JUTAL

巨濤海洋石油服務有限公司 Jutal Offshore Oil Services Limited

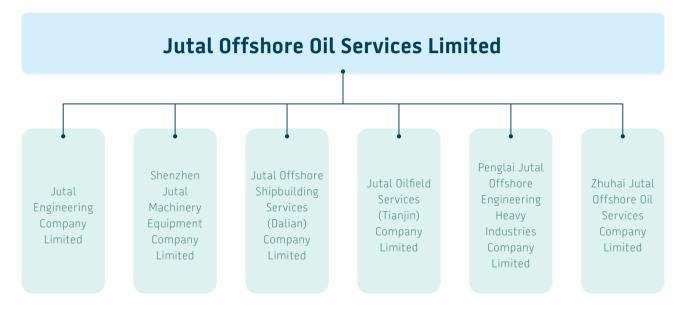




About Jutal

Jutal Offshore Oil Services Limited (the "Company") and its subsidiaries ("Jutal" or the "Group") are integrated service providers of manufacturing and engineering services in the energy and refining industries, mainly focusing on large-scale module construction, offshore engineering, and new energy equipment construction as the core businesses, intending to serve the global development and application of energy.

The Group is headquartered in Shenzhen, and has offices and construction sites in Dalian, Tianjin, Penglai, Zhuhai and Huizhou. The core businesses of the Group are mainly carried out through its subsidiaries in Mainland China as well as Singapore and Hong Kong. The details of the Group's major subsidiaries are as follows:



With years of business experience and strengths developed in the field of offshore engineering and module construction, the Group has gradually grown into a industry-leading service provider of manufacturing and engineering services, and extended its businesses to the international market. In recent years, multiple construction projects have been successfully delivered such as the GCGV natural gas chemical plant, the Arctic LNG2 module, offshore wind power equipment, etc. The Group has also been awarded "The Best Module Construction Site Award", "Excellent Completion Award", "The Best Construction Site" and "The Best Team Award".



About This Report

The Group is pleased to publish its sixth Environmental, Social and Governance ("ESG") Report, which mainly describes the Group's policies, measures, and performances of its sustainable development. The report is prepared in both Chinese and English, and has been uploaded to the website of the Stock Exchange of Hong Kong (https://www.hkexnews.hk) and that of the Company (http://www.jutal.com).

Reporting Boundary

This report mainly presents the sustainable development performance of the Group from 1 January to 31 December 2021 ("the Year", the "Reporting Period"). Due to limitations on the collection of information and data, this report only covers the operations of the Group located in Mainland China. Since the operation in Chengdu has ceased, this year's report only covers the offices located in Shenzhen, Tianjin, Penglai, Dalian¹ and Zhuhai (the "offices"), and the construction sites in Tianjin², Penglai³, Zhuhai⁴, and Huizhou (the "construction sites") (collectively referred to as the "operating sites"), and excludes operations of the Group located outside Mainland China, including subsidiary located in Hong Kong and the business operations out of the core businesses, such as the services provided to industries apart from oil and gas, new energy, and refining and chemical, and shipbuilding industries.

Reporting Standards

This report is prepared following the ESG Reporting Guide (the "Guide") under Appendix 27 of the Rules Governing the Listing of Securities of the Stock Exchange of Hong Kong Limited, and follows the reporting principles of Materiality, Quantitative, Balance and Consistency in preparing the report. A complete index is attached to the last chapter of this report, which readers can read this report following the Guide.

Stipulated Principles	Definition	Application of the Stipulated Principles
Materiality	The report should focus on disclosing important environmental, social and governance issues that are relevant to the Group and its stakeholders.	The Group conducts questionnaire surveys to the Board of Directors ("the Board") and relevant stakeholders of the Group to identify the environmental, social, and governance issues that may have significant impacts on the Group's business. It formulates the framework of this report on this basis to ensure that the contents disclosed are relevant and important to the Group and its stakeholders.

¹ The office located in Dalian is managed and operated by Jutal Offshore Shipbuilding Services (Dalian) Company Limited ("Dalian Jutal").

The office and construction site located in Tianjin are managed and operated by Jutal Oilfield Services (Tianjin) Co., Ltd. ("Tianjin Jutal").

The office and construction site located in Penglai are managed and operated by Penglai Jutal Offshore Engineering Heavy Industries Company Limited ("Penglai Jutal").

The office and construction site located in Zhuhai are managed and operated by Zhuhai Jutal Offshore Oil Services Co., Ltd. ("Zhuhai Jutal").

About This Report

Stipulated Principles	Definition	Application of the Stipulated Principles
Quantitative	The key performance data must be measurable and compared where appropriate.	The Group recorded and estimated the quantitative data, and compared it with past performances where applicable to show its stakeholders about its performance in the Year and the progress of achieving sustainable development. To ensure the accuracy of the environmental key performance indicators, the Group engaged with an external consultant to conduct carbon assessment with different national and international standards such as the Greenhouse Gas ("GHG") Emissions Accounting Methods and Reporting Guidelines for Mechanical Equipment Manufacturers (Trial), ISO14064-1 and the GHG Protocol. The quantitative data of social key performance indicators in this report were collected from the statistical records of relevant departments of the Group.
Balance	The report should provide an unbiased picture of the Group's performance and should avoid selective or omissive disclosures.	This report objectively and truthfully reports on the Group's environmental, social and governance achievements, as well as the challenges and solutions it faces.
Consistency	The Group should use consistent methodologies to allow for meaningful comparisons of ESG data and enable the stakeholders to understand the Group's performances.	The Group will use consistent methodologies where practicable. If any changes affect the comparison with previous reports, the Group will add a note to the corresponding content of this report, enabling the stakeholders to understand the differences and the reasons.

About This Report

Data Preparation

The Group has established internal control and a formal review process to ensure that information presented in the report is accurate and reliable. The report was confirmed and approved by the Board on 31 May 2022.

Opinion and Feedback

The Group attaches great importance to its stakeholders' opinions and feedback. Hence, the Group actively maintains communication with stakeholders through different channels and platforms to help itself establish a more robust sustainable development strategy. If you have any questions or suggestions about the contents of this report, please contact the Investor Relations Department of the Group through the following channels:

Jutal Offshore Oil Services Limited 10/F, Chiwan Petroleum Building, Shekou, Shenzhen, China Tel: +86-755-26694111 Email: yxy@jutal.com



Message From Director

The Group is pleased to publish its sixth ESG report, which aims to disclose the Group's commitment and performance of sustainable development to various stakeholders, and regulate the sustainable development policies and guidelines implemented by the Group.

In the past year, the global pandemic was still very severe, and various changes brought about by climate change had also become increasingly prominent. This forces companies to recognize and evaluate their long-term sustainable development risk management that targets reducing carbon emissions and the adverse impacts on their business operations. In response to that, Jutal has continued to promote and implement sustainable development work within the Group while responding to the pandemic, and strives to cope with the extreme weather crisis brought about by global climate change.

To fully be in line with China's goal of achieving carbon neutrality by 2060 and demonstrate the Group's strong emphasis and determination on sustainable development, the Group has actively integrated the concept of sustainable development into its enterprise risk management and internal control systems, which include implementing the "Risk and Opportunity Identification and Assessment Management System" and establishing an environmental management risk assessment team that is responsible for identifying and monitoring the Group's environmental, social and governance risks. The Group also formulated the "Climate Change Policy" during the Reporting Period, and adhered to the four orientations of "Mitigation", "Adaptation", "Resistance", and "Disclosure", clarifying the Group's relevant strategies and measures in dealing with climate change as well as reducing the environmental impacts caused by the production and business activities of the Group.

The Group believes that strengthening communication with stakeholders can help the Group formulate sustainable development plans and future business operation policies. Therefore, in addition to discussing policies and guidelines with the Board, the Group also invited various internal and external stakeholders to conduct questionnaires to share their expectations and views on the Group's long-term development, so as to address the Group's deficiencies and rectify the situation. During the Reporting Period, the Group also identified seven significant issues that were most relevant to the Group's operations, including Health and Safety, Employment, Development and Training, Product Responsibility, Anti-corruption, Waste, and Water Resources. The Group hopes to re-examine and update relevant policies and measures according to the importance of each issue, and to encourage all departments to work together to promote environmental protection awareness that helps formulate long-term carbon reduction goals and adopt more forward-looking strategies.

