carbon Neutral." We are strengthening and optimizing the traditional fertilizer industry, all while accelerating our transformation to become a world-class supplier of high-quality green fertilizers and special new chemical materials. In 2023, we will explore the opportunities of strategic emerging industries through internal and external cooperation. We will collaborate with Shenzhen Institute of Advanced Technology Chinese Academy of Sciences to carry out research on the comprehensive utilization of phosphorus resources and special industrial layout. Additionally, we will continue to improve environmental management, implementing measures to conserve resources and energy, and maintain our leading edge in energy efficiency. During the year, the Company's environmental protection facilities operated stably, with emission indexes of various pollutants remaining within normal limits. The total amount of emissions was far lower than the permitted quota value. Furthermore, the Company's methanol plant received the honorary title of "Energy Efficiency Leader" from the China Petroleum and Chemical Industry Federation for 12 consecutive years, while the ammonia plant was honored as the "Water Efficiency Leader" by the China Nitrogen Fertilizer Industry Association for 4 consecutive years.

## People-oriented, solidifying the foundation of "Harmony, Stability, Well-being and Happiness"

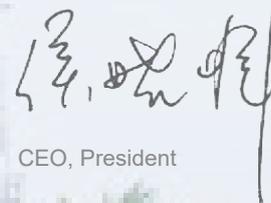
China BlueChemical prioritizes the well-being of its employees, adhering to the concept of "people-oriented, caring for employees". We promote the "talent development" strategy to cultivate and maintain a safe, healthy, and comfortable work environment. This approach fosters a shared sense of growth, allowing us to share the fruits of development with our employees. In 2023, we addressed employee concerns by formulating and promoting the "1+8 Livelihood Program". This program improves living and office conditions, supports the physical and mental health of employees, enhances transportation services, and strengthens talent development. Through these initiatives, we are committed to creating an internal environment that fosters well-being and happiness. We solidified our talent foundation by implementing the "Talent Development" guarantee action and deepening the "3+1" talent project. These initiatives accelerate the cultivation of young and middle-aged cadres who meet the requirements of high-quality development. We also promote the exchange of cadres across different sectors, fields, and regions. Our success is reflected in winning five first-class prizes for individuals and two first-class prizes for collectives in the National Vocational Skills Competition of the Petroleum and Chemical Industry.

## Demonstrate responsibility and build a harmonious society

China BlueChemical actively fulfills its corporate and social responsibilities. We support the national strategy of rural revitalization by participating in public welfare and charitable activities, all to contribute to building a better and more harmonious society. In 2023, we continued to deepen our efforts in rural revitalization, collaborating with Xiahe County, and taking the initiative to engage with the City of Wuzhishan and Baoting County. We also partnered with Hainan University to establish a scientific fertilizer system and set up a "Science and Technology Institute" to guide farmers in smart planting, embodying the essence of agricultural development. We will collaborate further with Hainan University to establish a scientific fertilizer application system and a "Science and Technology Courtyard" to promote smart planting practices, aiming to increase food production and farmers' income. Additionally, we conduct counterpart donations and fertilizer farming activities, with an annual charitable expenditure of RMB 2,992,500.

## There is no straight path to the peak, but only the will can reach it.

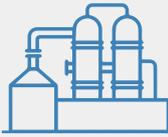
In 2024, China BlueChemical will continue to actively fulfill its social responsibilities, implementing energy saving, low-carbon, and efficiency enhancing strategies, promoting scientific and technological innovation, focusing on risk prevention and control, and compliance management, serving the rural revitalization, and assisting in improving people's lives. We will continuously enhance the level of ESG management, making a significant impact in the current era, striving to create a brighter future.



CEO, President



## About Us



China BlueChemical Ltd. is a modernized large-scale enterprise engaged in the development, production and sales of fertilizers and chemical products with the main business of deep processing of natural gas under China National Offshore Oil Corporation (CNOOC). China BlueChemical was founded in July 2000 and restructured into a joint-stock company in April 2006, with the headquarter located in Beijing and production units located in Hainan, Hubei and Heilongjiang etc. On 29 September 2006, China BlueChemical was successfully listed on the Hong Kong Stock Exchange with the stock code 3983.

China BlueChemical is mainly engaged in the production, development and sale of natural gas-based urea and high value-added synthetic chemical products, with advanced production technology and an extensive sales network covering more than 20 provinces, cities and autonomous regions in China. After more than 20 years of efforts, China BlueChemical has developed into a group of listed companies with resources, involved in the production and trade of nitrogen, phosphorus, potassium fertilizers and methanol, and other chemical products. The Company is one of the largest listed companies in China's production of fertilizers and methanol, ranking 12<sup>th</sup> in the country's output for 10 consecutive years. China BlueChemical has been recognized as the energy-efficiency leader in the synthetic ammonia and methanol industry, selected as one of the first batches of green products by the Ministry of Industry and Information Technology, and included in the first batch of green manufacturing system demonstration lists announced by the Ministry of Industry and Information Technology. The Company has a production capacity of 1.84 million tonnes of urea, 1 million tonnes of phosphate fertilizer, 1.4 million tonnes of methanol, and 270,000 tonnes of acrylonitrile combined plant.







## Key performance in 2023

### Business performance



Revenue

**12,990** Million RMB



Gross profit

**2,061** Million RMB



Net profit attributable to owners of the Company

**2,382** Million RMB



Earnings per share

**0.52** RMB



Proposed dividend

**0.207** RMB

### ESG performance

#### Responsible Governance, the Way to Sound Governance

- **No** cases of corruption or bribery occurred
- Board members participated in an average of **63** hours of anti-corruption training
- Employees participated in an average of **90** hours of anti-corruption training

#### Innovation-driven, Sustainable Business Approach

- Annual R&D investment was RMB **85.44** million
- **23** new patents were authorized
- **99.88%** of urea products met superior quality standards  
**100%** of methanol products met superior quality standards
- **No** quality incidents at or above level D occurred

#### Talent Priority, the Path to Work Together

- **100%** of employees received training
- Total employee training hours amounted to **604,221** hours
- **0** accidents and **0** deaths in workplace safety occurred
- **100%** of employees underwent physical examinations

#### Green Development, the Path to Low-carbon and Sustainability

- **0** environmental pollution accidents occurred
- Annual energy saving was **17,800** tonnes of standard coal
- Annual carbon reduction was **61,700** tonnes

#### Win-Win Cooperation and Building Harmony

- Annual charitable and public welfare donations were RMB **2.9925** million



## Social recognition and honors

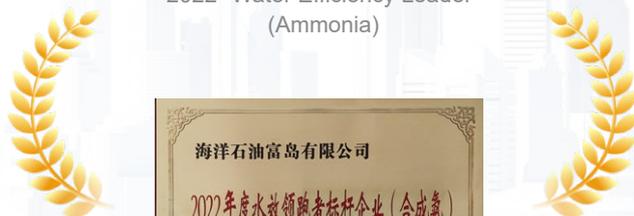
### Capital Media

2022 Outstanding Listed Enterprise Awards  
<Performance Awards>



### China Nitrogen Fertilizer Industry Association

2022 "Water Efficiency Leader"  
(Ammonia)



### China Petrol and Chemical Industry Federation

2022 "Energy Efficiency Leader"  
(Methanol)





# 02

## Responsible Governance, the Way to Sound Governance

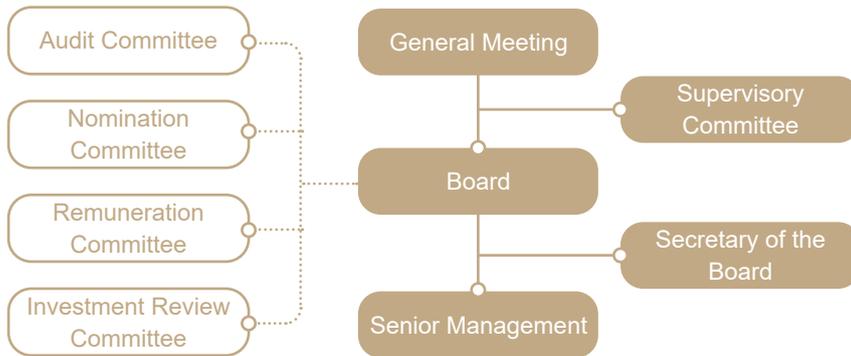
China BlueChemical continues to promote the enhancement of corporate governance standards, improve the governance system, pay attention to internal control and compliance management, emphasize risk prevention, adhere to the anti-corruption and integrity, and strengthen ESG governance to lay a solid foundation for the Company's sustainable operation and development.





## Corporate governance

China BlueChemical strictly complies with the *Company Law of the People's Republic of China* and the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited*, and other domestic and international laws and regulations. The Company amends the *Articles of Association* and the *Measures for the Administration of Meetings of the General Meeting, Board, and Supervisory Committee*, among other ancillary systems, improving meeting management standards for the General Meeting, Board, and Supervisory Committee, and establishing a modern corporate governance structure that provides effective checks and balances and independent operation.



China BlueChemical Organization Chart

### General Meeting

The General Meeting holds the highest authority within the Company. The Board and the Supervisory Committee are accountable to the General Meeting and responsible for reporting to shareholders on their work, implementing shareholder resolutions and exercising decision-making power on major Company matters. We strictly adhere to relevant laws, regulations, and our *Articles of Association* when convening meetings and approving motions. This ensures the effective protection of all shareholder rights and interests. In 2023, we held one Annual General Meeting, two Specific Category Shareholders' Meeting, and one Extraordinary General Meeting. Shareholders considered and approved 25 motions related to amending the *Articles of Association*, appointing directors and supervisors, and other matters.





Fourth Meeting of the Board 2023

## Board

The Board has four specialized committees, namely the Audit Committee, the Nomination Committee, the Remuneration Committee and the Investment Review Committee, each of which reports to the Board on a regular basis to provide recommendations to assist in the Board's decision-making. The Company has established a policy on diversity of board members, selecting and hiring people of different genders, ages, cultural and educational backgrounds, professional experiences, skills and knowledge. In 2023, the Board of the Company consisted of seven directors, of which six were male and one was female; two were executive directors, two were non-executive directors, and three were independent non-executive directors. During the year 2023, the Company held a total of four regular meetings of the Board, 2 interim meetings, considered and passed 40 motions, and received 11 reports. These included the consideration and adoption of the ESG report for the year 2022, the energy saving and emission reduction targets for the year 2024, as well as listening to the ESG report for the first half of the year 2023 and other ESG related matters.



## Supervisory Committee

The Supervisory Committee supervises the behavior of the Company's directors and senior management in performing their duties for the Company in accordance with the *Articles of Association*. During the year, the Supervisory Committee of the Company had three members, two of whom were external supervisors (one shareholder representative supervisor and one independent supervisor), and one of whom was a supervisor representing the Company's employees. In 2023, four meetings of the Supervisory Committee were held, and six motions were considered and passed.



During the year, we formulated the *Measures for the Management of Proposals for the Board and the Committees*, established the process for the management of proposals and review and approval of materials by the Board, improved the system of accounts for the work of the Board's affairs and standardized the work standards. The senior management of the Company regularly submitted to the directors information such as weekly report on capital market information, monthly report on QHSE and monthly report on risk management, etc., to support the directors in performing their duties in compliance. In addition, the Company arranged the directors to conduct 2 research visits to inspect the production and operation of the Hainan base and the reconstruction projects and rural revitalization work in the poverty alleviation cities and counties in Gannan.



## Investor communication

We continue to explore the Company's future development strategy and maintain active communication with shareholders. In 2023, the Company held an Earnings Conference Call in Hong Kong in March and August respectively to introduce the Company's operating results and answer questions from the media and investors. In 2023, the management of the Company led a team to conduct a roadshow meeting with the Company's shareholders and potential investors in Hong Kong, which helped investors gain a deeper understanding of the Company's operating results, future development, industry situation, and effectively strengthened the confidence of small and medium-sized shareholders in holding the Company. In 2023, the Company held a total of 32 investor meetings, and received 57 investor and analyst visits.



The Company's Hong Kong Roadshow 2023

## Compliance management

### Internal control compliance and risk management system

China BlueChemical strictly complies with the relevant requirements of the *Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited* and the *Basic Standard for Internal Control in Business Enterprises*. The Board is responsible for evaluating and determining the nature and extent of the risks it is willing to take in order to achieve the Company's strategic objectives and maintains a sound and effective risk management and internal control system. The Board itself, through the Audit Committee, reviews the adequacy and effectiveness of the Company's risk management and internal control systems to safeguard shareholders' investment and the Company's assets.

The Company has an Internal Control Compliance and Risk Management Committee led by the Chairman and comprising the President, Vice President, Audit Department, Legal Compliance Department and Financial Management Department and other relevant persons in charge. It is responsible for leading and coordinating the compliance management, establishing and improving the risk control management system, examining the major matters of the Company's internal control compliance and risk management, and guiding, supervising and checking the management of risk control and compliance.

In terms of risk management, the Company closely focuses on the overall objective of "strengthening internal control, preventing risks and promoting compliance", formulates internal systems and management methods such as *Internal Control and Comprehensive Risk Management System*, *Comprehensive Risk Management Measures*, and *Management Measures for Reporting and Responding to Significant Operational Risks*. The Company has established a four-level risk management structure, including the Internal Control Compliance and Risk Management Committee, Risk Management Office, functional departments of the headquarter, and subordinate units (project teams), and formed an annual, quarterly, and monthly mechanism for risk identification, assessment, tracking, and reporting of major risk events.

### Four-level risk management structure and risk management reporting mechanism

#### Subordinate Units (Project Teams)

Sort out risks within the scope of the unit and submit monthly reports to the functional department, and implement risk response measures.

#### Functional Departments of the Headquarter

Review the risks within the scope of business from the viewpoint of the headquarter and review the risk matters submitted by the subordinate units.

#### Risk Management Office

Carry out risk assessment, analysis, and refinement of control measures, form monthly, quarterly and annual risk management reports, and apply for submission to the Company's Risk Management Committee and the Board for review; pay continuous attention to daily operational risks, and feedback the relevant leaders' instructions to the relevant departments and units one by one to further supervise the implementation and ensure that the risks are generally controllable.

#### Internal Control Compliance and Risk Management Committee

Approve monthly, quarterly and annual risk management reports, consider major risk response strategies and understand the implementation status.

### Internal control compliance and risk management initiatives

During the year, China BlueChemical made significant progress in strengthening its internal control, compliance, and risk management systems. The following are the key measures implemented:

- Formulated internal systems such as *Compliance Management System* and *Trademark Management Measures*, focusing on revising the Company's compliance management, supply chain management, HSE management system, capital management, sales and trade systems.
- Formulated the *Compliance Manual for Listed Companies*, which contains compliance requirements for the Company and its employees in the areas of employee rights and interests, safety, health and environmental protection, anti-corruption and anti-money laundering, information security and privacy protection, and anti-monopoly, etc. The employees are required to sign the "Compliance Commitment Letter" when they are hired to comply with the Company's compliance requirements and ethical code of conduct.
- Carried out work to deepen the construction of enterprises under the rule of law and the evaluation of compliance effectiveness, compiled a "compliance management list", further improved the responsibility list for business approval processes, and incorporated the requirements for integrity risk management and control into the responsibility list version 2.0.
- Continued to improve the monthly risk reporting mechanism while coordinating the prevention and resolution of major business risks, and report key control risks to the Board and management of the Company.
- Organized 4 compliance trainings for directors, 9 compliance trainings for employees and 26 legal awareness campaigns to create a culture of compliance and ensure that directors and employees perform their duties in compliance with the law.



