



Hilong Holding Limited

(Incorporated in the Cayman Islands with limited liability)

Stock code: 1623

*For identification purpose only

2019 Environmental, Social and Governance Report



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About this Report

Hilong Holding Limited (the “Company”) (Stock Code: 1623) hereby presents the Environmental, Social and Governance Report 2019 (“the Report”) of the Company and its subsidiaries (collectively, the “Group” or “Hilong”). 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, covering principal businesses including oilfield equipment, oilfield service, line pipe technology and service, offshore engineering, new materials, etc. The reporting period is from 1 January 2019 to 31 December 2019. The key performance indicators (“KPIs”) in environmental areas disclosed in the Report cover all businesses in China directly managed by the Group, and those involved in overseas businesses will be disclosed in a timely manner in the future.

Compared with Hilong Holding Limited 2018 Environmental, Social and Governance Report published on 8th July 2019, there are no material changes in the reporting scope and coverage of environmental KPIs.

Reporting Principles

The Report is prepared according to the Environmental, Social and Governance Reporting Guide (the “ESG Reporting Guide”) in Appendix 27 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 has 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 is consistent with previous years.

Report Availability

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

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1 Company Profile

1.1 Company Brief

Hilong Group of Companies (Hilong Holdings, 01623.HK) is a large listed entity group that provides high-end oilfield equipment and integrated oilfield technical services for oil and gas exploration. Integrating scientific research, production and service, Hilong has established dozens of production bases and business branches around the world, with the Group headquartered in Shanghai.

Since its inception in 2002, along with horizontal expansion of drilling, mining, transmission of oil and gas exploration and vertical extension of the industrial chain, Hilong formed five core



business sectors including oilfield equipment, oilfield services, line pipe technology and services, offshore engineering and new materials. With the establishment of oil pipeline, petrochemical research institute and other professional research and development institutions, Hilong achieved integrated development of oilfield equipment products and integrated technical services, and the business was spread all over the world.

Hilong established a sound sales and service network in various oil-producing regions around the world, providing high-end products and integrated services for China National Petroleum Corporation, China Petrochemical Corporation, China National Offshore Oil Corporation and many internationally energy and oil service companies such as Shell, British Petroleum Company, TOTAL, ENI, Schlumberger, Weatherford, United Energy, Ecuador National Petroleum, Pakistan State Oil, Rosneft Oil, Oman Oil, Petronas, Petroleum Authority of Thailand, PERTAMINA, Saipem, etc. At present, Hilong products and services have spread throughout China, Southeast Asia, South Asia, Central Asia, Russia, the Middle East, Africa, North and South America and other countries and regions.

Hilong is committed to building the world's leading oilfield equipment and service providers, always adheres to the core development strategy of innovation and

internationalization, and provides high-quality, high-tech and differentiated products and integrated services, to create maximum value for global customers.

1.2 ESG Management

Hilong establishes and improves ESG management organizational structure with clear responsibilities to enable the Board of Directors (the “Board”) to understand the Group’s ESG risks and work progress in a comprehensive and timely manner. It also assists the Board to fully consider ESG risks and opportunities in risk management, policy making and strategic planning, to ensure that ESG risks and opportunities are integrated into the Group’s business strategies.

The Board is the highest decision-making body of ESG management. It is responsible for overseeing the Group's ESG issues and takes full responsibility for the Group's ESG strategy and reporting. The Board develops ESG management approach and strategy, including evaluating, prioritizing, and managing material ESG-related issues and their risks to the Group’ business. The Board also develops risk management and internal monitoring system, and regularly reviews the Group’s ESG performance, examines and approves the Group’s annual ESG report.

The management of the Group arranges work of ESG working group based on the ESG management approach and strategy established by the Board. The management reports ESG-related risks and opportunities to the Board, and provides the Board with the annual ESG performance and annual ESG report. The management provides a confirmation to the Board on the effectiveness of related risk management and internal control systems. The Group established an ESG working group which involves the head of each department, and designated special staff to carry out daily ESG work and prepare annual ESG report. The ESG working group reports to the management on the daily ESG performance and annual ESG report.

1.3 Stakeholders Engagement

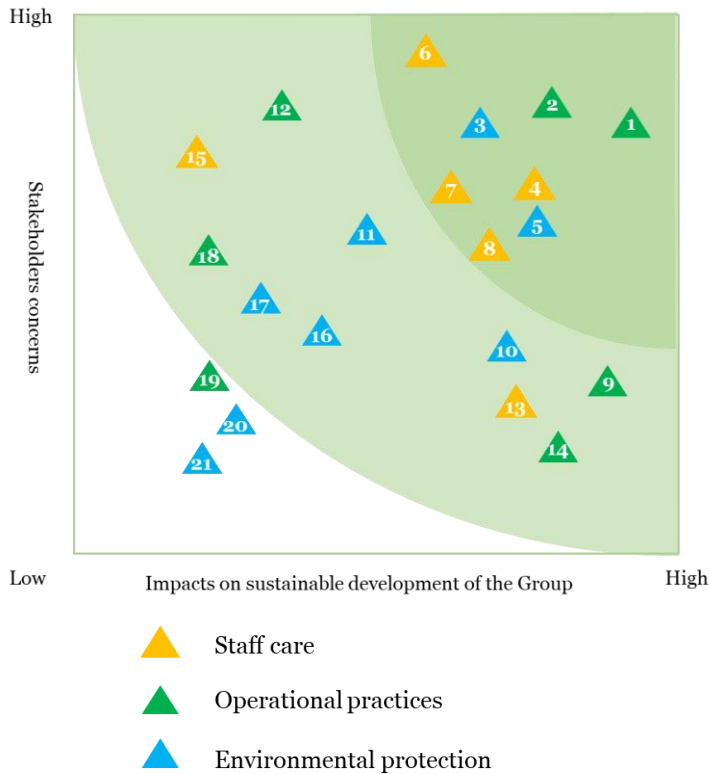
Through diversified communication mechanisms, Hilong builds close relationships with the government and regulators, shareholders, clients, employees, media, partners, community and society, environment and other stakeholders. The Group actively responds to the stakeholders' expectations and requirements on Hilong.