Looking ahead, Jutal promises to implement and report on sustainable development issues, continuously optimize its business operations and internal and external training, and fulfil corporate social responsibilities while implementing long-term strategies and carbon reduction goals. The Group will strive to balance the interests of various stakeholders, give back to society and fully implement the concept of sustainable development within the Group.

Jutal Offshore Oil Services Limited

Wang Lishan Chairman 31 May 2022



Governance Structure

The Group understands that establishing and maintaining a sound governance structure is of particular importance to the long-term development of the Group. Therefore, to ensure that the Group can maintain a high level of corporate governance, the Group promises to continuously adopt strict governance policies, measures, and performance management to improve corporate transparency that protects the interests of various stakeholders of the Group, and strengthen its business continuously in terms of sustainable development as its ultimate goal.

To effectively strengthen the sustainable development element in the Group's governance structure, the Board will be responsible for leading the Group to formulate and implement all relevant policies and measures, and monitor its performance to ensure the continued effectiveness of all policies and practices. In addition, the Group has established an ESG working group, which is directly managed by the Board and contains members composed of directors from the Board and company management personnel. The Group will also appoint staff from relevant departments to form a working group as its Executive Bodies according to its needs. Members of the ESG working group are responsible for identifying and responding to the ESG risk management and internal control systems of the Group when enforcing policies and measures that relate to environmental protection and production responsibility, ensuring a healthy and safe working environment. In the meantime, members have to act as a bridge between employees and the Board, and be responsible for providing a communication platform for both employees and the Board to exchange views regarding the environment, health, and safety issues. They are also responsible for advancing the management system, addressing all the potential risks faced by the employees, and reviewing the Group's performance before reporting the results to the Board regularly.

In the future, Jutal will remain committed to achieving the promise of responsible development, continuing to promote the Group's sustainable development work, and improving the existing sustainable development structure to ensure the effective promotion and implementation of sustainable development policies, measures, and targets.



Sustainability Strategy of the Group

During the Reporting Period, the Board integrated the concept of sustainable development into its business operations. It strives to create longer-term values for its stakeholders and business operations by soliciting the opinions of stakeholders to identify and manage risks and opportunities related to sustainable development. The Group also actively influences and encourages its supply chain partners to adopt the concept of sustainable development into their businesses to achieve long-term development that brings positive impacts to our industry and society.

Based on the Group's vision and strategic goals as well as referring to national policies, international trends and stakeholder opinions, the Group has identified three pillars of sustainable development, which details are as follows:

Employee Management and Wellbeing	Environment and Natural Resources	Business Operations and Product Responsibility
Health and Safety	Climate Change	Stakeholders Engagement
Employee Rights and Protection	Water Resources Usage and Management	Business Ethics and Compliance
Employment System	Greenhouse Gas Emissions and Management	Product Quality and Responsibility
	Waste Management	

The Group mainly provides equipment construction and offshore engineering services for the energy and chemical industries, which are characterized by high operational risks and intensive labor. To ensure effective risk management and consider the long-term development of the Group, the Group believes that it can create a longer and more diverse value for the Group, stakeholders, and society by integrating business operations and sustainable development concepts through this Sustainability Strategy.

Environmental, Social and Governance Risk Management

Focusing on the Group's ESG risk management, the Group has established the "Risk and Opportunity Management Procedures" and an environmental management risk assessment team. Every business unit and department is responsible for identifying and monitoring every current and potential risk and opportunity that the Group may expose to according to their duties and authorities, including but not limited to gas emissions, chemical pollution, waste management, occupational health and safety, and anti-corruption. The environmental risk assessment team must analyze and evaluate these risks following the "Risk and Opportunity Management Procedures" and provide solutions to the management to facilitate early correction and avoid any loss related to property, liability, and personal safety.

Sustainability Strategy of the Group

In addition, the Group regularly communicates with its internal and external stakeholders through different communication channels to understand the importance, expectations, and goals of all parties on the Group's sustainable development issues. To ensure the smooth operations and improve the service quality of the Group, the Group has also formulated various management policies, including "Health, Safety, and Environment Policy", "Supplier Management Procedures", and "Personnel Management System" to assess and mitigate the uncertainties and impacts of sustainability risks on business operations.

In the future, the Group will properly address the challenges and opportunities brought about by future climate change under the Group's sustainability strategy, and continue to refine its sustainable development risk management by reviewing its internal controls performance of different departments on schedule, and updating relevant policies, measures, and targets.

Our Development Goal

To correspond with national policies and enhance Jutal's ability to tackle climate change, the Group established the "Climate Change Policy" during the Year, and persisted in utilizing four orientations: "Mitigation", "Adaptation", "Resistance", and "Disclosure" as the Group's strategy to address climate change and reduce its financial and non-financial impacts on the Group's operations, details of which are as follows:

Mitigation





- Adopt and expand the application of renewable energy in the Group as appropriate;
- Establish a database for climate change management by assessing and recording the Group's GHG emissions continuously; and
- Set carbon reduction targets to reduce carbon emissions generated from the operations.

Adaptation

The Group is committed to ensuring that its business operations are adaptable to climate change, and will:





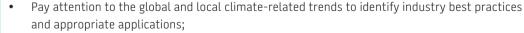
- Incorporate climate change into the Group's risk management system to identify and assess risks and opportunities arising from climate change;
- events on its business operations; and Provide regular training and drills to enhance employees' awareness regarding climate change

Develop emergency management plans to respond rapidly to the impacts of extreme weather

and emergency management.

Resistance

The Group is committed to enhancing its ability to recover from the impacts of climate change, and will:





- Review the impact of climate change caused on business operations and adjust strategies promptly in responding to climate change-related issues regularly; and
- Enhance its ability to manage climate change by maintaining close contact with stakeholders on the risks and opportunities brought about by climate change.

Disclosure

The Group promises to enhance its disclosure on climate change issues, and will:



Disclose relevant information about the Group's response towards climate change through the "Environmental, Social and Governance Report" and its website.

Sustainability Strategy of the Group

The Group will establish sustainable development goals based on its operating conditions, stakeholders' opinions, and external environmental factors, and incorporate climate change into its risk management system that aims to reduce carbon emissions by identifying the risks and opportunities derived from its business operation. The ESG working group will also regularly report to the Board and review the Group's risk management, and adjust relevant policies and measures according to the actual situation to ensure their relevance and effectiveness, thereby enhancing the Group's ability to manage climate change.

In the coming year, in addition to focusing on addressing the risks brought by climate change, the Group will also focus on improving the Group's occupational health and safety, employment system, development and training, and other important issues. The Group will propose solutions and corresponding actions one by one in response to the concerns of stakeholders and improve its risk management and policies.

Materiality Issues Assessment and Analysis

Stakeholder Engagement

To effectively establish appropriate sustainable development strategies and measures for the Group, the Group has been maintaining effective communication with various stakeholders to understand their expectations and opinions on future development, thereby minimizing the impacts caused by the changing in the company's business on them. The Group has already identified the major stakeholders, including the Board, management, employees, shareholders and investors, customers, suppliers, and contractors.

Stakeholders	Main Means of Stakeholder Engagement		
The Board, management, and staff	Board Meetings, daily operations, internal circulars, company events, meetings and emails		
Shareholders and investors	Annual general meetings, company website, annual reports, meetings, and seminars		
Customers	Client meetings, emails, and phone calls		
Suppliers and contractors	Suppliers and contractors assessments and meetings		

Material Sustainability Issues

To further identify the Group's materiality issues, the Group has continued to entrust an independent sustainability development consultant to conduct questionnaire with the Board as well as internal and external stakeholders, including directors, employees, suppliers, customers, business partners, contractors, and shareholders, to identify the material ESG issues of the business operations. The consultant has consolidated 16 ESG issues that are most relevant to the Group according to the Guide, which covers four areas, including: "Environmental Protection", "Employment and Labour Practices", "Operational Practices", and "Community Investment".



