

# Hilong Holding Limited\* (Incorporated in the Cayman Islands with limited liability)

Stock code: 1623

\*For identification purpose only

## 2023 Environmental, Social and Governance Report



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## **About the Report**

Hilong Holding Limited (the "Company") (Stock Code: 1623) hereby presents the Environmental, Social and Governance Report 2023 ("the Report") of the Company and its subsidiaries (collectively, the "Group", "Hilong" or "We"). The Report demonstrates the concepts and practices of the Group in Environmental, Social and Governance (ESG) areas to its stakeholders.

#### **Reporting Scope**

The Report primarily includes the Company and its subsidiaries. The reporting period is from January 1, 2023 to December 31, 2023 ("the Reporting Period"). The Key Performance Indicators ("KPIs") in environmental areas and social areas disclosed in the Report cover all businesses in China directly managed by the Group (of which, Hilong Pipeline Engineering Technology Service Co., Ltd., ("Hilong Pipeline"), which was sold on 31 March 2023 and the demerger process was not formally completed until November 2023, is still covered unless specified).

#### **Reporting Principles**

The Report is prepared according to the *Environmental, Social and Governance Reporting Guide* (the "ESG Reporting Guide") in Appendix C2 to the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited. The Report complies with reporting principles below:

- "Materiality": The Group determines material ESG issues through stakeholder engagement and materiality assessment which have been disclosed in the Report.
- "Quantitative": The standards, methods and sources of emission factors used in reporting emissions and energy consumption have been disclosed.
- "Balance": The Report provides an unbiased picture of the Group's environmental and social performance.
- "Consistency": The methodology and KPIs are consistent with previous years.

#### Reference

In this report, the Group's subsidiary Shanghai Hilong Drill Pipe Co., Ltd. is referred to as "Shanghai Drill Pipe", and Shanghai Tube-Cote Petroleum Pipe Coating Co., Ltd. is referred to as "Shanghai Tube-Cote", and Shenglong Oil and Gas Pipeline Inspection Technology Co., Ltd. Is referred to as "Shenglong Inspection".

#### **Report Availability**

The report is available in electronic version which can be viewed on the website of the Company (www.hilonggroup.com) and the HKEX news website (www.hkexnews.hk).

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## **About Hilong: Cultivation Leading to Expansion**

Hilong Group of Companies (Hilong Holding Limited (01623.HK), has been listed on the HKEX since 2011. The Group, as a large listed entity, is a manufacturer of high-end oilfield equipment and a provider of comprehensive oilfield technical service. Established in 2002 and headquartered in Shanghai, the Group has established production bases and business branches in more than 40 countries and regions around the world as at the end of the Reporting Period.

Hilong integrates scientific research, production and service, and continues to provide high-quality, high-tech and differentiated products and integrated services. Since our establishment, Hilong has undertaken horizontal development in drilling, exploitation, and transportation of oil and natural gas, as well as vertical development via industrial chains. The Group has established five core businesses: oil equipment, oil service, line pipe technology and services, offshore engineering, and new materials. With our five major businesses operating in synergy, we continue to innovate and have had a unique industrial chain and industrial advantages, providing high-end products and comprehensive services for internationally famous energy and oil service enterprises.



Drilling Tools

Petroleum Pipe Coating

Others



Integrated Technology Service & Turnkey
Services
Integrated Oilfield Development Service
Environment Protection of Oilfield
Automatic Drilling
Investment & Cooperation



Pipeline Anti-corrosion Coating Services

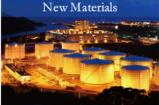
Concrete Weight Coating

Manufacture of CRA Lined Pipe

Pipeline Inspection



Engineering Technology Center Offshore Installation Center Engineering Construction Center Intelligent Control Technology Center Information Technology Services



Oil Country Tubular Goods(OCTG)

Coating

Pipeline Coating

Marine Coating

Protection Coating

After years of cultivation, the Group has established a complete sales and service network around the world. In China, the Group has established a long-term and strong strategic partnership with leading oil companies such as China National Petroleum Corporation ("CNPC"), China Petrochemical Corporation ("SINOPEC"), and China National Offshore Oil Corporation ("CNOOC"), etc. In terms of the international market, we provide highend products and comprehensive services for internationally famous energy and oil service enterprises, such as Royal Dutch Shell, British Petroleum Corporation, Schlumberger, Weatherford, ConocoPhillips, Petro Ecuador etc. As at the end of the

Reporting Period, the Group's products and services have been sold to China, Southeast Asia, South Asia, Central Asia, the Middle East, Africa, North America, South America, and other countries and regions.

Based on the transformation strategy of "Becoming a World-leading Integrated Oil Equipment and Services Provider", the Group has developed a medium-to-long-term digital transformation plan orientated towards technological innovation, the new model of "Product + Service", efficient business management, lean manufacturing operations and data-driven decision-making. The purpose is to enhance Hilong's core business capability and improve its management efficiency, thus fueling long-term, high-quality development and forming a sustainable enterprise with full perception, full connectivity, full scene and full intelligence.



**Domestic market map of Hilong** 



Global market map of Hilong

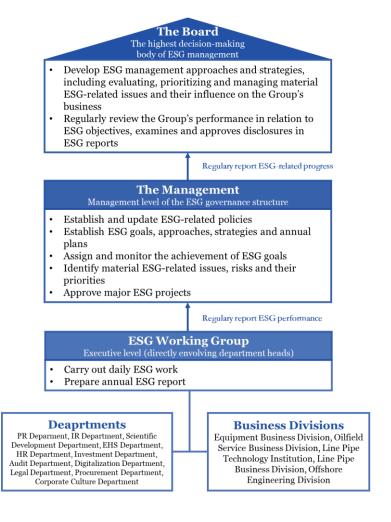
Adhering to the corporate culture of "Openness, Inclusiveness, Unity", and inheriting the Hilong spirit of "Passion, Dedication, Loyalty", Hilong will consider technological innovation and internationalization as the core development strategy, and strives to become an internationally competitive oilfield equipment and services provider, continuing to create maximized value for global customers.

#### 1. ESG Governance

A robust ESG governance is the foundation for Hilong to achieve sustainable development. To this end, we have established a comprehensive and effective ESG management structure and are actively implementing ESG management from top to down. Beyond that, we attach great importance to communication with internal and external stakeholders, including government and regulators, shareholders, customers, employees, and business partners. Through regular communication, ESG materiality assessment, etc., we have gained an in-depth understanding of their requirements and expectations for Hilong's ESG governance, which allows us to incorporate ESG considerations when developing pertinent goals, policies, and strategies.

#### 1.1 ESG Management Structure

The Group has incorporated ESG governance into its governance and has established a three-tier ESG governance structure, which consists of the Board of Directors (the "Board"), the Management, and the ESG Working Group, to assist the Group to fully evaluate ESG risks and opportunities during the work of risk management, policy formulation, and strategic planning, ensuring that the ESG-related risks and opportunities are fully integrated into the Group's business strategy.



#### 1.2 Statement of the Board

The Board of the Group takes overall responsibility for the Group's ESG management matters and reviews ESG-related matters at least once a year, including annual ESG performance, establishment of ESG goals and relevant progress, identification and prioritization of material ESG-related issues and risks, etc. The Board attaches great importance to ESG management and report preparation, requiring the ESG report to reflect the Group's key ESG areas and actively respond to the needs of various stakeholders. The Board regularly discusses the latest developments of ESG matters so as to continuously improve the sustainable development of the Group. Looking forward, the Group will continue to adhere to the concept of sustainable development and actively fulfil corporate social responsibility.

#### 1.3 Stakeholders Engagement

Highly aware of the importance of communication with stakeholders, Hilong has established effective communication mechanisms to actively respond to their expectations and requirements. Closely working with various stakeholders, we strive to promote the sustainable development of the Group.

Stakeholders	Expectations and Requirements	Communication Mechanisms
Government and Regulators	<ul> <li>Compliance with laws and regulations</li> <li>Pay taxes according to law</li> <li>Support local development</li> </ul>	<ul> <li>Daily management</li> <li>Meetings</li> <li>Monitoring and inspection</li> <li>Policy advice</li> <li>Case reporting</li> </ul>
Shareholders	<ul> <li>Continued development and return to shareholders</li> <li>Information disclosure and investor relations</li> <li>Corporate governance and risk control</li> </ul>	<ul> <li>General meetings</li> <li>Information disclosure</li> <li>Activities promoting investor relations</li> </ul>
Clients	<ul><li>High-quality products</li><li>High-quality services before and after sales</li></ul>	<ul><li>Signing of contract</li><li>Business dealings</li></ul>

Employees	<ul> <li>Remuneration and benefits</li> <li>Good work environment and development platforms</li> <li>Equal opportunities for promotion and development</li> </ul>	<ul> <li>Employee training</li> <li>Employee activities and employee care</li> <li>Performance Management</li> <li>Corporate internal publications</li> <li>Care for staff health</li> </ul>
⊗.⊗ Media	<ul> <li>Performance of corporate social responsibility</li> <li>Having a good knowledge of corporate significant events, activities and initiatives</li> </ul>	<ul> <li>Business interview</li> <li>Promotion of corporate culture</li> <li>Theme activities</li> </ul>
Partners	<ul> <li>Keep promises</li> <li>Equal, open, and fair procurement</li> <li>Mutual benefit development</li> </ul>	<ul> <li>Negotiation and communication</li> <li>Supplier assessment and evaluations</li> <li>Open bidding and tendering</li> <li>Communication and visitation</li> </ul>
Community and Society	<ul> <li>Promote urban development</li> <li>Raise public awareness</li> <li>Promote development of harmonious community</li> </ul>	<ul> <li>Industry-university- institute linkages</li> <li>Establishment of education base</li> <li>Community activities</li> </ul>
Environment	<ul><li>Promote environmental protection</li><li>Protect eco-balance</li></ul>	<ul> <li>Emission under standard thresholds</li> <li>Energy saving and emission reduction</li> </ul>

#### 1.4 ESG Materiality Assessment

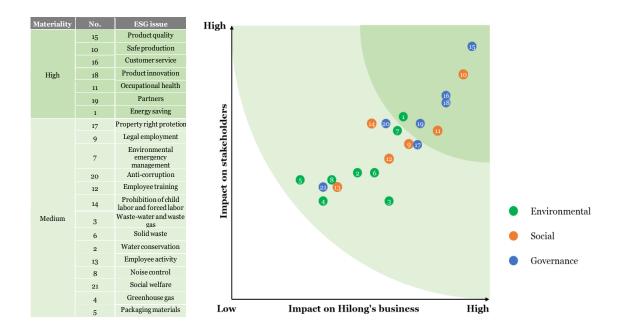
In order to understand the stakeholders' concerns about the Group's fulfilment of social responsibility and sustainable development, the Group regularly conducts materiality assessment based on ESG related standards, benchmarking against peers, expert analysis, and questionnaires collected from both internal and external stakeholders. In this way, we identified and evaluated our important material ESG topics. The specific process is as follows:

- **Step 1 Identify ESG topics:** Hilong identified ESG topics relevant to the Group in accordance with the requirements of the ESG Reporting Guide, and in line with peer benchmarking and expert analysis.
- Step 2 Determine the materiality: In the form of an online questionnaire, Hilong invited significant internal and external stakeholders to evaluate the materiality of those identified ESG topics. Based on the collected valid questionnaires, Hilong assessed the materiality of ESG topics from the perspectives of "impact on

business" and "impact on stakeholders", and then created a materiality assessment matrix.

• **Step 3 - Verify the assessment results:** The Management and the ESG Working Group reviewed and confirmed the assessment results.

During the Reporting Period, the Group carefully reviewed the ESG topics and corresponding materiality assessment results. As there are no significant changes in the Group's business and external environment, we decide to keep on using the assessment results from years before. The specific ESG materiality matrix is as follows:



**ESG Materiality Matrix** 

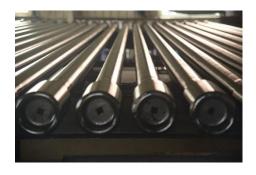
## 2. Responsible Operation

Hilong remains committed to being a responsible and conscientious industrial enterprise. Regarding high-performing research and development ("R&D") team and advanced equipment as one of the important guarantees for an organization's core competitiveness, we have established a number of professional R&D institutions with high-end experimental equipment and good R&D conditions to ensure that we have strong innovation ability and professional R&D level in various fields of oilfield technical services. In addition to delivering cutting-edge technology and quality services to customers, we also hope to use our influence to drive the sustainable development of the industry and even the society, spread the positive energy of Hilong, and make progress with all stakeholders.