Stakeholders	Expectations and Requirements	Communication Mechanisms
Government and Regulators	<ul style="list-style-type: none"> • Compliance with laws and regulations • Pay taxes according to law • Support local development 	<ul style="list-style-type: none"> • Daily management • Meetings • Monitoring and inspection • Policy advice • Case reporting
Shareholders	<ul style="list-style-type: none"> • Continued development and return to shareholders • Information disclosure and investor relations • Corporate governance and risk control 	<ul style="list-style-type: none"> • General meetings • Information disclosure • Activities promoting investor relations
Clients	<ul style="list-style-type: none"> • High-quality products • High-quality services before and after sales 	<ul style="list-style-type: none"> • Signing of contract • Business dealings
Employees	<ul style="list-style-type: none"> • Remuneration and benefits • Good work environment and development platforms • Equal opportunities for promotion and development 	<ul style="list-style-type: none"> • Employee training • Employee activities and employee care • Performance Management • Corporate internal publications

Media	<ul style="list-style-type: none"> • Performance of corporate social responsibility • Having a good knowledge of corporate significant events, activities and initiatives 	<ul style="list-style-type: none"> • Business interview • Promotion of corporate culture • Theme activities
Partners	<ul style="list-style-type: none"> • Keep promises • Equal, open and fair procurement • Mutual benefit development 	<ul style="list-style-type: none"> • Negotiation and communication • Supplier assessment and evaluations • Open bidding and tendering • Communication and visitation
Community and Society	<ul style="list-style-type: none"> • Promote urban development • Raise public awareness • Promote development of harmonious community 	<ul style="list-style-type: none"> • Industry-university-institute linkages • Establishment of education base • Community activities
Environment	<ul style="list-style-type: none"> • Promote environmental protection • Protect eco-balance 	<ul style="list-style-type: none"> • Emission under standard thresholds • Energy saving and emission reduction

1.4 Materiality Assessment

In accordance with the “ESG Reporting Guide”, Hilong constructs ESG materiality assessment model to assess 21 ESG issues related to environment, employees and operation. Hilong assesses ESG issues from two perspectives: stakeholders’ concerns and impacts on sustainable development of the Group through questionnaire surveys on relevant internal departments and communication with external stakeholders, and the result is showed as below. Hilong discloses these issues in this report based on their materiality.



Materiality	ESG Issues	No.
High	Product quality	1
	Customer service	2
	Waste water and gases	3
	Legal employment	4
	Energy conservation	5
	Safe production	6
	Occupational health	7
	Employee training	8
Medium	Property right protection	9
	Water saving	10
	Greenhouse gases	11
	Activities for public good	12
	Staff activities	13
	Product innovation	14
	Prohibit child labor and forced labor	15
	Packaging	16
	Solid waste	17
	Partners	18
Low	Anti-corruption	19
	Environmental emergency management	20
	Noise control	21

2 Operational Practices

2.1 Product Responsibility

➤ Quality Management

In compliance with relevant domestic and foreign laws and regulations, including but not limited to the “Product Quality Law of the People's Republic of China” (《中華人民共和國產品質量法》), as a leading international oilfield equipment and service provider, Hilong upholds the quality principle of “honoring contracts, perfecting quality control; relying on technology management, seeking quality improvement; building Hilong’s brand image, exceeding customers’ expectations”. Hilong continuously improves the quality management system and strengthens the management of quality, measurement and standardization.

Hilong continues to improve quality framework of all levels and clarifies responsibilities of quality management. All subsidiaries have established sound quality management system according to “Requirements of ISO9001/GB/T 19001 Quality Management System” (《ISO9001 / GB/T 19001 質量管理體系的要求》). Hilong conducts annual internal and external audits as well as management evaluations, etc. to ensure the appropriateness, effectiveness and practicability of the system to provide safe and high quality products and services to clients.

Activity: Hilong “Quality Open Day”

In September 2019, Hilong held the "Quality Open Day" event. In this event, the visitors learned about Hilong's products, R&D, quality control, high-end testing equipment, etc. by touring Hilong’s production control process at the production sites, Hilong Tubular



Product introduction

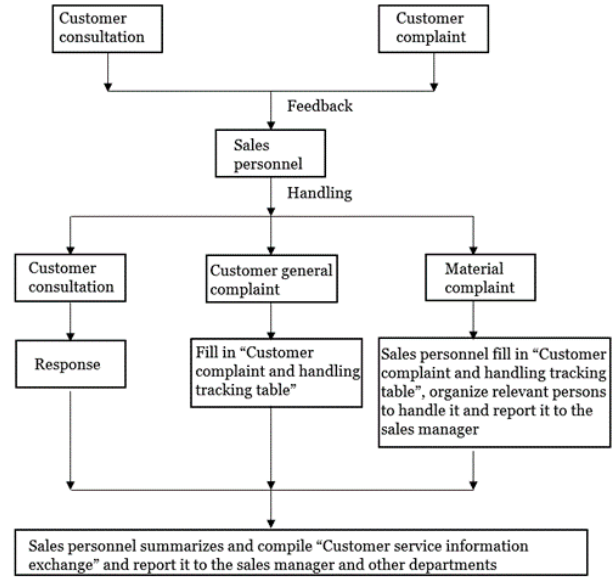


Touring the production control process

Goods Research Institute, exhibition hall, etc. Hilong also introduced the Group's quality control efforts to visitors and shared the successful experiences.

➤ **Customer Service**

Through the “Customer Service Management System” (《客户服务管理制度》), Hilong effectively controls the customer service work by defining the service standards and handling customers' complaints in a timely manner. The subsidiaries conduct regular customer satisfaction surveys and occasional call-back based on “Customer Satisfaction Control Procedures” (《顾客满意度控制程序》) to collect customer opinions and thus maintain their continued satisfaction with the Group.



Procedure of Customer Complaint Management

Hilong regards customers' information as confidential information of the Company. The customers' information was properly kept by the sales manager. Unauthorized personnel was not permitted to copy or extract the information. Customer data was sent or received, transmitted and carried about by designated personnel for effective protection of customers' privacy.



In December 2019, Hilong was awarded the medal of "National User Satisfied Supplier of Petroleum Equipment" by the Petroleum Technology Equipment Centre of China Association of Plant Engineering for the Group's outstanding achievements in innovation, design, service, operation and management of petroleum equipment, as well as Hilong's exemplary role in the industry development, environment-friendly services and production safety in petroleum equipment industry.

➤ **Technological Innovation**

Hilong has established several professional R&D institutions, and maintained strong and professional R&D and innovation capabilities in all areas of oilfield technical services with high-end experimental equipment and good R&D conditions. Hilong also actively carries

out domestic and foreign scientific research exchanges and cooperation. Hilong has established in-depth cooperation with several research institutes in many areas including key technical problem solutions, industrial processes development, high-end technological innovation talent cultivation, advanced scientific and technological information exchange, etc. Hilong has set up post-doctoral research station, Shanghai Petroleum Pipeline Engineering Technology Research Centre and the academician workstation, building a strong talent team of scientific and technological innovation.