Materiality Issues Assessment and Analysis

The survey was conducted in an online questionnaire format, and a total of 185 valid questionnaires were received. The materiality assessment results are as follows:



Importance to the Group

As shown in the above materiality issues matrix, a total of 7 key issues were identified in this survey, which are:

MATERIAL SUSTAINABILITY ISSUES



Materiality Issues Assessment and Analysis

The key issues identified in this stakeholder engagement focus on three areas: "Employment and Labor Practices", "Operating Practices" and "Environmental Protection". In "Employment and Labor Practices", health and safety and employee system continue to be the key issues to various stakeholders, and development and training is the new key issues; in "Operating Practices", anti-corruption continues to be a key concern to various stakeholders, and product responsibility is a new key issue; In "Environmental Protection", waste continues to be a key concern to various stakeholders, and water resources is the new issue.

In the future, the Group will continue to further collect opinions from stakeholders through different communication channels that aim to promote interactions and build up long-term partnerships with them. To determine future governance practices and achieve sustainable business development, the Group also promises to fully consider the needs and concerns of stakeholders when making business decisions, and will continue to promote the concept of sustainable development to them.

The Group strives to build a harmonious working environment with a sound employment system and corporate culture that bring out the best in its employees, where talents can be well-developed and create sustainable development goals for the Group and its stakeholders.

Health and Safety

Since the principal activities of the Group are mainly related to energy facilities construction and services, it is essential to provide a safe workplace with appropriate management measures to protect the health and safety of its employees, which is also one of the core values for stabilizing the long-term and sustainable development of the Group.

To effectively reduce the risks related to health and safety, the Group will conduct regular safety risk assessments for its business operations to identify and formulate countermeasures in addressing the current or potential safety threats. The Group conducts on-site safety inspections regularly, and each operating site of the Group formulates its own health and safety policies and measures based on the nature of its operations, including the implementation of the OHSAS 18001:2007 certified occupational health and safety management system, and the establishment of the "Health, Safety, and Environment Protection Policy" and "Occupational Health, Safety and Environment Management Manual" to regulate the policies and procedures of production safety. In addition to formulating corresponding measures based on the assessment results, the Group will also refer to employees' opinions to understand their needs and expectations, and implement appropriate safety measures to reduce the occurrences of safety accidents.

Apart from work safety, the Group also attaches great importance to its employees' physical and mental health. The Group provides various training and seminars on health and safety for new employees, employees of specific types of work and management personnel to enhance their understanding of safe operations. The Group will provide employees with necessary personal protective equipment to raise their awareness of safety practices and reduce the risk of health and safety hazards. The Group also cares about the physical and mental health of its employees. It provides annual body checkups for employees and establishes a psychological counselling center to provide employees with counselling services. As the Group advocates the concept of "work-life balance", it encourages its employees to pursue healthy lifestyles. Therefore, facilities such as staff rooms, an indoor basketball court and fitness equipment are set up at the operating sites to inspire employees to rest and exercise occasionally, thus, enhancing work vitality and overall work efficiency and effectiveness.

In the face of the volatile situation of the COVID-19 epidemic, the Group has not slackened its anti-epidemic measures. To reduce the risks bought by the COVID-19 epidemic, the Group has taken the following measures at each operating site:

- Implement closed-off management measures by setting up monitoring points at the entrance of every operating site to measure the temperature of employees and visitors before entering the sites.
- Provide protective equipment such as protective masks, alcohol sanitizers and gloves to all employees.
- Clean and disinfect the offices, meeting rooms, restaurants, toilets, and staff dormitory regularly.
- Disinfect every vehicle that enters the operating sites to reduce the risk of virus transmission.
- Provide educational information regarding epidemic prevention through WeChat public account, epidemic prevention posters and flyers to all employees.

When encountering accidents that pose serious risks to employee safety, such as fire and explosion, mechanical damage, leakage of dangerous substances, etc., the Group will first encourage employees to remain calm and ask them to handle the accident by following the measures under the accident emergency plan, and notify the emergency rescue command center immediately. To ensure employees have fully understood the emergency plans and be able to respond in a timely manner, the Group conducts emergency drills and training regularly so that the employees can familiarize themselves with the relevant procedures, and their awareness of fire safety can also be enhanced to prevent economic losses and fatalities.

During the Reporting Period, the Group did not have any safety incidents resulting in work-related fatalities, nor did it discover any violations of laws and regulations related to health and safety. However, the Group recorded a total of 25 work-related accidents, mainly due to the lack of safety awareness of employees and incorrect operation of machinery, resulting in work-related injuries. The Group had provided supports and compensations to injured employees in accordance with local laws and regulations as well as its own regulations. To avoid the recurrence of similar incidents and prevent injuries, the Group will investigate all work-related accidents, and promises to continuously formulate, improve, and implement safety production management systems at all levels to identify appropriate preventive and corrective actions.

Number of work-related fatalities occurred in the past three years (including the Reporting Period): 0 Lost day due to work-related injuries during the Reporting Period: 1,561 days

Employment System

Employees are one of the most valuable assets of the Group, and the Group's businesses will not be stable and sustainable without their dedication and hard work. Therefore, to help attract talents and uphold the team morale, the Group is committed to providing a sound employment system and establishing a working environment that can accept, respect, and support each other for its employees.

As of 31 December 2021, the operating sites within the reporting scope of the Group hired 3,705 employees and 7,488 workers, of which 90% and 84% of the total number of employees and workers were employed by the two major construction sites, the Zhuhai site and Penglai site, respectively. During the Reporting Period, the Group reviewed and improved its existing policies and measures, and did not violated any relevant policies and measures related to compensation and dismissal, recruitment and promotion, working hours, leaves, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.

Employment & Dismissal

The Group employs suitable employees based on the principle of "meritocracy", which provides equal employment opportunities and discovers talents to serve the company through open recruitment. Employees can terminate their labour contracts at any time as needed by going through the resignation procedures according to relevant regulatory requirements. In addition, if any employee is found to have misconducted and such behaviour is conflicting with due diligence or company policy, the company will terminate the relevant employee and provide a settlement of remuneration in accordance with laws and regulations to ensure full legal compliance.

Remunerations & Welfares

The Group is committed to providing competitive remunerations and welfares to employees, including regular wages, subsidies, annual health checkups, and social insurance and housing fund. The Group has also established a work performance evaluation mechanism which evaluates employees' performances and provides annual bonuses according to the evaluation results. The Group wishes to encourage employees to work devotedly, improve their work performance and have a sense of belonging to the Group, so as to attract and retain talents.

Working Hours & Leaves

The Group attaches great importance to the rights and interests of its employees, and will arrange employees' working hours following the "Employees Attendance Management Regulations", and strictly prohibit any form of forced labour. If employees need to work overtime, they must report to their managers according to the "Personnel Management Working Procedures". At the same time, the Group has provided the employees with different leaves, including annual leave, marriage leave, maternity leave, paternity leave, etc.

Other benefits

To build a great working environment with friendly employment culture that advocates equal opportunities, diversity and anti-discrimination, the Group promises to incorporate those elements into its existing policies to protect employees or job applicants from being discriminated against by age, gender, race, religion, marital status, disability, or other unfair treatments. The Group has an employee complaining mechanism established for those employees who are intimidated, insulted, or harassed to file their complaints to the department heads or human resources management department through the "Complaints and Reporting Management System". Every complaint will be investigated and handled by the relevant department to ensure that the employee's human rights and labour rights are protected.

Development and Training

The Group is committed to exploring and nurturing the potential of its employees, and doing its best to allocate resources for its employees' development so that their potentials can be fully realized with the support of the Group. Therefore, the Group continues to provide employees with different training opportunities to encourage and assist them to make good use of the company's resources to develop themselves and improve their work knowledge and skills.

The Group has based on its business needs to formulate some targeted, systematic and forward-looking training policies for employees, including the "Internal Training Management Measures", "Lecturer Management Method", "Employees Education Training Control Procedures", "Human Resources Education Training Implementation Procedures" and "Employees Career Management System", wishing to provide guidance to issues regarding employee training, training instructors, training subsidies and course supervision. The Group also provides annual training plans according to the abilities and development intentions of different employees in three channels, which include the management, technical, and skill streams, enabling them to demonstrate their strengths in various positions. In addition, the Group has organized various training activities to correspond the Group's sustainable development plan, including:

Training Types	Training Contents
Induction Training	Corporate culture, basic knowledge of the position, work skills
On-the-job Training	Quality management, computer software, production system operation, work safety, occupational protection, handling of hazardous chemicals, procurement and supplier management, social responsibility, and integrity education
Management Training	Leadership training for senior management, management skills training for middle management, daily management training for team heads
Worker Training	Safety training for cleaning staff

During the Year, 2,969 employees of the Group received training, accounting for 80% of the total number of employees, with an average of 45.13 hours of training per employee. Among the trained employees, male and female employees accounted for 84% and 16% respectively.