Training organized by Basuogang



## Anti-corruption

Integrity risk prevention and control is an important part of the Company's risk management. The Company takes a proactive approach, emphasizing preventative measures to identify and mitigate integrity risks. Upholding the highest ethical standards, we strictly comply with relevant laws and regulations, including the *Criminal Law of the People's Republic of China* and *Anti-Money Laundering Law of the People's Republic of China*. To build a comprehensive integrity risk prevention and control system, the Company fosters a culture of open communication and clear accountability structures. This system includes dedicated channels for integrity education and awareness campaigns, particularly during important holidays. We emphasize adherence to legal norms and ethical codes related to preventing bribery, extortion, fraud, and money laundering.

The Company has established a regular communication working mechanism to form a comprehensive integrity risk prevention and control system. The Company requires leaders and cadres at all levels to sign a responsibility statement, and higher-level leaders interview lower-level leaders to form a supervision chain with clear responsibilities and interlocking links. The Company implements annual anti-corruption work points, holds quarterly anti-corruption work meetings, establishes centralized learning, system implementation, briefing and conferencing mechanism, compaction business supervision "line of defense". The Company strengthens the supervision and management of the activities of leading cadres "beyond eight hours", gives the first lesson of integrity education to new employees, and strengthens the supervision and management of integrity risks in the work and life of employees.

The Company promotes the institutional mechanism of "not daring to corrupt, not being able to corrupt and not wanting to corrupt" as a whole, and publicizes the reporting telephone number, mailbox and address to accept the public's letters, petitions and reports. The Company has set up an information platform containing the whole process of acceptance and disposal of reports, and all reports are uniformly managed and controlled online; the Company has formulated the rules for acceptance of petitions and reports and other systems to standardize the scope of acceptance of reports, the disposal process, approval authority, etc. The Company has implemented strict protection measures for whistleblowers and reported information. The Company's whistleblower mechanism strictly prohibits the staff to disclose the information involved in the case and prohibits unauthorized access to the person involved in the case and his or her specific relationships.

In addition, the Company comprehensively upgraded the *HuaShuoQingLian Integrity Monthly Magazine*, compiled the *Collection of Works on Integrity Culture* and the *Integrity Warning Education Internal Cases*, and carried out the activities of Integrity Culture Awareness Month, to enhance the awareness of employees' integrity and self-discipline, and to provide a solid guarantee for the healthy development of the Company.



0 Case

Number of corruption litigation cases



63 Hours

Average number of hours of anti-corruption training attended by directors



90 Hours

Average number of hours of anti-corruption training attended by staff



### [Case] 2023 Integrity Culture Awareness Month Activities

In November 2023, the Company organized and carried out the activities for the month of integrity culture month with the theme of "Always harbor a sense of awe and together create a clean chemical company". The activities include a "clean letter" activity, a "special lecture on cleanliness" activity, a "warning to keep clean" activity, a "all staff warning" activity, a "legal education" session, and a "clean culture" evaluation activity. Through the promotion of family culture and education, warning education and clean culture publicity activities, the Company aimed to improve the staff's awareness of cleanliness and self-discipline, fostering a strong atmosphere of integrity and cleanliness within the Company.

## ESG governance

China BlueChemical has set long-term goals to gradually integrate the principles of sustainable development into its corporate governance and business development strategies. The Company has established a three-tier ESG governance structure, wherein the Board, as the highest decision-making body for ESG affairs, reviews the Company's ESG strategy, approves and tracks ESG objectives, and oversees the Company's ESG risk management, implementation of objectives and disclosure of information by holding meetings and listening to reports. As the management level of ESG governance, the Company's senior management is responsible for organizing and promoting ESG work, evaluating the effectiveness of implementation, and reporting to the Board on a regular basis. As the executive level of the Company's ESG governance, each functional department and subsidiary is responsible for the implementation of specific ESG-related matters and regular reporting of work progress.



### Decision-making

The Company's Board leads the deliberation and decision-making on major social responsibility matters, including the formulation of relevant strategies and guidelines, and special consideration of ESG reports.



### Management

The Company's senior management is responsible for the ESG-related work, including the organization, management and promotion of social responsibility work, clarifying development planning, improving ESG-related systems, and evaluating the effectiveness of the implementation of social responsibility work.



### Implementation

Each functional department and subsidiary of the Company is responsible for the specific affairs of various social responsibilities, assisting in the preparation of ESG reports, regularly reporting relevant management initiatives, performance indicators and case studies, as well as the organization and implementation of various ESG-related activities.



## Stakeholder communication

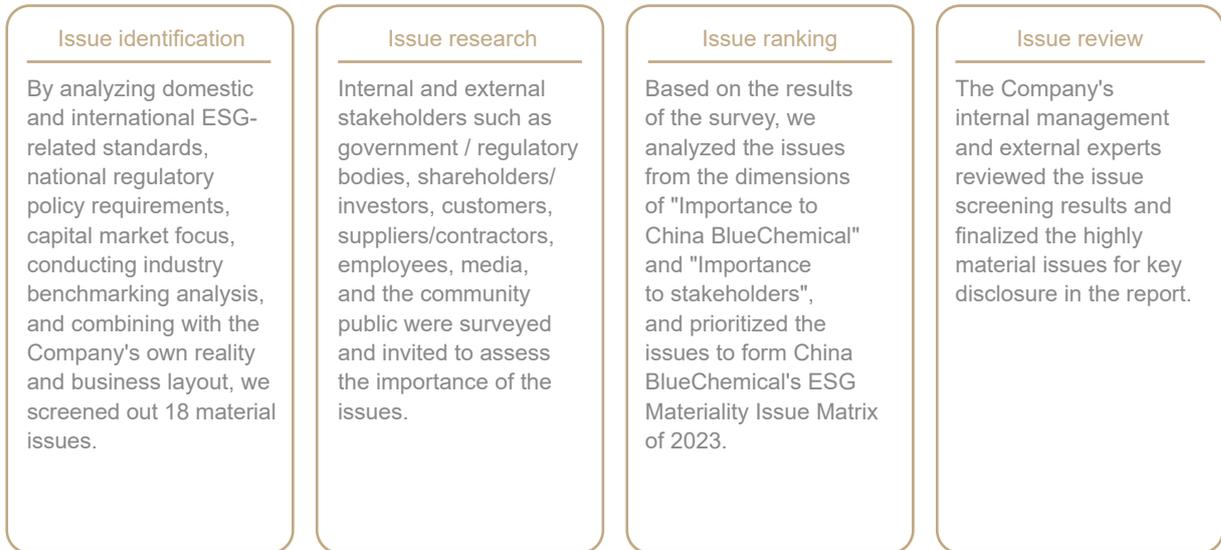
We emphasize communication with stakeholders and have established a regular stakeholder communication mechanism to hear different perspectives, which serves as an important basis for improving environmental, social and governance levels.

### Stakeholder lists and communication methods

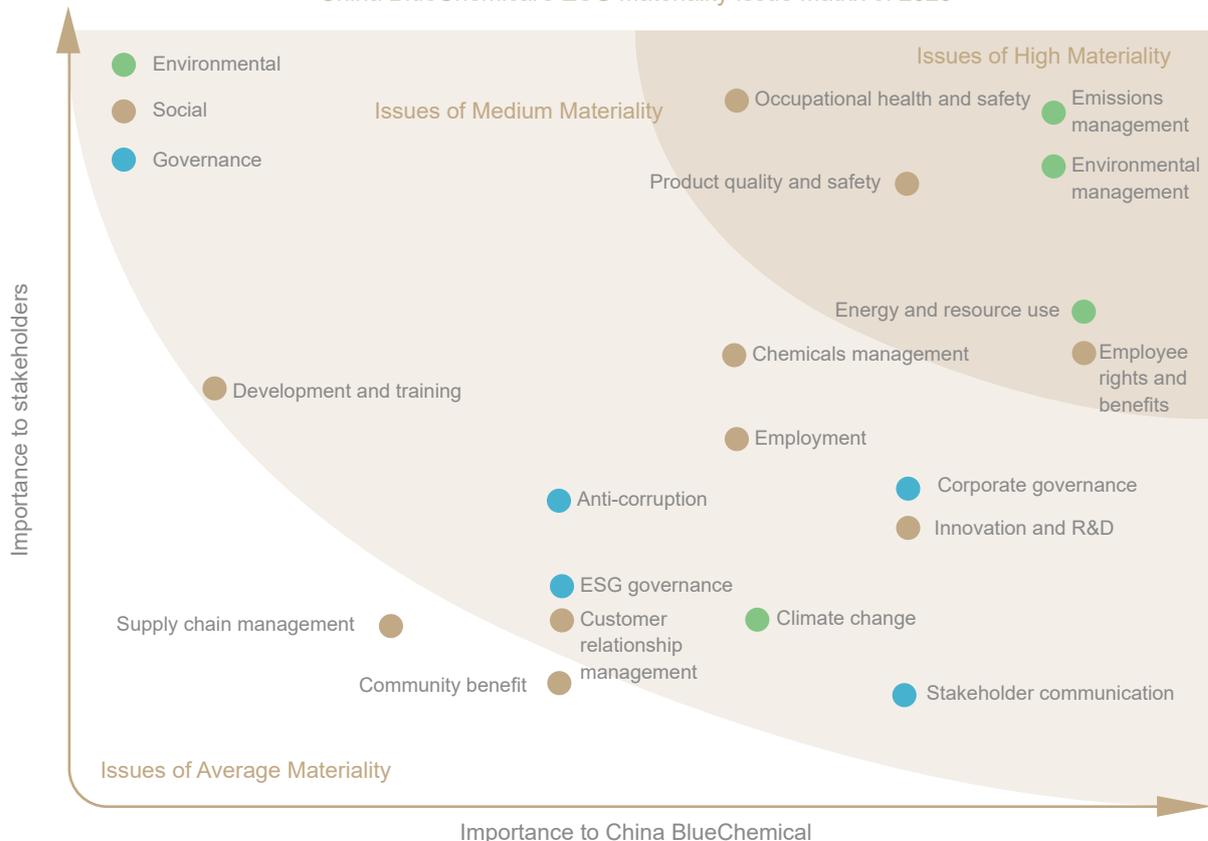
Stakeholders	Needs and expectations	Communication channels
Government / Regulatory Bodies	<ul style="list-style-type: none"> <li>Compliance operations</li> <li>Paying taxes according to the law</li> <li>Promote employment</li> <li>Responding to national strategies</li> <li>Helping the industry grow</li> </ul>	<ul style="list-style-type: none"> <li>Disclosure of information</li> <li>Daily communication reporting</li> <li>On-site inspection</li> <li>Monitoring</li> <li>Reception of visitors</li> </ul>
Shareholders/Investors	<ul style="list-style-type: none"> <li>Compliance operations</li> <li>Consistent and stable return on investment</li> <li>Risk management</li> <li>Corporate governance</li> </ul>	<ul style="list-style-type: none"> <li>Company website and email</li> <li>General Meeting</li> <li>Periodic reports and announcements</li> <li>Investor communication conference</li> </ul>
Customers	<ul style="list-style-type: none"> <li>Respect for customer privacy</li> <li>Quality products and services</li> <li>Business ethics</li> </ul>	<ul style="list-style-type: none"> <li>Customer satisfaction survey</li> <li>Customer service hotline &amp; email</li> <li>Face-to-face meetings and site visits</li> </ul>
Suppliers/Contractors	<ul style="list-style-type: none"> <li>Improving supply chain management</li> <li>Mutual benefit and win-win, long-term cooperation</li> </ul>	<ul style="list-style-type: none"> <li>Open tendering and standardized procurement procedures</li> <li>Face-to-face meetings and site visits</li> <li>Project cooperation and industry exchange</li> </ul>
Employees	<ul style="list-style-type: none"> <li>Employee rights &amp; benefits</li> <li>Occupational health and safety</li> <li>Training and development</li> <li>Employee care</li> </ul>	<ul style="list-style-type: none"> <li>Labor union, staff representatives' meetings</li> <li>Daily communication</li> <li>Employee training and performance appraisal</li> <li>Group building activities</li> </ul>
Media	<ul style="list-style-type: none"> <li>Green operation and environmental protection</li> <li>Fulfilling social responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Online communication</li> <li>Reception of visitors</li> </ul>
Community Public	<ul style="list-style-type: none"> <li>Building a harmonious community</li> <li>Carrying out public welfare activities</li> </ul>	<ul style="list-style-type: none"> <li>Volunteer services</li> <li>Public welfare activities</li> </ul>

## Identification of material issues

China BlueChemical identified and screened out ESG material issue list for 2023 through a comprehensive process. We considered various factors, including domestic and international sustainability standards, industry development trends, capital market concerns, and our own business operations. Considering the actual development of the Company's business, conducting peer companies' benchmarking analysis, expert assessment, internal and external stakeholder questionnaire survey, and on-site interviews, we have identified and screened out the Company's ESG material issue list for 2023. We have disclosed the highly material issues in this report to better respond to the concerns of stakeholders.



China BlueChemical's ESG Materiality Issue Matrix of 2023





# 03

## Innovation-driven, Sustainable Business Approach

China BlueChemical ensures long-term stable and sustainable operations and creates long-term profitability by conducting innovative research and development, improving product quality and safety management systems, strengthening chemical management, and enhancing customer service quality.





## Innovation and R&D

China BlueChemical is actively exploring new opportunities and stimulating the development vitality by scientific and technological innovation. In 2023, the Company focused on three major technology routes, built three major directions of "Source, Chain Extension, and Green", invested RMB 85.44 million in R&D, and optimized the construction of three fields: carbon-rich gas, new materials and value-added fertilizers, as well as the two platforms of Haikou Carbon-Rich Natural Gas Chemical Engineering Technology Center and Dongfang Scientific Research and Pilot Base. The Company has completed the key milestones in the efficient conversion and utilization of carbon-rich gas, laying a good foundation for expanding from traditional chemical industry to new material chemical industry and biochemical industry, and then further developing low-carbon green chemical industry by leveraging renewable and biomass resources.

During the year, Carbon-Rich Natural Gas Chemical Engineering Technology Center was officially opened in Haikou, and the first science and technology innovation alliance "Joint Laboratory for Cross-Innovation on Carbon Neutrality and National Food Security" was inaugurated. The project of "Green Efficiency Technological Innovation and Application of Bulk Fertilizer" won the Second Prize of the Science and Technology Progress Award of the China Petroleum and Chemical Industry Federation's Science and Technology Award for 2022. By the end of 2023, the Company had participated in the formulation of 9 existing national standards and 5 industry standards, with 3 national standards ready for implementation.



### Intellectual property protection

The Company strictly abides by the *Patent Law of the People's Republic of China*, *Copyright Law of the People's Republic of China*, and other relevant laws and regulations. The Company formulates the *Measures for the Management of Intellectual Property Rights*, refraining from engaging in activities infringing on intellectual property rights, and legally owns and protects the intellectual property rights of the Company. By the end of 2023, the total number of valid patents of the Company was 134, including 51 invention patents and 83 utility model patents. The total number of software copyrights was 18. During 2023, the Company applied for 6 patents and 2 software copyrights, and was authorized 23 patents, including 2 invention patents and 21 utility model patents.