#### 2.1 Promoting Technological Innovation

Focusing on customer needs and leading technology and sticking to the development strategy of "Scientific and Technological Innovation", Hilong has formed unique industrial advantages with its innovative technologies. With relentless efforts put into technological innovation of major products to support their large-scale application, we have built a scientific management system for R&D projects and a sound incentive mechanism for technology innovation. In addition to making constant breakthroughs in key and core technologies of the industry, we also work hard to promote the development and implementation of new products and new technologies. During the Reporting Period, the Group's subsidiaries, Shanghai Drill Pipe, Shanghai Tube-Cote and Hilong Pipeline were recognized as the national-level specialized, refined, distinctive and innovative (SRDI) "Small Giant" enterprises, and Hilong Drill Pipe (Wuxi) Co., Ltd. was awarded the title of SRDI small and medium-sized enterprise of Wuxi. Shanghai Drill Pipe and Shanghai Tube-Cote also accredited as "Shanghai Enterprise Technology Center". Besides, Shenglong Inspection was approved to establish the Engineering Research Centre for Pipeline Deformation Leakage Detection Technology in Baoshan District, Shanghai City.

We have always followed the "SRDI" development roadmap. In 2023, Hilong made significant investments in the R&D of drilling tools featuring "high strength, high sulfur resistance and high torsional strength", in a bid to continuously improve the performance of drill pipe products. We have achieved breakthroughs in the innovative design of drill pipe alloy materials, the optimization of pipe body heat treatment process and welding zone heat treatment process, and the testing and verification of sulfur resistance, which give us a relatively mature product - HL135MS super high-strength sulfur-resistant drill pipe that we are already able to produce in large scales. For novel special ties, Hilong also completed the independent development of the HLNST33/39/43/54 series products, which stand out for higher connection efficiency, higher torsional strength and better fatigue performance, and are suitable for deep wells, ultra-deep wells, extended reach wells, horizontal wells and other complex wells, presenting as a great success as demonstrated by their extensive application in the Middle East. In terms of magnetic leakage detection equipment for small-diameter pipelines, Shenglong Inspection has broken through the key technical problems of miniaturization of the mechanical structure of the small-diameter pipeline detector and saturation magnetization with high throughput and strong magnetization, and has successfully developed and tested the small-diameter pipeline deformation and magnetic leakage detector, which further enhances Hilong's capability in the field of magnetic leakage detection.



HL135MS Super High-Strength Sulphur-Resistant Drill Pipe



**HLNST Special Tie** 

During the Reporting Period, a number of the Group's products received external awards, honors and qualifications, which are expected to support the integration and quality development of intelligent oilfield technology services and offshore engineering technology services. Our self-developed 125S Super High-Strength Sulfur-Resistant Drill Pipe was included in the *Shanghai Innovative Product Recommendation List* (《上海市 創新產品推薦目錄》) and won an award in the Shanghai Outstanding Invention Competition; HLUDS Super Double Shoulder Drill Pipe was rewarded as Shanghai Hightech Achievement Transformation Project Top 100.

HL125S Super High-Strength Sulfur-Resistant Drill Pipe Included in the *Shanghai Innovative Product Recommendation List* and Won the Outstanding Invention Award

HL125S is one of Hilong's latest independently developed "three high" series products, featuring higher strength, high torsional resistance, and high sulfur resistance. It effectively addresses the performance bottlenecks of drill pipes that are used in harsh oil recovery environments, including issues such as hydrogen sulfide-resistant stress corrosion performance, insufficient torsional strength, and poor hydraulic performance, particularly in sulfur-rich deep wells, ultra-deep wells, and extended reach wells. This product has significantly improved the safety and reliability of drilling and production in deep wells and complex wells in harsh H2S gas reservoirs.

The product was included in the 2023 Shanghai Innovative Product Recommendation List, which is launched by the Shanghai Municipal Commission of Economy and Informatization and concluded after expert review. The list aims to highlight the cutting-edge technology innovation and application of Shanghai for the year, having a strong demonstrative significance in the industry. Besides, the product won an award in the Shanghai Outstanding Invention Competition.

HLUDS Super Double Shoulder Drill Pipe Recognized as a Shanghai Hightech Achievement Transformation Project Top 100

HLUDS Super Double Shoulder Drill Pipe is effective in solving the problems of insufficient mechanical properties, susceptibility to fatigue failure, low hydraulic efficiency, and slow tripping speed of the existing drill pipes. It utilizes a unique nonlinear thread profile structure, which can increase torque and improve the stress limit and stress distribution at threaded connections. It is one of the rotary-shouldered thread products with the best overall performance in the current market. Having been recognized as the Shanghai High-tech Achievement Transformation Project Top 100, this product is strong evidence of Hilong's efforts to promote the industrialization and practicability of new technologies.

While constantly strengthening the Group's R&D capabilities, we are also actively engaged in exchanges and cooperation with scientific research institutions at home and abroad. Hilong has successively established postdoctoral studios, Shanghai Hilong Petroleum Tubular Goods Research Institute and academician expert workstations, striving to build a strong scientific and technological innovation talent echelon. Furthermore, with our experience in product R&D and project services, we take an active part in industry exchange activities and the formulation and revision of industry standards, in an effort to contribute our strengths to overcome key technical difficulties and drive the steady development of the industry.

#### Shanghai Drill Pipe Participated in Various Industry Exchange Activities

In July 2023, Shanghai Drill Pipe, as a member of Standardization Institute of Chinese Petroleum Society (CPSI), participated in the 3rd session of the 1st CPSI meeting to discuss multiple industry standards, including the *Explanation of Standards under Development and Released by CPSI* (《石油團標委在研與發布標準項目說明》).

In October 2023, Shanghai Drill Pipe participated in the 2023 Conference jointly held by the Oil Country Tubular Goods (OCTG) Subcommittee of National Technical Committee on Petroleum and Natural Gas of Standardization Administration of China (SAC) and the OCTG Professional Standardization Committee of National Technical Committee on Petroleum Industry of SAC. The key topics discussed include the progress of the standards under development, as well as the planning of national standards and industry standards.

In December 2023, Shanghai Drill Pipe, as a member of CPSI, participated in the General Meeting of CPSI. The meeting covered policy interpretation of organization standards, release of standards, and relevant proposals.



**Industry Conference** 

#### Shenglong Inspection Participated in Technical Exchange Activities

In October 2023, Shenglong Inspection participated in the "Oil and Gas Pipeline Inspection Technology Exchange Meeting" organized by China Promotion Association for Special Equipment Safety and Energy-saving, focusing on the research of pipeline leakage magnetic detection technology, the application of new NDT (Non-destructive testing) technology in oil and gas pipeline annular weld inspection as well as the management of oil and gas pipeline integrity.

In November 2023, representatives from Shenglong Inspection attended the **Pipeline Integrity Assessment and Rehabilitation Technology Conference 2023** as speakers and gave a presentation on "**Finite Element Analysis of Pipeline Circumferential Magnetic Circuit Design**", sharing technical expertise with peers while helping industry development.

#### 2.2 Pursuing Excellent Quality

As an internationally competitive oilfield equipment and services provider, Hilong thoroughly implements the national innovation-driven development strategy and the concept of high-quality development and strives to build the core competitiveness of its brand. We strictly comply with the *Product Quality Law of the People's Republic of China* (《中華人民共和國產品質量法》), the *Regulations on Quality Responsibility for* 

Industrial Products (《工業產品質量責任條例》) and other relevant domestic and foreign laws and regulations, continuously refine our quality management system, strengthen quality-related training, focus on quality risk prevention and control, and work hard to improve the quality management ability, hoping to deliver high-quality and sustainable products and services to customers.

#### 2.2.1 Governance System Enhancement

#### **Hilong Quality Principle**

- Honouring contracts, perfecting quality control;
- •Relying on technology management, seeking quality improvement;
- •Building Hilong's brand image, exceeding customers' expectation.

To continuously provide customers with more stable and reliable products, we have obtained a number of international certifications in drilling services, drilling tools and production tools, including ISO 9001 quality management system certification, NS-1 (Non-productive-time Solution Level 1) accreditation. Moreover, we have been authorized to use the American Petroleum Institute (API) Monogram for various rotary drill stem elements of different size: API Spec7-1 (Rotary Drill Stem Elements), API Spec 5CT (Casing and Tubing), API Spec 5DP (Drill Pipe), API Spec Q1 (Specification for Quality Management System) and API Spec Q2 (Quality Management for Service Supply Organizations). In addition, to verify and ensure the effective operation of the quality

management system, the Group conducts internal and external audits of the quality management system every year to ensure its suitability, pertinence, effectiveness, and operability.



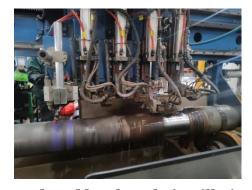
Hilong continues to strengthen its quality organization at all levels, incorporating all product quality and service quality into its quality management responsibilities scope and ensuring product quality by means of staff training, equipment selection and management, materials, production processes, operational standards, production environment, incentive mechanisms, and the provision of supervision support.

Elements of Control	Measures to Ensure Product Quality
Equipment and Testing Control	<ul> <li>Possesses advanced production and inspection equipment and establishes a complete preventive maintenance system.</li> <li>Possesses a laboratory accredited by the China National Accreditation Service for Conformity Assessment (CNAS), strictly implements the measurement management policy, and regularly carries out self-calibration and third-party manufacturer calibration and verification to guarantee the sensitivity and accuracy of inspection equipment.</li> </ul>
Material Control	<ul> <li>Ensures compliance with material quality requirements by conducting entry inspection, production process inspection, finished product inspection, physical and chemical performance testing, pre-shipment inspection, etc. on materials.</li> </ul>

Production and Inspection Process Control	<ul> <li>Makes sure that production personnel processes such as thickening, heating treatment, and non-destructive testing of drill pipe body are completed according to the relevant process control requirements of product production and inspection.</li> </ul>
Production Environment Control	• Effective management of production factors based on lean 5S principles.
Personnel Management and Incentive System Control	<ul> <li>All operators shall obtain certificates before being employed to ensure personnel capability.</li> <li>Establishes an inspection team and strengthens employees' self-supervision through process or discipline inspection and implementation of incentive systems.</li> </ul>

Through the introduction of automated inspection equipment, Hilong strives to improve the capacity and effectiveness of product quality inspection. During the Reporting Period, Shanghai Drill Pipe introduced the automated phased array ultrasonic flaw detector for the welding area of the drill pipe. With the aid of automated flaw detection technology, defects in welded seams (friction welding) can be detected more precisely, hence increasing the flaw detection rate. Apart from that, an intelligent Cloud visual inspection system was also introduced, which can use the surveillance camera to detect anomalies on the steel pipe surface and perform dimensional inspection, thereby lowering the risk of missing detection, increasing detection efficiency, and effectively saving labour costs.





**Automated Inspection Equipment Introduced by Shanghai Drill Pipe** 

The Group has established a complete emergency response plan and procedures. Once the quality management and inspection personnel have identified any safety risk in products, all the products with safety risks will be recalled immediately in accordance with the Product Recall Policy (《產品召回程式》) and be properly disposed. During the Reporting Period, there was no product subject to recalls for safety and health reason in the Group.

#### 2.2.2 Intensive Quality Training

Being fully aware that employees' quality awareness and technical ability are of great significance to assure product quality, Hilong has developed a series of targeted training courses, including professionalism, theoretical knowledge, and operational skills. Such training is designed to ensure relevant staff master the theoretical knowledge, understand the equipment operating procedures, and possess the ability to identify quality defects and inspect tooling facilities so that they can fulfill all standard operating requirements. After years of practice, the Group has cultivated a group of skilled workers and technicians with rich experience in drill pipe production and skilled in professional inspection.

During the Reporting Period, the Group formulated training plans according to the training needs of each department and carried out corresponding trainings for sales department, equipment department, production department, maintenance team, warehouse management, quality inspectors, etc. We have made sustained efforts to guarantee that quality awareness is deep-rooted in the heart of every employee and reflected in their daily work and behavior.

#### **Quality Training Activity of Shanghai Drill Pipe**

To strengthen the construction of enterprise quality culture and raise employee awareness of quality management, Shanghai Drill Pipe carried out a variety of quality training and education activities in 2023, intending to advocate full participation and ensure the smooth and orderly operation of the company's quality management system.

**Quality awareness training:** During the Reporting Period, Shanghai Drill Pipe organized on-site quality awareness training for its management staff once a week, with topics including fostering sense of responsibility, promoting the zero-defect concept, implementing total quality management (TQM), and exchanging ideas gained from reading quality management books.