Labour Standards

The Group strictly abides by local laws and regulations and adopts a zero-tolerance policy on hiring child labour and forced labour. To prevent any wrongful employment of child labour or forced labour, the Group has established the "Child Labour Rescue and Minor Labour Management Control System", "Personnel Management Working Procedures" and "Employee Attendance Management Regulations" to protect the legitimate rights and interests of employees from being infringed.

The Group requires the human resources department to strictly follow the procedures in the system during the recruitment process, carefully verify and record the identity documents of all applicants to ensure that they meet the legal employment age. If child labour is found to be mistakenly employed, the Group will immediately stop his/her work, send the child to the hospital for inspection, and notify the local labour and social security department to ensure that the child is in good health.

The Group prohibits any forms of forced labour. The management must arrange working hours for employees following the guidance of "Employee Attendance Management Regulations". If an employee needs to work overtime due to some specific reasons, he/she must report to the manager according to the "Personnel Management Working Procedures". The Group will remain vigilant to relevant incidents, and suspend relevant employees from working immediately once suspected violations are discovered. The Group will conduct in-depth investigations to review and improve its systems to close any loopholes. Employees can also take the initiative to terminate their labour contracts freely under the resignation procedures.

During the Reporting Period, the Group did not find any violations of laws and regulations related to child labour or forced labour.

Operations Management

The Group is committed to establishing mutually beneficial and long-term partnerships with its clients, and continues to provide them with excellent products and services. To this end, the Group has formulated a series of policies and measures to improve operational management and reduce risks related to product responsibility, anti-corruption, supply chain management and green procurement to business operations.

Product Responsibility

The Group is committed to providing customers with efficient, high-quality, and safe products and services. It also attaches great importance to the quality of its service management by establishing a quality management system that strictly follows the ISO 19001 international standard. The Group ensures that each project or service meets the quality requirements in the production process while fulfilling the needs and expectations of customers, and to continue to lead the Group on the road to success.

Quality Management

To enhance the Group's risk awareness of its product quality and ensure that all products meet their quality and safety requirements, the Group has implemented a systematic management system with a series of quality management inspection processes, which include: the "Operation Rules for Self-purchasing Materials", "Project Material Labeling and Tracking Procedures", "Installation Management Procedures", "Warehousing Management Procedures and Secondary Warehouse Management Procedures", controlling the procedures of raw material management, labelling, processing, storage, inspection and other processes. The Group has also established the "Product Process Inspection Control Procedures" to conduct a series of inspections on the quality of raw materials, for example: comparing the sizes of the products, the appearance of product seam welding, product sandblasting, product coating, heat treatment and pressure testing. The quality control department of the Group will conduct spot checks regularly to ensure all raw materials used in the project meet the construction requirements. During the Reporting Period, the Group did not find any products that had to be recalled due to safety and health reasons.

Customer Services

The Group is dedicated to providing professional and customized services to its customers, and ensuring that customers remain satisfied with the Group's products and services. To maintain a professional service level and enhance competitiveness, the Group provides after-sales services to follow up on customers' use of products. If a customer encounters any technical problems, the Group will arrange for employees from relevant departments to conduct investigations and provide solutions. The Group will also send technicians to perform on-site maintenance to resolve customers' technical problems if needed. Customers can leave their comments and file their complaints towards the Group through its customer inquiry and complaint handling mechanism. All feedback and complaints are centrally collected and analyzed by the Group's project department, which will conduct a comprehensive assessment of the complaints and provide improvement plans to resolve and prevent similar incidents from happening again. During the Reporting Period, the Group did not receive any complaints.

Customer Privacy

The Group respects customer privacy and their personal information and abides by all relevant rules and regulations. The Group has established the "Employee Confidentiality Management System", which requires employees to abide by the secrecy system and not to disclose any customer information to third parties for any personal gains. To protect customers' data from risks such as data leakage and unauthorized access caused by network attacks, the Group has migrated its mailbox from a local service to a third-party cloud platform. A firewall and an encryption system have also been added to the network system of the Group to increase the complexity of the administrator's password and improve the security protection effect of the application server. During the Reporting Period, the Group did not find any violation of relevant laws and regulations on service obligations and customer privacy matters that caused a significant impact on the Group.

Operations Management

Contract confidentiality and intellectual property

To protect the intellectual property rights and patents of the Group and its suppliers, the Group has attached non-disclosure clauses and other requirements when formulating the suppliers' contracts, requiring that confidential information cannot be disclosed, leaked, or used without both parties' consent to protect the mutual benefits. If any breach of contract terms or disclosure of confidential company information is found, relevant persons may be subject to disciplinary action and held criminally liable for unlawful acts. During the Reporting Period, the Group did not find any violation of laws and regulations on service obligations and customer privacy matters that caused a significant impact on the Group.

Advertisement

To ensure the credibility and accuracy of the published information, the Group established a sound news approval system during the Reporting Period. The responsible department can use the WeChat public account and other platforms to update the progress of the relevant project, which content must be approved and monitored by the management produced under the requirements of local laws and regulations before being released to the public.

Labelling

Due to the nature of the business, the Group believes that labelling has not had a significant impact on its daily operations. Therefore, this report does not disclose related policies and measures, nor does it find any violations of laws and regulations related to advertising.

Anti-corruption

The Group has always upheld to the highest standards of corporate integrity and business ethics when conducting its business transactions. It abides by all applicable laws and regulations, and adopts zero tolerance attitude towards any forms of corruption and illegal acts such as bribery, fraud and money laundering. To prevent and deal with corruption or conflicts of interest, the Group has formulated various corporate corruption prevention policies and implemented a corruption prevention management system to prevent employees from engaging in corruption or unethical behaviour.

To maintain corporate integrity and business ethics, we require all units and departments of the Group to strictly abide by the "Anti-commercial Bribery Management System" and "Code of Conduct for Trade" to prohibit employees from engaging in any improper behaviours, or soliciting bribes directly or indirectly from affiliated units, employees, and related parties. It is also strictly forbidden to keep, use and get involved with any act of embezzlement, misappropriation of company property, and accepting unnecessary hospitality and gifts. At the same time, the Group has provided clear guidance and an anti-corruption reporting channel, including the reporting box and reporting telephone number, to encourage employees to report misconduct involving business bribery. When receiving relevant reports or complaints, the Group will conduct indepth investigations and transfer those who violate the law to the local judicial authorities. During the Reporting Period, the Group did not find any corruption lawsuits against the Group and its employees.

To secure the reputation and long-term business development of the Group, the Group will regularly review its code of conduct and provide training regarding integrity, ethics, and anti-corruption to enhance employees' awareness of corruption prevention and regulations.

Operations Management

Supply Chain Management

As the Group's business development and scale have gradually expanded, our supplier network has also extended to different regions. The Group adheres to the principle of "fairness, impartiality and openness" to select suppliers consistent with the Group's values. It will also consider their backgrounds, products, and services according to the "Supplier Management Procedures", and strives to find and select environmentally and socially responsible suppliers to build strong relationships with.

To further identify the environmental and social risks of supply chain management, the Group continues to optimize and improve its procurement and supplier management. The Group's procurement department will work with other departments to handle the quality management assessment, and follow up on the quality and progress of suppliers' supply regularly to ensure that they fulfill requirements in the following areas, including materials, equipment, logistics, health and safety, and environmental management. The Group has also established the "Procurement Department HSE Management Procedures" and incorporated the performance of suppliers into the Group's occupational health and safety management system. When selecting the suppliers, the Group will conduct on-site reviews and performance assessments for the suppliers to ensure they can satisfy the needs of various aspects such as environmental protection, health and safety, labour and other factors. To reduce carbon emissions produced by transportation, the Group will prioritize the local suppliers and those with environmental certification. The Group also requires all suppliers to undertake social responsibilities and conduct effective control and continuous improvement in compliance with relevant laws and regulations on the environment and safety. If problems are found, the audit team will communicate with the suppliers and assist them to meet their requirements. The Group also encourages suppliers to adopt and implement the Group's sustainable development policies and measures to expand a broader and deeper cooperation. If any detrimental conduct is discovered, the Group will protect its best interests and customers by terminating the partnership with its suppliers.