Hilong was awarded the “Technological Innovation Award 2019 of Baoshan District” by People’s Government of Baoshan district, Shanghai for the excellent performance in industrial operation and development, technological innovation and other fields, which demonstrates Hilong's pioneering role in technological innovation.



Topic: Product Innovation

Oil Country Tubular Goods (“OCTG”) Solid Powder Coating

In 2018, Shanghai Tube-Cote Petroleum Pipe Coating Co., Ltd. (“Shanghai Tube-Cote”), a subsidiary of Hilong, began to replace solvent based coatings with environment-friendly powder coatings to reduce VOC emissions. In 2019, Shanghai Tube-Cote improved the OCTG powder coatings, and developed a high-performance inner coating for ultra-deep well drilling pipes with the features of non-toxic, zero VOC emission, high reliability, and no pollution to the environment. Meanwhile, Shanghai Tube-Cote developed a supporting primer using alcohol solvents that cause no burden to the ozone layer. The development and use of coatings and primers together improved the production process and engineering applicability, filled the gap in domestic market, and helped achieve better air and environment quality.

Complex Detector for Magnetic Flux Leakage (“MFL”) and Deformation of 48-inch Pipelines

Large-diameter pipelines often bear high flow rate of medium, detectors with excessive speed tend to generate high pressures on pipes and equipment in



operation, causing material safety accidents. To ensure the operation safety of projects, Hilong developed a 48-inch pipeline detector equipped with a complete set of speed control system that realises real-time control of the detector's operating speed and adjusts the speed to its default range. This marks that Hilong has mastered the development technology of another three-axis and high-definition MFL and corrosion detector for large-diameter pipelines following the successful development of complex detectors for MFL of 40-inch and 36-inch pipelines.

➤ Property Right Protection

In compliance with relevant domestic and foreign laws and regulations, including but not limited to “Trademark Law of the People's Republic of China” (《中華人民共和國商標法》) and “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》), Hilong formulated the “Management System for Trademark Use” (《商標使用管理制度》) to regulate the registration, maintenance and use of trademarks, etc.

To maintain the consistency and stability of corporate image, and regulate and promote corporate visual image system (VIS), Hilong 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》), “Application Specification for Business Card VI” (《名片 VI 應用規範》) and “Application Specification for Business Brochure VI” (《業務宣傳冊 VI 應用規範》), etc. These regulations specified roles & responsibilities of the Corporate Culture Department and other departments of the Group, as well as requirements of corporate image usage.

The sales of Hilong's products were mainly conducted through direct visits to customers and participation in exhibitions without advertising. In compliance with relevant domestic and foreign laws and regulations, including but not limited to the Advertising Law of the

People's Republic of China (《中華人民共和國廣告法》), Hilong is making relevant policies for improving the management of advertising to effectively manage possible advertising behaviour in the future.

2.2 Supply Chain Management

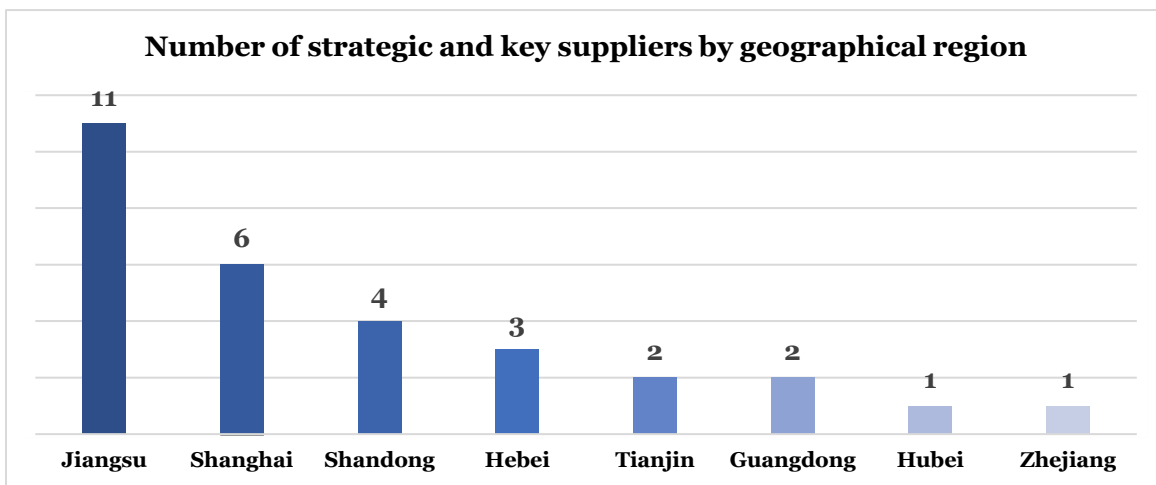
Based on the management principles of “differentiated management, dynamic evaluation and survival of the fittest”, and in line with the “Supplier Management System” (《供應商管理制度》), “Supplier Management Implementation Rules” (《供應商管理實施細則》) revised in 2019 and other guidelines, the Group strictly controls the supplier selection, assessment and exit procedures, standardises material procurement channels. Meanwhile, Hilong communicates the ideas on environmental and social risks, safety and health, anti-corruption etc. to suppliers, in an effort to build a sustainable and responsible supply chain.

The Material Management Department of the Group is responsible for supplier management, including reviewing the selection and changes of suppliers, submitting supplier information for approval, conducting daily assessment and supervision, and creating supplier profiles. The Group manages suppliers in a differentiated way, and divides suppliers into the following four types:



The Group set up a strict supplier selection and review system. For strategic and key suppliers, the selection progress includes four steps: information filling, on-site inspection,

review and approval. Suppliers are required to provide business licenses, copies of production licenses, ISO 9001 (quality management system) certificates and other materials for review. Hilong performs quantitative assessment on strategic and key suppliers with current business before the first quarter of each year, covering product quality, contract performance, after-sales service, quotation, etc. and fills out corresponding “Quantitative Assessment Rating Scale for Suppliers of Hilong Group” (《海隆集團供應商量化考核評分表》). For cooperative suppliers, Hilong adopts a filing system. The Group collects and inquires the credit of such suppliers through public platforms to learn about their operating status, and conducts on-site inspections when necessary.