**Quality Awareness Training** 

**Special training on API Spec 7-1 and API Spec Q1:** As for the updated API Spec 7-1 - Specification for Rotary Drill Stem Elements (2nd Edition) and **API Spec Q1** - Quality Management System Requirements for Organizations Providing Products for the Petroleum and Natural Gas Industry (10th Edition), Shanghai Drill Pipe provided special training for its management staff in September 2023. They invited external

instructors to interpret the latest-version document article by article, so as to help the staff better understand the specifications. Besides, an online exam was also organized after the training to help the participants consolidate their understanding of relevant knowledge.



Special training on API Spec 7-1 and API Spec Q1

**Position-based training and knowledge contest:** To encourage quality-related knowledge learning and sharing and to emphasize the importance of product quality, Shanghai Drill Pipe organized a position-based training and knowledge contest for shopfloor workers in September 2023. Under the theme of quality control, the activity explained in detail the standard operating procedures (SOP) for each position as well as the production, inspection and control technologies and processes, aiming to promote a quality culture throughout the production lines.



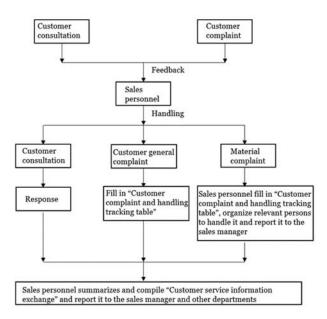
**Quality Training on Friction Welding** 

#### 2.2.3 Optimal Customer Service

Hilong is committed to providing high-quality services for its customers and keeps improving the content and quality of customer services throughout the pre-sales, sales, and post-sales processes. We have established a customer service information system and kept improving the system by strengthening the service awareness of our customer service staff and organizing service skills training. Through *Customer Service Management System* (《客戶服務管理制度》), the Group has clearly defined the handling methods and service standards for customer complaints. Each subsidiary has also formulated its own handling procedures and management methods of customer complaints, specifying the

responsibilities and specific operating procedures of each department. Shanghai Drill Pipe, for example, requires its marketing staff to issue a Customer Complaint Handling Form (《客戶投訴處理單》) one hour after receiving a customer complaint, for which Technical Quality Department needs to give a reply within 3 working days. In case of major complaint, a temporary remedy must be in place within 8 working hours, and a complete solution should be provided to the customer within 2 working days. Those who fail to handle any complaint within the required time shall be subject to corresponding fines or other penalties. In addition, we have developed the *Customer Satisfaction Control Procedures* (《客戶滿意度控制程序》) and conducted regular customer satisfaction surveys and occasional call-back to collect and respond to customer opinions, continuously improving quality of customer services.

During the Reporting Period, the Group received no complaints regarding its products and services.



**Procedure of Customer Complaint Management** 

Regarding customer information as the secret of the Group, we strictly abide by relevant laws and regulations in the places where we operate, including but not limited to the Personal Information Protection Law of the People's Republic of China (《中華人民共和國個人信息保護法》) and the Data Security Law of the People's Republic of China (《中華人民共和國數據安全法》). Under the Group's confidentiality system and work procedures, we require that the storage, sending, and receiving of customer information, as well as the transmission and carrying out of it, to be carried out by designated personnel, and no personnel are allowed to copy or extract it unless otherwise authorized. Meanwhile, we arrange more training sessions to strengthen the confidentiality awareness of employees, so as to enhance Hilong's ability to control information security risks.

As for advertising, Hilong is in strict compliance with relevant laws and regulations of the places where the Group operates, such as the Advertisement Law of the People's Republic of China (《中華人民共和國廣告法》). We have formulated the Trademark Management Regulations (《商標管理辦法》), regulating the advertising contents and conducts involving external publicity such as various types of promotional materials (brochures, newspapers and magazines, etc.), online advertisements and other forms of advertisements (SMS, WeChat, radio, television, outdoor billboards, lifts, etc.). Meanwhile, to maintain the consistency and stability of our Group's image, we have formulated the Management Regulations on the Use of Corporate Image VI(《企業形象VI 使用管理規定》), Corporate Image Visual Identity System (VI) – Basic Specification(《企業形象視覺識別系統(VI)—基礎規範》), etc., and are continuously regulating and promoting the corporate Visual Image System (VIS). During the Reporting Period, the Group's Legal Department also sent quarterly legal newsletters to the Group, all business divisions and subsidiaries to further enhance the understanding and awareness of responsible marketing.

#### 2.3 Protecting Intellectual Property Rights

Hilong is committed to respecting and protecting intellectual property rights (IPRs) and strictly abides by relevant laws and regulations and regulations, including but not limited to the *Trademark Law of the People's Republic of China* (《中華人民共和國商標法》), the *Regulations for the Implementation of the Trademark Law of the People's Republic of China* (《中華人民共和國商標法實施細則》), the *Patent Law of the People's Republic of China* (《中華人民共和國專利法》), and the *Enterprise Intellectual Property Management* (《企業知識產權管理規範》), etc. For in-house achievements in scientific research, we take timely measures to protect the patents. Overall, we have formed a comparatively complete IPR protection system.

During the Reporting Period, Hilong formulated and implemented the Regulations on Intellectual Property Management of Hilong Group (《海隆石油工業集團知識產權管理辦法》), which contains detailed provisions on the definition and classification of technical secrets, permissions of personnel with access to secrets, and the standards on the reservation and confidentiality of technical documents and materials. In case of any infringement of Hilong's intellectual property rights, the Legal Department will take timely action to protect the Group's IPRs by means such as applying for objections and filing lawsuits. The Regulations on Trademark Management of Hilong Group (Trial) (《海隆石油工業集團知識產權管理辦法》 (試行)》) also came into effect during the Reporting Period, which further clarified the segregation of duties relating to the Group's trademark management, and the processes of trademark registration, use and maintenance, further contributing to the optimization of the Group's IPR protection system. In addition, we actively engage in internal and external IPR training, seeing it as an essential means to enhance the Group's competitiveness.

#### The Group Organizes Symposiums and Training on Trade Secrets

Attaching great importance to the protection of technical secrets in the R&D process, Hilong has made continuous improvements to pertinent rules and policies to safeguard R&D secrets. During the Reporting Period, the Oilfield Service Division organized, among the Project Management Department, the technical team and other relevant parties, seminars and training on the protection of technical secrets and the process for archiving secret data. Considering the characteristics of the Division's actual projects, the *Regulations on the Management of Software Source Codes of Hilong Oilfield Service Division* (《海隆油服事業部軟件源代碼管理規定》) was formulated to refine the specific processes and clarify responsibilities of different departments.

#### **Hilong Takes an Active Part in External IPR Training Activities**

During the Reporting Period, Hilong participated in the policy interpretation meeting regarding the *Regulations on the Management of Special Funds for Intellectual Property in Shanghai* (《上海市知識產權專項資金管理辦法》) and the IPR application training workshop organized by Shanghai Baoshan District Administration for Market Regulation. Also, we took part in the training seminar on *Trade Secret Protection* (《商業秘密保護》) hosted by Shanghai Baoshan District High-Tech Zone Administrative Committee, in a bid to further enhance the Group's IPR management through industry exchanges and expert sharing.

As of 31 December, 2023, the Group has held 161 registered trademarks, 462 national authorized patents, and 54 copyright registration certificates for software programs.<sup>1</sup>

#### 2.4 Strengthening Supply Chain

<sup>&</sup>lt;sup>1</sup> Hilong Pipeline was sold on 31 March, 2023, and the Company no longer holds its equity. Thus the range of statistical data has changed, compared to that of 2022. Hilong Pipeline's trademarks, patents and copyrights are no longer included.

management, procurement process management, supplier management, quality management, warehousing management, etc.

We have set up a dedicated department responsible for managing the access and change of suppliers, reviewing and submitting supplier information for approval, conducting daily assessment and supervision, and creating supplier profiles. According to the management principle of "Differentiated Management, Dynamic Evaluation and Survival of the Fittest", we classify suppliers into four different categories, and apply different admission criteria and ways of management:

Types of Suppliers	Definition	Selection and Review System
Strategic suppliers	Suppliers that is necessary for Hilong's strategic development, directly affects Hilong's business and is irreplaceable.	The selection progress includes four steps of information filling, on-site inspection, review and approval. Suppliers are
Key suppliers	Suppliers providing a relatively large share of procurement	required to provide business licenses, copies of production licenses, ISO 9001 quality management system certificates and other materials for review.
Cooperative suppliers	Suppliers apart from strategic and key suppliers that cooperate with Hilong or its subsidiaries	The Group adopts a record filing system to collect and inquire the credit of such suppliers through public platforms to learn about their operating status and conducts on-site inspections when necessary.
Non-cooperative suppliers	Suppliers that Hilong decides not to cooperate with	

For strategic and key suppliers, who have regular business dealings with the Group, Hilong conducts annual quantitative assessments covering production quality, contract performance, after-sales service, quotation, etc. For cooperative suppliers, Hilong adopts an exception-based assessment system. Suppliers with serious violations of laws and regulations, benefits through improper means such as bribery, and serious dishonesty announced on the official websites of state organs and authorities are disqualified by the

Group. We also make a sustained effort to manage and monitor the quality of materials. We require visual inspection and internal quality control of materials before they enter the warehouse, and continuously monitor and provide feedback on their quality during the stage of usage.

#### **Material Procurement Management Training**

In August 2023, Hilong organized a training session on "Material Procurement Management", with approximately 149 participants from all the business divisions, as well as the procurement departments, production and user departments, and warehouse management departments of the subsidiaries.

The training focused on the do's and don'ts before signing procurement contracts, measures to avoid common issues in procurement contracts, evidence collection in case of contract disputes and litigation, and practices and risk prevention in signing procurement contracts. A systematic explanation of procurement compliance management was also provided. In the training, we also showed how to prevent the risk of violating the *Product Quality Law of the People's Republic of China* (《產品質量法》) and other relevant laws under the topic of "Procurement Quality Management".

This training helped material procurement personnel to significantly improve their professional competency and regulatory compliance, thus enhancing the Group's supply chain risk control and management capacities, especially material quality management capacity.



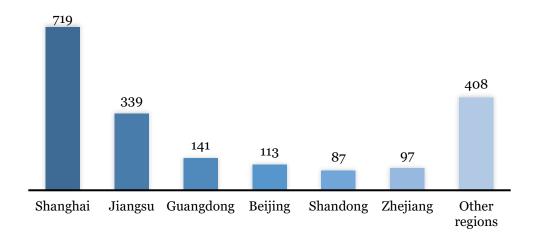
**Material Procurement Management Training** 

## New Supply Chain Management Initiative from the Material Management Department

During the Reporting Period, the Material Management Department introduced a quarterly procurement satisfaction survey for all the branches and subsidiaries within our centralized procurement scope. This new supply chain management initiative aims to understand and meet branches and subidiaries' procurement needs in a timely manner, optimize the supplier development and management process, and improve the Group's supplier management capacity.

During the Reporting Period, Hilong completed the assessment of all suppliers that had

business dealings with the Group, and no supplier was dismissed due to product quality problems. As of 31 December, 2023, Hilong had 1,904 suppliers<sup>2</sup>, and the number of suppliers by geographical region is showed as below:



Note: During the Reporting Period, we optimized the statistical scope of suppliers and newly included Hilong Oil Service & Engineering Co., Ltd. Under the new statistic caliber, the number of suppliers we had in 2022 and 2021 read 1,746 and 1,543, respectively.

In order to promote the establishment of a sustainable and responsible supply chain, Hilong actively conveys our ESG idea to the suppliers. For example, we encourage suppliers to recycle packaging materials, and promote them to produce environmental friendly products by selecting water-based paint, solvent-free epoxy paint and other environmental friendly products. For now, the packaging barrels of solvent materials recycling have been achieved, and we have incorporated environmental and social risk factors into our supplier management process.

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<sup>&</sup>lt;sup>2</sup> Since the demerger process of Hilong Pipeline was not formally completed until November 2023, for the majority of the Reporting Period, it was still managed and operated by Hilong. In order to better represent the actual status of 2023, the number of suppliers, as well as their distribution by geographical region stated in this Report, still includes Hilong Pipeline in the scope.



#### 2.5 Adhering to Business Ethics

Integrity is something the Group never stops pursuing in our operations. We see integrity as the foundation of our business. In addition, we are committed to promoting the sustainable development of the industry in an ethical and sustainable manner. Hilong strictly complies with relevant local laws and regulations, including but not limited to the Company Law of the People's Republic of China (《中華人民共和國公司法》), the Tender and Bidding Law of the People's Republic of China (《中華人民共和國反不正當競爭法》), the Anti-unfair Competition Law of the People's Republic of China (《中華人民共和國反不正當競爭法》), the Anti-money Laundering Law of the People's Republic of China (《中華人民共和國反流致法》), and the Audit Law of the People's Republic of China (《中華人民共和國審計法》), etc. In all business dealings, Hilong is opposed to any form of bribery, corruption, extortion, and corrupt practices and clearly communicates this to all employees as well as suppliers and partners.

