



DONGGUANG CHEMICAL LIMITED

東光化工有限公司

(incorporated in the Cayman Islands with limited liability) Stock Code : 1702



**2020 ENVIRONMENTAL, SOCIAL AND
GOVERNANCE REPORT**



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INTRODUCTION

About the report

Dongguang Chemical Limited (the “**the Company**”), and its subsidiaries (collectively, the “**Group**”) are pleased to submit their annual environmental, social and governance (ESG) report to disclose our ESG management policy and main operating performance.

Report period

Unless otherwise stated, the content of this report covers the year from January 1, 2020 to December 31, 2020.

Report scope

The Group focus on the research and production of urea products. At the same time, the company has added a new product-automotive urea, which is used in the field of diesel vehicles such as heavy trucks and buses.

The Group continues to fulfill its promise as a responsible company by making progress in environmental protection and sustainable development. Through cooperation with relevant stakeholders and partners, we fulfill our commitment to maintain the core values of the Group. Guided by the implementation of social responsibility plans, we focus on sustainable development, environment and society.

Reporting principles

This report aims to provide relevant stakeholders with an overview of the Group’s policies, performance and plans on major environmental and social issues. All information in this report is compiled and published in an accurate, truthful and transparent manner in accordance with existing policies, practices, and official documents or reports, and follows the following reporting principles:

Importance	Environmental, social and governance issues that have a significant impact on investors and other relevant stakeholders must be listed in this environmental, social and governance report.
Quantify	If key performance indicators are established, they must be measurable and comparable under appropriate circumstances. These indicators must also explain the purpose and effect of the quantitative information.
Balance	This Environmental, Social and Governance Report shall impartially report the Group’s performance in environmental, social and governance aspects, and avoid choices, omissions or reporting formats that may improperly influence readers’ decisions or judgments.
Consistency	This report calculates ESG data based on the “ESG Guidelines” and consistent methods.

Our ESG management policy

The Group has implemented a top-down management policy on ESG management within the group. The Board of Directors is responsible for determining the Group’s ESG strategy, assessing ESG risks and opportunities, and monitoring the overall ESG performance of the Group (including environmental management issues, labor practices and other ESG aspects).

1. COMPANY PROFILE

1.1 About us

1.1.1 Brief Introduction

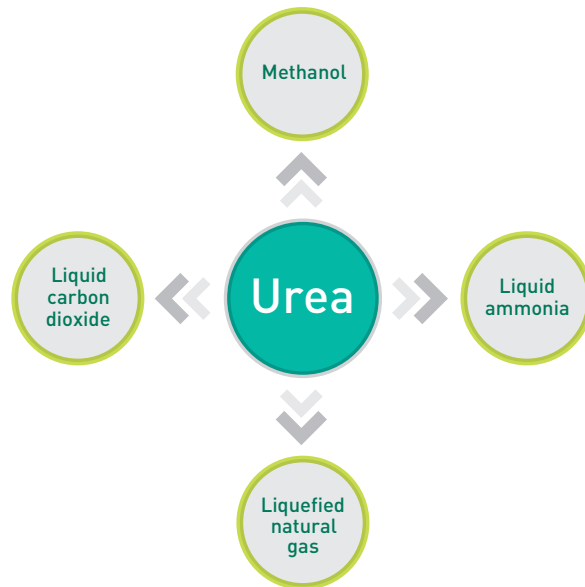
Hebei Dongguang Chemical Co., Ltd (“**Dongguang Chemical**”), the indirect wholly owned subsidiary of the Company, was originally established in 1970. Its predecessor, Hebei Dongguang Huafei Factory (“**Dongguang Huafei**”), was a local state-owned enterprise and was later privatized and reorganized in July 1998. On July 11, 2017, the Group was listed on the Main Board of the Stock Exchange of Hong Kong Limited (the “**Stock Exchange**”), (Stock code “1702”).

We have been focusing on the research and production of urea since 2001, and have gradually grown into the largest urea production enterprise in Hebei Province and ranked among the top 20 urea manufacturers over the country. We are close to major national highways, railways and important ports in North China. The superior geographical location allows the Group to quickly meet the demands of customers in various regions. The Group has maintained a good relationship with clients while building its brand image in Hebei Province and surrounding areas. We continuously improve production technology, improve product quality and quantity, and actively control costs while increasing company revenue. We focus on environmental protection and production safety, with a stable talent team and management team, laying a solid foundation for the Group’s subsequent development. The Group currently has 2 production plants equipped with advanced production equipment with a total area of 700,000 square meters. It has 1,315 employees. The Group currently has two sets of urea production plants, of which the annual production capacity of leading product urea is 1.1 million, and some by-products such as methanol, liquid CO₂, LNG, vehicle urea, etc. Since the establishment of the plant, the Group has been adopting the fixed-bed intermittent coal gasification process. After 50 years of scientific transformation and independent development, the Group has made the fixed intermittent coal gasification process fully automated and achieve zero-emission, ensuring that the production process is intrinsically safe and clean.

In July 2019, we were on the list of green factories announced by the Ministry of Industry and Information Technology and were selected as a “National Green Factory”, reflecting the society’s recognition of the Company’s environmental protection and actively promote our construction of green industry.

At the same time, the Group will continue to pay close attention to the latest development of the coronavirus and various latest regulatory announcements. We understand that the unfavorable factors of the market have brought a negative impact on our business activities, but we firmly believe that the trust and support of our stakeholders will enable us to survive a difficult period full of uncertainty.

1.1.2 Major industries



The Group is one of the major coal-based urea producers in the PRC, with headquarter located in Hebei Province. The Group mainly produces and sells urea. It also produces and sells other by-products of urea, including methanol, liquid carbon dioxide and liquid natural gas.


- Urea

Urea is a white crystal composed of carbon, nitrogen, oxygen and hydrogen. It is one of the simplest organic compounds and nitrogen fertilizer containing the highest nitrogen content. Urea is a neutral fertilizer, easy to store and use. It has little damage to the soil and is suitable for various soils and plants. Based on particle size, urea products can be categorized into granular urea (large granular) and prilled urea (small granular). Compared with the prilled urea, the granular urea has a higher fertilizer utilization rate and a longer fertilizer effect time. It is often used as a base fertilizer and has comparatively obvious seasonal characteristics. The prilled urea is slightly faster to dissolve and release after application. It is commonly used for fertilization and can be used all year round.

As the Group's main product, urea sales volume accounts for a high proportion of the total product sales year round, and customers who buy urea products mainly include (i) farmers who use urea as fertilizer; (ii) enterprises that directly sell urea to farmers; (iii) enterprises that use urea to produce synthetic fertilizers; (iv) Chemical enterprises that use urea to produce melamine and Cyan uric acid. In 2019, the Group launched a new product-compound fertilizer and tried to sell it in small quantities. Compared with urea, compound fertilizer has more nutrient elements, higher nutrient content, and improved fertilizer utilization, which plays an important role in promoting high and stable crop yields.

- Methanol

Methanol is a colorless, transparent and volatile liquid with a pungent odor. It is soluble in water and miscible in organic solvents such as ethanol and benzene. Therefore, it is an important organic chemical raw material. Methanol is mainly used in the production of formaldehyde, and is also commonly used in industries such as medicine, agriculture, chemical industry, and energy.



The methanol production methods include gas-to-methanol, coal-to-methanol, and cooking gas to methanol. Because of the lack of natural gas resources, the Group mainly uses coal to produce methanol, and is equipped with innovative equipment and utilizes technologies developed by China to facilitate the Competitors are in an advantage state.

- Liquid carbon dioxide

Liquid carbon dioxide is a gas generated in the decarbonization step during the manufacturing process of urea. It is obtained after several steps such as purification, compression, purification, distillation and cooling. Liquid carbon dioxide is often used as a refrigerant and artificial rainfall due to its extremely low temperature (-37°C); it can be used to extinguish fires caused by flammable liquids due to its rapid cooling and oxygen isolation characteristics. It is also one of the important main raw materials, for example it is often used to make products such as soda ash.

- Liquid natural gas

The main component of liquid natural gas is methane, which is recognized as the cleanest energy source on Earth. It is colorless, odorless, non-toxic, and non-corrosive. It is a relatively advanced energy source. As the heat utilization rate of natural gas can reach 55%, which is higher than that of oil and coal, many countries import liquefied natural gas for power generation. Secondly, companies that produce glass and ceramics are often far away from cities or gas pipelines while consuming a lot of energy. Compared with coal, liquefied natural gas can not only solve the above-mentioned problems, but also greatly improve the quality of products, making it a popular choice for similar enterprises. In addition, as a sustainable and clean energy source, liquefied natural gas can also be used as an alternative fuel for automobiles and as a fuel for residents' daily life.

- Liquid ammonia

Liquid ammonia, a colorless liquid with a strong pungent odor, is an important chemical raw material in industry. Liquid ammonia is widely used in the production of chemical fertilizers, such as nitric acid, and can also be used as a raw material for medicines and pesticides. Because liquid ammonia is converted into gas ammonia after gasification, it can absorb a lot of heat and is known as a refrigerant. In addition, liquid ammonia has a certain sterilization effect, so it is used for sterilization and cooling in the poultry breeding industry. At the same time, because of its special chemical properties, it is often used in the production of semiconductors and integrated circuits.

- Vehicle urea

Vehicle urea solution is an essential product for heavy-duty diesel vehicles to meet the National IV emission standards or above. It refers to an aqueous urea solution with a urea concentration of 32.5% and ultrapure water as the solvent. Heavy-duty trucks, buses and other diesel vehicles must meet the National IV emission standards, and in terms of exhaust gas treatment, it is necessary to select suitable SCR systems where urea solution is needed to treat the nitrogen oxides in the exhaust gas. Therefore, vehicle urea solution has become an essential product for heavy-duty diesel vehicles to meet the National IV emission standards.