During the Year, the Group had 250 suppliers providing raw materials and services. The suppliers were mainly from Mainland China, accounting for 96% of the total number of suppliers, and the rest were from different countries, including Korea, Germany and the United States, etc.



The Group focuses on mitigating every potential risk to the environment arising from its business operations. Therefore, the Group will undertake to strengthen our environmental governance practices, and strive to fulfil environmental and social responsibilities in all business operations by implementing various environmental management-related policies and measures. During the Year, the Group has established an environmental management system that complies with the ISO 14001 international standard as its environmental management framework for managing and operating its construction sites. It also formulated several policies and measures in the environmental field, including the "Policy for Healthy and Safe Environment", "Waste Disposal Working Instruction", "Environmental Operation Control Procedure", "Energy Conservation" and "Consumption Reduction Management System", "Hazardous Waste Management Plan", "HSE Target Indicators", and various types of environmental pollution emergency plans.

Emission Management

The Group cares about the emissions of its daily operations, including waste, wastewater, GHG emissions, and air pollutants. The Group has already established the "Policy of Healthy and Safe Environment", "Environmental Operation Control Procedures", and "Waste Collection, Identification, Storage and Treatment Procedures", demonstrating the Group's emission management guidelines, policies and implemented measures. The Group's Penglai site has set emission reduction and waste reduction targets during the Year. The details are as follows:

Emission categories	Emission reduction and waste reduction target	Performance in the Year
Hazardous waste	100% hazardous waste is collected, sorted, and handed over to an approved recycling company for recycling	The annual amount of hazardous waste generated was 522 tonnes, all of which were recycled and disposed of legally, with a disposal rate of 100%.
Wastewater disposal	 Concentration of suspended matter discharged does not exceed 150 mg/L Concentration of precipitable solids does not exceed 10 mg/L Concentration of animal and vegetable oils discharged does not exceed 100 mg/L 	Tests showed that the discharge of suspended solids, precipitable solids, and animal and vegetable oils all met the requirements of "Water Quality Standards for Sewage Discharged into Urban Sewers".
Exhaust gas and dust emission	 Concentration of toluene discharged does not exceed 5 mg/m³, while the discharge rate does not exceed 0.6 kg/h Concentration of dimethyl benzene discharged does not exceed 15 mg/m³, while the discharge rate does not exceed 0.8 kg/h Concentration of particles discharged does not exceed 10 mg/m³ Concentration of VOCs discharged does not exceed 70 mg/m³ while the discharge rate does not exceed 2.4 kg/h 	The quarterly test results showed that the emission concentration and rate of toluene, dimethyl benzene, VOCs, and particles were in line with the "Volatile Organic Compound Emission Standard" DB37/2801.5 2018 Part 5: Surface coating industry, "Regional Air Pollutants Comprehensive Requirement of Emission Standard" DB37/2376 2019. Benzene emission concentration ≤ 0.5 mg/m³, emission rate ≤ 0.3 kg/h.
Noise emission	Noise level of factories must be maintained at 60 dB or below during day time, and 50 dB or below during the night time	The noise level of factories maintained at 51-59 dB during day time and 42-49 dB during night time.

Waste Management

As a service provider in the energy and refining industry, it is inevitable that waste will be generated in the process of manufacturing equipment that may impact the environment. Due to this reason, the Group actively implements waste management and waste reduction measures at various operating sites and projects, and has formulated "Waste Collection, Identification, Storage and Treatment Procedures", "Wastewater Quality Standards for Discharge to Municipal Sewers", "Waste Disposal Working Instruction", and "Hazardous Waste Management Plan" to regulate the recycling, storage and disposal of the Group's waste in order to take appropriate management measures for the Group's hazardous and non-hazardous waste.

The hazardous wastes produced by the Group mainly include waste paint residues, waste mineral oil, waste paint buckets, waste lubricants and toner cartridges and other waste materials. Each operating site must classify its hazardous wastes according to their category, physical properties, hazardous characteristics and other factors to reduce the number of hazardous wastes produced. The temporary storage of hazardous waste in the company's material transfer station should be avoided and placed by their categories while waiting for qualified hazardous waste contractors to collect and process them.

At the same time, the Group also requires employees to reduce producing hazardous waste by following the four principles in the "Hazardous Waste Management Plan", including adopting advanced technology, using clean energy, improving management, and providing pollution prevention and control. Details are as follows:

Adopting advanced technology



Improve painting and rust removal processes, use more advanced equipment, improve paint utilization, reduce usage and try to avoid waste.

Using clean energy



Purchase higher-quality paints to reduce paint usage and avoid generating more hazardous waste.

Improving management



Reduce producing hazardous wastes as much as possible by adopting a hierarchical management system and separate control for the relevant processes involving the generation of hazardous wastes.

Providing pollution prevention and control

Establish a sound collection, storage, and transportation management system to classify, collect, and centralize hazardous wastes. Then, store them in the waste station, and transfer the hazardous waste to the relevant processing unit that signed the contract according to the principle of regular and quantitative.

The non-hazardous wastes produced by the Group mainly include waste metal and steel, domestic waste, waste cardboard boxes, waste timber and office paper. The Group is committed to implementing policies on saving, recycling and reusing resources at all operating sites, and encourages its employees to reduce waste by classifying recyclable items before getting collected by waste recyclers.

The total amount of hazardous and non-hazardous waste generated by the Group during the Reporting Period is as follows:

	2021	2020	Changes in %
Total consumption of hazardous waste ⁵ (tonne)	592	566	+5%
Hazardous waste intensity ⁶ (by number of employees and workers) (tonne/ person)	0.05	0.06	-17%
Total consumption of non-hazardous waste (tonne)	2,739	3,816	-28%
Non-hazardous waste intensity ⁷ (by number of employees and workers) (tonne/ person)	0.24	0.39	-38%

During the Year, the Group generated 592 metric tonnes of hazardous waste and 2,739 metric tonnes of non-hazardous waste, which increased by 5% and decreased by 38%, respectively. In the future, the Group will continue to review the amount of waste generated at each operating site, reduce its environmental impacts, and help improve the cost-effectiveness of its waste management by improving policies and approaches, and setting relevant long-term waste reduction targets, such as the recycling and disposal rate of 100%.

• Waste Water Management

The Group's wastewater mainly comes from production and domestic sewage at various construction sites and offices. To manage the wastewater discharges, the Group has set up drainage ditches and sedimentation tank at each operating site, and covered them with steel nets to prevent sludge, sewage and other harmful solids from discharging into the general drainage ditch and the municipal sewage pipe network. At the same time, the Group has also set up toilets, kitchens, and canteens in the employee dormitory and operating sites. They are all equipped with septic tanks and trenches to ensure that the domestic sewage meets the water quality standards before discharging into the sewage treatment plant through the municipal sewage pipe network for further wastewater treatment.

The Group complies with relevant laws and regulations, such as the "Atmospheric Pollution Prevention and Control Law of the People's Republic of China". It also entrusts an environmental monitoring agency to monitor wastewater discharge and domestic sewage from March to April every year to ensure that the Group's wastewater treatment can meet the emission standards. There were no violations of laws and regulations related to emissions and other environments during the Reporting Period.

⁵ Hazardous waste only includes only Tianjin, Penglai and Zhuhai. The remaining offices or construction sites within the reporting scope did not produce any hazardous waste.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

Greenhouse Gas Emission

During the Year, the Group continued to entrust an independent consultancy firm to conduct carbon assessment for the Group to quantify the greenhouse gas emissions generated by the Group's operations. The carbon assessment is conducted according to the "Greenhouse Gas Emissions Accounting Methods and Reporting Guidelines for Mechanical Equipment Manufacturers (Trial)" published by the National Development and Reform Commission of the People's Republic of China and with reference to international standard ISO14064-1 and the GHG Protocol.

During the Year, the Group's total GHG emissions were 51,286 metric tonnes of carbon dioxide equivalent, mainly from the purchased electricity, accounting for 73% of the total GHG emissions. Compared with last year's performance, the Group's total GHG emissions increased by 35%, which was mainly due to the increasing workload of construction sites. The GHG emission intensity by the numbers of employees and workers is 4.58 tonnes of carbon dioxide equivalent, while the intensity by RMB1,000,000 is 12.88 tonnes of carbon dioxide equivalent.