Hilong upholds the fundamental principles of "Prevention Precedes Punishment" and "Protect Whistle-blowers" in observing business ethics. We have formulated strict management system, such as Management System for Audit Department (《審計部管理制度》), Regulations for the Implementation of the Audit Work (《審計工作實施細則》), Management System for Fraud and Irregularities (《舞弊及違規行為管理制度》), Integrity and Self-Discipline Standard (《廉政自律規範》), and the Anti-corruption and Reporting System (《反舞弊和舉報制度》), etc. The Board of the Group is responsible for urging the establishment of the internal control system. The Audit and Supervision Department of the Group is a permanent establishment for anti-fraud work and is

responsible for internal audit. The management of each subsidiary is responsible for publicizing anti-fraud policies and reporting procedures through staff manuals, rules and regulations, or internal network and other channels. We engage all employees in the prevention, management, and control of fraud, corruption, and other illegal activities.

We actively communicate our philosophy of integrity in cooperation and business to our customers, suppliers, outsourcers and other stakeholders. Meanwhile, we highlight the declaration and reporting of conflicts of interest and prohibits employees from soliciting any benefits from those who have business dealings with the Group, including business partners, customers, suppliers, contractors, competitors, or those who have business relations with Hilong. During the cooperation with suppliers, Hilong strictly implements the *Tendering Management Policy*(《招標管理制度》) and purchases materials and services through an open and fair bidding process. When signing contract with partners, Hilong also sign the *Integrity Agreement*(《廉潔協議》) with them or present them with the *Integrity Notice*(《廉潔告知書》), clarifying that no corruption should be allowed in the cooperation process.

The Group has established a sound reporting mechanism to increase the efficiency of its internal supervision on anti-corruption and integrity. Hilong has established various reporting channels, which are disclosed at easily visible spots in offices and factories, as well as sound handling procedures. After receiving complaints, the Audit and Supervision Department conducts an investigation and will report to the Management or the Board in case of confirmation, while deciding punishments in accordance with relevant regulations of the Group. If the misconduct is against the law, the Audit and Supervision Department will refer the matter to the legal authorities for prosecution. Meanwhile, Hilong has established a whistle-blower protection mechanism, through which the information of both whistle-blowers and the matter itself should be kept confidential. If the whistle-blower encounters any form of discrimination or retaliation, the Audit and Supervision Department will intervene in a timely manner by demoting those who conduct retaliation, terminating the employment contract, etc. In case of violation of laws or regulations, the case will be referred to a judicial office for further processing.

Telephone for reporting: 021-66862705

E-mail for reporting: shenji@hilonggroup.com

Mail address: Audit and Supervision Department of Hilong, No. 1825, Luodong Road,

Baoshan District, Shanghai

While conducting prevention and supervision, the Group strengthens daily anti-corruption education and regularly organizes publicity and training on anti-fraud policies and reporting procedures, bringing the risks of corruption and conflicts of interest to the attention of management. We also strive to optimize measures to identify and mitigate related risks. During the Reporting Period, we issued the multilingual *Anti-fraud Notice* (《反舞弊告知書》) to all employees, so as to further raise their anti-fraud awareness. We

also held two training sessions for the Board on reporting and anti-corruption policies, and provided anti-fraud lectures to employees.

#### **Anti-Fraud Training**

In October 2023, the anti-fraud policy was read and explained at the Group's 2023 Q3 work meeting. Focusing on the *Anti-fraud and Reporting System* (《反舞弊和舉報制度》), the training was designed to help employees gain a deeper understanding of corporate anti-fraud principles. By incorporating common fraud cases, the training sought to further raise employees' awareness of abiding by the *Code of Conduct* and ethical standards, laying the foundation for building a clean, self-disciplined, and lawabiding working environment.



**Anti-fraud Training** 

During the Reporting Period, the Group and its employees have had no violations involving corruption, bribery, extortion, fraud or anti-money laundering. Also, there were no concluded legal cases regarding corrupt practices during the Reporting Period.

#### 2.6 Sincerely Giving Back to the Society

While pursuing self-development and industry progress, we strive to promote the sustainable development of society. We are active in all kinds of charity programs, with a focus on rural revitalization and community service. We also continuously encourage employees to carry forward the spirit of selfless dedication, responsible behavior, repay the society with practical actions and improve people's wellbeing. We have formulated the *Measures for the Administration of Charity and Public Welfare Activities* (《慈善與公益活動管理辦法》), which stipulates the source and use of funds, the form of activities, the summary and assessment of activities, etc.

Theme Activity of "Learning from Lei Feng's Good Example, Passing on the Spirit of Dedication in the New Era"

In March 2023, in order to carry forward the spirit of voluntary service of "dedication, fraternity, mutual assistance and progress" and the spirit of Lei Feng in the new era, the Group sticked to its good tradition of learning from Lei Feng, and launched the theme party day activity of "Learning from Lei Feng's good example, passing on the spirit of dedication

in the new era", which was based on the starting point of "Doing practical things for the public".

The activity was a combination of "traditional service projects and innovative online projects". We launched a campaign to improve the dining environment of the canteen and another to green the environment of the plant, while also launching English language learning activities through the corporate microblogging, web site and other online platforms, helping our employees to improve their English language proficiency.

The Group's Lei Feng Learning activities serve as a vehicle for forging corporate values and uniting employees. A total of 27 comrades participated in this activity.





The Activity of "Learning from Lei Feng's Good Example

The Group actively called upon its staff to participate in community volunteer services and to contribute to the society through volunteer activities such as blood donation and paying respect to the elderly. During the Reporting Period, a total of 40 people participated in blood donation activities and 42 people devoted more than 1,000 hours to volunteer services, contributing their efforts and spreading positive energy. In addition, Hilong also established a close and friendly relationship with the community. During the Reporting Period, we donated RMB8,000 to care for and comfort the elderly in the community, actively fulfilling the Group's corporate social responsibility.





Hilong Employees actively participated in Blood Donation and Community Volunteering

#### Hilong Organized An Anti-drug Public Service Seminar

June 2023 is the National Anti-drug Publicity Month, and June 26 is the 36th International Anti-drug Day. Hilong actively cooperated with the anti-drug publicity activities of Shanghai

Baoshan Industrial Park and hosted an anti-drug public welfare seminar. The training focused on methods of identifying drugs and preventing new drugs. It also included several real cases to explain the harm of drugs to individuals, families, enterprises, country and the society, guiding all parties to establish a green and healthy life philosophy and consciously resist drugs.



**Anti-drug Public Seminar** 

### 3. Care for Employees

Adhering to the management philosophy and employment criterion of "fairness, justice and openness", Hilong strives to create a healthy and safe work environment that is friendly and cooperative, as well as diverse and inclusive. Hilong strictly complies with relevant domestic and foreign laws and regulations, including but not limited to the Labour Law of the People's Republic of China (《中華人民共和國勞動法》), the Labour Contract Law of the People's Republic of China (《中華人民共和國勞動合同法》), the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases(《中華人民共和國職業病防治法》), the Work Safety Law of the People's Republic of China(《中華人民共和國安全生產法》), and the Provisions on the Prohibition of Using Child Labour(《禁止使用童工的規定》). Meanwhile, the Group has established a rigorous training system and smooth career development paths, in order to achieve mutual growth with employees, and thrive together with them towards shared success.

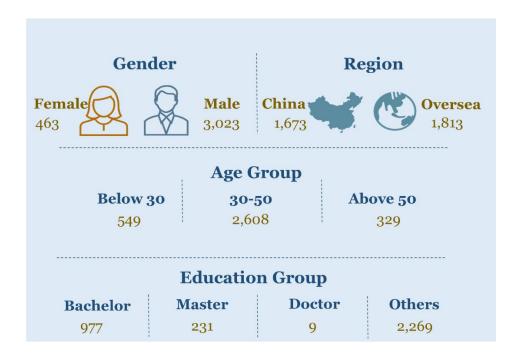
#### 3.1 Diversity, Equality and Inclusiveness

We actively maintain our diversified operations and firmly believe that diversified operations can keep the enterprise dynamic. We provide equal employment opportunities for talents regardless of their gender, nationality, race, age, family background, ethnic traditions, and religion. Based on all these, we also require all expatriate employees to fully respect the religious beliefs and living customs of local employees overseas, and arrange specialized training for employees dispatched to overseas subsidiaries and projects, so as to help them understand the laws, regulations, religious beliefs, and living customs of the corresponding countries and regions. We also work to ensure that employees of different countries, races, religious beliefs, and living customs are treated equally with respect and protection at Hilong.

Hilong strictly prohibits child labour and all forms of forced labour. In accordance with the appendix of the *Employment Management Policy* (《員工聘用管理制度》), the *Employment Standards for New Employees* (《新員工錄用標準》), the newly hired shall be above the age of 18, and their identity information is subject to strict scrutiny to prevent the unintended employment of child labour. In case of any unintended employment of child labour identified, we will immediately terminate the employment contract and send them back to their parents or other legal guardians in accordance with the *Prohibition of Using Child Labour*. Hilong strictly controls overtime in compliance with the legal working hours to guarantee the rest hour and physical and mental health of employees. In case of unavoidable overtime on holidays, employees are given compensatory time off or paid overtime wages in accordance with the law.

Besides, adhering to the principle of equality and non-discrimination, we respect the rights and interests of all employees and constantly improve the Group's internal employment management system. The Group formulated the *Employment Management Policy* and the *Labour Contract Management System* (《勞動合同管理制度》) to regulate

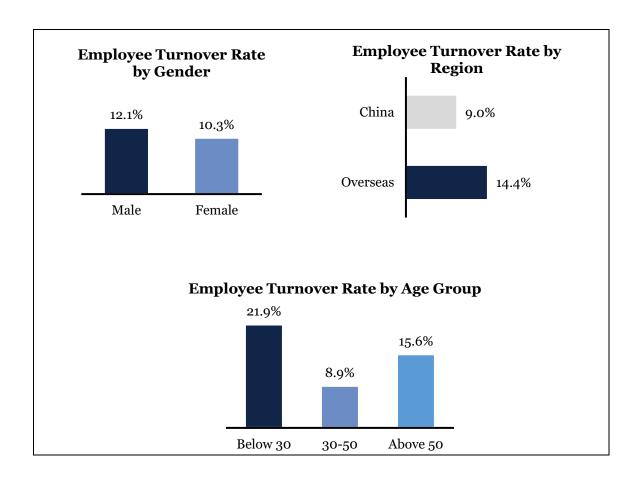
the recruitment process. Hilong explores and attracts outstanding talents through oncampus recruitment, social recruitment, recruiting websites, head-hunters, talent market, and so on. We continue to optimize the talent echelon, absorb employees with different backgrounds, and strive to improve the Group's capabilities in fields such as R&D and management. As of 31 December, 2023, Hilong had 3,486 employees<sup>3</sup> composed of all fulltime employees. More details are shown by gender, age group, region and education group as bellow:



In addition, the Group fully respects the career choices of its employees. As for resignation, Hilong strictly complies with the *Employee Termination Management Policy* (《員工離職管理制度》, and protects the legitimate rights and interests of employees. The dismissal process only starts when the employee meets relevant requirements for dismissal, plus the dismissal is confirmed by the head of his or her department. Hilong has also formulated the *Rules for Retirement Ceremony of Employees* (《員工退休歡送儀式的規定》) and organizes retirement parties and sends blessings to retired employees.

During the Reporting Period, the employee turnover rate of the Group by gender, age group, and region is shown below:

<sup>&</sup>lt;sup>3</sup> Since the demerger process of Hilong Pipeline was not formally completed until November 2023, for the majority of the Reporting Period, it was still managed and operated by Hilong. In order to better represent the actual status of 2023, the number of employees, as well as their composition and turnover rate stated in this Report, still includes Hilong Pipeline in the scope, which is different from the scope of the Group's annual financial report.



#### 3.2 Facilitating Talent Development

Hilong supports every employee to develop and grow. Recognizing the different needs and characteristics of different employees, we offer a range of training programs and transparent promotion channels, to help them achieve personal development and self-improvement.

#### 3.2.1 Comprehensive Training Systems

Hilong has formulated the *Staff Training Management Policy* (《員工培訓管理制度》) and formed a hierarchical training system to improve the ability and quality of employees, optimize their career paths, and promote the joint progress of employees and the Group. Training is arranged for employees at all levels across the Group from three levels: the Group, business division, and subsidiary company. Hilong organizes various training such as management training, professional technician training, sales training, overseas talent training, and operational and technical training each year so as to continuously improve employees' professional skills.