China BlueChemical is committed to responsible brand marketing practices. When our marketing activities involve the use of intellectual property rights from other organizations, we ensure legitimacy of the use of intellectual property rights by signing formal contracts and paying reasonable licensing fees. Meanwhile, we take proactive measures to safeguard our own valuable trademarks, including "Fudao" and "Xiangyan". This includes actively promoting trademark authorization within the Group, establishing clear agreements with the Group regarding the scope and fees for using the CNOOC trademark, and implementing robust monitoring and investigation procedures to identify and address potential infringements. We conduct regular anti-counterfeiting activities to protect our intellectual property rights and safeguard the Company's brand reputation.



### Incentives for research and innovation

Scientific researchers are the main discoverers and realizers of the Company's knowledge creation, scientific and technological innovation, and technological progress. They are the key force supporting the Company's innovation-driven strategy. The Company implements the policy of "respecting labor, respecting knowledge, respecting talents and respecting innovation" and revises the *Management Measures for Scientific and Technological Rewards*, which provides targeted incentives for scientific researchers, to further incentivize independent research and accelerate the translation of scientific discoveries into practical applications.



### [Case] Fudao Chemical's Carbon-Rich Natural Gas Chemical Engineering Technology Center was established

On 4 July 2023, the Carbon-Rich Natural Gas Chemical Engineering Technology Center ("Technology Center") established under China BlueChemical Fudao Chemical was formally inaugurated and put into operation, marking a solid new step in China BlueChemical's high-quality scientific and technological innovation and digital development path. It also lays the foundation for the development of core competitiveness in key industries such as plant nutrition solutions, carbon-rich natural gas utilization, and new materials.



Conceptual plan illustrations of Lot 46#, which is adjacent to the Technology Center

The pre-feasibility study report of the scientific research pilot base on Lot 46#, which is complementary to the technology center, has passed the expert review. The northern part of the base is the Oriental Park Safety Production Control Center project, mainly constructing the central control room, emergency command center, enterprise exhibition hall, training center (including safety and skills training), etc.; the southern part is the Oriental Park Scientific Research and Pilot Base project, mainly constructing the pilot plant and its related supporting functions to meet the R&D needs of the technology center in the next 10 years, such as the pilot scientific research, the supporting conditions platform, and the transformation of the results of the Company.



### [Case] China BlueChemical and Shenzhen Institute of Advanced Technology Chinese Academy of Sciences set up "Joint Laboratory for Cross-Innovation on Carbon Neutrality and National Food Security"

On 19 September 2023, China BlueChemical Ltd. and Shenzhen Institute of Advanced Technology Chinese Academy of Sciences signed a contract and inaugurated the "Joint Laboratory for Cross-Innovation on Carbon Neutrality and Food Security" in Beijing.

The two parties announced that they will carry out the first joint R&D project - "Creation of Microbial Reactor and its Research on CO<sub>2</sub> Starch Production" based on the joint laboratory, which is a symbol of the Company's exploration in the field of biochemicals. The project leverages the Company's own production capacity for many years and capitalizes on the major breakthroughs already made by the Chinese Academy of Sciences in the field of biochemicals. A breakthrough in the key core technology will broaden and extend the map of carbon-chemical industry based on the conversion and utilization of methanol/CO<sub>2</sub>, and is expected to solve the two major propositions of the times, namely, large-scale consumption of CO<sub>2</sub> and national food security, at the same time.

In the next step, the joint laboratory will focus on major frontier technologies, key core technologies and common technologies in the bio-industry of carbon dioxide and methanol, and foster several scientific and technological developments as soon as possible. Both sides will continue to promote cooperation and exchange a deep, wide-ranging and high-quality direction, to create a scientific and technological innovation consortium, to promote the high-quality development of green bio-manufacturing industry and strive to become a "source" of original technology and a successful model of cooperation between institutions and enterprises.



Signing and inauguration ceremony of the Joint Laboratory for Cross-Innovation on Carbon Neutrality and Food Security



### [Case] China BlueChemical and BASF cooperate to develop CO<sub>2</sub> catalysts

On 6 November 2023, CNOOC held the 6<sup>th</sup> China International Import Expo Forum and Global Procurement Contracts Signing Ceremony at the National Exhibition and Convention Center (NECC) Shanghai, where China BlueChemical and BASF signed a service trade contract for the CO<sub>2</sub> chemical reforming catalyst co-development project, marking the opening of a brand-new chapter in the joint construction of the country's first 10,000 m<sup>3</sup> CO<sub>2</sub> reforming-to-synthesis-gas technology. This will further promote the development and utilization of low carbon technology and offshore CO<sub>2</sub>-rich natural gas resources.

As a leader in CO<sub>2</sub> resource utilization in China, China BlueChemical always insists on expanding high-level opening up to the outside world, deepening international exchanges and cooperation, and committing itself to improving energy efficiency and carbon efficiency in the process of converting and utilizing carbon-rich natural gas.

The signing of this contract is a further deepening of international cooperation in energy technology, and the two parties will take the R&D and application of catalysts for CO<sub>2</sub> conversion to syngas as an opportunity. Leveraging the utilization of carbon-rich gas as a means to reduce carbon at the source and the energy saving and consumption reduction of industrial equipment as a means to reduce carbon during the process, will help join hands to promote the solution of the problem of developing and utilizing carbon-rich natural gas resources in the South China Sea on a large scale. This will also make a greater contribution to the Group's goal of achieving "double carbon" and implementing the major responsibility of safeguarding national energy and food security.

## Product quality and safety

The Company has abided by the laws and regulations, such as the *Product Quality Law of the People's Republic of China*, the *Trademark Law of the People's Republic of China* and the *Anti-unfair Competition Law of the People's Republic of China* and the national standards for various types of products; and enhanced its own systems such as the *Administrative Measures for Complaints from Customers about Self-manufactured Products* and the *Administrative Rules for Packaging Materials Distribution of Self-manufactured Products*. Comprehensive and stringent quality control measures have been put in place to govern the product quality and safety, advertisements and promotions, trademarks, labels, privacy and remedies. These all constituted a set of professional, standardized and effective administrative measures for product quality, which not only addressed the relevant after-sale issues about the marketed products and therefore facilitated the Company to boost the sales, but also provided the Company with a basis of decision making for enhancing the quality and effectiveness of products and improving the quality of its products and services. In 2023, the Company set up a leading group for the construction of a comprehensive quality management system, sorted out the whole business process of "mining / natural gas / coal – chemicals – fertilizers - marketing", identified 71 key quality risk control points, carried out internal and external audits of the quality management system on time, consolidated the brand name quality management, and built up a quality talent team.

In terms of quality management organization, the Safety Production Department of the headquarter coordinates the quality management work and has a quality management post; the relevant departments of the subordinate units have quality management functions, among which Dayukou Chemical set up the Quality and Market Management Department in 2021 to build a professional, standardized, and effective product quality management pattern. In terms of quality management system, the Company has formulated quality management systems such as *Product Quality Management Measures*, *Production Management System* and *Quality Management Rules for Internal Inspection and Testing Institutions* from the four phases of procurement, engineering, production and sales, clarified the responsibilities and authority of each department, standardized the working procedures and ensured the effective operation of the quality management system. By the end of 2023, among the production bases under the Company, Fudao, Dayukou and Huahe have obtained ISO 9001 quality management system certification.



IFA Protection and Sustainability Certification

The Company continues to promote the quality management of internal inspection and testing organizations, standardize laboratory management, and require laboratory personnel to have analytical and chemical testing qualification certification to continuously improve the Company's inspection and gate-keeping ability and ensure product quality level. Based on product characteristics, the recall system is temporarily not applicable to the Company's products. In 2023, the Company's urea and methanol product qualification rate was 100%, and the product excellence rate was 99.88% and 100%, respectively, which have reached the Company's product quality and efficiency annual targets. The Company did not have any quality incidents of level D or above, no major lawsuits and complaints arising from product quality and services, and no sold or shipped products that had to be recalled for safety and health reasons. In addition, in 2023, the Company underwent seven external sampling inspections of its products, all of which were satisfactory.

We focus on brand quality management and construction, implement the quality positioning of "plant nutrition solution provider", and have been a fertilizer manufacturer certified by the International Fertilizer Industry Association (IFA) for protection and sustainability since 2016. Since 2019, a number of our compound fertilizer products have been certified as green products, and we continue to enhance the value of our brand and improve the management of the trademark "China BlueChemical".

By carrying out mass quality activities, the Company is committed to improving the enthusiasm of all staff to participate in quality group activities, enhancing the level of quality achievement publication, and establishing a QC promotion talent team. We organize and hold company-level excellent QC achievement selection events in September every year, and the number of registered QC group activities increased from 43 groups in 2021 to 96 groups in 2023. Starting from 2019, the Company invites industry experts to carry out QC knowledge training every year, and provides online guidance on QC achievements of each unit. Our QC excellence is corroborated by the fact that 7 achievements won the Group's awards in 2023, and 2 achievements won industry excellence award. Furthermore, the Company actively organizes its employees to participate in quality training organized by the China Association for Quality and the China Petroleum and Chemical Industry Federation, and cultivates a number of core QC group members who know the method, application and practical operation. Currently, the Company has 6 national or provincial certified QC promoters.



### [Case] Dayukou Chemical strengthens product quality and safety management

In order to supervise the implementation of the main responsibility for product quality and safety, and standardize the behavior of quality and safety management personnel, Dayukou Chemical set up a product quality and safety management organization on 4 September 2023, and formulated the *Quality and Safety Director Job Responsibilities*, *Quality and Safety Officer Code*, *Quality Supervision Work Management Requirements*, *On-site Quality Supervision Work Plan*, and the *Implementing Rules for Quality and Safety Management Personnel Training and Examination*.

On 17 October 2023, at the *Working Meeting of Quality Management Committee (Expanded)* held by Dayukou Chemical, the director of Quality Management Committee of the Company awarded "Quality Supervisor" armbands to 7 representatives of quality safety personnel, and the first batch of quality supervisors were formally inaugurated. On 20 October 2023, all members of quality and safety management organization of Dayukou Chemical held a meeting to learn the *Quality and Safety Officer Code* and *Quality Supervision Work Management Requirements*, award the armbands, and arrange the quality supervision tasks of "daily control, weekly inspection and monthly dispatch". Every Friday morning, the quality and safety officers of each department work in groups to carry out comprehensive quality hazard inspection within the Company and notify and follow up the hidden dangers on OA.



Organizational meeting on product quality and safety management at Dayukou Chemical



## Chemicals management

The Company strictly abides by the *Law of the People's Republic of China on Work Safety, Regulations on the Safe Management of Hazardous Chemicals* and other laws, regulations and policy documents. The Company formulates the *Measures for the Safe Management of Hazardous Chemicals* and two rules, namely the *Rules for the Management of Major Hazard Sources* and the *Rules for the Management of the Transportation and Handling of Hazardous Chemicals*, to clearly define the responsibilities of the relevant departments of the Company and the subordinate units regarding the management of hazardous chemicals. This includes clarifying the Company's production, storage safety, transportation safety and requirements on procurement, sales and contractor management of hazardous chemicals.

The Company carries out identification, assessment and grading of major hazard sources according to *HSE Risk Management Measures, Hidden Danger Management Measures* and *Emergency Management Measures*. The Company classifies them into four grades, namely low risk, general risk, greater risk and significant risk, according to the degree of danger, and carries out assessment work once every three years. The Company implements the safety guarantee responsibility of major hazard sources, organizing at least one targeted safety risk and hidden danger inspection of major hazard sources every quarter. The Company must carry out safety risk and hidden danger inspections of major hazardous sources before major activities, key time periods and holidays, formulate management and control measures and governance programs and supervise their implementation. For old hazardous chemical plants, the subsidiaries will carry out self-assessment of safety risks, and the Group's headquarter will carry out in-depth assessment, improve the "one plant, one policy" for old plants, and reduce the safety risk level of old plants. Subsidiaries formulate emergency response plans for hazardous chemical incidents based on the characteristics of hazardous chemicals, equip emergency response personnel and necessary emergency response equipment and devices, and organize regular emergency response training and rescue drills to ensure the safe management of chemicals.



### Type of hazardous chemicals

### Name of hazardous chemicals

Key regulated hazardous chemicals

Ammonia, sulfur dioxide, sulfur trioxide, hydrogen fluoride, crude oil, benzene, toluene, styrene, propylene, liquefied petroleum gas, methyl tertiary butyl ether, methanol, gasoline, hydrogen, naphtha, acrylonitrile, acetone cyanohydrin, natural gas, carbon monoxide, hydrogen sulfide, acetylene, hydrogen cyanide, hydrocyanic acid, ethylene, methane

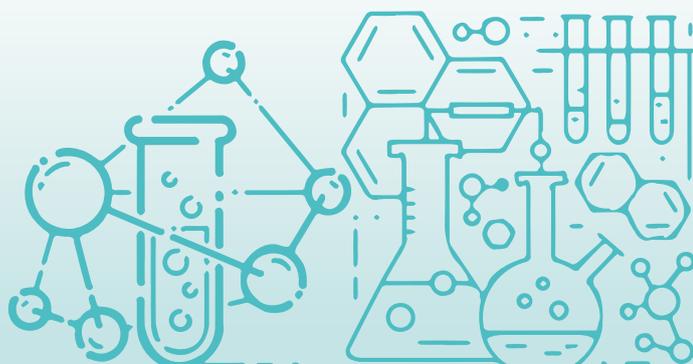
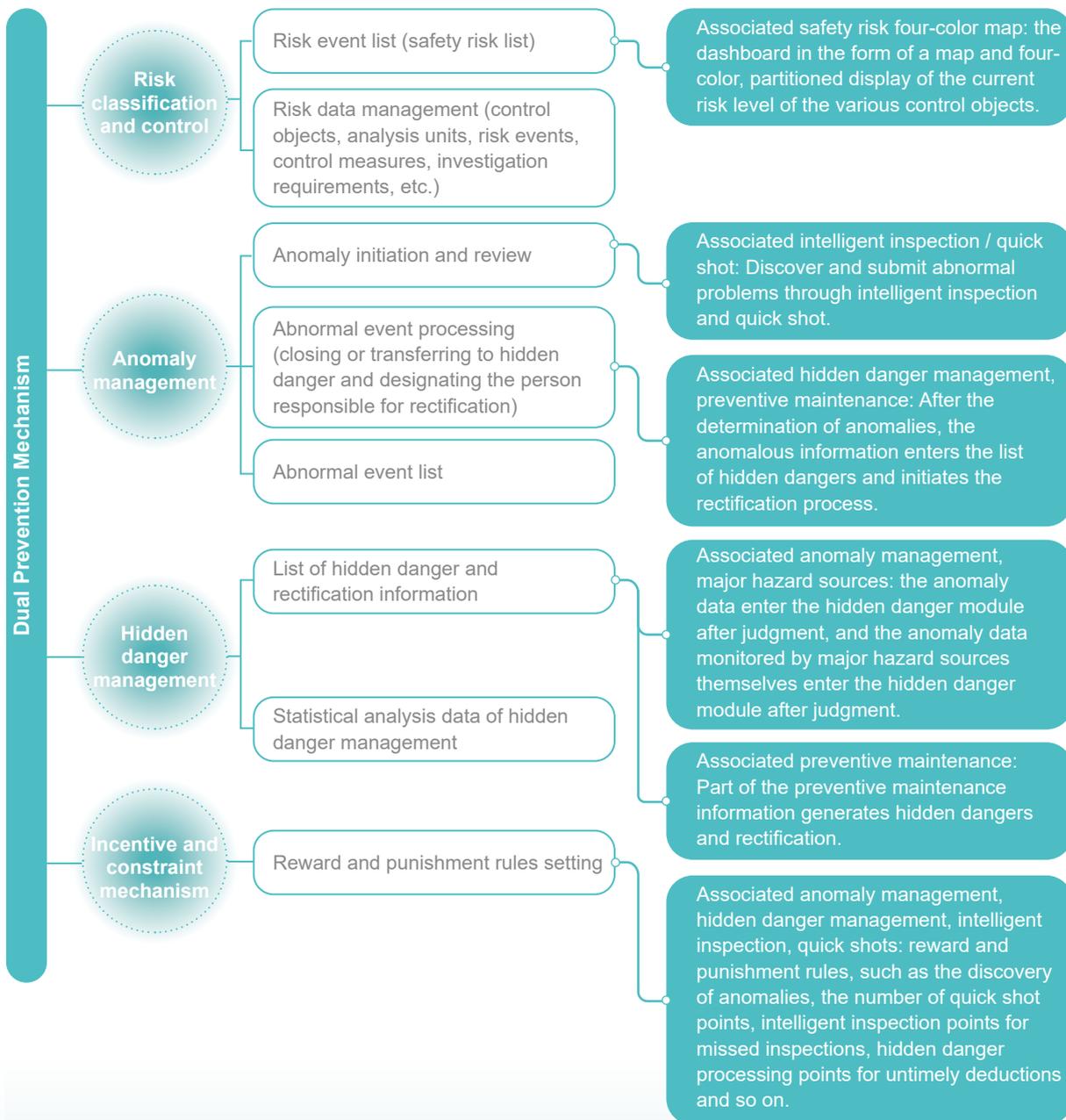
Precursor chemicals