GHG Emissions	2021	2020	Changes in %
Scope I -Direct emissions ⁸ (tonnes of carbon dioxide equivalent)	14,023	11,842	+18%
Scope II — Energy indirect emissions ⁹ (tonnes of carbon dioxide equivalent)	36,997	26,031	+42%
Scope III — Other indirect emissions ¹⁰ (tonnes of carbon dioxide equivalent)	266	251	+6%
Total GHG Emission (tonnes of carbon dioxide equivalent)	51,286	38,124	+35%
GHG Intensity ¹¹ (by numbers of employees and workers) (tonnes of carbon dioxide equivalent/person)	4.58	3.92	+17%
GHG Intensity (by turnover) (tonnes of carbon dioxide equivalent/RMB1,000,000)	12.88	10.45	+23%

Scope I includes emissions of stationary and mobile sources of fossil fuel combustion, fuel combustion of industrial production process, and equipment and system operations.

Scope II includes emissions of purchased electricity and heat (excluding Dalian Jutal)

Scope III includes emissions due to employees' air business travel.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

To effectively reduce greenhouse gas emissions in daily operations, the Group will continue to take various energy-saving and emission-reduction measures, details of which are as follows:

Energy-saving and emission-reduction measures taken by Jutal during the Year

- Set up rules for saving electricity at the offices and sites;
- Preferentially select low-consumption and energy-saving products when purchasing electrical equipment;
- High-energy-consuming equipment such as dust removal fans, paint mist treatment fans, dehumidifiers, and air compressors should only be turned on as needed to prevent long-term power-on standby.
- Air-conditioning usage requirements: cannot adjust the temperature of the air-conditioner to lower than 26°C during summer, and cannot adjust to higher than 18°C during winter (except for special circumstances);
- Energy-saving lights are preferred for lighting, and use natural light as much as possible during the day;
- Check and turn off all electrical equipment such as air conditioners, computers, lights, etc. after work;
- Conduct electricity-saving inspections and analyze electricity consumption regularly;
- Provide employees with training on energy conservation and emission reduction regularly to increase their awareness of environmental protection; and
- Monitor energy consumption and set energy saving targets.

In the future, the Group will continue to improve and formulate more targeted energy-saving systems and policies by regularly evaluating, recording and analyzing its greenhouse gas emissions, the performance of existing measures, and other environmental data records.

Air Pollutants

The Group's daily operation mainly covers equipment construction and various production procedure. The air pollutants produced during the operation mainly included nitrogen oxides, sulfur oxides, particulates and volatile organic compounds ("VOCs"). The Group's nitrogen oxides, sulfur oxides, and particulates mainly came from fossil fuels consumed by production equipment at the sites, kitchen equipment and vehicles; while particulates and VOCs came from the sites' sandblasting and painting processes.

Air Pollutants	2021	2020	Changes in %
Nitrogen Oxides (kg)	56,483	58,257	-3%
Sulphur Oxides (kg)	25,672	20,408	+26%
Particulates (kg)	27,140	32,116	-15%
Volatile organic compounds ¹² (kg)	3,447	3,457	-0.29%

The Group had established environmentally friendly treatment systems at various sites to reduce air pollutants, for example: Penglai Jutal's "Abatement Options for Air Pollutants and Comprehensive VOCs Treatment Plan" and "Comprehensive VOCs Treatment Plan". They treat air pollutants generated by industrial processes such as spraying, welding, sanding, etc. with down-flow dust collectors, painting mist filters, anti-explosion centrifugal fans, organic solvent adsorption devices, activated carbon devices etc., and check the maintenance and maintenance status of the equipment every month, such as regular replacement of filter cotton and activated carbon. The Group also regularly commissioned testing companies to conduct regular emission testing to analyse the progress of air pollutant emissions and ensure that the emissions comply with the Group's standards and the local laws and regulations.

The statistics of VOCs only include emissions from the operation of construction sites in Zhuhai and Penglai, while other sites and offices did not involve VOCs emissions.

Use of Resources

The Group actively integrates environmental protection elements into its business operations to enhance the Group's performance in energy conservation. To use resources effectively and avoid waste, the Group has formulated the Energy Conservation and Consumption Reduction Management System, the Environmental Operation Control Procedures and various resource management measures. During the Year, the Group's Penglai site set targets for resource conservation. The details are as follows:

Resources categories	Targets	Performance of the Year
Electricity	Power consumption per unit output does not exceed 1% of the total rated power consumption	The actual electricity consumption exceeds the rated electricity consumption by 50%.
Water consumption	Water consumption per unit output does not exceed 3.0 cubic meters/tonne	The average water consumption is 1.45 cubic meters/tonne, which is in line with the target indicators.

Consumption of Water

The major water consumption of the Group is the domestic water used in staff dormitories, office buildings and that used for production in the daily operations of the plant. During the Year, the total water consumption of the Group was 541,930 cubic meters. All sites and offices sourced water from municipal networks to fulfil production and domestic needs. The Group has no issues in sourcing water fit for purpose.

Total water consumption and intensity	2021	2020	Changes in %
Total water consumption ¹³ (cubic metre)	541,930	261,973	+107%
Water intensity ¹⁴ (by numbers of employees and workers) (cubic metre/person)	48.42	26.95	+80%
Water intensity (by turnover) (cubic metre/RMB1,000,000)	136.11	71.83	+89%

To eliminate waste and utilize and manage water resources more effectively, the Group has adopted water conservation measures such as recycling water and multiple uses of water to increase the reuse rate of water. At the same time, to strengthen the monitoring of the Group's water consumption, it conducts statistical supervision of the total water consumption monthly. The Group has also established a regular inspection system by assigning relevant personnel to inspect the water supply network and monitor the water consumption to determine whether there is any abnormality in the water consumption. If any leakage is found, the Group will arrange for relevant personnel to carry out maintenance to avoid any wastage.

The Group's total water consumption does not include the Dalian office, which cannot provide water consumption data as these offices do not have separate water meters.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

Energy Consumption

The Group's energy use is mainly for power facilities in offices and operating sites, production machinery and vehicles, and natural gas and liquefied petroleum gas used in kitchens. During the Year, the total energy consumption of the Group's operating sites was 109,837 MWh equivalent, an increase of approximately 42% over the previous year. Among them, the major energy sources of the Group were purchased electricity and diesel, which accounted for 58% and 27% of the total energy consumption respectively.

Energy	2021	2020	Changes in %
Direct Energy			
Gasoline (MWh equivalent)	1,505	1,468	+3%
Diesel (MWh equivalent)	29,341	14,705	+100%
Liquefied petroleum gas (MWh equivalent)	681	197	+246%
Natural gas (MWh equivalent)	518	596	-13%
Liquefied natural gas (MWh equivalent)	5,665	6,776	-16%
Acetylene (MWh equivalent)	1,839	2,665	-31%
Propane (MWh equivalent)	239	138	+73%
Acrylic (MWh equivalent)	6,432	7,907	-19%
Indirect Energy			
Purchased electricity ¹⁵ (MWh)	63,361	42,526	+49%
Purchased heat ¹⁶ (MWh)	256	217	+18%
Total energy consumption (MWh equivalent)	109,837	77,195	+42%
Energy intensity ¹⁷ (by numbers of employees and workers) (MWh equivalent/person)	9.81	7.94	+24%
Energy intensity (by turnover) (MWh equivalent/RMB1,000,000)	27.59	21.17	+30%

In the coming year, the Group will continue to monitor its energy consumption and promise to formulate more energy-saving measures, such as metering the Group's high-energy-consuming facilities twice and reading the meters daily. The data and information collected will be used to compare, analyse, and manage the Group's electricity consumption effectively.

The consumption of purchased energy did not include the amount of Dalian Jutal's purchased electricity as the electricity consumed there was provided by the property owner and could not be counted separately.

The specific heat capacity of water under normal room temperature and pressure 4.1868 kj/(kg*°C) is used as the fixed value to calculate the energy provided by 11,000 tons of hot water at 40°C.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

Use of Materials

During the Year, the Group consumed a total of 247 tonnes of paper and packaging materials, which were mainly used for daily office operations and packaging of construction projects, including stretch film, plastic paper, cartons, bubble film, tape, etc. To enhance the environmental awareness and sustainable development level of the Group, the Group promises to give priority to paper and packaging materials with environmental protection certification when purchasing. The Group also promotes paperless offices that encourage employees to use electronic office mode to share and archive relevant documents and reduce paper usage as much as possible. At the same time, all departments are required to implement annual budget and quota management to strengthen internal control and improve the efficiency of material use.