During the Reporting Period, we conducted a thorough assessment of talents in key posts and obtained an in-depth understanding of the talent reserves for management, R&D and technology, market/marketing, and other business lines. Based on that, we formulated the *Management Measures for Training Reserve Talents for Key Posts of the Group* (《集團

重點崗位後備人才培養管理辦法》) and the Implementation Plan for Training Reserve Talents (and Internal MBA Programs) for Vice General Managers and above of Branches and Subsidiaries (and Overseas Project Departments) of Hilong Group of Companies(《海隆石油工業集團分子公司(海外項目部)副總經理及以上崗位後備人才培訓(暨企業內部 MBA 班)實施方案》). The aim is to drive the training and quality improvement of reserve talents for all the key positions at different levels within the Group, consolidate our talent base, and accelerate our sustainable development in the long run through measures including "mentorship program", "job rotation", "sending leaders to front-line positions", and "theoretical learning". By the end of the Reporting Period, we had hammered out the first plans for "mentorship programs", "job rotations", and "theoretical learning" (i.e. "internal MBA program"), with 97, 88, and 106 employees selected for the three plans, respectively.

In 2023, we also launched the online learning platform "Hilong Cloud Classroom", so as to accelerate our progress in IT-based training. This platform makes it convenient for employees in different regions to receive training together, and contributes to the accumulation of knowledge and experience within the Group. It also allows employees to learn anywhere, anytime, making training more flexible and fun. By the end of 2023, 790 employees had completed online training in the "Hilong Cloud Classroom".

#### The "Mentorship Program"

During the Reporting Period, Hilong introduced a "mentorship program" for the first time to help employees develop their careers and improve their skills at a faster pace. We held a mentor worship ceremony to establish the mentor-apprentice relationship between new employees and their mentors and strengthen their sense of mission and identity as inheritors of the corporate culture.

In addition, the performance of the "mentorship program" was assessed and linked to the mentor's allowance. In this way, mentors were better motivated to teach their apprentices and provide them with a more immersive training experience. As a result, both the mentors and the apprentices became more engaged and had a stronger sense of achievement in the training.





**Mentor Worship Ceremony** 

During the Reporting Period, Hilong offered the first MBA program within the Group. Through a combination of online and offline training, the program consists of thematic learning modules: basic theories and case studies in business management, new products/technologies of all entities within the Group, market opportunities and challenges of the industry in overseas regions, technology and knowledge frontiers and development trends in the industry, and established management experiences of external benchmark enterprises. It helped the reserve talents in key positions of our branches and subsidiaries (and overseas project departments) to improve their comprehensive skills and consolidated the talent base for the Group's sustainable development.

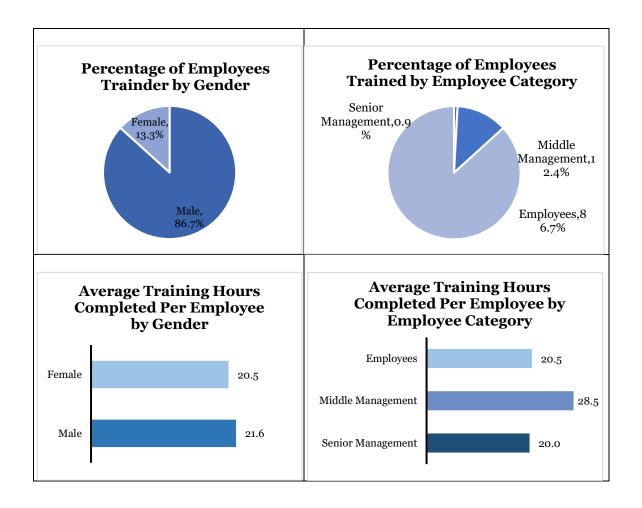
Launched in 2023, the program had 144 trainees and contained courses such as the Financial Management of Enterprises (《企業財務管理》), the Digital Transformation (《數字化轉型》), the Technologies of Carbon Capture, Storage and Utilization (《碳捕獲、封存與利用技術》), and the Introduction to New Products and Technologies of Marine Coatings/Industrial Anticorrosive Coatings (《船舶塗料/工業防腐塗料新產品、新技術介紹》).



Offline Training of the "Internal MBA Program"

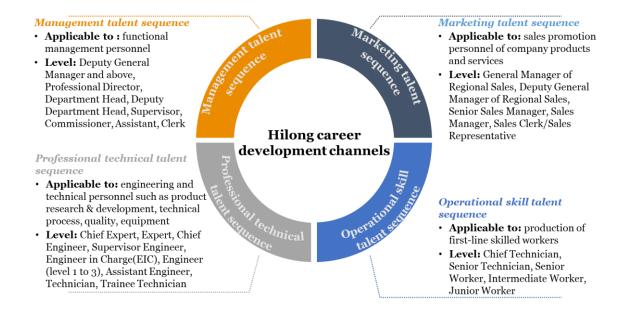
During the Reporting Period, the proportion of trained employees in the Group was 100%, with the total training hours throughout the year reaching 74,744 hours<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Since the demerger process of Hilong Pipeline was not formally completed until November 2023, for the majority of the Reporting Period, it was still managed and operated by Hilong. In order to better represent the actual status of 2023, training-related data stated in this Report still include Hilong Pipeline in the scope, which is different from the scope of the Group's annual financial report.



#### 3.2.2 Transparent Promotion Channels

In terms of employee promotion, we have set clear career development channels, helping and motivating employees to continuously realize their professional and personal values. We divide our employees into two talent categories and four talent sequences and provide appropriate career development and promotion channels for all of them.



At the same time, based on the *Performance Appraisal and Management Policy* (《績效考核管理制度》), Hilong implements annual employee performance appraisal and reviews employees' development potential. The appraisal results are taken as the basis of grade and salary adjustments. For employees of different positions and grades, the Group has formulated policies such as the *Implementation Measures on Level and Compensation Appraisal and Adjustment for Employees below Departmental Heads of the Group* (《集團部門長以下員工職級及薪酬核定調整實施辦法》), the Management Measures for Accreditation and Appointment of Professional and Technical Personnel (《專業技術人員任職資格評審及聘任管理辦法》), the Management Measures for Skill Rating of Frontline Production Operators and Appointment of Technicians (《一綫生產操作員工技能等級評定及技師聘任管理辦法》), continuously standardizing the management of employee grade adjustments and giving employees fair remuneration and clear career development channels.

### 3.3 Optimizing Compensation and Benefits

### 3.3.1 Transparent Compensation System

Hilong strictly abides by the laws and policies regarding employment, remuneration, social insurance, etc. of the countries or regions where it operates and has established competitive compensations system to ensure that the average salary of all employees are at the upper and middle levels in the market, and the salary of key core positions are at the leading level in the market. The Group has formulated the *Management Measures for Management Personnel Compensation of the Group* (《集團管理序列人員薪酬管理辦法》), *Implementation Measures on Level and Compensation Appraisal and Adjustment for Employees below Departmental Heads of the Group* (《集團部門長以下員工職級及薪

酬核定調整實施辦法》) and other management policies to improve and perfect the compensation distribution system. In accordance with the Group's principle "Equal Pay for Equal Work, Fairness and Reasonableness, Incentive and Ease of Operation", a dual-channel compensation system for management and professional technical positions is implemented.

In order to motivate employees and give rewards and punishment according to the actual situation, Hilong has formulated the *Annual Evaluation Fulfilment Measures on Group, Business Division (Specialized Company) and Subsidiary Management* (《集團、事業部(專業公司)及分/子公司管理層年度考核兌現辦法》), strengthened the link between the management's compensation, profit and completion ratio and established a compensation management system focusing on "Position, Ability and Performance".

### 3.3.2 Comprehensive Welfare Guarantee

The Group regards employees as critical assets and keeps working to improve employees' welfare support system. We strictly abide by the law, and pay social insurance premiums for employees. Moreover, our employees enjoy various benefits packages, including birthday bonuses, festival bonuses, annual physical checks, free shuttle buses, communication allowance, free work meals, etc.

In order to provide a comfortable and secure living and working environment for the new graduates, Hilong has specially prepared a well-furnished and well-equipped apartment building for them, which in turn is a strong guarantee for Hilong to attract talents. Ongoing efforts are made to help employees deal with pressing and difficult issues. Hilong has formulated and continuously implemented the *Management Measures for the Haizhou • Fund of Comprehensive Arrangement for Serious Disease* (《「海洲•大病統籌基金」管理辦法》), which helps employees with serious diseases, as well as their families, to cope with life stress.

The Group, with harmonious and stable labour relations and well-protected employees' rights and interests, was awarded the honorary plaque of "Standard Enterprise with Harmonious Labour Relations in Shanghai" by the Shanghai Human Resources and Social Security Bureau and Shanghai Federation of Trade Unions in conjunction with relevant associations, as well as that of "Demonstration Enterprise for Exemplary Labour Relations of Baoshan Industrial Park" by the Management Committee of Baoshan Industrial Park.





"Standard Enterprise with Harmonious Labour Relations in Shanghai" and "Demonstration Enterprise for Exemplary Labour Relations of Baoshan Industrial Park" Honorary Plaque

### 3.3.3 Wonderful Staff Activities

We highly value corporate culture development and are committed to offering a pleasant working atmosphere for employees. We hold splendid cultural events every year, emphasizing teamwork and enhancing employees' sense of belonging and involvement. During the Reporting Period, we successfully held the first Employee Skill Competition, the fifth Employee Sports Meeting and other major activities in alignment with our corporate culture. These activities provided a platform for employees to demonstrate their skills, communicate with each other and engage in learning opportunities. Meanwhile, we encourage our business divisions and subsidiaries to carry out team-building activities, to enrich the spiritual and cultural life of employees and lay the foundation for closer cooperation among team members.

### The First Employee Skill Competition of Hilong

To create a learning atmosphere, Hilong held the first Employee Skill Competition in June 2023. This competition also served as a platform for front-line skilled employees to demonstrate their skills, and learn from each other. 63 front-line skilled employees participated in 3 competitions, including the forklift operation competition and the maintenance competition. Outstanding performers won the first, second, and third prizes respectively. The event helped raise the awareness of continuous skill development for all employees and provided front-line staff the opportunity to showcase their talents and develop their skills.





### The First Employee Skill Competition of Hilong

### The Fifth Employee Sports Meeting of Hilong

In October 2023, the fifth Employee Sports Meeting of Hilong was held in our headquarters in Shanghai. It was aimed at helping employees to relieve work pressure and strengthening team building. The game included 15 individual sports, with badminton and running race as two examples, as well as 6 group sports, such as tug-of-war and 3x3 basketball. A total of 192 employees won awards in individual and group sports and were granted fabulous prizes by the Group. Our employees took part in the sports with great passion, demonstrating Hilong's corporate culture of "Openness, Inclusiveness, and Unity" and the Hilong spirit of "Passion, Dedication, Loyalty". Many employees shared the highlights of the meeting on WeCom, spreading the passion to every corner of the Group.





The Fifth Employee Sports Meeting of Hilong

### **Team Building Activities of Our Business Divisions**

During the Reporting Period, our business divisions also organized wonderful employee team building and cultural activities, with the intention to strengthen team cohesiveness. Such activities included badminton competitions, chess games, short video shooting, zongzi making, the lawn party on the Mid-Autumn Festival, staff birthday parties, etc., showcasing our care for employees both at home and abroad. Employees of our business divisions also shared what happened at the activities on WeCom, helping to build a positive corporate culture and injecting more energy into the development of Hilong.





**Team Building Activities of Our Business Divisions** 

We utilize the "Say Your Voice Interaction Platform" on WeCom as an online channel for communication with our employees, where employees can share their work and life stories, make suggestions, and speak up their feelings as topics for discussion. In recent years, increasingly more employees have shared their stories on the platform. During the Reporting Period, more than 300 topics were shared. We also created topics such as the "Teachers' Day: My Teachers at Hilong" and the "Hilongers' Vlogs on Mid-Autumn Festival and National Day", encouraging employees at home and abroad to participate in online interactions and showcase their professional dedication. Furthermore, we issue the internal journal *Hilongers* (《海隆人》) as a key channel to disseminate the voices of the management and keep the staff informed of the development directions of the Group. *Hilongers* also helps our employees to realize the news and technological innovations in the industry, thus paving the way for common growth and mutual promotion of the Group and its people.