Sulfuric acid, toluene, acetone, hydrochloric acid, methyl ethyl ketone, potassium permanganate, ethyl ether, trichloromethane

Explosive hazardous chemicals

Sulfur, hydrogen peroxide, hydrazine hydrate, potassium permanganate

In 2023, the Company continued to promote the digitalized management of hazardous chemicals based on Industrial Internet Plus and improved the dual prevention mechanism system. The system will set risk and hidden danger inspection tasks for each employee according to the risk list of each subsidiary, and if the employee finds a hidden danger during the inspection, they are required to take a photo and upload it, after which the system will record the person in charge of the rectification and acceptance of the hidden danger, forming a closed loop of risk and hidden danger management. The Company has set up an incentive and constraint mechanism, linking the dual prevention performance of the employee with the salary and remuneration (bonus) of the employees, clarifying the point collection system, assessment standards, frequency, ways and means, etc., and establishing a record account of rewards and punishments, so as to improve the enthusiasm, initiative and creativity of all the employees in participating in the construction of the dual prevention mechanism. Through the big data visualization platform of the dual prevention mechanism, the headquarters can view the risk classification and control, abnormality management and hidden danger management data of subsidiaries in real-time and discover the existing problems and dangerous factors in time. In addition, the Company has set up a dual prevention mechanism assessment system for hazardous chemicals, which evaluates and assesses the safety hidden danger investigation, monitoring and early warning, and management control of each subsidiary, and urges it to continuously improve and enhance the construction level of dual prevention mechanism for hazardous chemicals.





## Customer relationship management

In order to further enhance customers' consumption experience and satisfaction, China BlueChemical continuously improves its customer service system. The Company accepts quality complaints and customer suggestions, ensures adequate communication with customers, and strives to satisfy customers' needs. In 2023, there were 25 product quality complaints, all of which have been handled properly according to the customer complaint handling procedures stipulated in the Company's *Administrative Measures for Complaints from Customers about Self-manufactured Products*.



Business personnel who receive customer complaints should immediately report them to the department head. Within 72 hours, they should arrive at the site of goods damage, conduct investigations such as taking pictures and video forensics to verify complaints about product quality, storage environment, etc., and form a preliminary judgment:

- If the preliminary judgment is not our responsibility, and a final conclusion is reached after full communication with the customer and with mutual agreement, the Company's handling unit should appropriately address the issue.



If it is initially determined to be the responsibility of the Company, the handling unit will be responsible for tracking, investigating, and resolving the issue; personnel of the handling unit should go to the warehouse within 72 hours after the formation of the initial judgment. They should assess the storage conditions, including product quality and storage environment, through photography and video evidence verification, to determine the storage party's responsibility and the cause of the problem:

- If it is finally judged to be the responsibility of the storage party, the subsidiary will deal with it according to the agreement terms of the storage contract.
- If it is judged to be the responsibility of the non-warehousing party, the subsidiary's business personnel should communicate with the production unit within 72 hours to confirm whether it is the responsibility of the production unit.



Preliminary judgment falls under the responsibility of the production unit. Business staff should convey the preliminary determination results using the *Product Quality Issues Feedback Form* and related information to the relevant production unit within 72 hours. The relevant production unit is required to issue opinions on how to deal with the quality issue:

- If the loss amount is RMB 20,000 or less, the relevant production unit shall feedback the *Product Quality Issues Feedback Form* and issue opinions on how to deal with the problem, and if necessary, send someone to the site to investigate. If there is no formal feedback by mail within 72 hours after each production unit confirms receipt of the *Product Quality Issues Feedback Form*, it will be deemed to agree with the handling opinion of the *Product Quality Issues Feedback Form*, and will be handled by the Company in consultation with the customer in accordance with the business event licensing regulations.
- If the loss amount exceeds RMB 20,000, the relevant production unit should send someone to the site of goods damage and investigate with the relevant business personnel of Fudao Chemical within 72 hours, issue opinions on the handling of the matter, feedback to the *Product Quality Issues Feedback Form*, and be responsible for the tracking and investigation of the problem.

In order to protect the legitimate rights and interests of customers, the Company has revised the *Contract Management Measures*. These measures are committed to ensuring the transparency of contracts, eliminating hidden fees and overbearing terms, and ensuring that customers enjoy the full right to information and consent. To protect consumer privacy, the Company has formulated *Confidentiality Provisions*, requiring employees to sign confidentiality agreements and prohibiting unauthorized disclosure of confidential data. Additionally, the Company implements training programs for the marketing staff to enhance employees' awareness of compliance.



Compliance training for the marketing staff

Through regular customer visits and seminars, we actively strengthen our interaction with customers, gaining a deeper understanding of their needs. This allows us to provide excellent marketing services and realize a win-win situation between the Company and its customers. In addition, the Company conducted two customer satisfaction surveys in 2023. The Company's customer satisfaction survey for its methanol business covered all business areas and received a total of 27 responses. The results showed that customers' overall satisfaction with the Company's product quality, service quality and corporate reputation reached 100%. In the customer satisfaction survey of the "Dayukou Quality Miles" campaign, 194 questionnaires were returned, and customer satisfaction in the market reached 92.27%. Through the customer satisfaction survey, the Company objectively and comprehensively grasped the customer's satisfaction with the product, complaints and suggestions for improvement, further clarifying the direction for product quality improvement.



# 04 Talent Priority, the Path to Work Together

The development of the Company depends on the development of talent. China BlueChemical is well aware of the importance of employees to the sustainable development of the enterprise. The Company adheres to the concept of "Be people-oriented, care for employees", to create a fair and transparent employment environment for the staff, and effectively safeguard the legitimate rights and interests of each and every employee. The Company solidly promotes the strategy of "Talent-driven enterprise", constantly optimizes the staff growth and development system, strengthens the construction of the enterprise talent team, and helps more employees to obtain growth opportunities and realize their self-worth. The Company strives to build and maintain a safe, healthy and comfortable working environment, and is committed to working with employees to grow together.





## Employee rights and benefits

China BlueChemical adheres to the concept of "Be people-oriented, care for employees", and constantly improves the employment system to protect the basic rights and interests of employees. The Company adheres to the principle of "scientific and reasonable, capable and efficient employment", improves the construction of talent team and incentive mechanisms, constantly stimulates the vitality of the staff, and works hand in hand with the staff for mutual development.



### Legal employment

The Company strictly implements the relevant national employment laws and regulations, abiding by the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Social Insurance Law of the People's Republic of China*, and the *Law of the People's Republic of China on the Protection of the Rights and Interests of Women*. It formulates the *Management Measures for Employee Recruitment*, the *Management Measures for Daily Personnel Management*, the *Management Measures for Salary*, and other management systems, establishing a comprehensive employment management system that covers the recruitment, promotion, dismissal, working hours, wages, insurance and benefits, vacations, remuneration, equal opportunities, diversity, anti-discrimination, fair treatment and other aspects. The Company adheres to the principles of legal and equal employment, and resolutely oppose employment discrimination, forced labor, child labor, workplace harassment and other acts, ensuring that the rights and interests of the employees are effectively safeguarded.

China BlueChemical abides by the principle of employment diversity and anti-discrimination and does not set up any discriminatory rules against the principle of fairness, such as "gender, ethnicity, marital status, religion", etc., in the recruitment, training, promotion and salary system. It insists on the equal treatment of different races, nationalities, beliefs, genders, marital statuses, and employees who are under the protection of special laws. All employees of China BlueChemical sign labor contracts with the Company, in accordance with the principle of equality and voluntariness.

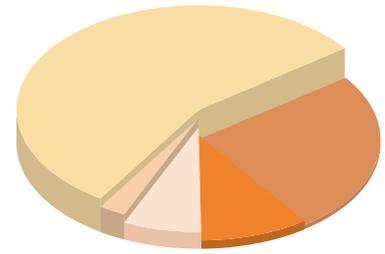
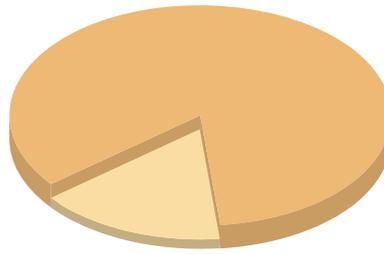
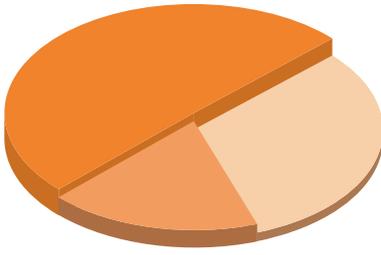
The Company strictly abides by labor laws and regulations and complies with regulations on wages, overtime hours and statutory benefits, and prohibits forced labor. In 2023, the Company was not aware of any cases of forced labor. The Company strictly abides by the legal requirements on the prohibition of child labor and has formulated the "Regulations on the Prohibition of Child Labor", effectively preventing and controlling the employment of child labor through the establishment of strict recruitment review procedures, improving daily labor supervision and raising awareness of standardized labor practices, etc. In 2023, the Company did not find any cases of child labor.

### Highlights of the Company's initiatives to achieve the goal of prohibiting child and forced labor





[Data] Employee Profile



By age (persons)

By gender (persons)

By region (persons)

	Under Age 30	<b>403</b>
	Age 31-50	<b>2,163</b>
	Over Age 50	<b>1,198</b>

	Male	<b>3,134</b>
	Female	<b>630</b>

	Beijing	<b>233</b>
	Hainan Province	<b>2,000</b>
	Hubei Province	<b>985</b>
	Heilongjiang Province	<b>451</b>
	Others	<b>95</b>



[Data] Employee Turnover Rate



**1.46%**  
Employee turnover rate

Employee turnover rate by gender

Employee turnover by age

**1.40%**      **1.74%**  
Male employees      Female employees

**6.95%**      **0.92%**      **0.58%**  
Under Age 30      Age 31-50      Over Age 50

Employee turnover by region

**2.58%**      **1.00%**      **0.91%**      **3.55%**      **4.21%**  
Beijing      Hainan Province      Hubei Province      Heilongjiang Province      Others



## Compensation and Benefits

China BlueChemical continues to improve its employee compensation management system, strictly following the *Labor Law of the People's Republic of China*, the *Social Insurance Law of the People's Republic of China* and other relevant laws and regulations, to provide employees with competitive compensation and benefit plans.

In terms of salary management and performance appraisal, the Company takes employee rank, working ability and experience as the factors for employee salary evaluation to ensure the rationality of the salary structure. Based on market competition and internal equity, the Company provides employees with a comprehensive and competitive compensation and benefit system. Employee remuneration is determined according to the position, performance, and ability of the employee combined with the consideration of the corporate efficiency.

The Company pays attention to the daily care of employees, and regularly organizes various recreational and sports activities such as badminton contests, hikings, spring and autumn outings, handmaking, health lectures, etc., to enrich the spare time life of employees and increase the cohesion of the Company. The Company attaches great importance to protecting the rights and interests of female employees, opposes any form of discrimination, and carries out special activities on the March 8<sup>th</sup> Women's Day to continuously improve employee happiness.

The Company promotes democratic management, formulates the *Implementation Rules for the Democratic Management of Employees*, the *Implementation Measures for the Open management of Factory Affairs*, the *Implementation Rules for the Management of the Workers' Congress* and other systems, convenes an Employee Representative Meeting every year, and announces matters involving the interests of employees through various democratic meetings, open forums, the Company's OA and other channels to ensure that employees are fully informed, and extensively solicit the opinions of employees. We continue to optimize the management of rationalization suggestions, carry out feasibility analysis on the suggestions put forward by the staff, clarify the responsible departments, communicate the feedbacks, and strive to implement the rationalization suggestions put forward by the staff.