The Environment and Natural Resources

To fulfil the Group's corporate social responsibility commitments, it has been doing its best to reduce the potential impact of its business on the surrounding environment and natural resources. Because of this, the Group has already implemented a series of plans based on the "Environmental Operation Control Procedure" and "2022 HSE Target Indicator Management Plan" in response to the environmental risks and factors generated in daily operation and construction activities, in order to prevent, control, reduce, and eliminate corresponding pollutions and the negative impact on the surrounding environment.

To identify and assess the potential environmental impacts and risks associated with construction projects effectively, the Group will first carry out an environmental assessment for the construction project before it commences; and then formulates environmental protection measures based on the assessment results. The Group has also established the "Emergency Plan for Environmental Pollution Accidents" to clarify all the emergency procedures and responsibilities of each department when dealing with potential environmental pollution incidents, including water, air, waste, and chemical pollution. Thereby, reducing the impacts induced on the surrounding environment in the event of an environmental pollution incident. The Group has also entrusted a qualified third party to conduct environmental monitoring on its project sites regularly, including monitoring the exhaust gas noise every quarter and checking up on the seawater and domestic sewage every year to control the pollutant discharge during the operating process that aim to enhance the quality of the environment and natural resources and improve the sustainable development of the Group.

Climate Change

During the Reporting Period, the Group established the "Climate Change Policy" with four orientations: "Mitigation", "Adaptation", "Resistance", and "Disclosure" as the Group's strategy to address climate change and minimize its financial and non-financial impacts on the Group's operations. The Group undertakes to adopt and increase the use of renewable energy based on the actual circumstances of its business by incorporating climate change into the Group's risk management system to reduce carbon emissions during operations and identify risks or opportunities that arise from them. Looking ahead, the Group will continue to monitor and review the strategies and measures in the "Climate Change Policy" to ensure that it can be integrated into every level of the business. It will also further increase employees' involvement by encouraging them to achieve the long-term strategy and carbon reduction goals of the Group that leads to the path of sustainable development.

Community Investment

To demonstrate the Group's commitment to taking its social responsibilities and giving back to society, the Group has always cared about vulnerable groups and paid attention to community development. Penglai Jutal donated a total of RMB5,000 to the affiliated communities located in Xingang Sub-district, Penglai District, Yantai City, and Shandong Province during the Reporting Period to support the sustainable communities and promote the harmonious and friendly coexistence between the enterprise and the community.

In the coming future, the Group plans to implement different types of investment by enthusiastically participating in social welfare activities, and continues to put more resources into helping the people and projects that bring diversity and positive impacts to the community.

Environmental Performance

Environmental Key Performance Indicator	Unit	2021	2020	2019
Type of emissions and the relevant emission d	ata			
Nitrogen Oxides	kg	56,483	58,257	30,147
Sulphur Oxides	kg	25,672	20,408	7,904
Respiratory Particulates	kg	27,140	32,116	16,199
Volatile organic compounds ¹⁸	kg	3,447	3,457	10,872
GHG emissions and intensity				
Scope 1 — Direct emissions ¹⁹	tonnes of carbon dioxide equivalent	14,023	11,842	5,863
Scope 2 — Energy indirect emissions ²⁰	tonnes of carbon dioxide equivalent	36,997	26,031	14,219
Scope 3 — Other indirect emissions ²¹	tonnes of carbon dioxide equivalent	266	251	320
Total GHG emissions	tonnes of carbon dioxide equivalent	51,286	38,124	20,402
GHG Intensity ²² (by numbers of employees and workers)	tonnes of carbon dioxide equivalent/person	4.58	3.92	2.39
GHG Intensity (by turnover)	tonnes of carbon dioxide equivalent/RMB1,000,000	12.88	10.45	10.08
Generation of hazardous waste and intensity				
Total generation of hazardous waste ²³	tonne	592	566	245
Hazardous waste intensity ²⁴ (by numbers of employees and workers)	tonne/person	0.05	0.06	0.03
Hazardous waste intensity (by turnover)	tonne/RMB1,000,000	0.15	0.16	0.16

The statistics of VOCs only include emissions from the operation of construction sites in Zhuhai and Penglai, while other sites and offices did not involve VOCs emissions.

Scope I includes emissions of stationary and mobile sources of fossil fuel combustion, fuel combustion of industrial production process, and equipment and system operations.

²⁰ Scope II includes emissions of purchased electricity and heat (excluding Dalian Jutal).

Scope III includes emissions due to employees' air business travel.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

²³ Hazardous waste only includes only Tianjin, Penglai and Zhuhai. The remaining offices or construction sites within the reporting scope did not produce any hazardous waste.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

Environmental Key Performance Indicator	Unit	2021	2020	2019
Generation of non-hazardous waste and inten	sity			
Total generation of non-hazardous waste	tonne	2,739	3,816	1,410
Non-hazardous waste intensity ²⁵ (by numbers of employees and workers)	tonne/person	0.24	0.39	0.17
Non-hazardous waste intensity (by turnover)	tonne/RMB1,000,000	0.69	1.05	0.07
Total energy consumption and intensity				
Direct energy	MWh equivalent	46,220	34,452	11,191
Indirect energy ²⁶	MWh	63,617	42,743	23,306
Total energy consumption	MWh equivalent	109,837	77,195	34,497
Energy intensity ²⁷ (by numbers of employees and workers)	MWh equivalent/person	9.81	7.94	4.04
Energy intensity (by turnover)	MWh equivalent/RMB1,000,000	27.59	21.17	17.06
Total water consumption and intensity				
Total water consumption ²⁸	cubic metre	541,930	261,973	224,272
Water intensity ²⁹ (by numbers of employees and workers)	cubic metre/person	48.42	26.95	26.28
Water intensity (by turnover)	cubic metre/RMB1,000,000	136.11	71.83	115.78
Packaging material used in finished products a	and intensity			
Total consumption of packaging materials	tonne	247	316	4
Packaging material intensity ³⁰ (by numbers of employees and workers)	tonne/person	0.0221	0.0325	0.0005
Packaging material intensity (by turnover)	tonne/RMB1,000,000	0.0621	0.0867	0.0026

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

The indirect energy consumption does not include Dalian Jutal's purchased electricity as the electricity consumed there was provided by the property owner and could not be counted separately.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

The Group's total water consumption does not include the Dalian office, which cannot provide water consumption data as these offices do not have separate water meters.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

This Year's intensity formula has been updated to be based on "the total numbers of employees and workers", the relevant intensity data for 2019 and 2020 have also been recalculated according to the updated intensity formula.

Social Performance

Number of emplo	oyees				2021				2020
Region		Shenzhen	Zhuhai	Penglai	Tianjin	Huizhou	Dalian	Total	Total
Gender	Male	23	593	1,743	95	132	571	3,157	2,922
	Female	9	140	321	16	6	56	548	504
Age	Below 30	3	234	704	9	25	137	1,112	1,024
	31-40	9	267	969	59	33	221	1,558	1,463
	41-50	13	175	309	30	56	202	785	732
	Above 50	7	7	82	13	24	67	250	207
Types of	Senior Management	2	1	5	0	0	0	8	14
Employment	Middle Management	7	20	18	8	11	8	72	94
	General Staff	23	712	2,041	103	127	619	3,625	3,318
	Full-time	32	733	2,064	111	138	627	3,705	3,426
	Part-time	0	0	0	0	0	0	0	0
Total		32	733	2,064	111	138	627	3,705	3,426

Number of v	vorkers³¹	2021							
Region		Shenzhen	Zhuhai	Penglai	Tianjin	Huizhou	Dalian	Total	Total
Gender	Male	1	799	4,403	212	132	771	6,318	5,455
	Female	1	74	981	0	6	108	1,170	840
Total		2	873	5,384	212	138	879	7,488	6,295

³¹ Workers include contractors, employees of service outsourcers, site workers, security personnel and cleaners.