1.1.3 Corporate social responsibility



1.2 Honors and Achievements

1.2.1 Responsibility honors overview

Since the establishment of the Group, we have won many honors with our good brand image, advanced manufacturing process, well-developed corporate governance structure, sound information disclosure system, and environmentally safe production awareness and concepts. We were honored 2011-2012 Technologically Advanced Enterprises, Top 20 National Nitrogen Fertilizer Enterprises Urea Total Profit Companies in 2015, Safety Production Standardization Secondary Enterprise in 2016. In 2018, we were honored the title of "Advanced Enterprise" and Top 20 National Nitrogen Fertilizer Enterprises Urea Production and Total Profit Companies. In 2019, it was awarded the titles of Advanced Unit of Energy Conservation and Emission Reduction in the Nitrogen Fertilizer and Methanol Industry, and "Hebei Province Credit Enterprise". In 2020, it was awarded the "2020 China Top 500 Petroleum and Chemical Enterprises", "Hebei Province Leading Industry Leading Enterprise", "China Nitrogen Fertilizer Industry Vice Chairman Unit of the Seventh Council of the Association" and other titles.

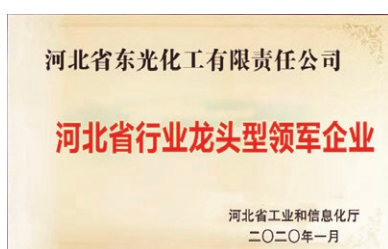
The following is an overview of the honors we received in 2020:



In October 2020, China Petroleum and Chemical Industry Federation and China Chemical Enterprise Management Association awarded Dongguang Chemical the title of "2020 China Top 500 Petroleum and Chemical Enterprises".



In October 2020, Dongguang Chemical ranked the 236th place among China's top 500 independent production and operating petroleum and chemical companies.



In January 2020, Dongguang Chemical was rated as "Leading Enterprise in Hebei Province" by Hebei Provincial Department of Industry and Information Technology.



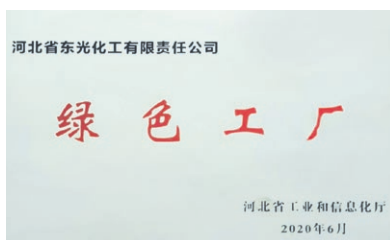
Dongguang Chemical was rated as "Honesty Enterprise in Hebei Province" by Hebei Province Honest Enterprise Selection Committee in 2020.



In September 2020, China Nitrogen Fertilizer Industry Association awarded Dongguang Chemical the title of "Vice Chairman Unit of the Seventh Council of China Nitrogen Fertilizer Industry Association".



In September 2020, Hebei Province Federation of Industry and Commerce awarded Dongguang Chemical the title of "No. 82 in the Top 100 Private Manufacturing Enterprises in Hebei Province in 2020".



In June 2020, Dongguang Chemical was awarded the title of "Green Factory" by Hebei Provincial Department of Industry and Information Technology.



In April 2020, China Nitrogen Fertilizer Industry Association awarded Dongguang Chemical "Enterprise Credit Rating AAA Credit Enterprise".



In October 2020, Dongguang Chemical participated in the "Cangzhou City 2020 Safety Production (Dangerous Chemical) Emergency Rescue" skills competition launched by the Cangzhou Municipal Administration and won the third prize of the group's overall performance and the initial fire disposal project of chemical equipment.



1.2.2 Key achievements overview

In 2020, Dongguang Chemical will continue to introduce advanced technology and equipment on the production line to effectively increase production capacity and reduce production costs. Secondly, a thorough transformation and upgrade have been carried out, in response to the environmental protection problems that have plagued the fixed-bed intermittent coal gasification process for many years. Dongguang Chemical realizes the closed circulation and clean treatment of the direct cooling of the gas-making cooling water to indirect cooling, and realize the "zero discharge" of waste water, waste gas and residue. Based on the company's continuous attention and efforts to environmentally friendly production and safe production, Dongguang Chemical has been shortlisted for the fourth batch of green manufacturing publicity lists of the Ministry of Industry and Information Technology since 2019, and has been rated as a national green factory.

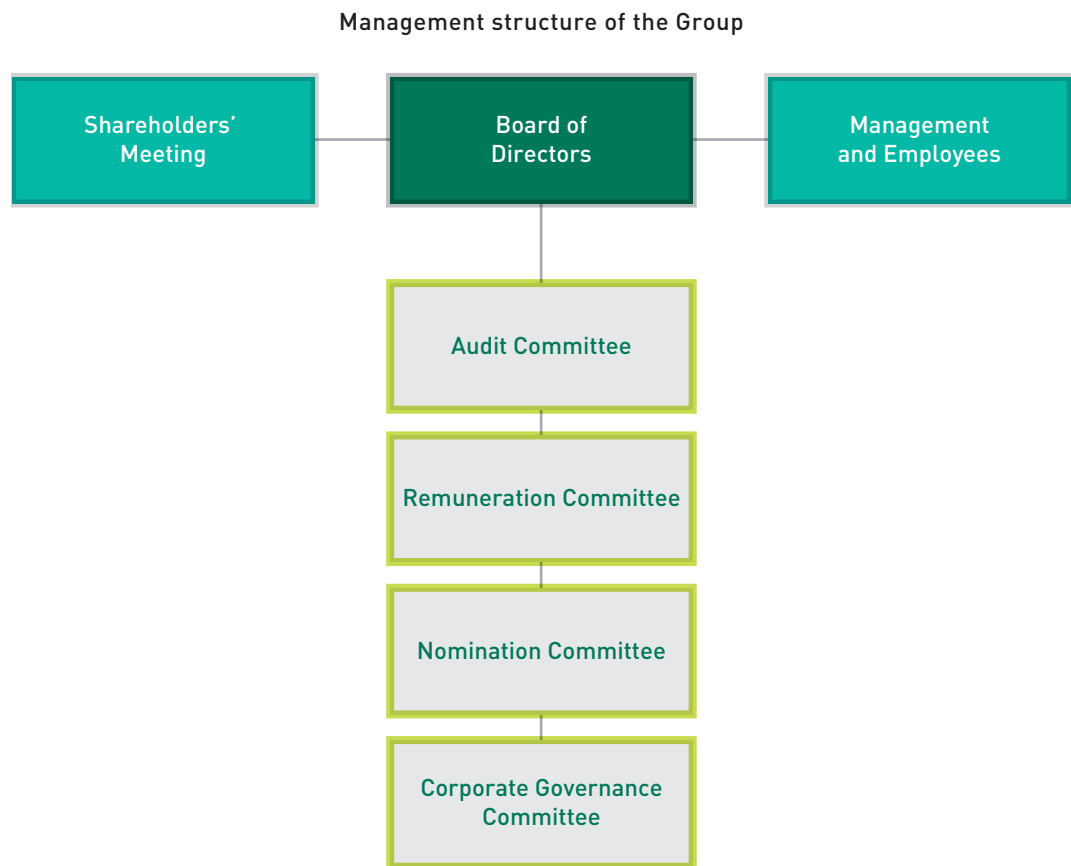
A green factory refers to a factory that realizes intensive land use, clean production, waste recycling, and low-carbon energy. In June 2015, the State Council officially issued "Made in China 2025", which proposed to adhere to the basic principles of "innovation-driven, quality first, green development, structural optimization, talent-oriented", and took the construction of green factories as a priority. The green factory is the main body of green manufacturing and plays a vital role in the industrial environmental protection upgrade. Green manufacturing is an important means to solve national resource and environmental problems, an important task for industrial transformation and upgrading, an effective way for the industry to achieve green development, and an inevitable choice for enterprises to actively assume social responsibility.

We have long been adhering to the concept of green environmental protection development, non-stop technical transformation, management and efficiency, and has done a lot of work in green transformation and achieved good results. In the future, we will continue to improve the Group's green level from various aspects such as energy and water saving, cleaner production, pollution prevention, and comprehensive utilization of resources, and improve the construction of the Group's green manufacturing system.

1.3 Corporate governance

1.3.1 Corporate Governance Framework

In accordance with relevant laws and regulations, the resolutions of the shareholders' (general) meeting and the Company's articles of association, the Group has clarified the organization of the chairman, management and various levels of the company's internal organization, staffing, responsibilities, working procedures and related requirements Hierarchical system. The Group's management structure is shown in the following table:



With reference to the above corporate governance system, the main conditions of corporate governance are as follows:

- (1) Shareholders and Shareholders' Meetings: During the year, when the general meeting of shareholders of the Group reviewed relevant proposals and the Group's major business decisions, the topics of the meeting were considered through voting and the authorities were exercised according to law.
- (2) The relationship between the controlling shareholder and the Company: The resolution of the general meeting must be passed by more than half of the voting rights held by the shareholders attending the meeting. The controlling shareholders strictly abide by the relevant laws and regulations of the securities market, regulate the company's corporate governance and information disclosure procedures, and perform their duties with due diligence to promote the standardized operation of the Company and improve the quality of the Company.
- (3) Directors and Board of Directors: All directors of the Company exercise their powers and obligations strictly in accordance with the provisions of the listing rules, perform their duties faithfully, and safeguard the interests of the Group. The directors of the Company maintain a cautious, serious and diligent attitude, and make objective and fair judgments on the resolutions considered by the board of directors based on their professional knowledge and capabilities. Regularly convene and actively participate in board meetings to promote the effective operation of the Company. The board of directors is responsible for formulating and supervising the company's strategic development and assuming the company's corporate governance responsibilities.
- (4) Executives: The Company employs and changes senior management personnel in strict accordance with the provisions of the listing rules. Senior management personnel are able to perform their duties in accordance with laws and regulations, have important responsibility for the Company's management and performance benefits, and make every effort to realize the Company's best interests.