### 3.4 Safeguarding Safety and Health

At Hilong, protecting employees' occupational health and life safety is one of our most important responsibilities. A number of the Group's subsidiaries have obtained relevant certification of the ISO 45001 occupational health and safety system. We set up an Occupational Health, Safety and Environmental Protection Committee ("HSE Committee"), which has the HSE Management Office as one of its subsidiaries, to manage the Group's health, safety and environmental protection issues. Also, we summarize the safety achievements of each division in the previous month and our HSE work priorities for the following month at our regular meetings on a monthly basis. The Group regularly conducts holistic and comprehensive safety inspections on its subsidiaries to identify and analyze potential safety risks in their technological processes, production operations, equipment and facilities, working environment, fire safety, use of hazardous chemicals, occupational health and safety management, personnel behavior, and management system, etc., with targeted rectification suggestions proposed to eliminate potential safety hazards in production processes in a timely manner.

During the Reporting Period, to further improve the overall HSE management at all levels of the Group, Hilong formulated and implemented the *Compilation of HSE Management Systems of Hilong Group* (《海隆集團 HSE 管理制度匯編》) across the Group to further

prevent and control occupational diseases and work-related accidents, and implement environmental protection. The Compilation serves as a practical basis for the Group to establish a unified and standardized safety management system and lays a solid foundation for Hilong to implement its HSE policies and realize its HSE goals.

### **HSE Policies:**

•People Oriented, All Staff Participation, Scientific Management, and Sustainable Development

### **HSE Goals:**

•Pursuing No Accident, No Injury and No Pollution to Create First-class HSE Performance

The Group promptly tracked the reasons, strengthened the supervision of safety hazards and implemented improvements. Besides, the Group also improved the relevant management systems, and further strengthened employee safety awareness training and safety operation assessments. During the Reporting Period, the number of lost working days of the Group was 38 days<sup>5</sup>, and the injury rate of million working hours decreased by 0.44 compared with the same period last year. In the past three years, the Group never had any work accident that involved employee fatality.

### 3.4.1 Prioritizing Production Safety

Production safety is the foundation and prerequisite of business operations. Hilong is committed to the production safety policy of "Putting Safety and Prevention First, and Governing in a Comprehensive Manner" and takes robust measures to protect the lives and properties of all parties. We have built up a robust safety production management framework comprising a range of safety systems and have enhanced the standardization of production safety for better management of production safety and fewer safety accidents.

We have established a system for inspecting production safety hazards, striving to make it everyone's responsibility, including principal personnel in charge and general staff, to inspect, manage, prevent and control hazards. Based on local laws and regulations as well as the needs and features of production safety, we adopt such different approaches to inspect hidden hazards as comprehensive, specialized, seasonal, holiday and daily inspections. For the hazards inspected, we carry out special treatments and reassess the treatment results to fully eliminate risks. During the Reporting Period, business divisions and subsidiaries of the Group organized a total of 965 hazard inspections, eliminating a number of safety hazards and accidents.

To involve all employees in safety risk prevention and control while strengthening their awareness of responsibility for safety, Hilong introduced the Safety Training Observation

<sup>&</sup>lt;sup>5</sup> Since the demerger process of Hilong Pipeline was not formally completed until November 2023, for the majority of the Reporting Period, it was still managed and operated by Hilong. In order to better represent the actual status of 2023, the number of lost working days (due to work-related injuries) still includes Hilong Pipeline in the scope, which is different from the scope of the Group's annual financial report.

Program ("STOP Card") in 2022. During the Reporting Period, the "STOP Card" was promoted across the Group, and the related program was continuously optimized.

### Sustained Promotion of the "STOP Card" in Hilong

The "STOP Card", originally proposed by a US-based company, DuPont, can identify unsafe behaviors of employees and unsafe state of objects with the participation of all employees, so as to prevent accidents through real-time risk identification. However, in practice, the "STOP Card" often suffers from a low level of employee engagement, which greatly undermines its actual effectiveness.

In response to the above issue, Hilong worked on the four aspects of "convenience, effectiveness, motivation and timeliness" during the Reporting Period and tried every possible way to mobilize employees to use the tool:

- **Convenience:** An exclusive Mini Program for the "STOP Card" has been set up, so that employees can fill in information at any time and departments can check and then rectify the problems in a timely manner.
- **Effectiveness:** Problems like irregularity and inaccuracy can easily reduce the effectiveness of the "STOP Card". To this end, Hilong has organized training to help employees acquire the right way of filling out information, so as to make the information collection more accurate and efficient.
- **Motivation:** After screening the valid "STOP Card", Hilong gives material incentives to those who fill out it to encourage employees to identify and report problems.
- **Timeliness:** For the "STOP Card" submitted by employees, Hilong requires managers to provide timely feedback on the results of the hazard inspection and related rectification, thus ensuring that the employees are aware of the follow-up of their reported problems.

In 2023, Hilong received a total of **6,041** reports of safety hazards through the "STOP Card", and granted rewards of RMB 50,230. Across the Group, there was a significant decrease in the amount of safety violations, and the number of minor injuries dropped by an incredible 86% year-on-year.

Hilong conducts safety training on an annual basis for management, department managers and operators to enhance their safety awareness. During the Reporting Period, Hilong carried out a range of theme training events on "Electrical Safety", "Safety Risk Identification", "Safety on Dust Explosion Prevention" and "Employee Safety Manual", which comprehensively improved the safety skills and enriched the safety knowledge of relevant personnel. In addition, Hilong conducted its "Production Safety Month" in June 2023 at all levels, further reinforcing the safety culture across the Group.

### Hilong's "Production Safety Month" Event

June 2023 is the 22nd "Production Safety Month" in China. On this occasion, the Office of the Work Safety Commission under the State Council and the Ministry of Emergency Management jointly issued the *Notice on Launching the 2023 National Production* 

Safety Month Campaign (《關於開展 2023 年全國「安全生產月」活動的通知》). In response to the national appeal, Hilong conducted its "Production Safety Month" event with the theme of "Safety Awareness and Emergency Response for Everyone" and built up the safety red-line for all employees through a variety of activities.

**Drawing escape road maps:** All business divisions and subsidiaries actively responded to the Group's call to mobilize and organize employees to draw escape road maps of their workshops and offices. By participating in this activity, employees became more familiar with the safety facilities and escape routes in their workplaces and surroundings with enhanced safety awareness and emergency preparedness.

Training by external lecturers: Hilong invited external experts on safety, emergency response and fire-fighting to deliver safety-specific training, including Safety Production Expenses and Costs of Safety Accidents for Enterprises (《企業安全 生產費用與安全事故成本》), Safety Knowledge of Dangerous Operations (《危險作業 安全知識》) and so on. A total of 247 employees across the Group joined the training online or offline and took an examination altogether at the end of the training to consolidate relevant knowledge and skills.



### **Safety Knowledge Training on Dangerous Operations**

**Production Safety Knowledge Contest:** On 28 June 2023, Hilong organized the 4th Production Safety Knowledge Contest, attracting a total of 64 front-line participants. Quizzes therein were closely related to employees' work and life, aiming to further enhance and consolidate their safety knowledge and skills and to assess the results of daily safety education by each division. After 30 rounds of intense competition in the preliminaries and finals, 6 employees finally stood out as the winners of first, second and third prizes.



### **Awardees Receiving Certificates**

In addition, the Group continuously strengthens the production safety and occupational health control of contractors, suppliers and other parties. We also incorporate them into internal management and further standardize the system and process of pre-qualification, selection, training of operators, supervision and inspection of operation, provision of products and services, and performance evaluation. We have established a list of qualified contractors and regularly maintain it to take effective control measures on identified safety risks of services.

In the event that a safety incident does occur, Hilong will strictly follow the *Incident and Accident Control Procedures* (《事件事故控制程序》) to handle the situation appropriately and ensure a quick response through hierarchical reporting, establishing an accident investigation team, releasing an investigation report, making an imputation based on the investigation results. We will also learn from it timely by preparing an accident analysis report and making announcement to learn lessons, so as to avoid the recurrence of similar incidents.

### 3.4.2 Protecting Occupational Health

Hilong attaches huge importance to employees' occupational health and is committed to creating a safe and favorable working environment for them. We have developed and strictly follow the *Occupational Health Management Policy* (《職業健康管理制度》) and other management procedures to standardize the management of our employees' occupational health. According to the *Administrative Regulations on Periodic Testing of Occupational Disease Hazards by Employers* (《用人單位職業病危害因素定期檢測管理規範》), Hilong yearly conducts a comprehensive inspection on work sites where the occupational disease hazards exist. If the concentration or intensity of occupational disease hazard factors exceeds the limit of occupational exposure, we will develop plans and take immediate corrective actions.

For employees working in positions with high potential of occupational disease hazards, Hilong informs them of the hazards before they start work, and arranges health examinations before, during, and after their work. All examination results will be promptly recorded in the occupational health file and communicated to the employees to ensure that they fully understand their occupational health status. During the work process, Hilong takes measures such as issuing labour protection supplies to effectively reduce the impact of the work environment on employee health. During the Reporting Period, we optimized the "Standardization of Occupational Health Files" by integrating and organizing occupational health management files, occupational hazard monitoring and evaluation files and so on, thereby enhancing the accuracy and completeness of these files.

We kept optimizing our prevention and control measures for occupational hazards in production. In the friction welding automation transformation project, we replaced the traditional polishing rust removal process with a safer and more environmental friendly laser rust removal, which not only completely eliminates the occupational health hazards of the traditional process but also alleviates the problem of environmental pollution in the

plant. To address the occupational health hazards of dust, Hilong installed online dust detection devices, spark detectors, explosion-proof valves, automatic fire extinguishing sprinklers, and other safety devices at the relevant locations of the dry dust removal system following the Safety Regulations on Dust Explosion Prevention for Industrial and Trade Enterprises (《工資企業粉塵防爆安全規定》), and the Safety Regulations for Dust Explosion Prevention and Protection (《粉塵防爆安全規程》) to thoroughly prevent safety accidents. In addition, Hilong pays attention to health education and training for all employees by regularly conducting occupational health training to popularise knowledge

on the prevention and treatment of occupational diseases and labour protection, as well

as information about healthy lifestyles, disease prevention, and mental health.

### 3.4.3 Strengthening Emergency Response

Hilong has established a sound emergency response mechanism. It has formulated enterprise-level specialized emergency response plans based on the HSE Management System of Hilong Group (《海隆集團HSE 管理制度》), and other internal regulations for major emergencies such as leakage, fire, and explosion in the production and storage of hazardous chemicals and special hazard mediums. Guided by the mechanism, the Group conducts emergency response drills annually to constantly enhance the emergency awareness and hands-on capabilities of staff and extract corresponding corrective measures from the drill results to continuously improve emergency management capabilities.

To reduce potential accidents in the workplace and production process, such as the short circuit of power cables and equipment, which may easily result in casualties, the Group has compiled the *Exercise Plan for On-site Electric Shock Response* (《觸電事故現場處置演習方案》). During the Reporting Period, the Group conducted on-site exercises for such scenarios for a timely and effective emergency response to electric shock incidents. Moreover, during the Reporting Period, Hilong organized the "Fire Prevention Month" event, to strengthen employees' emergency response capabilities in case of fire and other emergencies.

### Hilong's "Fire Prevention Month" Event

During November 2023, all business divisions and subsidiaries of the Group launched "Fire Prevention Month" events to promote the fire safety awareness and enhance the emergency response capabilities of all employees through publicity, training and special inspections.

For example, Shanghai Drill Pipe conducted two special inspections on fire safety and one special training session on fire prevention, which demonstrated two practical skills of fire-fighting in the form of lecture during the "Fire Prevention Month".





**Event of Special Inspection on Fire Safety by Shanghai Drill Pipe** 

Apart from special fire safety inspections, a special leading team set up by the Pipeline Division held two emergency drills on "Office Fire" and "Workshop Dust Explosion" to enhance staff's ability for self- and mutual rescue in a fire accident.





**Event of Fire Safety Drill by the Pipeline Division** 

### 4. Green Operation for Better Ecosystem

Hilong is committed to environmental protection and energy conservation. We keep pursuing clean production and implementing the philosophy of sustainable development for the goal of zero environmental pollution.

The Group strictly complies with the laws and regulations of the countries or regions in which it operates, including but not limited to the Environmental Protection Law of the People's Republic of China (《中華人民共和國環境保護法》), Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution (《中華人民 共和國大氣污染防治法》), Law of the People's Republic of China on Prevention and Control of Water Pollution(《中華人民共和國水污染防治法》), Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste (《中華人民共和國固體廢物污染環境防治法》), etc. Meanwhile, under the guidance of the "People-oriented, Health Priority, Safety First, and Leading in Environmental Protection" policy, Hilong continuously improves its environmental management system and insists on the efficient use of energy resources in accordance with the ISO 14001/GB/T 24001 Environmental Management System Requirements and Usage Guidelines (《ISO 14001/GB/T 24001 環境管理體系要求及使用指南》) and the Hilong Holdings' Environmental Protection and Energy Conservation Management System (《海隆控股 環保節能管理制度》). A number of the Group's subsidiaries have already obtained the ISO 14001 environmental management system certification, and its core enterprise, Shanghai Drill Pipe, has even been listed as a Shanghai Green Manufacturing System Demonstration Unit.