For the quality of products and services provided, Hilong requires suppliers to provide inspection certificates, improve and give feedbacks in a timely manner on quality and delivery issues raised by Hilong to ultimately protect consumers’ safety and health.

For the management of suppliers’ environmental and social risks, Hilong requires suppliers to provide ISO14001 (environmental management system) and OHSAS18001 / ISO45001 (occupational health and safety management system) certificates at the time of information submission, which will be reviewed during on-site inspections and regular assessments. The result will be used as one of the indicators for supplier selection.

To strengthen the fairness, transparency, and healthy growth of the industry, Hilong prohibits fraud, forgery, bidder collusion and any forms of bribery, such as providing commission, rebates, consulting fees, intermediary fees and others to Hilong’s employees. According to the Regulations for the Implementation of the Supplier Management (《供應商管理實施細則》), the suppliers with above behaviour and other violations of laws will be disqualified by the Group.

2.3 Anti-corruption

Hilong attaches importance to anti-corruption, and complies with relevant domestic and foreign 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” (《中華人民共和國招標投標法》), 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” (《中華人民共和國反洗錢法》), and the Audit Law of the People's Republic of China (《中華人民共和國審計法》), etc. Hilong formulated several internal anti-corruption policies such as the “Management System for Audit Department” (《審計工作管理制度》), “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》), and “Integrity and Self-Discipline Standard” (《廉政自律規範》). The Audit and Supervision Department of Hilong is responsible for internal audit. The department upholds the fundamental principles of “Prevention Precedes Punishment” and “Protect Whistle-blowers, Withdraw from Investigation if Necessary”, continuously strengthens internal management and supervision, and prohibits any form of bribery, extortion, fraud and money laundering behaviours.

Hilong revised the “Anti-corruption and Reporting System” (《反舞弊和舉報制度》) in 2019, which highlighted the definition and declaration scope of conflict of interest, increased the declaration and reporting of conflict of interest, and implemented tougher punishments for corruption behaviours. Employee affiliates and companies related to employee affiliates are not allowed to have any economic dealings with Hilong subsidiaries. If the cooperation is necessary, the “Approval Form for Conflict of Interest” (《利益衝突審批表》) should be filled, and the approval from the Audit and Supervision Department is required.

Hilong encourages employees to report to the Audit and Supervision Department when they find violations of laws, regulations, company code of conducts and ethics. The whistleblowing channels includes telephone, E-mail and mail, etc. The Audit and Supervision Department conducts an investigation into the reported case and reports to the management or the Board. Employee who were proven to have committed corrupt conduct will be punished in accordance with the relevant regulations of the Company. In

case of violation of the laws, the case will be referred to a judicial office for further processing. Meanwhile, Hilong has established a whistle-blower protection mechanism to prohibit any illegal discrimination or retaliation.

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Hilong communicates the new policies to employees at all levels during regular audit process in a timely manner, and promptly reports to the Audit Department in case of any violations. At the audit findings communication meeting, the Audit Department highlights the risks of corruption and conflict of interest to the management, and proposes measures to identify and reduce related risks. In addition to disseminating anti-corruption policies and reporting procedures to employees, Hilong also actively communicates relevant concepts to customers, suppliers, business outsourcing parties and other relevant units. 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 the contract with partners, Hilong signed the “Integrity Agreement” (《廉潔協議》) with them or presented them with the “Integrity Notice” (《廉潔告知書》), requesting that no corruption be allowed in the cooperation process.

2.4 Public Welfare

While pursuing economic interests, Hilong also actively assumes social responsibilities and formulates “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 fund, the form of activities, and summary and assessment. In 2019, Hilong continued to carry out charitable donations, volunteer services and other public welfare activities to serve the society, reflecting the social responsibility and value of Hilong.

Activity: Targeted Poverty Alleviation

In May 2019, in an continuous and active response to the call of the Central Government and Shanghai to effectively implement the village-enterprise pairing support activity, Hilong paired up with eight impoverished villages in Huize Town of Qujing City, Yunnan Province (Yangjia Village, Shuimo Village and Huangcao Village) and Kargilik County of Xinjiang (Ourang Village in Boxireke Town, Wahepa Village in Qiasimiqiti Town , Sugaiteairike Village in Tuguqi Town, Xiahepu Village and Outakeqi Village in Xiahefu Town) for targeted poverty alleviation, and input a total of RMB 500,000, contributing to the fight against poverty.

Activity: Community Service

Hilong devotes to pairing supports and contributes to rural revitalisation. In 2019, Hilong visited communities in Luojing Town of Baoshan District, Shanghai to send regards and help elderly people and families in need:

- In January 2019, Hilong, together with Luojing Town Disabled Persons' Federation, visited families in need and provided assistance on festivals, totalling RMB 3,000;



- In July 2019, to deepen village-enterprise pairing supports, Hilong Party Committee input RMB 3,573 to show the care for advanced and poor Party members in Xinlu Village of Luoqing Town;
- In October 2019, Hilong input RMB 4,345 to assist elderly people in Xinlu Village of Luoqing Town.

Activity: Voluntary Blood Donation

Hilong has been participating in voluntary blood donations for 7 consecutive years since 2013. In 2019, Hilong organised 50 employees to participate in the voluntary blood donation of Shanghai Baoshan Industrial Park.



3 Staff Care

In compliance with relevant domestic and foreign laws and regulations, including but not limited to Labour Law of the People's Republic of China (《中華人民共和國勞動法》), Labour Contract Law of the People's Republic of China (《中華人民共和國勞動合同法》) and Provisions on the Prohibition of Using Child Labour (《禁止使用童工的規定》), Hilong continues to consolidate its employment principles and policies. Hilong constantly improves the 3-level human resources management framework including the Group, the Business Division and the subsidiaries. Hilong protects employees' rights and interests with a high sense of responsibility, creates healthy and safe work environment for employees, provides sound promotion channels and training system, and arranges staff activities, so as to achieve co-development of employees and the Company.

3.1 Safety and Health

In compliance 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》), "Law of the People's Republic of China on Work Safety" (《中華人民共和國安全生產法》), "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》), and "Regulations of Shanghai Municipality on Work Safety" (《上海市安全生產條例》), Hilong devotes itself to providing the employees with a healthy, safe and comfortable working environment.

To improve safety and health management, Hilong set up an Occupational Health, Safety and Environmental Protection Committee ("HSE Committee"), and a safety management structure of HSE Committee - Production Safety and Environmental Protection Department - Safety and Environment Office, to improve the safety and health management.