## Development and trainings

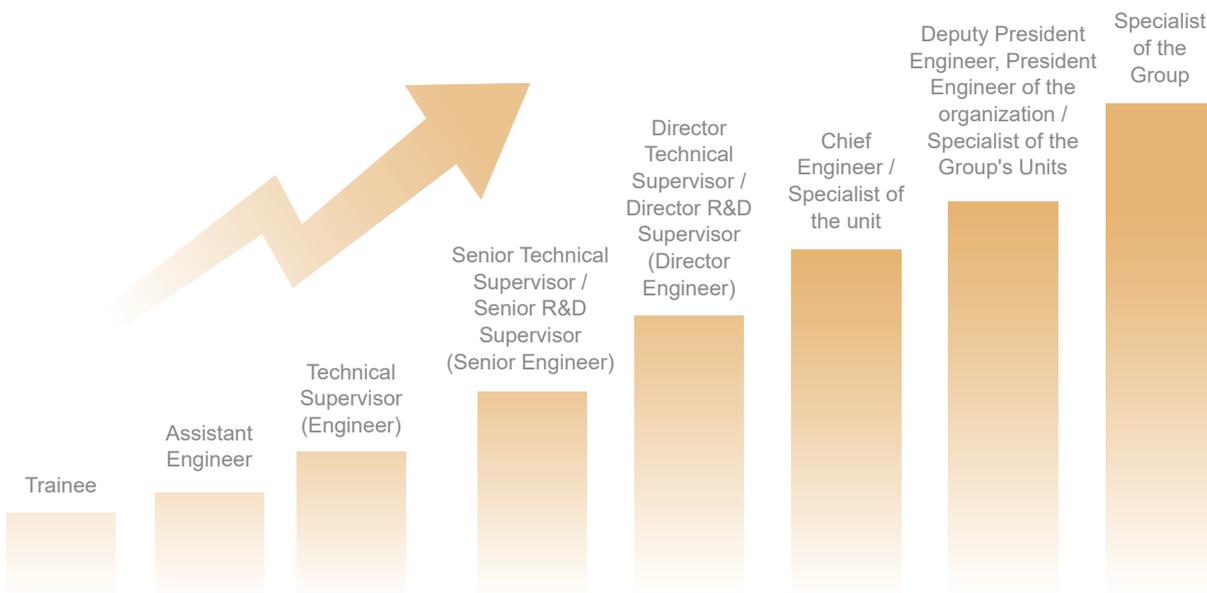
The year 2023 is a critical year for the Company to implement the "14th Five-Year Plan". Focusing on the strategic needs of the Company's high-quality industrial development, the Company adheres to the strategy of "Talent-driven enterprise", firmly establishes the concept of talent as the first resource and implements the talent policy that can stimulate the vitality and value of the Company. The Company has continuously deepened the "3+1" talent project and the Company's "14th Five-Year" development plan. This has set into motion the implementation of three system reforms and the enhancement of baseline management, as well as the enhancement of the comprehensive ability and quality of key and high-level talents. These reforms are established as annual work objectives. To achieve these objectives, the Company prioritizes clear assignment of talent work responsibilities, development of innovative training methods, and rigorous assessment of talent training programs. These strategies ensure planned, focused, classified, and hierarchical training for the Company's three talent teams: management personnel, professional and technical personnel, and skilled personnel. By adhering to its annual training plan, the Company actively promotes talent development.

To build a professional and technical personnel team with an appropriate scale, reasonable structure, excellent technology and strong innovation, the Company has formulated the *Management Measures for the Construction of Professional and Technical Teams (Trial)*. This provides a general plan for the overall scale, professional structure, development channels, and policies for promotion, training, and incentives for professional and technical teams. It supports professional and technical personnel to continuously improve their quality and ability, develop along career paths, and achieve success in their positions. The Company has established a perfect career development channel to help employees clarify career development paths and promotion directions, expanding career development opportunities for employees. The Company has set up a comprehensive promotion mechanism, and the promotion results are closely related to the performance appraisal results, education, years of work experience, professional and technical qualifications, etc. However, employees who have made outstanding contributions and can independently undertake key technical work may be promoted without being restricted by their education and years of work experience.

The Company encourages skilled employees to study technology, practice skills, and actively participate in all kinds of skill competitions from the national to the company level. The Company has set up the *Management Measures for the Promotion of Vocational Skill Levels of Award-winning Personnel in Skill Competitions* to encourage front-line skilled personnel to continuously improve their skills, and comprehensively standardize the promotion management of vocational skill levels of award-winning personnel in skill competitions, promote the professional skill level of employees who win the ranking in the skills competition, and actively promote the career growth and progress of employees.



Career path



Professional and technical personnel can choose different career development paths after becoming a director technical supervisor, with the two paths running parallel and interconnected, that the president engineer/deputy president engineer, chief engineer (worker) of the unit in which the chief engineer was originally promoted in the sequence of technical posts can participate in the selection of specialists at the same level.

A small number of outstanding professional and technical talents with managerial skills are promoted along the ladder of **"Chief Engineer → Deputy President Engineer, President Engineer of the unit → Chief Engineer (Worker)"**.

The rest of the outstanding professional and technical talents are promoted along the path of **"Specialist of the unit → Specialist of the Group's Units → Specialist of the Group"**.



#### [Case] Skillful Team Cultivation is Effective

To further implement the requirements for the construction of skilled operating personnel, the Company mobilized the staff to study hard and improve their skills. At the final of the 14th National Petroleum and Chemical Industry Vocational Skills Competition, 19 teams consisting of 43 players participated in the competition. The nine teams sent by the Company performed well and achieved excellent results. Among them, the team won one first prize and one second prize for the mechanic workers; one first prize, three second prizes and one third prize for the chemical general controllers; and three third prizes for the chemical inspectors. These achievements demonstrate the Company's remarkable progress in cultivating skillful teams.

In case of improving overall competence of core talent and high-caliber talent, following the principle of "Controlled total, effective utilization, structural optimization, and quality improvement," the Company implements a five-step talent management process: selection, cultivation, assessment, utilization, and management. Through this framework, various measures are implemented to optimize the talent structure, allocate human resources effectively, refine incentive and constraint mechanisms, and enhance organizational efficiency and effectiveness. These efforts ensure the Company has the organization and talent it needs for its transformation, upgrade and high-quality development.

To assist every employee in realizing their full potential, the Company conducts various levels and categories of talent training, creating an environment where everyone can succeed and develop their talents to the fullest. In 2023, the Company conducted 111,651 employee trainings, accumulating a total of 604,221 training hours, averaging 160.53 hours of trainings per person.



#### [Case] The "10+N" series of training programs to enhance the overall competence of management staff

To address weak management foundations and outstanding management issues, and to deeply implement the Group's grassroots management enhancement requirements, we combine "double-base" work with talent team construction. Consequently, we organized and conduct the "10+N" series of training programs to further enhance the overall competence and quality of our managers. This training includes courses on management skills such as negotiation, structural thinking, digital transformation, supply chain management, and lean management, as well as office skills courses covering PowerPoint making, data analysis, and official document writing. To maximize the reach of participants, the training adopts a hybrid format, with centralized on-site training at headquarters and video connections for managers in subordinate units. Nearly 1,000 management staff have undergone this training.



#### [Case] Multi-dimensional trainings for new employees

By breaking through the existing training forms and innovating existing training methods, we cultivated new employees in an all-round way. In 2023, a total of 58 college students newly recruited by the headquarter and its affiliated units carried out offline centralized training at CNOOC Gaobeidian Base. In addition, we continued to implement the mechanism of master-take-apprentice and mentor-guidance, effectively enhancing the management ability and business skills of new employees.



[Cases] Organize training courses for high-potential professionals and technical talent

We organize and conduct training courses for high-potential professionals and technical talents. 32 individuals from various units participated in this training, focusing on enhancing their abilities in improvement, innovation, problem analysis, and problem-solving. The course content mainly includes the study of improvement methods such as "ECRS and the 5-5 method", "Cause and effect chain", and "Experience extraction method". Through this training for high-potential professionals and technical talent, we aim to enrich and strengthen the reserve team of high-level technical talent and consolidate the foundation of professional and technical team leaders.



**111,651** person-time

Total number of employee participated in employee trainings



**604,221** hours

Total hours of employee trainings

Percentage of employees trained by gender

**83%**

Male employees

**17%**

Female employees

Percentage of employees trained by employee types

**0.1%**

Senior management

**2.3%**

Middle management

**97.6%**

Basic level employees

Average number of hours trained by gender

**161.46**

hour

Male employees

**155.88**

hour

Female employees

Average number of hours trained by employee types

**276.85**

hours

Senior management

**208.03**

hours

Middle management

**159.24**

hours

Basic level employees





## Occupational health and safety

The Company strictly adheres to the law of the *People's Republic of China on Prevention and Control of Occupational Diseases*, the *Law of the People's Republic of China on Work Safety* and other relevant laws and regulations. It upholds the work policy of "prevention as the mainstay, combining prevention and control", continuously enhancing the management of employees' occupational health and safety to provide them with a healthy and safe working environment.

The Company promptly addresses health hazards and disease risks, and actively promotes the prevention of outbreaks of disease by issuing *Notice on Strengthening the Prevention of Outbreaks of Disease*. It further improves the health management system, and equips important places with first-aid kits and automated external defibrillators (AEDs). Regarding infectious disease prevention, the Company pays timely attention to and responds to the national and local government's information on infectious disease outbreaks and related policies on public health emergencies. It regularly disseminates information on epidemic prevention and control, issues health notice such as *Notice on Preventing COVID and Other Recent Respiratory Diseases*, *Notice on Preventing and Controlling Respiratory Infectious Diseases in Autumn and Winter* and *Health Notice on Monkeypox Epidemic*. Additionally, it strengthens the monitoring and early warning systems and conducts regular health risk studies to formulate effective countermeasures.



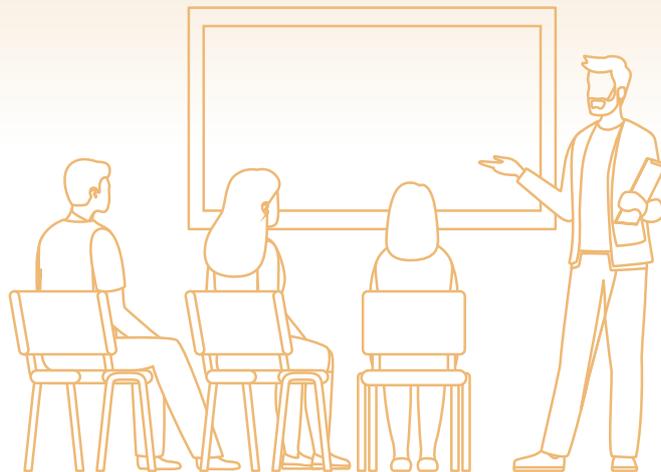
### [Case] The Company carried out cardiovascular disease prevention lectures

To enhance staff awareness and preparedness in preventing cardiovascular diseases, the Company meticulously organized a lecture on cardiovascular disease prevention. Experts in the field of cardiovascular diseases were invited to provide detailed explanations on the basics of cardiovascular diseases, preventive measures, and first aid skills. The lecture content was tailored to common abnormal indicators found in employees' health checkups, offering targeted preventive suggestions to help employees better understand how to mitigate disease risk through adjustments in daily life. This initiative effectively bolstered employees' health consciousness and empowered them with improved self-protection abilities against cardiovascular diseases.



Lecture on cardiovascular disease prevention

The Company attaches great importance to the mental health of its employees and has opened a 7\*24-hour mental health counseling hotline to provide free psychological counseling services for all employees. In 2023, the Company initiated a comprehensive mental health assessment across the organization. The aim was to help employees gain insights into their psychological well-being, attend to their mental health needs, and offer precise psychological assistance to those in need. Additionally, the Company regularly hosts lectures on mental health promotion, where experts explain stress generation processes, professional assessment methods, and stress reduction techniques. These initiatives effectively alleviate employees' work pressure, fostering a sense of well-being and promoting a harmonious work-life balance.



[Case] The Company held a mental health promotion seminar on "Scientific Stress Reduction and Sunshine Mindset".

In order to help employees cope with stress scientifically and cultivate a positive mindset, the Company carefully planned and successfully organized the "Scientific Stress Reduction and Sunshine Mindset" mental health promotion seminar. Experts in the field of mental health were invited to analyze the mechanism of stress, systematically introduce professional stress assessment methods, and share practical stress reduction strategies. The lectures adopted a combination of on-site interaction and live broadcasting in the session halls, while supporting personal video participation. The seminar not only enriched the employees' psychological knowledge base, but also provided a variety of stress reduction techniques to enhance their mental health and sense of well-being. The positive training effect achieved by the seminar reflects the Company's care and support for the overall development of employees, laying a solid foundation for creating a healthy and harmonious working environment.



"Scientific Stress Reduction and Sunshine Mindset" Mental Health Promotion Lecture



The Company attaches great importance to production safety, establishing the core values of "Safety first, environmental protection first, keep employee as fundamental, keep equipment intact", and continuously improving various protective facilities to minimize the possibility of work-related accidents or injuries. In 2023, the Company was full of vigor, undertook concerted efforts, and moved forward to successfully complete the following tasks. The Company completed a number of HSE key tasks such as the Year of Deepening and Expanding Basic Capabilities for Safety and Environmental Protection, the 2023 Action of Special Investigation and Rectification of Major Accidents and Hidden Dangers, the improvement of the safety management of large-scale mobile facilities, the construction of the "re-systematization" of HSE management, the improvement of the construction of workgroups, the construction of the intelligent control platform for safety risks, etc. The number of production and safety accidents fell for three consecutive years. According to the rules in the industry and the requirements of the Group Company, the Company mainly adopts OSHA values to count the number of work-related injuries. In 2023, the OSHA recordable accident rate was 0. The Company did not have any lost workday events due to work-related injuries, and there were no fatal accidents due to work-related injuries in the past three years, including this reporting period.

The Company implements the requirements of "three simultaneous", conducting comprehensive risk assessment of occupational disease hazards, graded management of hearing protection for noise workers, and organizing the reporting of China BlueChemical Occupational Health Management System. The Company continuously strengthens the trainings of prevention and control of occupational hazards, improves the awareness of occupational safety and health of all staff, actively controls occupational hazards, controls, and eliminates occupational diseases, improving the management level of prevention and control of occupational hazards. In 2023, the Company prioritized the improvement of the operating environment and reinforcement of employees' occupational health as key tasks. It focused on propagating the prevention and control of occupational diseases, establishing training and management systems, equipping individual protection facilities, and implementing dust prevention measures, among others, to create a safe and healthy working environment for all employees of the Company.

In 2023



1,536

employees were exposed to occupational disease hazards



100%

medical examination rate

There were no suspected cases or cases of occupational diseases found during medical examinations.



Data on work-related deaths for the past three years

Number of work-related deaths

0 person      0 person      0 person  
2021            2022            2023

Percentage of work-related deaths

0%            0%            0%  
2021            2022            2023

Number of working days lost due to work-related injuries

56 days      42 days      0 day  
2021            2022            2023

## Employee care

The Company cares about employees facing difficulties and has revised and issued the *China BlueChemical Difficulty Support Work Management Measures (Trial)* to implement precise support by various measures. The Company established the China BlueChemical Difficulty Support Leading Group to enhance the scientific and standardized implementation of difficulty support work. Utilizing special funds for difficulty support, the Company organized the implementation of difficulty support work in 2023, providing precise support for different types of workers' families. In 2023, the Company provided precise support 347 times to workers facing difficulties, disabled workers, workers with serious illnesses, and their family members. This effectively conveyed the Company's warmth and care to each worker facing difficulties.





# 05

## Green Development, the Path to Low-carbon and Sustainability

The Company has always adhered to the investment decision-making mechanism of giving priority to ecological protection over economic benefits, with the goal of creating a “Green Chemical Enterprise”. It closely monitors the environmental protection requirements of the Company’s stakeholders, takes various measures to save energy and reduce emissions, strengthens the compliance management of the Company’s environmental protection work, and explores a new green development model that promotes win-win between production and operation and ecological environmental protection. In 2023, the Company will continue to implement the green and low-carbon development strategy, maintaining its leading position in energy efficiency. The Company’s methanol plant has been awarded the honorary title of “Energy Efficiency Leader” by the China Petroleum and Chemical Industry Federation for 12 consecutive years, and the ammonia plant has received the honorary title of “Water Efficiency Leader” by the China Nitrogen Fertilizer Industry Association for 4 consecutive years.