Hilong will continue its efforts for the proactive protection of natural resources and environmental governance. For this purpose, Hilong will integrate green solutions into the Group's existing business through the exploration of clean energy projects and the innovation of green, energy-saving materials. By doing so, Hilong will shoulder its corporate responsibilities in realizing the national goal of "carbon peaking and carbon neutrality", as well as tackling climate change on a global scale.

### 4.1 Green Product Research and Development

Upholding the green development concept of "Innovation, Green Development, Openness, and Sharing", the Group has developed its own research and development capabilities. During the Reporting Period, some of our products made technical breakthroughs and won external recognition, which are expected to help the industry achieve production that is more environmentally friendly, more efficient and more secure.

Hilong's self-developed TC-3000FP powder coating is resistant of high temperature, tear, and corrosion. It also has higher fluidity and can thus reduce VOC (Volatile Organic Compounds) emissions during the coating process. TC-3000FP powder coating has been listed in the Recommended Catalog of Shanghai Innovative Products because of its green, safe and pro-environment characteristics.

### 4.2 Efficient Utilization of Resources

To deliver on Hilong's transformation strategy of "developing into a world's leading manufacturer and service provider of oilfield equipment", we work on shifting to a more efficient and leaner model of production and operation. Also, we strictly comply with policies, goals and commitments on health, safety and environment protection during production and operations, and fulfill the requirements of sustainable development on energy conservation and clean production.

### 4.2.1 Energy Resource Utilization

The energy used by Hilong mainly includes natural gas used in the production, petrol and diesel consumed by forklifts, electricity used in production, office and life in the factory, as well as natural gas, diesel, petrol and electricity used in the drilling process of oilfield service and marine engineering services.

Hilong strictly abides by the relevant laws and regulations of countries or regions where it operates, for example, the Energy Conservation Law of the People's Republic of China (《中華人民共和國節約能源法》). We have developed our own Environmental Protection and Energy Conservation Management Policy (《環保節能管理制度》) to standardize the management of energy conservation within the Group. Each division has set up an energy office and formulated its own energy-saving targets and related implementation plans to improve energy efficiency and reduce total energy consumption by vigorously promoting green office and green production. During the Reporting Period, we carried out an energy-saving renovation of the headquarter office building in Shanghai by upgrading the entire lighting system to LED energy-saving lamps. At the same time, we proactively promoted the rooftop photovoltaic power generation project in Shanghai's industrial park. The project has almost completed the bidding process and is scheduled to commence in 2024 with its estimated total installed capacity over 9MW. On the other hand, Hilong Pipeline commenced the replacement and renovation of the medium frequency machine and added electromagnetic induction heating equipment to control the heating temperature more efficiently and accurately during the Reporting Period. It is expected to save approximately 10% of energy upon the completion of the renovation.





Hilong Pipeline: Medium Frequency Machine Energy Saving Renovation Project

During the Reporting Period, the direct/indirect energy consumption in total and intensity are shown below:

A2.1 Energy	2023	2022	2021	Unit
Natural gas	606	480	345	10,000 m <sup>3</sup>
Diesel	86	92	62	tonnes
Gasoline	20	38	33	tonnes
Liquefied gas	5	6	5	tonnes
Total direct energy consumption	66,888	53,579	38,529	MWh
Electricity	44,506	36,602	42,839	MWh
Total indirect energy consumption	44,506	36,602	42,839	MWh
Total energy consumption	111,394	90,181	81,368	MWh
Energy consumption intensity	26.2	24.1	27.9	MWh/million RMB revenue

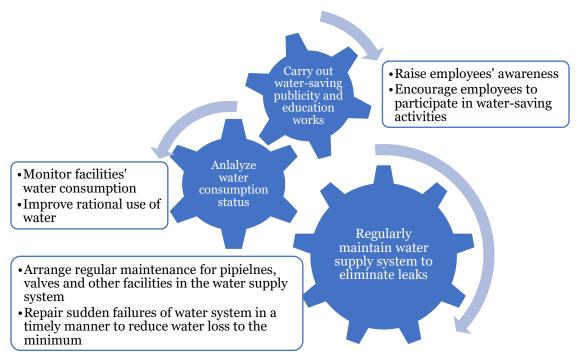
Note 1: Total energy consumption is calculated based on the consumption of natural gas, diesel, gasoline and liquefied gas and the amount of electricity purchased. Conversion factors come from Appendix 1: default values of fossil fuel and Appendix 2: default density of fuel oil of the Accounting Methods and Reporting Guide for Greenhouse Gas Emissions from Mechanical Equipment Manufacturing Enterprises (《機械設備製造企業溫室氣體排放核算方法與報告指南》) issued by the NDRC.

Note 2: During the Reporting Period, the increase in the use of natural gas and electricity was mainly attributable to the increase in overall production; the decrease in the use of diesel and gasoline was mainly attributable to the restructuring of certain operations and the decrease in demand for business trips.

### 4.2.2 Water Resource Utilization

Hilong uses municipal water and applicable local water sources, and did not encounter any difficulty in sourcing water during the Reporting Period. We strictly abide by relevant laws and regulations of countries or regions where we operate, including but not limited to the Water Law of the People's Republic of China (《中華人民共和國水法》). By formulating and perfecting the Environmental Protection and Energy Conservation Management Policy (《環保節能管理制度》) and Management Rules on Water Utilisation (《用水管理制度》), the Group strives to ensure that its water usage and water conservation work are carried out in an effective and orderly manner.

Our water conservation initiatives include, but are not limited to:



In 2023, we carried out a water-saving renovation of the headquarter office building in Shanghai, and replaced all sanitary wares in washing rooms with water-saving ones, which is expected to save up to 900 tonnes of water per year.

During the Reporting Period, the Group's water consumption in total and intensity are shown below:

A2.2 Water	2023	2022	2021	Unit
Water consumption	105,096	106,060	81,043	tonnes

Water consumption intensity	24.7	28.4	27.8	tonne/ million RMB revenue
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Note: During the Reporting Period, the Group effectively improved the efficiency of water usage by repairing water leakage and optimising the heat treatment process. Therefore, the water consumption intensity declined in 2023.

### 4.2.3 Packaging Material Utilization

The packaging materials used by Hilong primarily include packing frames, iron packing belts, pipe protection ropes, wooden cases, paper cases, etc. For packaging materials that meet the conditions for recycling and reuse, we proactively carry out recycling operations to reduce unnecessary consumption of resources.

During the Reporting Period, the total amount and intensity of packaging materials used in the Group's finished products are shown below:

A2.5 Packaging Materials	2023	2022	2021	Unit
Packaging materials consumption	273.8	275.6	215.0	tonnes
Packaging materials intensity	64.4	73.8	73.7	kg/million RMB revenue

Note: During the Reporting Period, although the overall production volume increased, the production volume of products with a high demand for packaging materials decreased, thus the packaging materials intensity went down.

### 4.3 Implementation of Emission Management

Hilong is committed to sustainable management throughout its operation and upholds emission management with environmental standards above national and local standards. "No Pollution" has long been set as one of our HSE goals. The Group regularly invites and cooperates with local environmental supervision department to test its emissions, thus ensuring the compliance. To raise awareness of emission management within the Group, Hilong has set up specific environmental protection indicators and incorporated them into the assessment system for each business division and its leading members. Meanwhile, the Production Safety and Environmental Protection Department of the Group conducts a unified yearly inspection of all production units in Shanghai, monthly inspections of the Baoshan Industrial Zone, and unscheduled on-site inspections on emission management. It also requires the Safety and Environment Offices of subsidiaries to conduct independent environmental inspections to ensure up-to-standard discharge.

#### 4.3.1 Waste Gas and Wastewater

Hilong's waste gas emissions mainly include VOCs generated from the coating production, NOx and SO2 from natural gas combustion in boilers for pipe heating, particulate matters from powder coating, and waste gases from diesel consumption in diesel engines for well drilling. We strictly comply with the relevant laws and regulations and have set up corresponding purification treatment equipment in process links that can generate exhaust gas, collect and process the generated exhaust gas, and only discharge them into the atmosphere after making sure they reach the emission standard.

### Implementation of Dust Removal Plan by Shanghai Drill Pipe

During the Reporting Period, Shanghai Drill Pipe installed new dust removal equipment for the drill pipe resharpening process, and compiled internal procedures for equipment operation and record books for equipment inspection to standardize the use of equipment. As of December 31, 2023, the dust removal equipment in Line 2 and 3 had already passed check, while same efforts would be stepped up for the equipment in Line 1.





Shanghai Drill Pipe: New Dust Collector

Wastewater generated from Hilong includes domestic wastewater and production wastewater from general production processes and oilfield services. Hilong discharges domestic wastewater directly into the municipal sewage network. General production wastewater is recycled without external discharge, and wastewater generated by oilfield services is treated in accordance with the laws and regulations of the jurisdictions where they are located to ensure that discharges are in compliance with regulations. Hilong and its subsidiaries all have the *Permit to Discharge Urban Sewage into the Drainage* 

Networks (《城鎮污水排入排水管網許可證》), ensuring that the number and location of drains, water discharge, variety and concentration of major pollutants discharged, etc. comply with the *Urban Drainage and Sewage Treatment Regulations* (《城鎮排水與污水處理條例》) and other relevant regulations.

During the Reporting Period, the types of wastewater and waste gas related emissions generated by the Group and the emission data are shown below:

A1.1 Emissions	2023	2022	2021	Unit
VOCs	0.5	0.5	0.3	tonnes
NO <sub>x</sub>	4.1	5.1	4.9	tonnes
SO <sub>2</sub>	0.87	0.28	0.24	tonnes
Particulate Matter	4.8	6.5	6.7	tonnes
Wastewater	85,867.0	92,284.2	72,807.2	tonnes

Note 1: During the Reporting Period, the Group's nitrogen oxides emissions decreased year-on-year, mainly due to the introduction of low-nitrogen combustion technology by some subsidiaries, which could effectively reduce nitrogen oxides emissions during the production process.

Note 2: During the Reporting Period, the Group's sulphur dioxide emissions increased year-on-year, mainly due to the increase in overall production volume and the optimisation of data accounting methods by some subsidiaries, which resulted in an improvement in the accuracy of the relevant data as compared with those of previous years.

Note 3: During the Reporting Period, the Group's particulate matter emissions decreased year-on-year, mainly due to the optimisation of data accounting methods by some subsidiaries, which resulted in an improvement in the accuracy of the relevant data as compared with those of previous years.

Note 4: During the Reporting Period, the Group's wastewater emissions decreased year-on-year, mainly due to the optimisation of processes by some subsidiaries, which reduced wastewater emissions.

#### 4.3.2 Greenhouse Gases

Hilong's greenhouse gas emissions primarily include fuel used in heat treatment processes, gasoline and diesel burning of vehicles and indirect emissions from purchased electricity. Since greenhouse gas emissions mainly come from energy consumption, Hilong actively encourages green office and green production, carries out energy-saving renovation projects and adopts energy-saving measures to reduce energy consumption, thus reducing greenhouse gas emissions.

In 2023, as part of the effort to promote sustainable development and better manage greenhouse gas emissions, Hilong Pipeline and Shanghai Hilong CRA-Lined Steel Pipe invited third-party professional organizations to assist in the verification of their carbon emissions, helping confirm their greenhouse gas emissions from 2020 to 2022. The above verification work helped the two companies to figure out their own carbon emission baseline and to fully explore the opportunities for emission reduction, laying a solid foundation for further energy saving and emission reduction in the future.

During the Reporting Period, the Group's greenhouse gas emissions in total and intensity

are shown below:

A1.2 Greenhouse gases	2023	2022	2021	Unit
Scope 1: Direct emissions	13,449	10,801	7,768	tCO <sub>2</sub> e
Scope 2: Indirect energy emissions	27,019	22,705	26,869	tCO <sub>2</sub> e
Total emissions	40,467	33,506	34,637	tCO <sub>2</sub> e
Emission intensity	9.5	9.0	11.9	tCO2e/million RMB revenue

Note 1: Greenhouse gas emissions are presented in CO2 equivalent. Greenhouse gas emissions from electricity purchased in Shanghai are calculated based on the electricity emission factors adjusted by the Shanghai Municipal Bureau of Ecology and Environment in 2023, while other accounting methods and conversion factors come from the Accounting Methods and Reporting Guide for Greenhouse Gas Emissions from Mechanical Equipment Manufacturing Enterprises (《機械設

備製造企業溫室氣體排放核算方法與報告指南》) issued by the National Development and Reform Commission . Note 2: During the Reporting Period, the increase in our GHG emissions was mainly due to the increase in overall production volume and production energy consumption.