➤ Production Safety

In compliance with the policies on work safety of "Safety First, Precaution Crucial and Comprehensive Treatment", each business division and subsidiary of Hilong has formulated a series of safety policies and has formed a sound work safety mechanism to conduct enterprise work safety standardization work thoroughly, thereby enhancing work safety management and reducing the occurrence of accidents.

Hilong has established a comprehensive organisational structure at all levels for safety production management, with nearly 30 registered safety engineers in service. The Group strictly implements the safety production responsibility system, makes vigorous efforts on the construction of safety teams, strictly controls production safety, and organises safety trainings and emergency drills to avoid any potential safety incident. In 2019, Hilong changed the basis for accident assessment from injury rate per thousand persons to injury rate per 100 million working hours to fairly assess safety management of subsidiaries of different sizes. During the reporting period, no major accident happened in Hilong, and the number and rate of work-related fatalities is zero.

Hilong actively carries out production safety and firefighting educations. The Group organises emergency drills every year, and reviews, revises and updates the emergency plan in time to ensure its effectiveness. In 2019, the business divisions and subsidiaries of Hilong organised employee safety trainings and safety knowledge competitions in line with activities such as “Production Safety Month” and “11.9 Fire Safety Week” to enhance employees’ safety awareness. Meanwhile, they carried out fire emergency drills to improve employees’ awareness of fire prevention as well as self-rescue knowledge and skills. In addition, Hilong also introduced new requirements and new specifications for routine management and control of daily hazardous chemicals to ensure the safety of the use and storage of these chemicals. In 2019, the Quality, Safety and Environmental Protection Department of Hilong, with its sound management level and knowledge reserve, performed well in the “3rd Shanghai Hazardous Chemical Safety Knowledge Contest” and won the competition award.

Activity: Production Safety Education and Training

From June to September 2019, various subsidiaries of Hilong carried out in-depth production safety education and trainings that further implemented safety production responsibility, publicised safety culture, and popularised safety knowledge, in an effort to improve the safety awareness of all employees, and prevent safety accidents.



Safety training for all employees at Shanghai Tube-Cote Petroleum Pipe Coating Co., Ltd.



Accident case study training for production teams at Shanghai Hilong Drill Pipe Co., Ltd.



Safety education and training at Sichuan Hilong Petroleum Technology Co., Ltd.



Safety month promotion by Hilong Pipeline Engineering Technology Service Co., Ltd.

Activity: Safety and Firefighting Training and Emergency Drill



Emergency drill at Shanghai Tube-Cote Petroleum Pipe Coating Co., Ltd.



Fire extinguishing skill competition at Shanghai Hilong Drill Pipe Co., Ltd.



Emergency fire simulation in the workshop during coating spraying at Sichuan Hilong Petroleum Technology Co., Ltd.



Firefighting drill at Jiangsu Tube-Cote Shuguang Petroleum Pipe Coating Co., Ltd.

➤ Occupational Health

Hilong attaches great importance to the health of its employees. Each business division and subsidiary has established management systems for occupational health. For example, Shanghai Hilong Drill Pipe Co., Ltd. established the “Occupational Health Management Policy” (《職業衛生管理制度》) to protect employees’ occupational health.

The occupational health hazards of Hilong mainly include the noise and dust produced in the process of production. Hilong reduces the impact of noise and dust on employees’ occupational health effectively through distributing personal protective equipment and installing dust removers. In accordance with relevant provisions in the “Provisions on the Supervision and Administration of Occupational Health at Work Sites” (《工作場所職業衛生監督管理規定》), Hilong commissions occupational health technical service organizations with relevant qualifications to assess the current condition of occupational disease hazards every three years and implements the proposals and measures proposed in the assessment report. 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 conducts a comprehensive inspection on work sites where the occupational disease hazards exist on a yearly basis. If the test result shows that the concentration or intensity of occupational disease hazards exceeds the occupational exposure limit, Hilong would formulate proposals in a timely manner and rectify the situation immediately.

For employees exposed to occupational disease hazards, Hilong establishes occupational health records, informs them of occupational disease hazards prior to their joining, and arranges pre-post physical examinations before their duty performing. An annual on-the-job occupational health physical examination and a physical examination after they leave the posts will be performed, all physical examination results will be entered into occupational health records in time and provide to the employees for full understanding of their occupational health conditions. In addition, Hilong carries out occupational health trainings regularly and set up a bulletin board at an obvious place, announcing rules and regulations, operational instructions in relation to occupational disease prevention, first-aid measures for occupational disease hazard accidents, inspection results of occupational disease hazards at the workplace and corresponding preventive measures.

3.2 Employees' Rights and Benefits

➤ Compensation and Dismissal

Hilong 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. Hilong provides a competitive remuneration package for employees based on principles of equal pay for equal work, fairness and reasonableness, incentive and ease of operation. Hilong provides market leading compensations for core positions, and provided all employees with competitive compensations that was at the upper and middle level in the market.

In order to motivate employees, Hilong 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》). Hilong implements compensation incentive and evaluation fulfilment mechanism for the management, so that the management’s compensation can be well linked to profit and completion ratio. Hilong established compensation management system focusing on Position, Ability and Performance.

As for resignation, Hilong strictly complies with the “Employee Termination Management Policy” (《員工離職管理制度》), which requires that the Company shall not dismiss employees arbitrarily. The dismissal process starts only when the employees who met the relevant requirements for dismissal and the dismissal was confirmed by the head of department. The system has also provided for detailed regulations for handling procedures and requirements of five types of resignation-voluntary resignation, negotiated termination of labour contracts, non-renewal of expired contracts, voluntary dismissal, and retirement at the statutory retirement age - to protect employees’ legal rights and interests.