## Environmental management

The Company closely monitors the environmental impact of its production and operations, adhering to relevant environmental protection laws and regulations. It has built and implemented a comprehensive environmental management system in line with industry standards, viewing environmental protection as a crucial indicator of the enterprise's commitment to green values. Strict adherence to the *Environmental Protection Law of the People's Republic of China*, *Regulations on the Administration of Environmental Protection of Construction Projects* and other regulations, the Company formulates *Management Measures for Eco-environmental Protection and Regulation for Enterprise Environmental Risk Management* and other regulation to continuously strengthen environmental management.

### Environmental Management System

China BlueChemical has established an effective environmental management system, including the Quality, Health, Safety, and Environmental Protection Committee responsible for major decisions regarding safety and environmental protection. The Department of Safety and Production formulates the Company's overall environmental protection policy, ensuring its implementation, while also guiding, supervising, and assessing the environmental protection efforts of subordinate units. Each subordinate unit undertakes specific environmental protection measures and complies with responsibilities for environmental protection management.

During the reporting period, China BlueChemical's Fudao Chemical obtained ISO 14001 environmental management system certification. In 2023, China BlueChemical did not experience any environmental violations.



## Risk management

The Company actively implements the *Law of the People's Republic of China on Environmental Protection* and its supporting regulations, strictly implementing the requirements of simultaneous design, construction and commissioning of environmental protection measures and project construction. It strengthens the promotion of environmental protection and hidden danger management, and comprehensively controls the environmental risks of the enterprise.

The Company has formulated the *Rules for Corporate Environmental Risk Management* to correctly guide the normalized management of corporate environmental risks, consolidating the main responsibility of hierarchical management of ecological environmental protection, and enhancing the Company's ability to respond to environmental events. The Department of Safety and Production is responsible for upkeeping the environmental risk management system, guiding the subordinate units to carry out environmental risk management work, establishing the Company's risk management and control system for environmental emergencies, identifying the risks of environmental events, organizing and carrying out the Company-level investigation and management of environmental hazards, rectification and improvement of environmental protection compliance issues as well as management of environmentally sensitive information. This is done so as to ensure that the environmental risks are effectively controlled.

Environmental risks are uncertain and random. The Company has established an early warning system for environmental emergencies and has continuously improved the online monitoring system for the operation status of facilities and equipment, the online monitoring system for characteristic pollutants and toxic and hazardous gas emissions, the remote video monitoring system and the monitoring system for the transportation of hazardous chemicals and radioactive substances, etc., to effectively warn of a series of environmental risks.

As an important part of the response to environmental accidents, the environmental emergency response plan can effectively reduce the possibility and severity of environmental emergencies and safeguard the lives and properties of the residents of the surrounding communities and environmental safety. The Company has formulated an environmental emergency management plan, clarified the process of handling emergency environmental incidents, and endeavored to reduce the impact of acute environmental incidents on society and the environment.



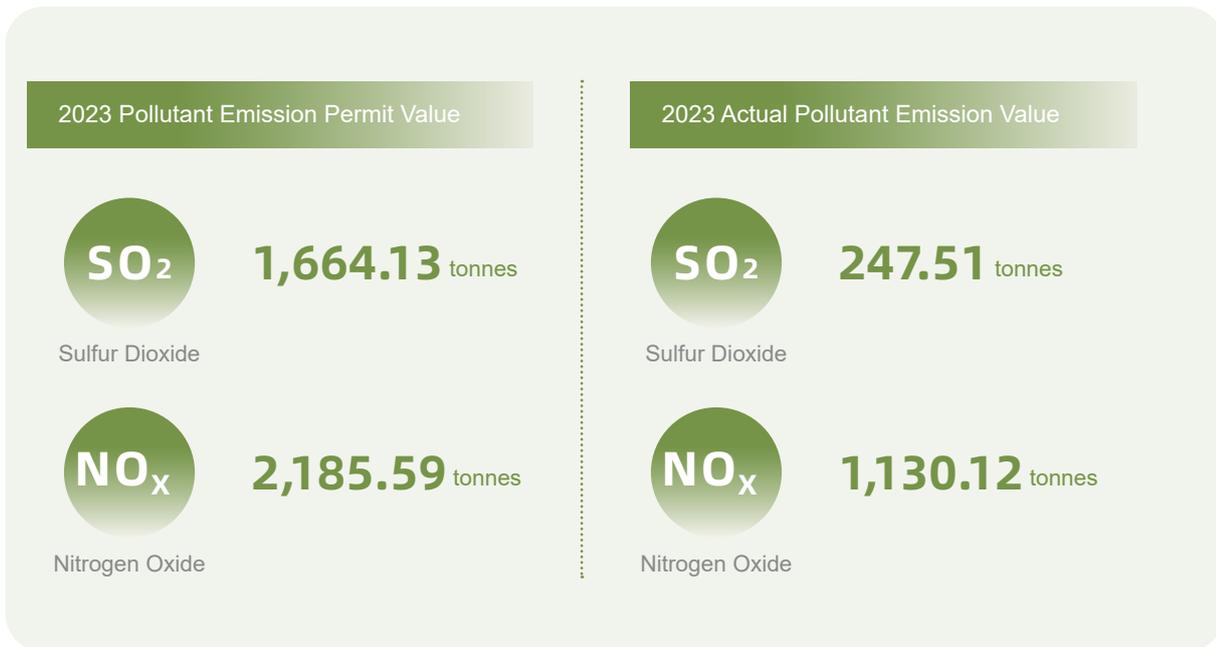
## Emissions management

The Company complies with the *Environmental Protection Law of the People's Republic of China*, the *Air Pollution Prevention and Control Law of the People's Republic of China*, the *Water Pollution Prevention and Control Law of the People's Republic of China*, the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes*, and other relevant laws and regulations. It strengthens the management of discharges, and continues to optimize and improve the production process and the procedures for the disposal of wastes to reduce the impacts on the environment.



## Emission control

The Company produces urea and methanol with natural gas and coal as raw materials, and ammonium phosphate (monoammonium phosphate and diammonium phosphate) and compound fertilizer with phosphate ore, sulfur and synthetic ammonia as raw materials, with the main emissions of CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub> and other exhaust gases. The Company strictly implements the *Law of the People's Republic of China on Prevention and Control of Air Pollution*, *Comprehensive Emission Standards for Air Pollutants*, *Emission Standards for Air Pollutants from Thermal Power Plants*, and other regulations and standards. The production units meets the SO<sub>2</sub>, NO<sub>x</sub> national environmental protection emission standards, and focuses on promoting the flue gas treatment of coal-fired boilers and other major environmental protection treatment projects, greatly reducing the emission of air pollutants.



### [Case] Fudao Chemical realizes the upgrading of exhaust gas treatment

Fudao Chemical is equipped with two sets of advanced urea plants and two sets of top-quality methanol plants, with an annual capacity of 1.32 million tonnes and 1.4 million tonnes respectively. In response to the requirements of national pollution prevention and the battle for blue sky, Fudao Chemical has carried out a number of exhaust gas treatment and upgrading, including gas turbine and auxiliary boiler denitrification renovation, formaldehyde and methanol loading station VOCs treatments, and the renovation of closed sampling points.

Regarding denitrification renovation, the company overcame the difficulties of the epidemic in 2020 and completed the upgrading of the gas turbine, adopting low-NO<sub>x</sub> combustion technology, transforming the traditional combustion chamber into a dry low-NO<sub>x</sub> emission combustion chamber, and realizing a significant reduction of NO<sub>x</sub> emissions by adding an ammonia injection device to auxiliary boilers and applying SNCR and SCR technologies. For formaldehyde VOCs treatment, the company built a new VOC control facility for the loading dock and adopted technologies such as three-stage water washing, CO catalytic oxidation, three-stage condensation, water washing and biological purification, which effectively improved the removal efficiency and achieved more than 97% stable removal effect. In addition, the VOCs emissions during the sampling process have been minimized through the closed sampling renovation. By continuously optimizing and adjusting the process indexes of the production system, continuously investing in environmental protection, and actively completing the upgrading and renovation of environmental protection management, Fudao Chemical has achieved the reduction of pollutant emissions.



Formaldehyde VOCs treatment device



Confined Sampling Point Modification

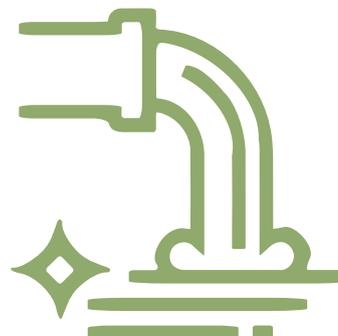
### Solid waste management

The Company's non-hazardous waste mainly consists of solid waste such as boiler ash produced during the production process, while the hazardous waste mainly consists of catalysts used in the production of products. The Company attaches great importance to the generation and disposal of hazardous and non-hazardous waste, strictly implements the *General Industrial Solid Waste Storage and Disposal Site Pollution Control Standards*, *Hazardous Waste Storage Pollution Control Standards* and *Hazardous Waste Management Regulation* and other requirements, standardizes the collection, storage, declaration, transfer and other activities of hazardous waste to develop relevant management systems and processes. The Company adopts anti-dispersion, anti-volatilization, anti-loss, anti-leakage or other measures to prevent environmental pollution, avoid environmental pollution caused by sprinkling, and entrusts units with national environmental protection qualifications to handle hazardous waste professionally, and the safe disposal rate reaches 100%. Due to the Company's production pattern, solid waste production is uncertain and it is difficult to set a clear reduction target, but the Company will continue to carry out safe disposal and maintain a 100% safe disposal rate.



### Wastewater management

The Company's wastewater mainly comes from industrial wastewater and domestic sewage. The Company complies with the *Standards of Emission Standards for Water Pollutants in Ammonia Industry*, *Emission Standards for Pollutants in Petrochemical Industry*, *Emission Standards for Pollutants in Petroleum Refining Industry*, etc., and strictly treats industrial wastewater and domestic sewage to achieve the standard discharge. It improves the efficiency of wastewater reuse and reduces the wastewater discharge. The Company's cumulative emission of Chemical Oxygen Demand (COD) in 2023 was 42.08 tonnes and ammonia nitrogen (NH<sub>3</sub>-N) was 0.60 tonnes.





2023 Pollutant Emission Permit Value

**COD** 50.69 tonnes

Chemical Oxygen Demand

**NH<sub>3</sub>-N** 15 tonnes

Ammonia Nitrogen

2023 Actual Pollutant Emission Value

**COD** 42.08 tonnes

Chemical Oxygen Demand

**NH<sub>3</sub>-N** 0.60 tonnes

Ammonia Nitrogen



[Case] Recycling of wastewater from production in Dayukou Chemical

Dayukou Chemical is committed to the full recycling of wastewater, ensuring that it meets the standards for reuse by installing advanced water purification devices for in-depth treatment and purification of wastewater. This measure not only realizes 100% treatment and reuse of the return water in the tailing pond, but also significantly reduces the dependence on and consumption of fresh water by each production unit, effectively reduces the pollution pressure on natural water bodies, and demonstrates Dayukou Chemical's social responsibility and commitment to environmental protection and sustainable development.



[Case] Huahe Company Completed Water System Optimization and Upgrading

In the water system optimization and upgrading project, Huahe Company has adopted the innovative technology of quality separation treatment, effectively reducing the emissions, pollutant concentration and total amount of wastewater discharged. By upgrading the wastewater system with a two-stage AO+MBR process to replace the original SBR biochemical system, the removal efficiency of pollutants and the system's shock resistance have significantly improved, ensuring the stability and high efficiency of treatment. In addition, the optimization of iron removal process in the raw water station significantly reduces the concentration of iron ions in the make-up water of the circulating water system and improves the concentration multiplication rate of the circulating water, thereby reducing the amount of sewage. Meanwhile, the Company adopts inclined tube sedimentation tank and submerged ultrafiltration process to treat clean water, realizing the reuse of circulating water and effectively reducing the discharge of pollutants.

After this optimization and upgrading, Huahe's annual discharged wastewater volume has been reduced by 20.8%, while meeting the total pollutant control standards. The total COD discharge has been reduced by 18%, the total ammonia nitrogen discharge has dropped by 79%, and the total nitrogen discharge has been reduced by 53.6%. The annual recycled water reuse reached about 590,000 tonnes, significantly reducing the demand for fresh water. This case fully demonstrates Huahe's outstanding achievements in environmental protection and resource recycling, providing a model for water system management in the industry.

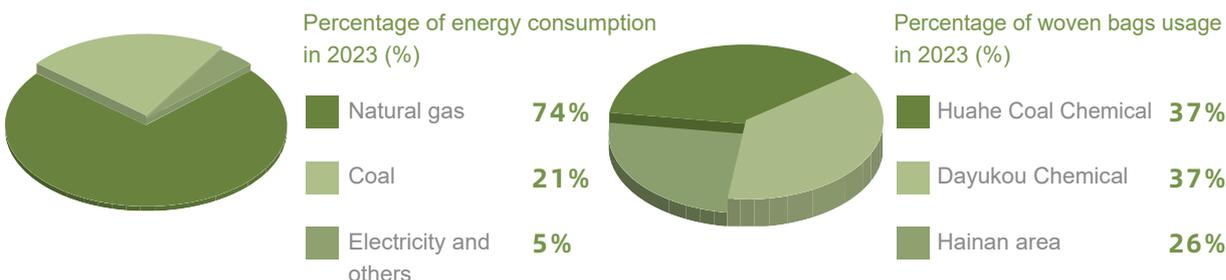
## Energy and resource use

The Company strictly abides by the *Energy Conservation Law of the People's Republic of China* and other relevant laws and regulations, continuously improving the energy management system, implementing refined management, enhancing the efficiency of energy use in the production process, and continuously optimizing the structure of energy use.

### Resource use

The energy sources utilized by the Company mainly include natural gas, coal, and electricity, etc. In 2023, the enterprise's consolidated energy consumption will be 3,599,400 tonnes of standard coal, of which natural gas consumption will be 3,515,670,000 standard cubic meters (mscm), accounting for 74% of the total energy consumption; coal consumption will be 1,073,425.12 tonnes, accounting for 21% of the total energy consumption; and electricity and others accounted for 5%.

In 2023, the Company consumed 6,181 tonnes of woven bags, of which about 1,634 tonnes in Hainan area accounted for 26%, about 2,278 tonnes in Dayukou Chemical accounted for 37%, and about 2,269 tonnes in Huahe Coal Chemical accounted for 37%.



<p>Total energy consumption</p> <p><b>3,599,423.09</b> tonnes of standard coal</p> <p>Total electricity consumption</p> <p><b>61,174.52</b> 10000 KWh</p> <p>Cleaned coal</p> <p><b>547,841.09</b> tonnes</p> <p>Natural gas</p> <p><b>350,156.70</b> 10000 cubic meters</p> <p>liquefied petroleum gas</p> <p><b>207.94</b> tonnes</p> <p>Heat</p> <p><b>1,067,096.91</b> MkJ</p>	<p>Intensity of total energy consumption</p> <p><b>956.28</b> tonnes of standard coal/person</p> <p>Intensity of total electricity consumption</p> <p><b>16.25</b> 10000 KWh/person</p> <p>Bituminous coal</p> <p><b>525,584.03</b> tonnes</p> <p>Gasoline</p> <p><b>3.24</b> tonnes</p> <p>Refinery dry gas</p> <p><b>40,083.51</b> tonnes</p>
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## Water utilization

China BlueChemical adheres to the *Water Law of the People's Republic of China*, *Action Plan for the Improvement of Industrial Water Efficiency* and other laws and regulations and relevant systems of the places where it operates, in the management of water sources to ensure the rational and efficient use of water resources. In 2023, the Company consumed 28,447,800 metric tonnes of fresh water, and the Company did not encounter any problems with obtaining and utilizing water sources, without having any significant impacts on the environment and the outside world.