1.3.2 Overview of Board of Directors

The board of directors is the Company's business decision-making center. The board of directors is entrusted by the general meeting of shareholders to manage the Company's property and is responsible for the general meeting of shareholders. As of December 31, 2020, the Company's board of directors is served by seven directors, including three executive directors, one non-executive director and three independent non-executive directors.

Director Information:

Name	Age	Position	Date of appointment	Date of joining the Group	Responsibility
Wang Zhihe	63	Executive director Chairman of the Board	2014.06.12	1998.07	Responsible for the Group's overall strategic development and lead the Group's business development
Sun Zushan	68	Executive director	2014.06.12	1998.07	Responsible for the overall operational management of the Group
Xu Xijiang	59	Executive director	2014.06.12	1998.07	Responsible for the overall technology and production management of the Group
Chen Jimin	47	Non-Executive Director	2018.04.06	2018.05	Supervise management, participate in the direction of the Group's business and affairs, and provide objective opinions on the issues facing the board.
Lin Xiuxiang	58	Independent non-executive director	2017.06.20	2017.06	Supervise the board, Audit Committee, Remuneration Committee, Nomination Committee, Corporate Governance Committee and make independent judgments
Liu Jincheng	57	Independent non-executive director	2017.06.20	2017.06	Supervise the board, Audit Committee, Remuneration Committee, Nomination Committee and make independent judgments
Ng Sai Leung	48	Independent non-executive director	2017.06.20	2017.06	Supervise the board, Audit Committee, Remuneration Committee, Corporate Governance Committee and make independent judgments

1.3.3 Overview of stakeholders and the communication with them

The relevant stakeholders and the Company are complementary to each other, and different stakeholders play different roles in the Company. The development of the Company is inseparable from the participation, investment and supervision of various stakeholders, so the relevant stakeholders are extremely important for the survival, development and governance of the Company, and the relevant stakeholders also achieve their own goals through the Company. Therefore, the ability to maintain good communication with relevant stakeholders will affect the Company's daily operations. The Company should maintain a certain frequency of contact with relevant stakeholders to facilitate understanding of its goals and concerns. At the same time, the opinions of relevant stakeholders are also factors that the Company needs to consider when making important decisions.

The following figure is an overview of relevant stakeholders:

Stakeholders	Main objectives and focus	Communication channel	Measures
Shareholders and investors	Steady operations, revenue payback, protection of shareholders' rights; true, accurate, and timely disclosure of information.	Interim Report, Annual Report, Shareholders' Meeting, Stock Exchange Information Disclosure	According to the Listing Rules, regularly discloses interim reports, annual reports and announcements, and holds shareholders' meetings.
Customers	Product quality and quantity guarantee, long-term and stable cooperation.	Visit regularly and maintain daily communication.	Establish a quality inspection center and a customer service center. Strictly monitor product quality and provides customers with satisfactory products. While focus on protecting the interests of customers, facilitating customers and serving customers and ensuring the smooth delivery of goods.
Government	Operating legally, paying taxes according to law, producing safe and environmentally friendly, fulfilling social responsibilities.	On-site inspections, work conference discussions, approval of work reports.	Legal operation, compliance management, and tax payment in accordance with the law. Strengthen the Company's safety production and environmental protection management; receive supervision and inspection by the government, and actively undertake social responsibilities.
Staff	Guarantee of fundamental rights and interests, welfare and remuneration, working environment, development space, occupational health and safety, self-value realization.	Trade unions, employees and management communication channels, set up a WeChat platform for employees to facilitate timely feedback on job suggestions, employee activities, training and learning.	Establish a corporate trade union organization to provide employees with a communication platform; pay compensation and benefits in full and on time, pay social insurance in accordance with the law; provide a healthy and safe working environment; establish a fair promotion mechanism; care for employees, help employees in difficulties, and organize employee activities.
Suppliers	Fair bidding, long-term stable cooperation and timely payment.	Bidding meetings, fairs, daily communication.	Fair bidding, selection of merit, performance of contracts as per contract, strengthening of daily communications, long-term cooperation with high-quality suppliers.

Stakeholders	Main objectives and focus	Communication channel	Measures
Bank	Repayment on schedule, operating conditions, business risks, honesty and credit.	Work conference, on-site inspection, post-loan tracking, and daily communication.	Repayment of loans and interest on time, cooperation with loan review and supervision.
Competitors	Fair competition, cooperative development, sharing of technology and experience, industry development.	Seminars, exchange visits, negotiations, industry conferences.	Practiced fair competition, achieved win-win cooperation, shared experiences, participated in industry seminars and research exchange activities for more than ten times, and promoted the sustainable development of the industry.
Market supervisor	Compliance with regulatory requirements, compliance management, disclosure of information and filing information.	Consulting, information disclosure, reporting, filing information.	Strictly abide by regulatory requirements, and disclose information and filing materials in a timely, accurate, and truthful manner according to law.

- **Investor Relationship Management**

Investor relationship is an important factor to enhance the Company's value. Strengthening the management of investor relations is beneficial to the Company's establishment of a good capital market, improvement of investor's recognition and loyalty to the Group, and then maximizes the relative value of the Company. The Group communicates with investors through emails, regularly disclose interim reports, annual reports and announcements in accordance with the Listing Rules and hold shareholders' meetings.

- **Customer Relationship Management**

The Group has fully developed its production technology and management since joining the industry, continuously improving the quantity and quality of its products and enabling the Group to establish long-term and stable relationships with customers in the industry.

In order to complete the customer's order with quality and quantity, we use a quality control system to strictly control the quality of the product, mainly in the testing and inspection of product production, and the secondary control of product quality in packaging and storage, through sealed packaging and timely delivery with production, so as to ensure the high quality of products.

- **Environmental Protection Agency Relationship Management**

Dongguang County Branch of Cangzhou Environmental Protection Bureau strictly supervises and manages the Group's environmental protection implementation in accordance with relevant national laws and regulations. At the same time, the Environmental Protection Bureau will propose improvements to the Group's existing environmental protection work, so that the Group's environmental protection work can continue to be improved while meeting the standards.

- Government Relation Management

We strive to use various information dissemination channels and methods to carry out two-way information exchange with the government to obtain government trust, support and cooperation, so as to establish a good external environment for the Group and promote the Group's survival and development.

- Relationship Management In The Same Industry

Hebei Fertilizer Industry Annual Conference and the Seventh Member Representative Conference of Hebei Nitrogen Fertilizer



On October 30, 2020, Dongguang Chemical participated in the "Hebei Fertilizer Industry Annual Conference and the Seventh Member Representative Conference of Hebei Nitrogen Fertilizer" held in Shijiazhuang by the Hebei Nitrogen Fertilizer Industry Association. The meeting discussed and studied how the industry can ensure stable operation under the impact of the epidemic, overcome current difficulties, continue to improve safety and environmental protection levels on the basis of ensuring the survival of enterprises, further expand the industrial chain, and develop high-end, high-value-added fertilizer-related products.

China Nitrogen Fertilizer Industry Association Seminar



On April 29, 2020, the China Nitrogen Fertilizer Industry Association held a seminar on improving the environmental protection quality of the fixed-bed intermittent coal gasification circulating cooling water system in Dongguang Chemical, Hebei Yangmei Zhengyuan Chemical Group Co., Ltd., Shandong Union Chemical Co., Ltd., Henan Haohuajun Chemical Development Co., Ltd. participated in the meeting, the meeting discussed and determined the next step of the environmental protection improvement and transformation of fixed-bed intermittent coal gasification and conducted on-site visits to Dongguang Chemical's environmental protection improvement and transformation projects.

Appraisal of the achievements of the fixed bed environmental protection project and site visit



From November 9 to 10, 2020, China nitrogenous fertilizer industry association held a seminar on the environmental protection transformation path of fixed bed intermittent coal gasification technology to discuss and demonstrate the environmental protection transformation path of fixed bed intermittent coal gasification technology. The first set of "fixed bed multi pollution source integrated environmental protection treatment device" constructed by our company in China has been accepted by the relevant leaders and experts of the Ministry of industry and information technology of the people's Republic of China, China Academy of Environmental Sciences, China nitrogenous fertilizer industry association, as well as more than 100 representatives from the national fixed bed coal gasification ammonia production enterprises and related technology and equipment units Ensure the on-site inspection of the reconstruction project. All leaders, experts and representatives saw the effect of the transformation and the great changes before and after the transformation through watching documentaries and on-site investigation, they highly praised and widely recognized the project. After the implementation of the environmental protection improvement project, Dongguang Chemical has realized the complete treatment of pollutants and unorganized emissions in the fixed bed intermittent coal gasification process, the appearance of the gas making device has been completely improved, and the whole gas making system has reached a virtuous cycle of environmental protection, which fundamentally solves the environmental protection problems that have been pending for many years in the fixed bed intermittent coal gasification process, and provides new environmental protection services for the fixed bed coal gasification process manufacturers. It also provides solutions for gas purification and wastewater treatment of moving bed and fixed bed slag gasification processes.

In addition, China National nitrogenous fertilizer industry association organized experts to identify the scientific and technological achievements of the treatment technology for volatile pollutants in circulating water of Hebei Dongguang chemical industry. The expert group said that the technology has independent intellectual property rights, and the operation of the device is stable and reliable, reaching the leading level in China. At the same time, the expert group pointed out that the technology has realized the zero discharge of wet slag and VOCs of the fixed bed intermittent gasification technology, and the ultra-low discharge of wastewater up to the standard, which has set up a model project and transformation mode for the whole industry.