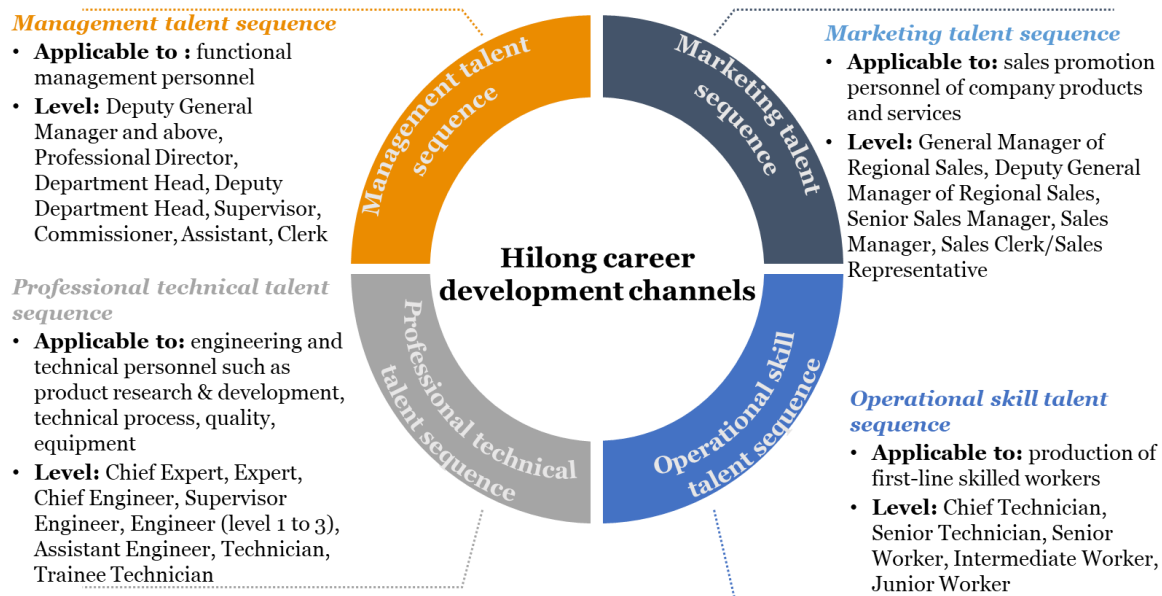
Retirement Party

In 2019, Hilong released the “Rules for Retirement Ceremony of Employees” (《員工退休歡送儀式的規定》), according to which, the Group organised retirement parties for and send blessings to retired employees.

➤ **Recruitment and Promotion**

In recruitment, according to “Employment Management Policy” (《員工聘用管理制度》), Hilong formulates “Annual On-Campus Recruitment Plan” (《年度校園招聘計劃》) and “Annual Social Recruitment Plan” (《年度社會招聘計劃》) at the beginning of each year. Hilong explores resume resources and attracts outstanding persons through on-campus recruitment, social recruitment, recruiting websites, head-hunters, colleges and universities, talent market and so on. Hilong enters into labor contracts with regular employees based on the “Labor Contract Management System” (《勞動合同管理制度》).

Sticking to employment standard of “focusing on morality and capability, giving priority to morality”, Hilong sets up two major categories (management and marketing, and technical skills) and four sequences (management talent, marketing talent, professional and technical personnel, and operational talent) of career development and sets the corresponding rankings. Based on the “Performance Appraisal and Management Policy” (《績效考核管理制度》), Hilong conducts annual performance appraisal and reviews the development potential on employees. The appraisal results are taken as the basis of salary and rank adjustment.



Hilong performs 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》) to properly manage the level and work adjustment of employees below department heads of the Group. In accordance with relevant national laws and regulations, Hilong formulated “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》), which regulates the accreditation, appointment and relevant compensations of professional and technical personnel. According to “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》), Hilong conducted training, examinations and recommendation for frontline production operators and provided career development channels for qualifying frontline production operators, whose compensation and level adjustment were based on their performance appraisal.

➤ Working hours, Holidays, Other Benefits and Welfare

In compliance with national and local regulations, Hilong developed the “Attendance Management Policy” (《考勤管理制度》). Hilong implemented a working hour system which combines standard working hours system, comprehensive working hours system and irregular working hours system. Employees who need to work overtime under special circumstances should apply to the department heads for approval. The operation staff receive their overtime pay within the same month. General management and technical employees are given extra adjusted holidays in terms of the overtime. If the aforesaid holidays couldn't be taken, overtime pay will be paid after approval.

Employees are entitled to statutory holidays, such as New Years, Spring Festival, Qingming Festival, Labour Day, Dragon Boat Festival, Mid-Autumn Festival and National Day, annual leaves and other holidays based on the “Holiday Management Policy” (《假期管理制度》).

Hilong paid social insurance premiums for employees according to law. Hilong formulated 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 the employees with serious diseases and their families to cope with their troubles. Hilong offers benefits including birthday bonuses, festival bonuses, annual physical checks, free shuttle buses, communication allowance and free work meals.

Hilong actively organises various employee activities. In 2019, it organised and participated in the Baoshan Industrial Park Sports Games, Baoshan Industrial Park 5km Racing, "Luojing Cup" Basketball League Match, etc., and organised the “Moon Cake DIY at Mid-Autumn Festival”, "1 Hour at Noon", "Expression Photograph under High Temperature in August“ and other activities that enriched employees' spare time.