By the end of the “14th Five-Year Plan” (2025), the Company expects to achieve a total water savings of 283,000 tonnes from 2021 to 2025. To improve water usage efficiency, the Company actively promotes water-saving technical transformation and measure projects during the “14th Five-Year Plan” period. By carrying out comprehensive recycling and utilization of wastewater and comprehensive water management, the Company aims to further reduce primary water consumption and lower the cost of secondary water treatment, thereby enhancing water usage efficiency.



## Energy conservation

Through technological improvement and management optimization, we strive to reduce the demand for new energy and simultaneously improve the efficiency of energy use, so as to achieve the purpose of energy saving and carbon reduction. In 2023, the Company will vigorously promote the application of advanced energy-saving technologies, processes, and equipment through technological transformation and implement a series of energy-saving and carbon reduction projects.

Firms	Sports event	Content of the project	Effectiveness
Hainan Area	Installation of Lighting (Energy Saving Upgrade Project)	The purchase and installation of new LED lamps can ensure the brightness of the premise, effectively reduce power loss, effectively improve the economy of lighting, reduce the need for temporary electricity	Electricity saving 320,000 degrees, energy saving 39.3 tonnes of standard coal; Carbon reduction of 169 tonnes of CO <sub>2</sub>
Dayukou Chemical	Overall production and process optimization project	Implemented 100% cogeneration using equivalent heat drop, optimized the overall production process, and increased NPK production to achieve energy savings.	Electricity saving 6.1818 million degrees, energy saving 759.74 tonnes of standard coal; Carbon reduction of 3,249.75 tonnes of CO <sub>2</sub>
Huahe Company	Joint optimization project of air separation plant and air compressor	Under the condition of ensuring the safe and stable operation of the air separation system, the air separation device and the air compressor unit are jointly optimized in expander efficiency, rectification system efficiency, cold box cooling capacity distribution, anti-surge valve opening of the pressurized section of the air compressor unit, air compressor inlet guide vane and air compressor exhaust pressure.	76,992 tonnes of steam saved; Energy saving 8,868.23 tonnes of standard coal; Carbon reduction of 28,502.74 tonnes of CO <sub>2</sub>



By the end of the "14th Five-Year Plan"(2025), the Company expects to achieve a total energy savings of 34,844 tonnes of standard coal from 2021 to 2025. In 2025, the Company aims to control comprehensive energy consumption to 4,835,500 tonnes of standard coal, with the comprehensive energy consumption per RMB 10,000 revenue below 3.85 tonnes of standard coal per RMB 10,000 revenue. To improve energy efficiency, the Company actively implements various technical transformations and project measures during the "14th Five-Year Plan" period, including strengthening the recovery and utilization of waste heat and pressure, improving motor efficiency, adjusting product structure, and promoting the optimization of production and operation methods. In addition, the Company will also advance the construction of photovoltaic power generation projects to assist in achieving energy saving and carbon reduction goals. In 2023, the Company's energy savings were 17,800 tonnes of standard coal, and the carbon reduction was 61,700 tonnes.

### Green mining

In 2023, the Company conscientiously implemented the national policies and regulations on mining geological environment protection and restoration and management, strictly enforced the obligation of "mining while managing", and effectively carried out the rational development of mineral resources and the effective protection of the mining environment to ensure the coordinated development of development and utilization of mineral resources and environmental protection.

#### Green Mining Regulation Initiatives

- ▶ Continuously carry out the suppression and control of mine dust, and regulate the orderly stacking of ore and waste rock.
- ▶ Adopting advanced mining technology and equipment, the Company will carry out the recycling and utilization of underground drainage and production of wastewater, realizing the efficient utilization and recycling of resources, and reducing the waste and loss of resources.
- ▶ Increase the investment in the construction of an intelligent mine. On the basis of the completion of the centralized control automation platform and the micro seismic monitoring system, the Company will further realize the underground pump room unattended.
- ▶ According to the *Mineral Resources Development, Utilization and Ecological Restoration Plan*, and in accordance with the requirements of the *Annual Geological Environment Restoration and Governance Program*, we carry out the work of leveling and overlaying of discharge sites, management of collapsed areas, greening of mines and land reclamation, etc., and intensify the publicity and training on green mines, and establish a new concept that the ecological environment protection of mines is given equal importance to the development and utilization of mineral resources.

## Climate change

The Company actively implements the national "Dual Carbon" goals, adheres to the concept of "Lucid waters and lush mountains are invaluable assets", refers to the recommendations of the framework of the Task Force on Climate-related Financial Disclosure (TCFD), actively responds to climate change, promotes the identification of climate change risks and opportunities, and develops climate change risk response strategies with partners to address climate change risks. The Company has always adhered to the basic principle of "Ten precautions must be taken, even if they all may seem futile" and will continue to do a good job in coping with extreme weather. In 2023, there were no accidents or incidents caused by natural disasters.

### Climate change risks and opportunities

Based on the characteristics of the industry and our actual business operations, the Company identifies and analyzes the risks of climate change physical and transition risks, assesses its own climate risks and opportunities, and formulates corresponding countermeasures. The risks and opportunities related to climate change identified by the Company and its countermeasures are outlined below:



Climate risks and opportunities	Potential impact	Responses	
Physical risks	Flood	Increased health and safety incidents lead to higher operating costs; Repairing or replacing damaged equipment resulting in higher costs; May cause chemical spills, raising the risk of environmental contamination.	<p>The Company is actively concerned about the 2023 flood season national natural disaster risk situation forecast released by the National Disaster Reduction Commission Office, strictly abide by the safety bottom line and red line, solid and strong deployment and implementation of natural disaster prevention work to ensure the safe and stable operation of the Company.</p> <p>Improve the leadership during the disaster prevention system, do a good job in the special period of typhoon prevention, flood control, heavy protection, ensuring timely and effective disposal and reporting of accidents and dangerous situations.</p> <p>Pay close attention to the extreme weather conditions around the world, formulate response plans in advance for typhoons and natural disasters, and respond and activate the emergency plan at the first time.</p> <p>Timely cleaning and unblocking of the drainage system to prevent extensive flooding.</p> <p>Reinforcement of port facilities and timely avoidance of platforms by ships to prevent ships from anchoring, running aground and collision.</p> <p>Carry out regular inspection of materials to ensure that all kinds of raw and auxiliary materials and emergency supplies are in perfect and effective standby status to meet the daily production needs and emergency rescue in case of emergency call.</p>
	Drought and water resource urgency	The need for replenishment scheduling when incoming water from the operation site decreases the water consumption rate and increases operating costs; Caused the ship to run aground.	
	Typhoon	Resulting in damage to port facilities and ships; Repairing or replacing damaged equipment results in higher costs.	
	Geologic disaster	Increased health and safety incidents lead to higher operating costs; Repairing or replacing damaged equipment results in higher costs.	
	Rise in temperatures	High temperatures affect operational efficiency and increase operational and labor costs.	
	Increased frequency and intensity of extreme weather	This results in frequent disruptions to normal operations and prevents the Company from replenishing emergency supplies in time to respond to extreme weather.	
Transition risks	Laws and regulations related to environmental protection and low carbon are getting stricter.	The Company's operating costs have increased; Failure to meet regulatory requirements may expose the Company to penalties from regulators and affect the Company's reputation.	Continuously pay attention to the development trend of environmental protection and low-carbon laws and regulations and formulate countermeasures in a timely manner.
Opportunities	Green energy transition	Reduce dependence on fossil fuels by focusing on the development and utilization of green energy.	Actively embrace the green energy transition and policy dividends, seize the opportunities and accelerate the green transformation.
	Policy supports and subsidies	Actively respond to national policies and take advantage of national subsidies and support in green industry to accelerate the green transformation of enterprises.	

## Climate action

The Company continues to promote the integration of green and low-carbon concepts into its business operations, and help the country achieve the goals of carbon peaking and carbon neutrality. The Company's carbon emissions in 2023 was 5,781,100 tonnes, an increase of approximately 6% year-on-year due to the commencement of production of the acrylonitrile joint plant this year. Among them, the direct CO<sub>2</sub> emission (including industrial production process emission and fossil fuel combustion emission) is 5,345,800 tonnes, and the indirect CO<sub>2</sub> emission (net purchased power and heat emission) is 435,300 tonnes, of which 3,770,200 tonnes are emitted from Hainan area, accounting for 65.22%; 139,700 tonnes are emitted from Dayukou Chemical, accounting for 2.42%, and 1,871,200 tonnes are emitted from Huahe Coal Chemical, accounting for 32.37%.



Note: Hainan Area includes CNOOC Fudao, CNOOC Jiantao, CNOOC Subian, Hainan Bashuo Port and Acrylonitrile Combined Unit.

Direct (Scope 1) greenhouse gas emissions	Intensity of direct (Scope 1) greenhouse gas emissions	Indirect greenhouse gas emissions	Intensity of direct (Scope 2) greenhouse gas emissions
<b>5,345,800</b> tCO <sub>2</sub> e	<b>1,420</b> tCO <sub>2</sub> e/person	<b>435,300</b> tCO <sub>2</sub> e	<b>116</b> tCO <sub>2</sub> e/person



### [Case] Dayukou Chemical deepens energy saving and carbon reduction to increase efficiency

Dayukou Chemical actively implements the requirements of "Dual Carbon" to improve energy utilization efficiency and reduce greenhouse gas emissions. Through continuous exploration, Dayukou successfully reduced the steam turbine discharge pressure from 0.48 to 0.49 MPa to 0.42 to 0.44 MPa, which increased power generation by 2,531,700 kWh, saved 311.15 tonnes of standard coals, and reduced greenhouse gas emissions by 1,330.93 tonnes of carbon dioxide.

In the future, Dayukou Chemical will continue to dig deeper into the management of energy-saving and carbon reduction, break down the annual energy saving and emission reduction targets and formulate practical implementation measures; strengthen the energy statistics, analysis and reporting work, carry out energy saving potential analysis, and compare and analyze the energy consumption situation with the energy performance parameters, and benchmark the energy consumption situation with the domestic energy efficiency frontrunners; continue to explore the production and operation modes after the adjustment of the product structure in order to achieve a balanced and stable economic operation of the units and reduce energy consumption. We will continue to find out the production operation mode after the product structure adjustment, to ensure the balanced and stable economic operation of each device, reduce energy consumption, and continue to strive for the high-quality completion of the "Dual Carbon" goals.



Waste heat power turbine



# 06

## Win-Win Cooperation and Building Harmony



China BlueChemical is deeply committed to practicing corporate social responsibility, promoting the comprehensive development of agriculture, rural areas and farmers, and actively engaging in public welfare and charity. Through the implementation of various social responsibility initiatives such as peer-to-peer donations and fertilizer assistance, we help farmers increase their incomes, promote the sustainable progress of agriculture, and ensure the stable development of rural areas.





# Help with rural revitalization

China BlueChemical adheres to the strategy of "Storing grain in technology and hiding technology in Fertilizer", promotes the upgrading of new technology and the promotion of new fertilizers, and contributes to the revitalization of China's rural areas. The Company has set up the director of the rural revitalization leading group office to lead the rural revitalization matters, and carried out cultural and educational support, technological innovation support, talent and financial support, and other initiatives in 2023, to put its corporate social responsibility into practice.

## Cultural and educational support

China BlueChemical supports the educational cause of Xiahe County and Cooperation City in Gannan Tibetan Autonomous Prefecture, donating books to Cooperation City and Xiahe County, and donating start-up funds to Nationalities Pictorial Newspaper to carry out rural revitalization publicity, so as to promote the revitalization of the tourism industry through cultural revitalization.

## Technological innovation support

Promote the establishment of the Wuzhishan City, Hainan Province, large-leaf tea science and technology courtyard, Hainan Qionghai yellow crystal fruit and Dongfang City, organic fertilizer science and technology courtyard, Baoting County, Hainan Province, the construction of rich island of plant nutrient solutions as a demonstration field for local villagers to set up a zero-distance, zero-threshold, zero-cost exchanges with the team of experts in the development of agriculture experience, learning fertilizer technology platform, to lead the local villagers to embark on a path to prosperity.

## Talent and financial support

Fudao Chemical and Basuo Port, according to the requirements of the local government, sent a total of four village cadres, responsible for assisting and supporting local rural revitalization work in accordance with the requirements of the higher level government, mainly to carry out the continuous consolidation of the "Three Guarantees" and drinking water safety, the full implementation of the prevention of returning to poverty and poverty dynamic monitoring, promote the improvement of human settlements, continue to strengthen stable employment, and vigorously carry out financial assistance and other work.



## [Case] Science and Technology Courtyard in Wuzhi Mountain

The scientific research and production line moved to the field, so that the "ivory tower" and "soil" intermingling and mutual aid, science and technology courtyard is not only the agricultural science and technology innovation of the "front line", but also breeding the development of unlimited power.

In 2023, China BlueChemical signed a tripartite strategic cooperation agreement with Hainan Provincial Department of Agriculture and Rural Affairs and Hainan University, to take the Company's existing new green fertilizer products as the basis, relying on the in-depth cooperation with universities, to establish an integrated platform for industry, academia and research with a science and technology academy, and to explore a new model of "government-led, science and technology-supported, enterprise-operated, and farmer-benefited" rural revitalization. Let the tea become the villagers to increase income and prosperity of the "golden leaves", so that "Fudao" fertilizer become a "signature brand" which is known far and wide.

# Supply chain management

China BlueChemical continuously improves the supply chain management system, formulates the *Supplier Management Measures*, *Supplier Management Implementation Rules*, etc., and carries out the management mode of centralized management and hierarchical responsibility for suppliers. The Engineering and Procurement Department of the Company is responsible for the formulation of supply chain management system, and the Procurement and Sharing Center of the Company is responsible for the construction and maintenance of the supplier database, including the approval of supplier entry, annual assessment, and optimization management of the supplier database, etc. The stationing team of the Procurement and Sharing Center in each subsidiary is responsible for the recommendation of the suppliers, preliminary examination, and process assessment.



### Supplier Admission

The Company's supplier management implements the principle of "Manage first, Admit latter" and establishes a list of qualified suppliers. The channels of admission of the list include admission after signing the procurement contract, admission after taking the initiative to develop and carry out the necessary audits, and invitation of the suppliers on the list to participate in the Company's purchasing business within the scope of the approved product categories.