2. ENVIRONMENTAL PERFORMANCE ANALYSIS

2.1 Overview of relevant environmental protection policies in major business areas



2.2 Emissions Correlation Analysis

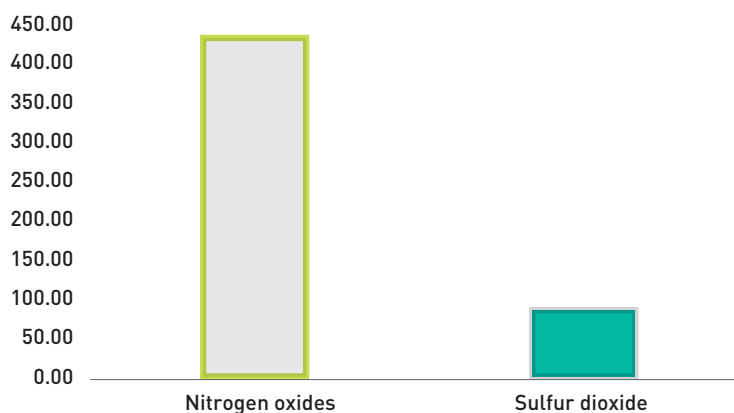
The pollutants emitted by Dongguang Chemical due to fuel combustion mainly include nitrogen oxides (NO_x), sulfur dioxide (SO₂) and particulate matter. Most of the exhaust gas emitted comes from the consumption of coal fuel combustion, and a small part comes from the consumption of cars.

The Group's main fuel combustion source is coal. White coal and bituminous coal are the main raw materials used in the production of products. White coal has a high carbon content and the least amount of impurities. It is used as a raw material for the production of urea and methanol. Bituminous coal has a lower carbon content than white coal. It is used to produce electricity for the production process and steam for gasification. The types of vehicles that consume fuel are mainly small and light-duty vehicles, mainly from small-sized vehicles, and the consumption of passenger cars, trucks and other vehicles.

2.2.1 Exhaust emission data calculation

In the process of combustion, air pollutants such as nitrogen oxides, sulfur oxides, and particulates are emitted. Excessive discharge of pollutants can lead to air pollution. Therefore, the appropriate amount of pollutants is an important prerequisite and a priority for the chemical industry. The emission of each emission is calculated based on the data obtained and collected of Dongguang Chemical's gas fuel consumption and vehicle emissions and is shown in the following figure:

2020 Dongguang Chemical Air Pollutant Emissions (Unit: Tons)



According to the standards set by the local environmental protection bureau for waste emissions, the annual limit of nitrogen oxides are 549.25 tons, and the annual limit of sulfur oxides are 327.1 tons. As shown in the above figures, the NO_x and SO_x emissions of the Group in 2020 were 427.86 tons and 93.74 tons respectively. The total emissions of the two major air pollutants have not exceeded the standard indicator.



2.2.2 GHG emissions data calculation

Greenhouse gases will be emitted through both direct and indirect methods. The combustion of fuel by fixed and mobile sources will directly emit a certain amount of greenhouse gases, which covers the greenhouse gas emissions directly generated by the business owned or controlled by Dongguang Chemical, which is Scope 1; The electricity provided will indirectly emit greenhouse gases which is Scope 2; Our company can basically recover carbon dioxide generated during the production process of fixed source combustion. The carbon dioxide recovered from this part is then produced into liquid carbon dioxide as by-product and then into the sales channel. The mobile source (small and light vehicle emissions) fuel consumption and emissions of carbon dioxide, methane and Nitrous Oxide amounted 69,076.16tons of carbon dioxide equivalent. We calculate the carbon dioxide emissions of 622,285.47 tons of carbon dioxide equivalent via the Group monthly electricity bills.

2.3 Waste classification and emissions

2.3.1 Waste classification and processing

Dongguang Chemical Waste Sorting and discharging in 2020 (Unit: Ton)

Category	Name	Collection	Treatment	Weight	
General waste	Non-recyclable waste 	Peel, residual food and other domestic waste	Placed in company trash	Collection	6.50
		Sludge	No emission targets and no emissions	Burned by three-waste furnace	556.90
Recyclable waste		Slag	Put it in the specified storage	Send three waste furnace to burn	32,765.50
		Waste paper: waste newspapers, office waste paper, etc.	Put it in the specified storage	Dealt by waste recyclers	1.56

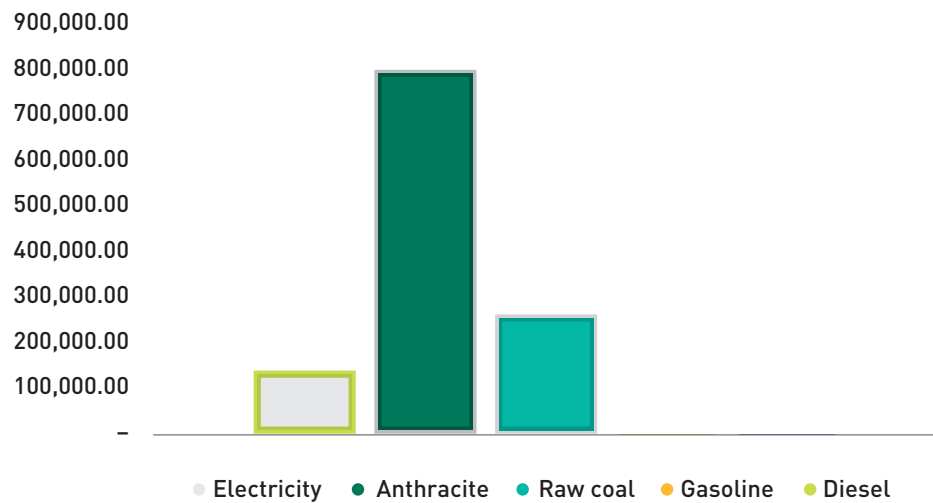
2.4 Resource Usage Analysis

2.4.1 Main energy consumption structure of enterprises

In 2020, Dongguang Chemical consumed 21.73 tons of gasoline, 64.77 tons of diesel, 0.34 million tons of fuel coal, and 0.82 million tons of anthracite, the power consumption is 0.988 billion kwh. The Group applies water sources according to relevant national environmental protection policies and regulations, and has always adhered to the concept of water conservation. In 2020, the total water consumption of groundwater is about 474,000 tons, the water consumption of Yangtze River is about 570,300 tons.

In 2020, the Dongguang Chemical's various energy consumption was 1.14 million tons of standard coal, of which 67.99% originated from anthracite, 21.38% originated from bituminous coal, and 10.97% originated from electricity.

Comparison of energy consumption of various types of Dongguang Chemical (unit: ton of standard coal)



2.4.2 Other Energy Consumption Statistics

Since coal is the main source of the Group's energy consumption, it is a difficult task for the Group to develop the urea industrial chain through the system's maximum use of the gas emitted from urea production, while reducing energy consumption, emissions, and environmental pollution. As of the end of December 2020, the number and types of company office equipment have been calculated. There are 218 computers, 462 printers, 3 fax machines, and 2 copy machines. In addition to working equipment, a total of 1,680 light bulbs are energy-saving lamps. There are 129 air conditioners, 115 split units and 14 water-cooled units.

Dongguang Chemical's sewage disposal capacity of 2020 is 49.68 cubic meters per hour. All sewage discharges are properly handled in accordance with relevant national environmental protection policies and regulations. Waste water treatment facilities in factory I can treat 1,017.4 tons of waste water per day; facilities in factory II can treat 174.8 tons per day.

In addition, for the urea industry, the amount and treatment of fertilizer packaging also has important implications for the protection of human and animal security and the ecological environment. In order to strengthen the quality management of urea bags, Dongguang Chemical has established a bag inspection and management system, strictly implements sampling inspections and issues inspection reports. Discarded packaging bags are standardized for recycling and unified scientific treatment to maximize the protection of the ecological environment.

2.4.3 Plan and Effects of Energy Saving and Emission Reduction

Energy-saving and emission reduction is an important measure to implement the scientific concept of development, promote economic restructuring, change the mode of economic development, and increase the potential for sustainable development. Dongguang Chemical strictly implements the energy-saving and emission-reduction system, and has repeatedly upgraded the production line to achieve certain results in reducing energy consumption.

2.4.3.1 Freeze blocking and waste avoiding

In order to minimize waste, Dongguang Chemical has done lots of job on preventing freezing. It is stipulated that the on-duty dispatcher should always pay close attention to the temperature change when the temperature reaches zero degree centigrade, and immediately notify the various positions to check the discharge status of each dredge to avoid the occurrence of frozen plugging events. When the temperature reaches above zero degree, the dispatcher on duty should be responsible for notifying each position, reasonably controlling (or shutting down) the drain discharge, and avoiding waste.

2.4.3.2 The use of heater

In order to reasonably control the on and off of heaters, Dongguang Chemical stipulated that when the temperature is higher than 15 degrees centigrade, all heating facilities in the office buildings and workshops should be turned off. When the temperature is lower than 15 degrees centigrade, heating facilities can be turned on according to the needs of the employees, so as to avoid waste of resources due to long-term use of heating facilities.

2.4.3.3 Electricity-saving management

In accordance with the principle of maximizing electricity savings, Dongguang Chemical stipulates the timely turn-off of office computers, the air-conditioner on-off control in the production workshop, and the prohibition of permanent lights in the factory area. The employees are required to turn off the lights and the fans when they leave the workshop.

2.4.3.4 The use of air-conditioning

The use of air-conditioning is based on the principles of safety management, energy saving and consumption reduction, so Dongguang Chemical makes relevant regulations on the use of air-conditioning according to changes in seasonal temperatures. Doors and windows should be closed during use, air conditioners must not be arbitrarily changed the direction of the fan blades, and air conditioners and other energy-saving regulations should be promptly closed when off duty.