Baoshan Industrial Park 5km Racing



Baoshan Industrial Park Sports Games



1 Hour at Noon

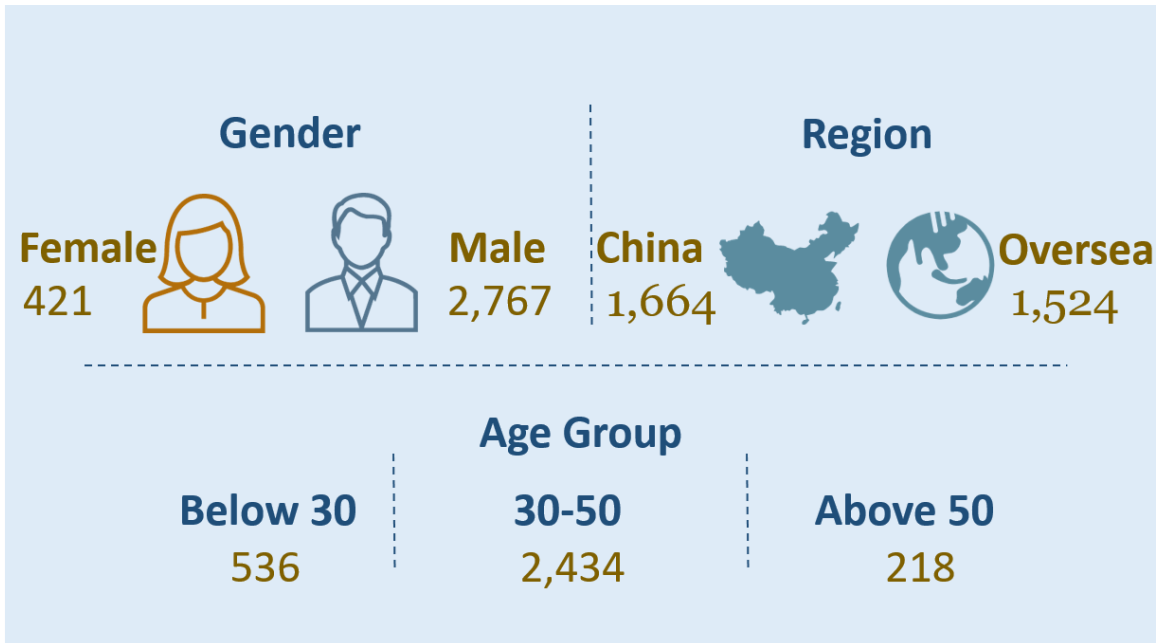


Moon Cake DIY at Mid-Autumn Festival

➤ **Equal Opportunities, Diversification and Anti-discrimination**

The Group recruits employees in accordance with the principles of fairness, impartiality and openness. Meanwhile, the Group strictly complies with the national and local laws and regulations and respects all employees, irrespective of race, gender, color, age, family background, national tradition, religion, physical fitness and original nationality. Employees can enjoy fair treatment in compensation and dismissal, recruitment and promotion, working hour, holidays and other benefits and welfare. The Group strives to provide everyone with equal opportunities.

By the end of December 2019, the workforce of Hilong was composed of all full-time employees and is shown by gender, age and region as bellow:



➤ **Labour Standards**

Hilong strictly complies with relevant domestic and foreign laws and regulations, including but not limited to the “Provisions on the Prohibition of Using Child Labour” (《禁止使用童工規定》). In the appendix “Employment Standards for New Employees” (《新員工錄用標準》) of “Employee Employment Management Policy” (《員工聘用管理制度》), new employees should be over the age of 18, and the use of child labour is prohibited. Hilong strictly complies with the statutory working hours and controls the overtime work to ensure the rest and physical and mental health of employees. If the jobs entail the overtime work of employees during public holidays, the employees are entitled to deferred holidays or overtime wages according to law. Forced labour is not allowed.

3.3 Cultivation and Development

Hilong formulated the “Staff Training Management Policy” (《員工培訓管理制度》), and formed a unique hierarchical training system, where trainings are arranged for employees at all levels across the Group, including divisions and subsidiaries. Hilong organizes various training such as management training, professional technician training, sales training, overseas talent training and operational technical training each year, so as to continuously improve employees’ professional skills.

Activity: Diverse Staff Training

In October 2019, the Offshore Engineering Division organised a Professional English training. The training introduced the basic international legal knowledge related to offshore engineering, frequently used English vocabulary on offshore engineering and relevant English abbreviation diagrams on shipping. Besides, the training also provided simulations on relevant business English communication scenarios.



technologies, work ideas and methods.

In November 2019, Hilong conducted a training on oil and gas industry corrosion and protection technologies and cutting-edge technologies attended by relevant key management and technical personnel of the Group, to help them learn about new technologies and processes on oil and gas corrosion and protection, and open up their visions and expand management

In December 2019, the Oilfield Equipment Division conducted a technical training on wear-resistant belts of petroleum drilling tools, which introduced relevant knowledge and inspection standards on wear-resistant belts, analysed common problems and their solutions, and highlighted on-site application precautions, so as to deepen technological, operational and sales staff's understanding on wear-resistant belts.



4 Environmental Protection

Hilong adheres to the HSE policy of “People First, Health First, Safety First, and Environmental Protection First” and firmly complies with the laws, regulations and emission standards of the countries and regions where it operates, as well as the requirements of the international conventions on emissions.

Hilong strictly complied relevant domestic and foreign laws and regulations, 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》), “Air Pollution Prevention and Control Law of the People’s Republic of China” (《中華人民共和國大氣污染防治法》), “Water Pollution Prevention and Control Law of the People’s Republic of China” (《中華人民共和國水污染防治法》), and “Law of the People’s Republic of China on the Prevention and Control of Solid Waste Pollution” (《中華人民共和國固體廢物污染環境防治法》). It also formulated “Hilong Holding Environmental Protection & Energy Conservation Management Policy” (海隆控股環保節能管理制度) to regulate environmental protection and energy conservation of its subsidiaries.

The HSE Committee centrally manages the Group’s occupational health, safety and environmental protection. The Production Safety and Environmental Protection Department takes charge of the supervision and control of environmental protection and energy use situation, as well as tracking and assessing progress of relate work of all subsidiaries, etc. The Safety and Environment Office in each business division arranges dedicated employees for environmental protection work.

4.1 Emission Management

Hilong requires its subsidiaries to improve their environmental management system according to the “Requirements of ISO14001 and GB/T24001-2004 Environmental Management System” (《ISO 14001/GB/T24001 环境管理体系的要求》) and re-evaluate the system timely to ensure the operation of the system, thus reducing environmental impacts.

Hilong invites local regulatory authority in charge of environment monitoring to conduct tests on emissions and prepare monitoring reports regularly each year. The Production Safety and Environmental Protection Department conducts unified inspection on all production units in Shanghai every year, monthly inspection on Baoshan Industrial Zone,

and unscheduled on-the-spot inspections. It also requires the Safety and Environment Offices of subsidiaries to conduct independent environmental inspections to ensure their up-to-standard discharge. Hilong has set up specific environmental protection indicators in the appraisal indicator system for members in various business divisions and their management to encourage each business division to put more emphasis on emission management.

➤ **Waste Gas and Waste Water**

Hilong's waste gas emissions mainly include volatile organic compounds ("VOCs") generated in the coating production process, NO_x 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. Hilong has installed purification facilities to collect and tackle such waste gases so as to ensure the emission into the atmosphere are up to standard.

The waste water generated by Hilong mainly includes waste water due to production and oil services, and domestic waste water from factories, oil services and offshore engineering services. In compliance with the "Water Pollution Prevention and Control Law of the People's Republic of China" (《中華人民共和國水污染防治法》) and "Waste Water Quality Standards for Discharge to Municipal Sewers" (《污水排入城鎮下水道水質標準》) and other domestic and foreign laws, regulations and discharge standards, industrial water is recycled and reused instead of being emitted, and domestic sewage is discharged into urban effluent pipe networks. Industrial waste water from oil services is treated according to laws and regulations within the territory.