### Supplier Review and Evaluation

At the stage of supplier bidding qualification requirements, the Company will set the qualification certificates, green and social credit, and other supporting materials that the bidders must provide according to the specific project requirements. During the supplier qualification review stage, the Company assesses the supplier's qualifications, performance, environmental and social risks through government websites such as the State Administration of Taxation, Judgment Website, Credit China, etc., and conducts on-site assessments and inspections of the supplier's production capacity, quality system, and environmental certifications. This process is designed to ensure that the selected suppliers can provide stable and reliable supply quality and comply with national production safety and environmental protection standards. During the bid evaluation and finalization stage, the Company carries out step-by-step approval and supervision in accordance with the provisions of the supply chain management system, and finally establishes contractual relationships with suppliers.

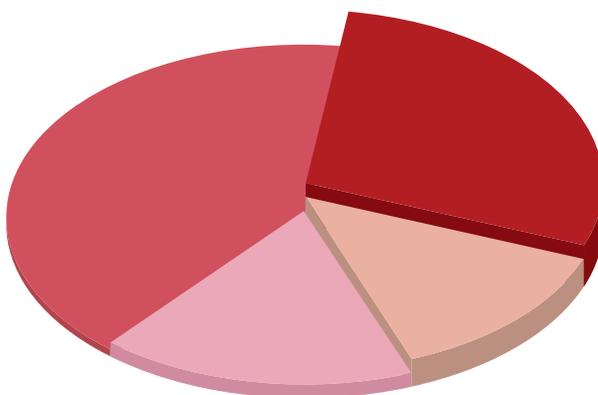
### Supplier environmental and social risk management

We emphasize environmental and social risk management in the supply chain system. The Company clearly states that it will give appropriate preferential incentives to suppliers that use green, environmentally friendly and energy-saving products and services. In the actual procurement work, the Company gives extra points to suppliers using green and energy-saving products and services according to the bid evaluation program of the comprehensive bid evaluation method. It also supervises the procurement process and contract implementation.

### Supervision of supplier performance

The Company monitors the contractual performance of suppliers in accordance with relevant systems and contract terms to ensure that the products provided by suppliers are of high quality and timely supply and comply with local government policies and safety and environmental protection regulations. Through the procurement business information system, the Company centralizes online control of procurement transactions and supplier pool information, and tracks supplier services throughout the procurement process. The Company also implements dynamic appraisal, i.e., one trade one appraisal, and regularly monitors and appraises, evaluates and classifies and grades suppliers annually.

Adhering to the principles of fair operation, mutual trust and reliance, and win-win cooperation, we advocate the establishment of a business environment of fair competition, equality and mutual benefit, and the establishment of a reasonable evaluation and management mechanism and communication mechanism with various suppliers and partners. This strongly prevents illegal and illicit behaviors such as underhanded operation and commercial bribery, and promotes the sustainability of the supply chain.



Number of suppliers by region

Northeastern China	<b>252 companies</b>
North and Central China	<b>1,046 companies</b>
Southern China	<b>496 companies</b>
Other areas	<b>855 companies</b>



## Community benefit

China BlueChemical regards giving back to the community as a corporate responsibility, actively participates in social welfare activities, is committed to serving community building, supports education development, and promotes the harmonious coexistence of enterprises and communities through various forms of donations. In 2023, annual expenditure in charitable public welfare donations amounted to RMB 2,992,500.

### Industry support

Since 2002, the Company has sent 12 cadres to cooperate with the Hezuo city and Xiahe County of Gannan Prefecture in Gansu Province and Wuzhishan City in Hainan Province, exporting competent strength to the front line of poverty alleviation and assisting the Group in implementing nearly 100 projects involving over RMB 100 million, and striving to provide support for the impoverished areas with measures like "blood transfusion" and "blood creation". Hezuo City, Xiahe County and Wuzhi mountain City achieved poverty eradication in 2018, 2019 and 2020 respectively.

### Consumption support

The Company vigorously carried out consumption support through purchasing supportive products amounting to about RMB 2.41 million for the whole year. The Company actively implemented the procurement of products from employment-help factories, with an annual procurement amount of about RMB 6.81 million. This included 13,493 sets of uniforms procured, amounting to RMB 5.09 million, and 5,967 pairs of work shoes procured, amounting to RMB 1.72 million. The Company also centralized fixed-point procurement of agricultural and sideline products in helping areas (Gannan, Wuzhi mountain, etc.), amounting to about RMB 234,000.



Fudao Chemical Fertilizer Donation Campaign

## ○ Volunteer service

The Company has 5 youth volunteer service teams and 359 youth volunteers active in the front line, actively participating in various activities such as rural revitalization, difficulty assistance, public welfare and environmental protection, and educational services. On "World Ocean Day", "World Soil Day" and other occasions, the Company has carried out 37 instances of volunteer services centering on farmland protection, energy saving and environmental protection, which have been highly recognized by the local government. Fudao Chemical carried out the volunteer service of "protecting arable land" and received appreciation from the local village committee. Dayukou Chemical carried out "Micro Wish" volunteer fundraising and made 87 donations to Hubei Youth Development Fund.



The Company has

**5** youth volunteer service teams



**359** youth volunteers



carried out

**37** times of volunteer services



Volunteers help with "World Ocean Day" activities



## Key Performance Indicators Table

Environmental and social indicators			Data	Unit	
Emissions Management	Air	SO <sub>2</sub>	247.51	tonnes	
		NO <sub>x</sub>	1,130.12	tonnes	
		COD	42.08	tonnes	
	Water	NH <sub>3</sub> -N	0.60	tonnes	
		Hazardous waste	55,096	tonnes	
	Solid waste	Intensity of hazardous waste	14.64	tonnes/person	
		Non-hazardous waste	2,698,930	tonnes	
		Intensity of non-hazardous waste	717.04	tonnes/person	
	Direct (Scope 1) greenhouse gas emissions			5,345,800	tCO <sub>2</sub> e
	Intensity of direct (Scope 1) greenhouse gas emissions			1,420	tCO <sub>2</sub> e/person
	Indirect greenhouse gas emissions			435,300	tCO <sub>2</sub> e
	Intensity of indirect (Scope 2) greenhouse gas emissions			116	tCO <sub>2</sub> e/person
Resource Use	Total energy consumption		3,599,423.09	tonnes of standard coal	
	Intensity of total energy consumption		956.28	tonnes of standard coal/person	
	Gasoline consumption		3.24	tonnes	
	Diesel consumption		1,356.07	tonnes	
	Cleaned coal consumption		547,841.09	tonnes	
	Bituminous coal consumption		525,584.03	tonnes	
	Natural gas consumption		350,156.70	10000 cubic meters	
	Liquefied petroleum gas consumption		207.94	tonnes	
	Refinery dry gas consumption		40,083.51	tonnes	
	Heat consumption		1,067,096.91	MkJ	
	Total electricity consumption		61,174.52	10000 kWh	
	Intensity of total electricity consumption		16.25	10000 kWh/person	
	Combined energy consumption of Urea		0.1438	tonnes of standard coal/tonnes	
	Combined energy consumption of methanol		1.1203	tonnes of standard coal/tonnes	
	Total water consumption		28,447,800	tonnes	
	Intensity of water consumption		21.90	tonnes/RMB 10,000 revenue	
	Reuse of water		13,690,093	tonnes	
	Piped water		8,626,900	tonnes	
	Underground water		572,100	tonnes	
	Surface water		17,611,200	tonnes	
	Outsourcing and other aquatic products		8,453	tonnes	
	Purchased steam		7,923	tonnes	
	Combined Urea water consumption		2.57	tonnes/tonnes	
Combined methanol water consumption		3.54	tonnes/tonnes		
Woven bag		6,181	tonnes		
Employee Responsibility	Total number of employees		3,764	persons	
	Number of employees by types	Full-time employees	3,764	persons	
		Part-time employees	0	person	
		Labor dispatch employees	22	persons	
	Number of employees by gender	Male employees	3,134	persons	
		Female employees	630	persons	
	Number of employees by age	Under Age 30	403	persons	
Age 31-50		2,163	persons		
Over Age 50		1,198	persons		

Environmental and social indicators		Data	Unit
Employee Responsibility	Number of employees by region	Beijing	233 persons
		Hainan	2,000 persons
		Hubei	985 persons
		Heilongjiang	451 persons
		Others	95 persons
	Employee turnover rate		1.46 %
	Employee turnover rate by gender	Male employees	1.40 %
		Female employees	1.75 %
	Employee turnover by age	Under Age 30	6.95 %
		Age 31-50	0.92 %
		Over Age 50	0.58 %
	Employee turnover by region	Beijing	2.58 %
		Hainan	1.00 %
		Hubei	0.91 %
		Heilongjiang	3.55 %
		Others	4.21 %
	Number of work-related deaths		0 person
	Work-related death rate		0 %
	Number of working days lost due to injury		0 day
	Percentage of employees trained by gender	Male employees	83 %
Female employees		17 %	
Percentage of employees trained by employee types	Senior management	0.1 %	
	Middle management	2.3 %	
	Basic level employees	97.6 %	
Average number of hours trained by gender	Male employees	161.46 hours	
	Female employees	155.88 hours	
Average number of hours trained by employee types	Senior management	276.85 hours	
	Middle management	208.03 hours	
	Basic level employees	159.24 hours	
Supply Chain Management	Total number of suppliers in the Company's supplier directory		2,649 companies
	Number of suppliers by regions	Northeastern China	252 companies
		North and Central China	1,046 companies
		Southern China	496 companies
		Other regions	855 companies
Number of suppliers that have conducted environment and social related audits		2,649 companies	
Product Responsibility	R&D investment		8,544 RMB 10000
	Number of recalls for safety and health reasons out of total products sold or shipped		0 piece
	Number of product quality complaints		25 times
	Effective complaint handling rate		100 %
	Number of new intellectual property rights added in the year		23 pieces
	Intellectual property holdings		152 pieces
	Urea product qualification rate		100 %
	Methanol product qualification rate		100 %
	Urea product excellence rate		99.88 %
Methanol product excellence rate		100 %	
Anti-corruption	Number of corruption litigation cases		0 case
	Average training hours of management participation in anti-corruption trainings		63 hours
	Average training hours of employees participation in anti-corruption trainings		90 hours
Community Welfare	Total public welfare donations		299.25 RMB 10000



# HKEX ESG Reporting Guide

Main areas	Descriptive	Relevant chapters
A. Environment		
Aspect A1: Emissions		
General Disclosure	Emissions of exhaust gases and greenhouse gases, discharges to water and land, generation of hazardous and non-hazardous wastes, etc: (a) the policies; and (b) information on compliance with relevant laws and regulations that have a material effect on the issuer.	Emissions management
A1.1	The types of emissions and respective emissions data.	Emission control, wastewater management
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions and, where appropriate, intensity.	Goals and targets
A1.3	Total hazardous waste produced and, where appropriate, intensity.	Solid waste management
A1.4	Total non-hazardous waste produced and, where appropriate, intensity.	Solid waste management
A1.5	Description of emissions target(s) set and steps taken to achieve them.	Emissions management, goals and targets
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Solid waste management
Aspect A2: Resource utilization		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials	Energy and resource use
A2.1	Direct and/or indirect energy consumption by type in total and intensity.	Energy use
A2.2	Water consumption in total and intensity.	Water utilization
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Energy conservation
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Water utilization
A2.5	Total packaging material used for finished products and, if applicable, with reference to per unit produced.	Key performance indicators table
Aspect A3: Environment and natural resources		
General Disclosure	Policies on minimizing the issuer's significant impacts on the environment and natural resources	Environmental management
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Environmental management system, risk management



Main areas	Descriptive	Relevant chapters
Aspect A4: Climate change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Climate change risks and opportunities
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Climate change
B. Society		
Aspect B1: Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti – discrimination, and other benefits and welfare.	Employee rights and benefits
B1.1	Total workforce by gender, employment type, age group and geographical region.	Employee rights and benefits
B1.2	Employee turnover rate by gender, age group and geographical region.	Employee rights and benefits
Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Occupational health and safety
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Occupational health and safety
B2.2	Lost days due to work injury.	Occupational health and safety
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Occupational health and safety
Aspect B3: Development and training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Development and trainings
B3.1	The percentage of employees trained by gender and employee category.	Development and trainings
B3.2	The average training hours completed per employee by gender and employee category.	Development and trainings
Aspect B4: Labor Guidelines		
General Disclosure	Information on: (a) the policy; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Employee rights and benefits
B4.1	Description of measures to review employment practices to avoid child and forced labor.	Employee rights and benefits
B4.2	Description of steps taken to eliminate such practices when discovered.	Employee rights and benefits



Main areas	Descriptive	Relevant chapters
<b>Aspect B5: Supply Chain Management</b>		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Supply chain management
B5.1	Number of suppliers by geographical region	Supply chain management
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Supply chain management
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Supply chain management
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Supply chain management
<b>Aspect B6: Product Liability</b>		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Product quality and safety, customer relationship management
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Product quality and safety
B6.2	Number of products and service related complaints received and how they are dealt with.	Customer relationship management
B6.3	Description of practices relating to observing and protecting intellectual property rights.	Innovation and R&D
B6.4	Description of quality assurance process and recall procedures.	Product quality and safety
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Customer relationship management
<b>Aspect B7: Anti-Corruption</b>		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Compliance management
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Compliance management
B7.2	Description of preventive measures and whistle – blowing procedures, and how they are implemented and monitored.	Compliance management
B7.3	Description of anti-corruption training provided to directors and staff.	Compliance management
<b>Aspect B8: Community investment</b>		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Help with rural revitalization, community benefit
B8.1	Focus areas of contribution.	Help with rural revitalization, community benefit
B8.2	Resources contributed to the focus area.	Help with rural revitalization, community benefit

# Reader Feedback Form

Greetings, esteemed readers:

Thank you very much for reading the 2023 Environmental, Social and Governance (ESG) Report of China BlueChemical Ltd. in your busy schedule. We look forward to your comments and suggestions on the report and our work. You can mail or scan the completed questionnaire and send it back to us by e-mail to give us your valuable opinions. Thank you!

You can also fill out the online questionnaire by scanning the QR code below:



## 1. Which category of stakeholders do you/your organization belong to in China BlueChemical:

- |                                                       |                                                               |                                                      |
|-------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> Shareholder/Investor         | <input type="checkbox"/> China BlueChemical Senior Management | <input type="checkbox"/> China BlueChemical Employee |
| <input type="checkbox"/> Government/Regulatory Agency | <input type="checkbox"/> Supplier/Contractor                  | <input type="checkbox"/> Customer                    |
| <input type="checkbox"/> Community Public             | <input type="checkbox"/> Media                                | <input type="checkbox"/> Academic Institution        |
| <input type="checkbox"/> Non-Profit Organization      | <input type="checkbox"/> Other (please specify)               |                                                      |

## 2. Is the information you concerned about reflected in the report?

- Yes                       Average                       No

## 3. Your comprehensive evaluation of the ESG Report 2023:

- Readability (easy-to-understand presentation, attractive and engaging design, easy to find the required information)

- 3 points (good)                       2 points (fair)                       1 point (poor)

- Credibility (the information in the report is true and credible)

- 3 points (good)                       2 points (fair)                       1 point (poor)

- Information integrity (both positive and negative information and meet your information needs)

- 3 points (good)                       2 points (fair)                       1 point (poor)

## 4. Can you easily find the information you concerned about in the report?

- Yes                       Average                       No

## 5. In addition to what has been disclosed in the report, what other information would you prefer to see?