2.4.3.5 Water conservation

Water conservation is also an important measure for effective energy conservation and emission reduction. Dongguang Chemical strictly forbids the occurrence of dripping, long running water and other phenomena in the water system. Employees will be punished if it violates the regulations. In addition, Dongguang Chemical stipulates that every time water is added to the desulfurization circulating water and gas-making circulating water, it must be approved by the water supply workshop. The addition of faucets must also be submitted to the production department and the water supply workshop for approval. At the same time, while advocating water conservation, we also introduced a reclaimed water reuse device combining membrane separation technology and biotechnology to achieve sewage treatment, solid-liquid separation and reclaimed water reuse. The intermediate water reuse device is mainly used to purify the waste water generated in the production process. After the treatment of the device, more than 50% of the waste water can continue to be recycled for production, which greatly avoids the waste of water resources and reduces our economic expenditure.

2.4.3.6 Energy saving

Every ton of urea produced by our company needs to consume a certain amount of steam. We recycle this part of steam through the equipment to achieve more possibilities for saving and reducing consumption. Secondly, we will also use the waste heat generated by fuel combustion to generate electricity, thereby saving the raw coal required for power generation. In addition, our production department will formulate energy-saving and consumption-reducing measures for gas production, purification, compression and other links according to the actual situation every month, such as the transformation of the through furnace to increase the gas production; the use of old stainless steel pipes to detect leaks in the urea synthesis tower Renovation; continuously optimize the devices that need to be strengthened and improved in production to better achieve the effect of energy saving and consumption reduction.

2.5 Environmental protection

2.5.1 *Report on the air, water and noise situation of the plant*

Each year, the EPA entrusts or we commission a testing technology service company to inspect Dongguang Chemical's operating conditions and environmental protection facilities. The monitoring of the locations and items corresponding to exhaust gas, waste water, and noise is performed according to the implementation of the standard values. The monitoring equipment is used to check whether the monitoring limits of the equipment exceed the standard values. Based on the inspection results, the test results are obtained and a monitoring report is issued. the Group uses the monitoring report to obtain the discharge permit.

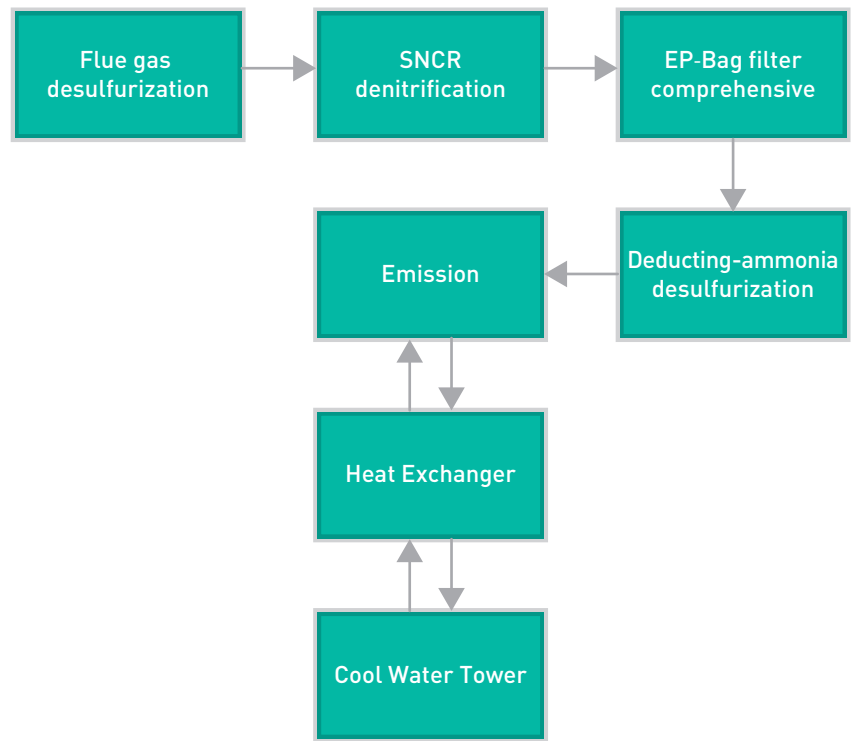
The monitoring report data of 2020 shows that the monitoring values of exhaust gas, waste water and noise meet the local or national emission standard values.

2.5.2 Environmental System Treatment Process

“Three wastes” are the products of the chemical industry in production, and improper treatment will cause serious pollution to the surrounding environment. The waste gas, waste water and waste residue generated by Group’s manufactured products are processed by environmental protection equipment and will not be discharged until they reach the standard.

(1) Waste gas/water/residue treatment flow chart

Waste gas treatment flow chart

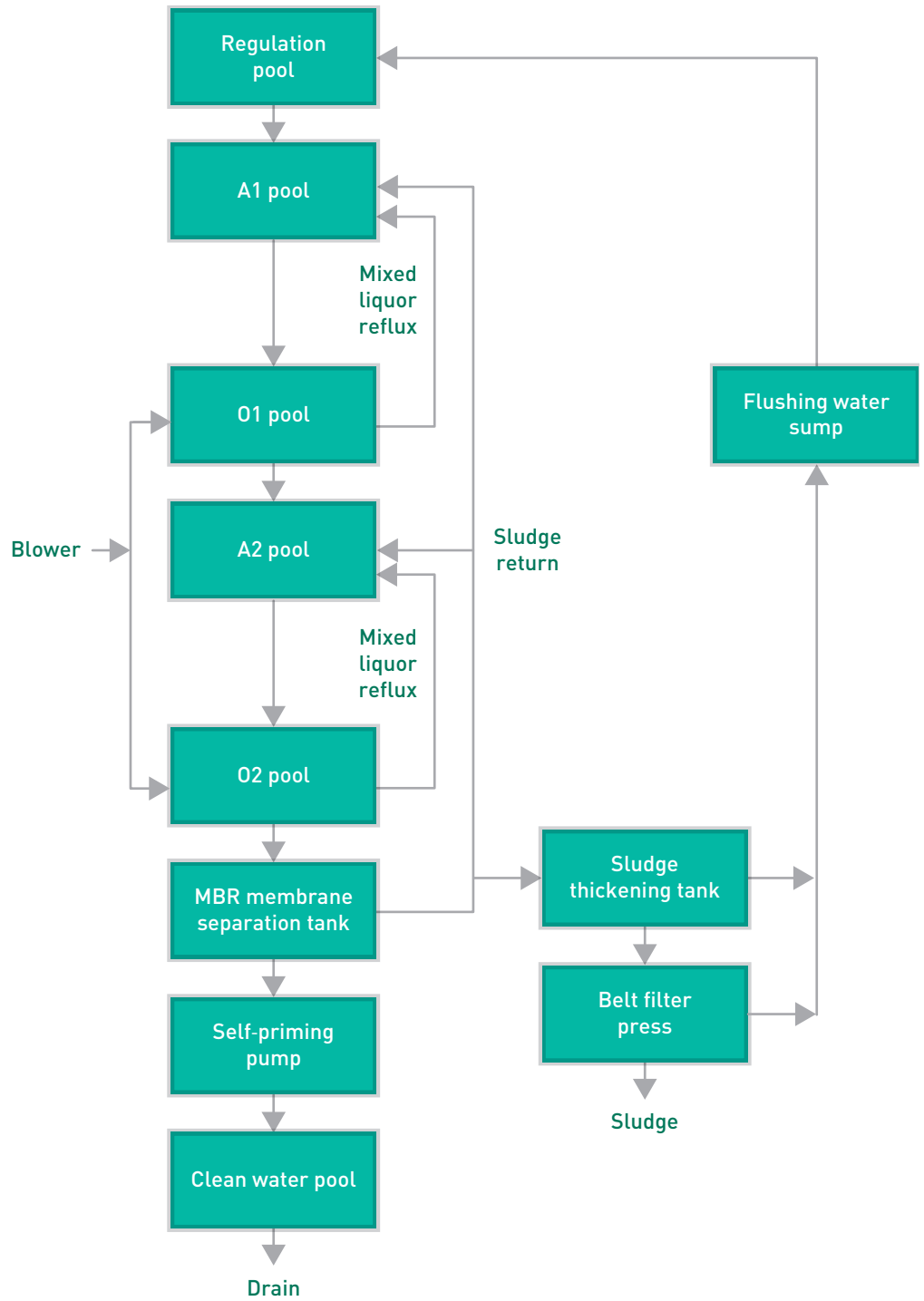


Exhaust gas is produced during the production of urea. the Group first uses the SNCR denitration process to treat the exhaust gas, and then removes the dust through a wet scrubber, using electric bag composite dust removal, ammonia desulfurization and other treatment procedures, and finally reaches the national standard for discharge. We subsequently upgraded the flue gas desulfurization equipment, which increased the number of spray layers, expanded the spray contact area, and further improved the effect of sulfur and dust removal.

In 2020, Dongguang Chemical added UGI gasifier multi pollution source integrated treatment project, which greatly reduced the carbon emission. Through the system transformation, pneumatic conveying was used to completely seal the conveying to the ash bin, and then into the three wastes furnace for combustion. There was no dust on site, which solved the environmental protection problems such as VOCs emission and eliminated the environmental pollution.

Therefore, the waste gas generated in the production process of the Group becomes cleaner after denitrification, dust removal, desulfurization, whitening and other measures. After meeting the emission standards of the new environmental protection smoke and rain treatment policy, it is discharged into the air through the chimney. After the Group’s continuous exploration and improvement in environmental protection in recent years, the air conditions at and around the Group ’s location have significantly improved.