Rate of new hires		Rate of n	ew hires	Employee tu	rnover rate
employee turnove	r rate	2021	2020	2021	2020
Region	Shenzhen	6%	19%	19%	25%
	Zhuhai	20%	30%	18%	17%
	Penglai	6%	22%	10%	14%
	Tianjin	11%	13%	8%	12%
	Huizhou	6%	2%	26%	11%
	Dalian	94%	45%	85%	24%
Gender	Male	25%	26%	27%	17%
	Female	18%	18%	17%	12%
Age	Below 30	20%	51%	18%	28%
	31-40	4%	16%	12%	11%
	41-50	4%	12%	7%	10%
	Above 50	0%	10%	6%	11%
Total		24%	25%	25%	16%

Employee occupational	Empl	loyees	Wor	Workers		
safety performance	2021	2020	2021	2020		
Work-related fatalities	0	0	0	0		
Work-related injuries	25	11	2	0		
Lost days due to work-related injury	1561	832	0s	0		
Incidence of work-related injury per 100 employees	0.67	0.32	0.027	0		

Rate of trained e	mployees				2021				2020
Region		Shenzhen	Zhuhai	Penglai	Tianjin	Huizhou	Dalian	Total	Total
Gender	Male	22%	89%	100%	88%	100%	2%	79%	91%
	Female	100%	79%	100%	0%	100%	25%	84%	90%
Types of	Senior Management	100%	0%	100%	0%	100%	0%	80%	57%
Employment	Middle Management	43%	68%	100%	0%	100%	50%	69%	47%
	General Staff	39%	88%	100%	82%	100%	4%	80%	93%
Total		44%	87%	100%	76%	100%	4%	80%	91%

Percentage of em	ployees being reviewed	regularly on K	PI and caree	r developmen	t			
Region		Shenzhen	Zhuhai	Penglai	Tianjin	Huizhou	Dalian	Total
Gender	Male	100%	100%	100%	100%	100%	100%	100%
	Female	100%	100%	100%	100%	100%	100%	100%
Types of Employment	Senior Management	100%	100%	100%	100%	100%	100%	100%
	Middle Management	100%	100%	100%	100%	100%	100%	100%
	General Staff	100%	100%	100%	100%	100%	100%	100%
Total		100%	100%	100%	100%	100%	100%	100%

Supplier Management	Mainland China	Germany	Korea	Netherlands	United States	Norway	Japan	United Kingdom	Total
Number of Suppliers ³²	241	3	1	1	1	1	1	1	250
Number of suppliers where the practices are being implemented ³³	241 (100%)	3 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)	250 (100%)

Product quality	Region	Shenzhen	Zhuhai	Penglai	Tianjin	Huizhou	Dalian	Total
Customer complaints	Amount of customer complaints	0	0	0	0	0	0	0

Excluding suppliers of Dalian Juta. The headquarters does not involve specific business practices; therefore, there were no supplier information in the headquarters.

The Group selects suppliers based on the "Supplier Management Procedures" or "Sub-Supplier Management Procedures".

Appendix I: HKEx ESG Reporting Guide Index

Material Aspect	Content	Page Index
A1 Emissions		
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 air and GHG emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	21–25, 41
A1.1	The types of emissions and respective emissions data.	21, 25, 30
A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	24, 30
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	23, 31
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	23, 31
A1.5	Description of measures to mitigate emissions and results achieved.	21–25
A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	22–23
A2 Use of Resources	5	
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	26-28, 41
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	27, 31
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	26, 31
A2.3	Description of energy use efficiency initiatives and results achieved.	26-27
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	26
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	28, 31

Material Aspect	Content	Page Index
A3 The Environment	t and Natural Resources	
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	28, 41
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	28
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.	28, 41
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.	28
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.	15-16, 39
B1.1	Total workforce by gender, employment type, age group and geographical region	15, 32
B1.2	Employee turnover rate by gender, age group and geographical region	33
B2 Health and Safet	у	
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. 	14–15, 39
B2.1	Number and rate of work-related fatalities.	15, 33
B2.2	Lost days due to work injury.	15, 33
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	14–15

Material Aspect	Content	Page Index			
B3 Development and Training					
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	16, 39			
B3.1	The percentage of employees trained by gender and employee category.	16, 34			
B3.2	The average training hours completed per employee by gender and employee category.	16, 34			
B4 Labour Standards					
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 preventing child and forced labour.	17, 39			
B4.1	Description of measures to review employment practices to avoid child and forced labour.	17			
B4.2	Description of steps taken to eliminate such practices when discovered.	17			
B5 Supply Chain Ma	nagement				
General Disclosure	Policies on managing environmental and social risks of the supply chain.	20, 40			
B5.1	Number of suppliers by geographical region.	20, 34			
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	20			
B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	20			
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	20			

Material Aspect	Content	Page Index
B6 Product Respons	ibility	
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.	18-19, 40
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	18
B6.2	Number of products and service-related complaints received and how they are dealt with.	18, 34
B6.3	Description of practices relating to observing and protecting intellectual property rights.	19
B6.4	Description of quality assurance process and recall procedures.	18
B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	18
B7 Anti-corruption		
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.	19, 40
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.	19
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	19
B7.3	Description of anti-corruption training provided to directors and staff.	19
B8 Community Inve	stment	
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.	29
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	29
B8.2	Resources contributed (e.g. money or time) to the focus area.	29

Appendix II: Laws and Regulations Compiled by the Group

Aspects	Materiality Issues	Group's Policies	Laws and Regulations (including but not limited to)
Employee	Employment	Employees Handbook; Personnel Management Policy; Employees Remuneration Management Policy; Complaints and Reporting Management System; Employees Welfare Management Policy; Code of Conduct for Employee Discipline	Labour Law of the People's Republic of China; Labour Contract Law of the People's Republic of China; Social Insurance Law of the People's Republic of China
	Health and Safety	Employees Handbook; Personnel Management Policy; Occupational Health, Safety and Environment Management Manual; Health, Safety, and Environment Policy	Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases; OHSAS18001:2007 certified occupational health and safety management system
	Development and Training	Employees Attendance Management Regulations; Internal Training Management Measures; Lecturer Management Method; Employees Education Training Control Procedures; Human Resources Education Training Implementation Procedure; Employees Career Management System	N/A
	Labour Standards	The Child Labour Rescue and Minor Labour Management Control System; Personnel Management Working Procedures	Labour Law of the People's Republic of China; Law of the People's Republic of China on the Protection of Minors; Provisions on the Prohibition of Using Child Labour

Aspects	Materiality Issues	Group's Policies	Laws and Regulations (including but not limited to)
Operation	Supply Chain Management	Product Process Inspection Control Procedures; Procurement Department HSE Management Procedures; Employees Handbook; Code of Conduct for Trade; Anti-commercial Bribery Management System; Code of Conduct for Employee Discipline; After-sales Service Management Procedures; Supplier Management Procedure	Product Quality Law of the People's Republic of China (2018 Amendment)
	Product Responsibility	Employee Confidentiality Management System; Operation Rules for Self-purchasing Materials; Project Material Labeling and Tracking Procedures; Installation Management Procedures; Warehousing Management Procedures; Secondary Warehouse Management Procedures	ISO 19001 international standard
Business Ethics	Anti-corruption	Employees Handbook; Code of Conduct for Trade; Anti-commercial Bribery Management System; Code of Conduct for Employee Discipline; After-sales Service Management Procedures	Criminal Law of the People's Republic of China

Aspects	Materiality Issues	Group's Policies	Laws and Regulations (including but not limited to)
Environment	Emissions	Abatement Options for Air Pollutants; Comprehensive VOCs Treatment Plan; Waste Safety Management Regulations; Policy of Healthy and Safe Environment; Environmental Operation Control Procedures; Waste Collection, Identification, Storage and Treatment Procedures; Waste Disposal Working Instruction	Atmospheric Pollution Prevention and Control Law of the People's Republic of China; GHG Emissions Accounting Methods and Reporting Guidelines for Mechanical Equipment Manufacturers (Trial); International standard ISO14064-1; GHG Protocol
	Use of Resources	Energy Conservation; Consumption Reduction Management System	N/A
	The Environment and Natural Resources	Consumption Reduction Management System; Emergency Plan for Environmental Pollution Accidents; Serious Pollution Weather Emergency Plan; Risk and Opportunity Management Procedures; Dangerous Substances/Chemical Control Procedure	ISO 14001 international standard
	Climate Change	Climate Change Policy	N/A



巨濤海洋石油服務有限公司 Jutal Offshore Oil Services Limited