### 4.3.3 General Solid Waste

The general solid waste generated by Hilong mainly includes domestic waste and general industrial waste from the production process. The Group reinforces the management of general solid waste in accordance with laws and regulations of where it operates, such as the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste (《中華人民共和國固體廢物污染環境防治法》), while being guided by the idea of "Full Coverage Based on Different Levels and Categories with Traceable Destination". We have formulated and refined the General Industrial Solid Waste Management Policy (《一般工業固廢管理制度》) to optimize the classification system and clarify the main responsibilities of relevant units, thus forming a closed loop general solid waste management system that could cover the whole process of generation, storage, collection, utilization and disposal.

General Solid Waste Category	Regulations/ Policies to Follow	Disposal Measures
Domestic Waste	<ul> <li>Administrative Measures for Living Garbage of Shanghai (《上海市生活垃圾管理 條例》)</li> <li>Management Measures for Environmental Sanitation within Hilong Industrial Park (《海隆工業園區環境衛</li> </ul>	<ul> <li>Set up a domestic waste classification system to promote the classification of domestic waste</li> <li>Entrust the municipal environmental sanitation department to collect and dispose of the waste</li> <li>Actively implement the garbage classification and "Empty Plate Initiative"</li> </ul>

	生管理辦法》)	activities through various publicity methods, encouraging employees to reduce domestic garbage from the very beginning
General Industrial Waste	• Waste Disposal Measures (《(海隆 集團)廢舊物資處理辦 法》)	<ul> <li>Sell recyclable solid wastes, such as scrap steel pipes, to qualified enterprises for recycle and reuse</li> <li>Store other unrecyclable non-hazardous industrial wastes in a specific place and entrusts qualified professional organizations to deal with them</li> </ul>

During the Reporting Period, the total amount of non-hazardous wastes produced and their respective intensity are shown below:

A1.4 Non-hazardous Waste	2023	2022	2021	Unit
Total non-hazardous wastes produced	1,010.1	925.9	1020.7	tonnes
Non-hazardous wastes intensity	0.238	0.248	0.350	tonnes/million RMB revenue

Note: During the Reporting Period, the Group's overall production increased and hence the total amount of non-hazardous waste generated also increased.

### 4.3.4 Hazardous Waste

Hazardous waste generated by Hilong mainly includes oily wastewater, waste mineral oil, paint packaging, and paint waste, etc. The Group has assigned storage sites to store hazardous wastes and employed qualified professional bodies for unified treatment. We substitute the packaging drums for solvents and resins in the liquid coating production line in the Class A workshop into tankers, and use closed pipes for material transportation during batch feeding. Such measures could significantly reduce employees' frequency of touching materials and thus the volatilization of organic compounds, while helping to reduce the hazardous waste generated during production.

In 2023, China revised the Standard for Pollution Control on Hazardous Waste Storage (《危險廢物貯存污染控制標準》) (GB 18597-2023) and issued and enforced the Technical Specification for Setting Identification Signs of Hazardous Waste (《危險廢物識別標志設置技術規範》) (HJ 1276-2022), which clearly stipulate the positioning and construction, pollution prevention and control, and operation and management of storage facilities for hazardous waste, as well as the categories, content requirements and production methods of identification signs of hazardous waste. Following the new standards, we updated Hilong's Hazardous Waste Management Policy (《危險廢物管理

制度》) and Accountability Mechanism for Staff of Hazardous Waste Related Positions (《危險廢物崗位人員責任制》). We continuously implement the management work of hazardous waste, while implementing pollution prevention and environmental management for hazardous waste storage sites, and updating relevant identification signs.

During the Reporting Period, the total amount and intensity of hazardous wastes generated by the Group are shown below:

A1.3 Hazardous Waste	2023	2022	2021	Unit
Total hazardous wastes produced	125.1	75.9	91.0	tonnes
Hazardous wastes intensity	0.029	0.020	0.031	tonnes/million RMB revenue

Note: During the Reporting Period, the increase in the total amount and intensity of hazardous waste of the Group was mainly attributable to the increase in the overall production, as well as the commencement of the replacement of equipment and installation of new production lines by Shanghai Drill Pipe.

### 4.4 Climate Change Response

Climate change has become a global challenge, the impact of which on businesses is under increasing scrutiny. Extreme weather events, such as typhoons and floods, might occur at higher frequency, and post impacts towards the Group's normal operation. The Group takes the initiative to tackle these challenges by taking climate-related risks into account in contract review and engineering operations. By taking a series of measures, such as preventing risks during contract review, resolving them during engineering operations, and providing relief upon completion of the operations, we strive to minimize the potential losses that may be caused by climate-related risks.

The subsidiaries of the Group have already formulated specific emergency plans based on local climate conditions. Shanghai Drill Pipe, for example, has formulated the *Disposal Scheme for Flood Prevention, Typhoon Prevention and Rainstorm*(《防汛防台暴雨處置 方案》),while Hilong Pipeline has formulated the *Special Emergency Scheme for Typhoon and Flood Prevention*(《防台防汛專項應急預案》),and set up relevant leading groups for emergency handling, so as to ensure quick respond, effective control and proper treatment, when encountering extreme weather events. By integrating relevant training into daily work, Hilong also strives to strengthen its employees' knowledge reserve and capability related to extreme weather prevention and emergency handling.

### Special Emergency Plan Drill for Flood and Typhoon and Prevention

In 2023, Hilong organized the Quality Safety and Environmental Protection Department, Production Department, Department of Logistics and Storage, and

emergency teams to conduct a special emergency plan drill for flood and typhoon prevention. The on-site safety personnel reported the conditions of weather and standing water to the general director in real time. The emergency team blocked the roller shutter doors with sandbags to prevent water from spreading into the warehouse, while reinforcing the roller shutter doors with steel pipes to withstand the typhoon, and lifting or transferring materials in the warehouse. Personnel from all parties accomplished the emergency work with clear divisions of responsibilities in a reasonable and efficient manner.

The Group took targeted measures to address the problems identified during the drill, so as to ensure it could respond quickly and appropriately to extreme weather conditions like typhoons and rainstorms, and minimize potential losses.





**Emergency Drill For Flood and Typhoon Prevention** 

# **Appendix I: ESG Reporting Guidance Index**

Aspect	Requirements	Chapter
A1	Emissions	
General Disclosure	Information on:	4.3 Implementation of Emission Management
A1.1	The types of emissions and respective emissions data.	4.3 Implementation of Emission Management
A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.3.2 Greenhouse Gases
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.3.4 Hazardous Waste
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.3.3 General Solid Waste
A1.5	Description of emissions target(s) set and steps taken to achieve them.	4.3 Implementation of Emission Management
A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	4.3.3 General Solid Waste 4.3.4 Hazardous Waste
A2	Use of Resources	
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	4.2 Efficient Utilization of Resources
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).	4.2.1 Energy Resource Utilization
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	4.2.2 Water Resource Utilization
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	4.2.1 Energy Resource Utilization
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	4.2.2 Water Resource Utilization
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	4.3.2 Packaging Material Utilization
<b>A3</b>	The Environment and Natural Resources	

		,
General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	4. Green Operation for Better Ecosystem
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	4. Green Operation for Better Ecosystem
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.	4.4 Climate Change Response
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.	4.4 Climate Change Response
B1	Employment	
General Disclosure	Information on:  (c) the policies; and  (d) compliance with relevant laws and regulations that have a significant impact on the issuer.	3. Care for Employees
B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	3.1 Diversity, Equality and Inclusiveness
B1.2	Employee turnover rate by gender, age group and geographical region.	3.1 Diversity, Equality and Inclusiveness
B2	Health and Safety	
General Disclosure	Information on:  (a) the policies; and  (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	3.4 Safeguarding Safety and Health
B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	3.4 Safeguarding Safety and Health
B2.2	Lost days due to work injury.	3.4 Safeguarding Safety and Health
B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	3.4 Safeguarding Safety and Health
В3	Development and Training	
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	3.2.1 Comprehensive Training Systems

		3.2.1						
D.	The percentage of employees trained by gender and	Comprehensive						
B3.1	employee category (e.g. senior management, middle management).	Training						
	management).	Systems						
	The average training hours completed per employee by	3.2.1 Comprehensive						
B3.2	gender and employee category.	Training						
	Service Projections 2	Systems						
B4	Labour Standards							
General	Information on:							
	(a) the policies; and	3.1 Diversity, Equality and						
Disclosure		Inclusiveness						
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer.							
B4.1	Description of measures to review employment practices to	3.1 Diversity, Equality and						
54.1	avoid child and forced labour.	Inclusiveness						
_	Description of steps taken to eliminate such practices when	3.1 Diversity,						
B4.2	discovered.	Equality and Inclusiveness						
B5	Supply Chain Management	THE I WE THE SE						
General		2.4						
Disclosure	Policies on managing environmental and social risks of the	Strengthening						
	supply chain.	Supply Chain						
_	N. 1. C. 1. 1. 1. 1. 1.	2.4						
B5.1	Number of suppliers by geographical region.	Strengthening Supply Chain						
B5.2	Description of practices relating to engaging suppliers,							
	number of suppliers where the practices are being	2.4 Strengthening						
20.2	implemented, and how they are implemented and monitored.	Supply Chain						
	Description of practices used to identify environmental and	2.4						
B5.3	social risks along the supply chain, and how they are	Strengthening						
	implemented and monitored.	Supply Chain						
B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers,	2.4 Strengthening						
2017	and how they are implemented and monitored.	Supply Chain						
B6	Product Responsibility							
	Information on:							
General Disclosure	(a) the policies; and	2.2 Pursuing Excellent						
	(b) compliance with relevant laws and regulations that	Quality						
	have a significant impact on the issuer.	C						
B6.1	nave a distinuciant impact on the issuer.	2.2.1						
	Percentage of total products sold or shipped subject to recalls	Governance						
	for safety and health reasons.	System						
		Enhancement 2.2.3 Optimal						
B6.2	Number of products and service related complaints received	Customer						
	and how they are dealt with.	Service						

B6.3	Description of practices relating to observing and protecting intellectual property rights.	2.3 Protecting Intellectual Property Rights	
B6.4	Description of quality assurance process and recall procedures.	2.2.1 Governance System Enhancement	
B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	2.2.3 Optimal Customer Service	
<b>B</b> 7	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.	2.5 Adhering to Business Ethics	
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.	2.5 Adhering to Business Ethics	
B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	2.5 Adhering to Business Ethics	
B7.3	Description of anti-corruption training provided to directors and staff.	2.5 Adhering to Business Ethics	
B8	Community Investment		
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.	2.6 Sincerely Giving Back to the Society	
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	2.6 Sincerely Giving Back to the Society	
B8.2	Resources contributed (e.g. money or time) to the focus area.	2.6 Sincerely Giving Back to the Society	

## **Appendix II: Reader's Feedback Form**

Thank you for reading 2023 Environmental, Social and Governance (ESG) Report of Hilong Holding Limited. In order to provide more valuable information to the Group's

stakeholders and	l improve its a	bility and	d level of ful	filling so	ocial responsibilities, we about this report.			
You can send this form to any of the following:								
Fax: +86-21-338	51886							
Postal address: No.1825, Luodong Road, Baoshan Industrial Zone, Shanghai, PRC								
1. How would you rate your opinion of the Hilong Holding 2022 ESG Report?								
□Very High □High □Neutral □Low □Very Low								
2. How would you rate your opinion of the economic, social and environmental responsibilities of Hilong Holding?								
Economic responsibility	□Very High	□High	□Neutral	□Low	□Very Low			
Social responsibility	□Very High	□High	□Neutral	□Low	□Very Low			
Environmental responsibility	□Very High	□High	□Neutral	□Low	□Very Low			
3. Please rate the effectiveness of this Report in reflecting the economic, social and environmental impact Hilong Holding has brought about through its social responsibility practices?								
□Excellent □Good □Fair □Poor □Terrible								
4. How would you rate your opinion of the clarity, accuracy and completeness of the information, data and indicators this Report has disclosed?								
Clarity	□Very High	□High	□Neutral	□Low	□Very Low			
Accuracy	□Very High	□High	□Neutral	□Low	□Very Low			
Completeness	□Very High	□High	□Neutral	□Low	□Very Low			
5. Do you find this Report in easy-to-read contents and formatting?  □Yes □Neutral □No								
6. Feel free to share any comments or suggestions you may have on Hilong Holding and this report:								