Flow chart of wastewater treatment



Our production and operation must comply with various environmental protection, occupational health and safety laws and regulations, government policies and industry standards applicable to China's environmental protection, occupational health and safety related to the discharge of waste water, solid waste and gas. We installed waste water treatment facilities in Plant 1 and Plant 2 respectively to treat all waste water generated during the production process of our products. The respective waste water treatment capacity of the relevant facilities is 751 tons and 104 tons per day, respectively.

In 2020, Dongguang Chemical added a new intercooling transformation project. Dongguang Chemical adopts self-cleaning filter to capture more than 99% of coal powder, dust, salt and other substances in semi water gas and more than 90% of tar and aerosol by dry method, so as to make the cleanliness of gasification circulating water reach an excellent level, improve the cleanliness of semi water gas. Air-generation cooling water realizes indirect cooling and closed circulation. The incremental water produced in the process of gasification can be reasonably transformed and utilized to realize "zero" discharge of wastewater.

Waste slag processing flow chart



Unlike urea producers who use natural gas as raw materials, we use coal for urea production, so a large amount of waste residue will be generated during the production process. We send the generated waste slag to three waste furnaces for combustion. After combustion, some waste slag can be recycled as boiler fuel, and some waste slag can be processed into new building materials and sold to other companies.

Dongguang Chemical's new intercooling renovation project in 2020-the dust treatment link, the coal pulverized coal collected by self-cleaning filters containing organic matter and unburned carbon is sent to the three-waste boiler for secondary mixing, eliminating the traditional water washing and dust removal. The device for separating coal ash by wastewater sedimentation eliminates the generation of wastewater, waste gas, sludge and wet residue, and achieves "zero discharge of waste residue."



The three-waste furnace is a facility for treating three wastes, waste gas, waste residue, and coal foam. In order to respond to the national environmental protection policy and reduce pollutant emissions, the Group renovated the flue gas desulfurization facility, and solved the problem that the original 150-ton boiler and 90-ton three-waste furnace had no desulfurization facilities. At present, Dongguang Chemical has a total of 4 exhaust gas outlets, all of which are connected to the Municipal Environmental Protection Bureau and the County Environmental Protection Bureau to achieve information disclosure and discharge in strict accordance with standards. According to statistics, the real number of four chimneys is 24 hours/day to achieve uninterrupted production facilities. The running time in the past three years is as follows:

Category	Time	2018		2019		2020	
		Operating days	Operating hours	Operating days	Operating hours	Operating days	Operating hours
Three waste furnace chimney (120 tons)		362	8,680	348	8,352	282	6,782
Three waste furnace chimney (90 tons)		277	6,654	62	1,491	57	1,371
Boiler chimney		260	6,239	43	1,046	51	1,228
New exhaust gas outlet		84	2,024	314	7,547	298	7,155

2.5.3 Strengthen pollution control facilities

In order to improve the air environment in the surrounding areas in autumn and winter, we actively improve the problem of the unorganized emission of particulate matter in the coal sheds where coal is stored. In addition, we also use low-noise equipment, vibration reduction, distance attenuation and other methods to reduce noise, while meeting environmental quality standards, and further reducing the impact on the ecological environment. Facing the severe energy conservation and environmental protection situation, we started with comprehensive energy utilization, combined the "three wastes" treatment, comprehensive utilization and technological transformation, closely linked the enterprise development with environmental protection, and achieved good economic benefits and environmental protection results.

2.5.4 Environmental inspection department daily inspection

In order to protect our living and production environment, prevent pollution, implement sustainable development strategies, and gradually realize cleaner production, we have formulated the "Environmental Protection Management System" and implemented related management. Cadres and employees must pay attention to energy conservation and emission reduction, so as to improve their environmental protection awareness and legal concept. Keep the production workshop clean, clean up the factory roads in time to prevent dust pollution; check, repair and maintain the environmental protection facilities on time to ensure the integrity of equipment. The supervision and management of the above situations are all under the responsibility of the Environmental Protection Department.

The Environmental Protection Department will formulate a monthly inspection plan, conduct daily inspections in accordance with the daily inspection plan, and conduct a joint inspection once a week. In addition, unannounced inspections are also essential, such as checking whether the online monitoring facilities are operating normally, whether the environmental protection equipment is inspected on time, or whether the workshops and departments are cleaned in time, etc. Penalties are imposed and a penalty notice is formed. Monthly check the operation of each production facility and form an inspection table of the Environmental Protection Department to check whether the equipment is operating normally.

2.5.5 *Green construction*

In order to optimize and afforest the plant environment, improve the afforestation management level, consolidate the afforestation construction achievements of the plant, and make the afforestation of our plantation institutionalized and standardized, Dongguang Chemical has formulated the "Greening Evaluation" policy for annual company-wide evaluation. In 2020, Dongguang Chemical added 2,200 square meters of greening area for the plant. In order to promote more refined and routine greening work, and to further improve the greening enthusiasm of production cadres and employees, a greening fund system has been formulated in accordance with the actual situation of Dongguang Chemical. We provide a fixed amount of greening fund in the spring and autumn to support greening activities. The branch's production department, environmental protection department, and logistics department are responsible for the overall planning of greening, planting and other technical support, and are also responsible for greening logistics support and daily supervision and management; each workshop does its own green plant maintenance work in accordance with the planning. We evaluate and reward the greening achievements of each branch and workshop every spring and autumn.

3. CSR ANALYSIS

3.1 Employment and labor status analysis

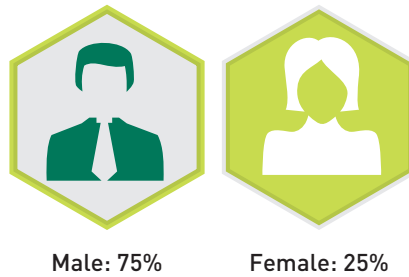
3.1.1 *Overview of staff employment and labor standards*

Dongguang Chemical formulates a comprehensive staff employment rules and regulations in accordance with national and local policies regarding the employment of staff and labor conditions. From the employee handbook, it is seen that employees work eight hours a day and implement a three-shift system for factory workers. The non-production department is closed for five days a month, and the production department is closed for eight or nine days a month. At the same time, employees legally enjoy any prescribed benefits, wages, and holidays. In addition, during the period of high temperature, workers will be issued heatstroke and cooling supplies to provide employees with a good and suitable working environment, which also ensures safe production in high temperature weather and effectively prevents the occurrence of heatstroke in front line employees.

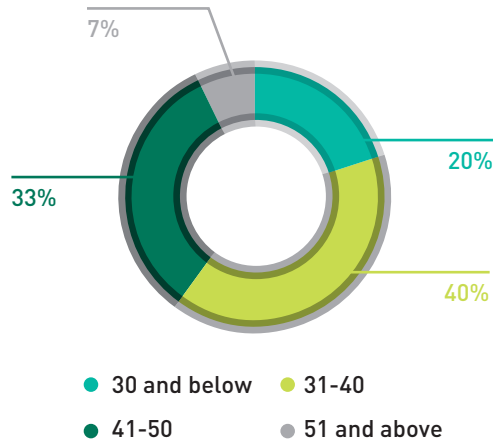
We hire employees strictly in accordance with the established recruitment process and plan. The person in charge of the human resources department and the head of the relevant department determines the employees to be hired, and the employees can only be hired after review and approval by the chairman. We uphold the principle of "justice, openness and fairness" to motivate and restrain every employee, and resolutely resist the employment of minor children as regular employees of the Group. At the same time, we pay attention to personnel training and development, and every employee has the right and opportunity for promotion. We evaluate self-recommended employees in accordance with relevant systems, implement a promotion system for qualified employees, create a space for employees to fully implement their talents, and develop training plans to enable employees to develop better.

Dongguang Chemical's major indicators of employees 2020

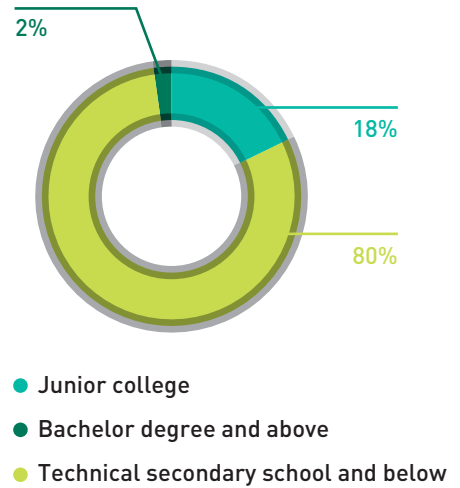
Gender



Age



Education situation



Dongguang Chemical's number of employees and turnover rate in 2020

Type of employees	Number at year end	Percentage at year end	Number of staff left	Turnover rate
Functional management	211	16.05%	6	2.84%
Urea production	1,046	79.54%	56	5.35%
Other	58	4.41%	1	1.72%
Total	1,315	100.00%	63	4.79%

As of December 31, 2020, the total number of employees in Dongguang Chemical was 1,315, of which males accounted for a relatively large proportion, and the staff number of urea production was the largest. Overall, our annual turnover rate was small, and there was little change in personnel, so the overall situation is stable.

3.1.2 Overview of employee Health and Safety

In order to ensure safe production, we have formulated and implemented the "Working Environment and Safety Management Measures", "On-site Safety Management Percent Assessment Measures" and other rules and regulations, and evaluates daily production safety in accordance with the "Production System Percent Assessment Management Measures" Happening. Secondly, the Environmental Protection Department is responsible for the supervision and inspection of the Group's civilized production management work. It implements daily inspections and regular joint inspections. It issues daily assessments and rectification notices within a time limit to departments that violate civilized production assessment standards, and performs daily assessments and rectification Check records and ledger. At the same time, the Safety Department organizes comprehensive inspections with the participation of production, equipment, process, electrical, instrumentation and other departments, and conducts comprehensive inspections once a quarter. Then, the Group adopts different investigation methods and investigation frequencies for different types of hidden dangers. The responsible person strictly implements the "security inspection and hidden danger investigation and governance system", and implements preventive treatment by classification, and handles the discovered hidden dangers in a timely manner. In addition, the investigation, treatment, and monitoring of hidden dangers of various departments are included in the monthly safety assessment of the person in charge of the unit, and the excellent inspection workshop is rewarded, and the responsible persons who do not require the implementation are given corresponding penalties.

In addition, in order to ensure the safe operation of production facilities, we will implement a one-year repair system for large-scale substations, and small-scale production equipment will also be regularly repaired and maintained; seasonal and professional investigation of hidden dangers, and immediately prepare hidden danger inspection records, the Safety Department establishes the hidden danger files, clarifies the hidden danger level, and urges the implementation of various measures for hidden danger management in accordance with the "five fixed" principles, monitors the hidden danger management situation, and ensures that the hidden danger management is completed on schedule; We hand out labor protection materials around the 15th of each month, ensure adequate, complete, and timely materials for employees. Do a good job in all aspects of the Group's safety in production, reduce the possibility of accidents, so as to ensure that employees have a safe working environment.

In 2020, on the basis of 2019, on-site management has been greatly improved. In order to prevent and reduce production safety accidents, in accordance with Hebei Province [No. 2] Order Hebei Province Safety Production Risk Management and Control and Hazard Management Regulations, risk management and control have been identified. Determine all the risk points on the site, formulate a list of risk points, conduct hidden hazard investigations according to risk points, and standardize on-site safety management.

Due to the initiative of the employees of the Group and the frequent self-examination of the workshop groups, no safety accidents have occurred in 2020.

Safety-production indicators	Times
Environmental pollution accident	0
Fire accident	0
Minor injury	0
Serious injury	0
Fatal accident	0

Statistics of employee work related casualties in the past three years

Work related casualties	2020	2019	2018
Environmental pollution accident	0	0	0
Fire accident	0	0	0
Minor injury	0	0	0
Serious injury	0	0	0
Fatal accident	0	0	0
Total	0	0	0

In order to ensure the health of employees, we also invite hospitals to “home service” every year to conduct health checks for all employees. For the front-line employees, we will also arrange related occupational health checks. In addition, we also have corresponding protection for female employees. During the physical examination, it has added inspection items related to female health to ensure the physical and mental health of female employees.

In addition, the coronavirus first appeared in December 2019 and the epidemic has spread to the world. This epidemic is mainly spread through respiratory droplets or physical contact. Therefore, we should always be alert to health and safety risks and be prepared for a high degree of emergency. At Dongguang Chemical, we closely follow the instructions and recommendations of the local government and pay attention to the latest situation. We also assess employees' health and safety risks, including commuting to get off work and office hygiene. To ensure that employees receive maximum protection in their daily operations, Dongguang Chemical has adopted corresponding preventive and control measures, including:

Formulate emergency plans and establish a leading group for epidemic prevention and control

It is strictly forbidden for company employees to enter the factory without wearing a mask

Use video conferencing to minimize physical contact

Use forehead electronic heat detector to check body temperature

Ask employees about their travel records during the Lunar New Year period and assess the risk of exposure to the virus

Implement regular disinfection of the workplace and require employees to reduce going out

3.1.2.1 SIS (Safety Instrument System)

With the development of industry, the production process is becoming more and more complicated, and the possibility of safety accidents is increasing, so the safety control procedures are becoming more and more complicated. There are a lot of production parameters and equipment data in the production process. If these parameters and data are within the specified range, it means that the production is in a normal state; if it exceeds the specified range, it means that there is an abnormal production. In the normal range, this advanced program is called a safety interlock. SIS (Safety Instrument System) is a system to prevent accidents from automatically taking part or whole production equipment to stop, or automatically introducing a predetermined safe state, which can prevent further expansion of abnormal conditions such as mechanical equipment failure and energy interruption. The Group introduced the system in 2019, which greatly improved the degree of automation of the Group's production and provided a guarantee for safe production under abnormal working conditions. This transformation also achieved the Group's safety management ideas of centralized production control, mechanized substitution, and automation reduction.

3.1.2.2 Daily fire drill



"Safety first, environmental protection determines the future" is the slogan and goal of Dongguang Chemical. In order to implement the national laws and regulations on safe production, strengthen safety management, further strengthen fire safety education for all personnel, and do a good job in fire safety in the factory area. A fire brigade of Dongguang Chemical was formed and equipped with professional firefighting facilities and equipment, and employees of the plant were often organized for fire drills.

In order to effectively prevent, control and eliminate the hazards of production safety accidents in a timely manner, improve the emergency response capabilities of safety accident rescue, establish and improve early warning and emergency mechanisms to ensure the safe and stable operation of Dongguang Chemical's production. On June 23, 2020, Dongguang Chemical organized a fire drill, which is mainly a comprehensive drill of the emergency plan for production safety, which simulates the disposal of liquid ammonia leakage in the liquid ammonia tank area and the preliminary medical treatment of ammonia poisoning personnel. This drill was successfully completed and increased relevant skills of participated rescuers, enhanced accident prevention and handling capabilities, and also provided employees with an opportunity for actual combat simulation drills, so that everyone can consolidate firefighting knowledge and familiarize themselves with emergency operations, and at the same time strengthen employees' awareness of production safety.

3.1.3 Overview of Staff development and training

In order to provide employees with a better working environment and development prospects, Dongguang Chemical arranges various training courses from time to time to enhance employees' safety awareness and professionalism. The main training items are safety operation skills; emergency rescue training; protection supplies, emergency supplies training; workshop operation rules learning, etc. In addition, all employees must carry out on-boarding training to ensure they master the necessary professional skills. Employees in certain special positions must also hold a certificate to avoid unnecessary damage caused by the lack of technology knowledge.

At present, Dongguang Chemical's internal training is divided into on-boarding training, daily training and other internal training. The training contents mainly include two parts: process and safety. According to statistics, there were 394 training activities in 2020, with an accumulated training hour of 1,768 hours and 2,616 participants.

Training Name/type	Content	Internal/ external	Acc. Hours (unit: hours)	Acc. Times (unit: times)	Acc. Percent (acc.		Result
					Participants (unit: people)	Part./total staff)	
On-boarding training	process	internal	504	7	83	100%	Y
	safety	internal	504	7	83	100%	Y
Daily training	process	internal	520	260	1,250	97%	Y
	safety	internal	240	120	1,200	93%	Y
Total			1,768	394	2,616		

- Special operation process training

The picture below shows Dr. Wu Changcheng explaining the focus of special tasks to employees:



On September 3, 2020, Dongguang Chemical invited Dr. Wu Changcheng from Hebei University of Technology to explain the safety management of “special operations”. Special operations refer to operations that are prone to casualties and may cause significant harm to the life and health of the operator, others, and the safety of surrounding facilities. Dr. Wu Changcheng explained to the employees the risks that may be encountered in special operations and the consequences of illegal operations through the dimensions of a series of operation procedures such as operation application, risk assessment, safety measures, operation approval, operation implementation, operation verification, and operation closure. The Group hopes that by explaining these serious consequences employees can be highly aware of the importance of safe production. In a word, through this training, Dongguang employees can be equipped with the necessary professional technical knowledge, safety knowledge, and safe operation skills. At the meantime, they have come to realize what safe production is and laid the solid foundation for future work.

In addition to training, Dongguang Chemical also organizes job skill competitions, daily discussions, and various leisure activities such as outings to enrich the lives of employees.

- Employee welder skills competition



In order to improve employees’ enthusiasm, self-motivation for professional ability and to better integrate into the team in future, on August 20, 2020, Dongguang Chemical organized a welder skills competition under the leadership of the factory and the department. The competition consists of three main events, including industrial arc welding plate-plate butt, manual arc welded pipe-pipe butt, and argon electric welding pipe-pipe butt. In the competition, each participant showed his talents and manner. Through this competition, the enthusiasm of all employees to learn and specialize in technology has been stimulated, and the morale of employees to practice their skills in job positions has been encouraged, and the cohesion of the Group has been enhanced.

- Staff basketball and table tennis games



In October 2020, we held the third “Donghua Cup” basketball game. The players on the court took an active part in the game, sweated, and showed themselves. Although the competition was very fierce, the players all followed the bottom line that friendship is the first place and the win of game lies behind. The game was fantastic. The result of the game is that team1 of subsidiary factory 1 and team2 of subsidiary factory 1 performed best, winning the championship and runner-up respectively.

On November 28, 2020, we held “Donghua Cup” table tennis competition for the first time. There are men’s singles and women’s singles, and the top three of the two games were awarded respectively.

These two employee competitions have enlivened the atmosphere among employees, relieved employees’work pressure, and enriched their spare time life. At the same time, our spirit of unity, civilization and friendship was carried forward.

- New Year’s Day Gala



In order to learn from the past, look to the future, and improve our team cohesion, the Group held a New Year’s Day gala with the theme of “Hand in hand for a bright future” on January 1.

The content of this event considers the actual situation of the Group. This event, showing the big picture from the small point, highlights the achievements of Toko Chemical from different angles. The whole event lasted nearly two hours. It was not only elegant and beautiful, but also passionate and enthusiastic. Meanwhile, it conveyed our employees’ pursuit of love for art, love for civilization, love for life, showing that our employees are optimistic and energetic. The fruitful results of the new era civilization practice in Dongguang County are demonstrated, further enhancing the cohesion and combat effectiveness of the enterprise, and inspire all employees to keep their mission in mind.

3.1.4 *Guidelines and measures to prevent child labor or forced labor*

The Group strictly abides by state laws and regulations in labor and employment and strictly prohibits the employment of child labor. The Group strictly controls all aspects of recruitment, registration, labor contracts and so on to avoid hiring child labor resulting from work errors. There are no cases of child labor, nor the use of adolescents for high manual jobs from the view of 2020 employment of both the Group and suppliers.

3.2 Analysis of Operation Management Status

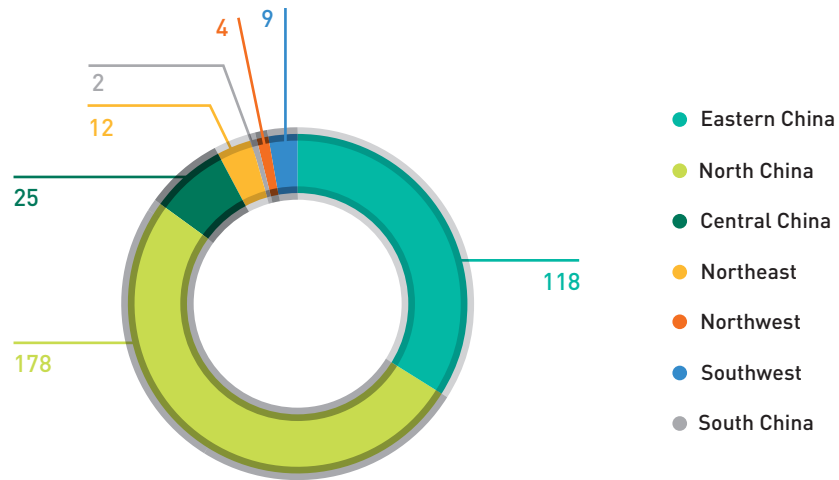
3.2.1 *Overview of Supply Chain Management*

To effectively evaluate and select qualified suppliers, optimize the Group's supply structure, improve the Group's supply system, and ensure that suppliers' supply quality and production delivery capabilities are in line with the Group's requirements, the Group has formulated corresponding regulations for supplier selection and evaluation management. Based on the Group's "supplier selection and evaluation management system", we set up a responsibilities assessment team to assess the supplier's qualifications, then evaluate them in accordance with the norms of supplier evaluation. From those suppliers we select quality ones to ensure the Group's normal production needs.

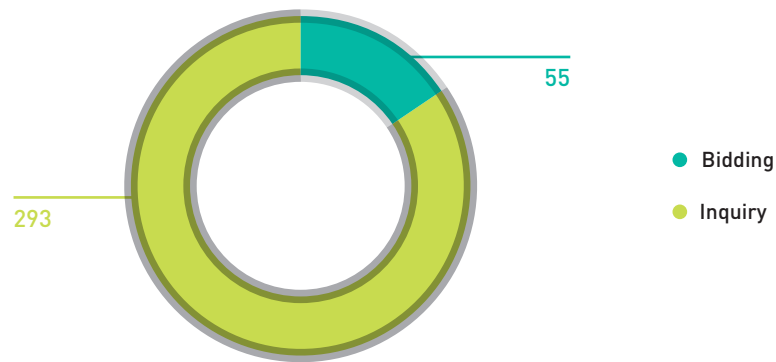
The Group has established a list of suppliers and are ready to update them once circumstances change. For suppliers whom we have long-term cooperation with, the Supply Department shall establish a file to obtain copies of a valid business license and various related licenses. The Supply Department organizes related departments and personnel to conduct annual comprehensive evaluations of large suppliers and long-term suppliers at the end of each year, determine the business volume for the following year based on the evaluation situation, and record the evaluation results in written documents. The methods of selecting suppliers include bidding and price comparison. In 2020, Dongguang Chemical had a total number of 348 suppliers and they are distributed in various regions in East China, North China, and Central China. Most of the suppliers were selected through the method of price-inquiry and price-comparison.

Dongguang Chemical takes environmental and social factors into considerations when it comes to the procurement process and suppliers. We require suppliers to fulfill their social responsibilities and promise in writing documents that they should comply with environmental, occupational safety and health, labor, human rights and other matters. We will also provide relevant training or guidelines to ensure that they understand these requirements and how to implement them. Social responsibility performance, such as environment, occupational health and safety, labor, human rights, and ethics, is also one of our criteria for selecting new suppliers. If the supplier failed to fulfill our social responsibility policy, they are not eligible to become our suppliers.

Suppliers regional distribution



Suppliers selection method



3.2.2 Analysis of Anti-corruption Measures of Enterprise

According to the requirement of relevant national laws and policies, the Group has formulated anti-corruption company policies. Fraud, corruption, and other violations of professional ethics that damage the Group's economic interests can be reported through the hotline or email, and the Group will take corresponding penalties for those who violate the rules after verification; the unfair economic benefits obtained will be ordered to be removed; if it causes economic losses to the Group, it shall be liable for economic compensation in accordance with relevant national regulations. In 2020, Dongguang Chemical did not have any major corruption litigation cases.

3.3 Product liability

The Group has been in strict compliance with laws and regulations including the Law of the People's Republic of China on Product Quality, the Law of the People's Republic of China on the Protection of Consumer Rights and Interests; and pays full attention to product quality and sales management. We ask for the high quality for each step from production to delivery. We continuously make innovation breakthroughs in the areas of product enhancement and improvement in order to ensure the quality of products and to provide safer and more environmentally friendly products. The Group produces products in its own production facilities, so it has been constantly looking for solutions to improve the production processes, identifying new production facility models, optimizing equipment and upgrading production facilities to improve the quality and efficiency of production processes, and ensure that products are more efficient.

In addition, the Group has formulated and strictly implemented internal system procedures such as "Product Quality and Safety Management System", "General Principles of Intellectual Property Management", and "Sales Management System" to strive to enhance customer satisfaction and strengthen after-sales services to win customers' trust and support, thereby fulfilling the responsibility of the Group for consumers and the society.

3.4 Community investment

The Group attaches great importance to safety in production, and has specifically set up a fire department, equipped with professional fire equipment, and conducts fire drills from time to time. Therefore, we have skilled countermeasures for various fire accidents. When a fire occurs in the surrounding area, the Group's fire department will also be dispatched as soon as possible, volunteering to participate in firefighting, and contributing to the environmental safety of the Group's surroundings.

Secondly, since the Group is a coal-based urea production company, huge heat will be generated in the production process. The Group will send the waste heat generated in the production process to the office area through the pipeline, thereby solving the problem of heating in the office area of the Group in winter, and at the same time achieving the effect of energy saving and emission reduction. Even so, the Group still has abundant industrial waste heat in the production process. Under the leadership and coordination of the Dongguang County Government, the Group signed an agreement with Luyuan Group to provide the waste heat of the Group's gas cooling tower to Dongguang County Heating place. After 5 years of development, the Group has now provided heating for 67 communities, 4 schools, and approximately 1.91 million square meters in Dongguang County. The total number of users using central heating is approximately 15,464, and the total number of heating users is approximately 48,000.

In addition, in February 2020, during the epidemic period, Dongguang Chemical donated 10,000 masks to the Red Cross Society of Dongguang County, and at the same time donated 10,000 masks to front-line epidemic prevention personnel, and distributed them to frontline epidemic prevention personnel in a timely manner. The Group has made its due responsibilities and obligations to fight the epidemic.

Finally, the Group does not forget to perform its own social responsibilities while developing itself, insists on participating in charitable causes, investing in the community where it is located, and encouraging employees to actively participate in various charity donations. In addition, the Group also provides employment opportunities for poor residents in the county, and provides 10 public welfare jobs every year to help some residents obtain employment, creating opportunities for them to live a better life, and contributing to the harmony of the communities where they are located.



4. FUTURE PLANNING

4.1 The external risks and future plans

In recent years, China's energy industry structure has been continuously optimized, structural reforms on the energy supply side have been continuously progressing, and the release of clean energy supply capabilities has accelerated. The domestic energy industry is facing a transformation, and the rise in market energy supply costs will directly affect the Group's costs and reduce competitiveness. The rapid change of urea market has led to frequent fluctuations in urea market prices. The decline in urea prices directly affects the Group's sales performance.

Facing the constant changes in market supply and demand and the unstable fluctuations in the market price of urea, we have gradually increased appropriate product categories to increase product diversification; actively introduced new technologies for energy saving and consumption reduction, and promoted technological upgrading and production process transformation. We will continue to develop downstream products related to urea, expand the industrial chain and product chain, open new sales channels, and always pay attention to the new direction of industry development.

4.2 The internal risks and future plans

Independent innovations such as research and development, technology investment, and application of information technology, professional ethics of senior management personnel, professional competence of employees, and other management factors such as organizational structure, operating methods, asset management, business processes, operational safety, employee health, and environmental protection and other safety and environmental protection factors are all internal risks faced by enterprises, and risks arising from internal factors that enterprises should correctly identify.

We will continue to expand professional technical personnel, develop technical strength, increase talent reserves, and improve the quality and knowledge reserves of the original employees of the enterprise to meet the needs of the development of the knowledge economy. In order to exert greater economic and social benefits, we will continue to actively study energy-saving and environmental protection technologies, increase investment in energy-saving and environmental protection facilities, and effectively reduce production costs by adopting new technologies and new equipment. On the basis of increasing benefits, we will further strengthen energy-saving management and achieve green development of enterprises.

4.3 Future development strategy and business plan

The Company will continue to optimize its growth strategy, including effectively increasing production capacity, actively improving production quality and efficiency, and expanding the value chain to urea-related products such as automotive urea products. In addition, we will strengthen our strategic partnership with major clients, diversify our customer resources and identify strategic acquisition opportunities, achieve sustained and stable development, and actively respond to future challenges in order to provide more efficient and environmentally friendly products and quality services.