Activity: A1.5 Emission Reduction

**Jiangsu
Tube-Cote
Shuguang
Petroleum
Pipe
Coating
Co., Ltd**

- Install the VOC organic waste gas treatment system, to outperform national emission standards on on-site emission concentration;
- Improve the working environment through workshop dust control and technical transform and upgrade of the sandblasting and dust removal system.



Workshop dust control

<p>Shandong Shengli Oilfield Wuhua Tube-Cote Oil Pipeline Coating Co., Ltd.</p>	<ul style="list-style-type: none"> • Install external anti-corrosion waste gas treatment equipment; • Install waste gas treatment equipment for primer and coating spraying; • Install workshop cleaning furnace for dust gas treatment; • Upgrade sandblasting dust gas treatment equipment. <p>All waste gas emissions are less than the required emission standards after completion of these projects.</p>	 <p>Waste gas treatment equipment for sandblasting</p>
<p>Shanghai Hilong Drill Pipe Co., Ltd.</p>	<p>Add dust removal devices for oil fume and welding fume to the wear-resistant belt to ensure compliance with the emission requirements.</p>	 <p>Dust removal devices for oil fume and welding fume</p>

During the reporting period, the types of emissions generated by the Group and the emission data are shown as below:

A1.1 Emissions	2019	2018	2017	Unit
Volatile organic compounds (VOCs)	0.4	0.2	1.3	tonnes
Nitrogen oxide (NOx)	5.5	1.6	1.9	tonnes
Sulphur dioxide (SO₂)	0.07	0.01	0.7	tonnes
Particulate matter	10.3	9.6	14.6	tonnes
Waste water	91,820.7	110,119.5	122,085.6	tonnes

➤ Greenhouse Gases

Hilong's greenhouse gas emissions primarily include Scope 1- direct greenhouse gas emissions and Scope 2 - indirect energy greenhouse gas emissions. The direct emissions mainly include the emissions from the use of fuels in heat treatment process and emissions from the combustion of petrol and diesel of vehicles. Indirect energy emissions mainly include the emissions from purchased electricity. Given that the greenhouse gas emissions are mainly from energy consumption, Hilong proactively encourages green office and green production, conducts energy-saving retrofit projects and adopts energy saving measures to reduce the energy usage, thus reducing the greenhouse gas emissions.

During the reporting period, the greenhouse gases emissions in total and intensity are shown as below:

A1.2 Greenhouse gases	2019	2018	2017	Unit
Scope 1: Direct emissions	12,437	11,711	9,175	tCO ₂ e
Scope 2: Energy indirect emissions	36,290	34,154	32,157	tCO ₂ e
Total emissions	48,727	45,865	41,332	tCO ₂ e
Emission intensity	13.4	14.2	15.5	tCO ₂ e/ million RMB revenue

Note: Greenhouse gas emissions are presented in CO₂ equivalent, accounting method and conversion factors come from the Accounting Methods and Reporting Guide for Greenhouse Gas Emissions from Mechanical Equipment Manufacturing Enterprises issued by the National Development and Reform Commission (NDRC).

➤ Solid Waste

Hilong's solid waste emissions primarily include non-hazardous industrial wastes and hazardous wastes due to production, as well as domestic wastes from work and life in factories, oilfield services, and marine engineering services.

According to "Waste Disposal Measures" (《廢舊物資處理辦法》) formulated by the Group, Hilong sells the recyclable parts of solid wastes like scrap steel pipes, and other waste materials and idle assets to qualified enterprises for recycle and reuse. Hilong stores other unrecyclable non-hazardous industrial wastes in a specific place and entrusts qualified professional bodies to deal with them. The Municipal Sanitation Department is entrusted to collect and deal with domestic wastes. In compliance with local laws and regulations,

Hilong entrusts local qualified bodies with the collection and disposal of hazardous and non-hazardous waste produced when delivering overseas services.

Hilong’s hazardous wastes primarily include oily wastewater, waste mineral oil, coating packaging materials and coating wastes generated during production. In compliance with the “Law on the Prevention and Control of Environmental Pollution by Solid Waste” (《固體廢物污染環境防治法》) and other relevant domestic and foreign laws and regulations, Hilong formulated policies including the “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》). It has also set up particular storage sites to store hazardous wastes and employed qualified professional bodies for unified treatment.



Promotion on garbage sorting

In 2019, Hilong revised the “Management Measures for Environment Sanitation in Hilong Industrial Park” (《海隆工業園區環境衛生管理辦法》) based on the “Administrative Measures for Living Garbage of Shanghai” (《上海市生活垃圾管理條例》), which added the assessment method for living garbage sorting in an effort to promote the classification of living garbage in the park. In addition, for the implementation of garbage sorting, the Group also organised employees to participate in special lectures and trainings thereof.

Activity: A1.6 Replacement of Membrane Curing

Hilong Pipe Engineering Technology Co., Ltd. purchased large-capacity, high-lift diesel sprinklers to replace membrane curing with water curing (except rainy days and days with a minimum temperature of less than 2°C) when producing cement-weighted steel pipes, effectively reducing the raw material cost and emissions of curing membrane.



During the reporting period, the hazardous and non-hazardous wastes produced and their respective intensity are shown as bellow:

A1.3&A1.4 Hazardous / Non- hazardous wastes	2019	2018	2017	Unit
Total hazardous wastes produced	99.3	100.3	135.5	tonnes
Intensity of hazardous wastes	0.027	0.031	0.051	tonnes/million RMB revenue
Total non-hazardous wastes produced	853.1	684.3	555.1	tonnes
Intensity of non-hazardous wastes	0.234	0.212	0.208	tonnes/million RMB revenue

4.2 Use of Resources

➤ Energy Saving

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 and; natural gas, diesel, petrol and electricity used in the drilling process of oilfield service and marine engineering services, etc. Hilong strictly complies with relevant domestic and foreign laws and regulations, including but not limited to the “Energy Conservation Law of the People’s Republic of China” (《中華人民共和國節約能源法》). It also developed “Environmental Protection and Energy Conservation Management Policy” (《環保節能管理制度》) to carry out unified management of the energy-saving work through its production safety and environmental protection department. Each business division sets up an Energy Office that is responsible for their respective energy-saving work. Production Safety and Environmental Protection Department is responsible for calculating the energy usage on a monthly basis, promoting green office and green production, as well as conducting energy-saving retrofit projects to reduce energy consumption.

Activity: Energy Saving	
Shanghai Tube-Cote Petroleum Pipe Coating Co., Ltd.	Inspect the sealing performance of natural gas pipelines and replace related components in time to avoid energy waste and potential hazards caused by gas leaks, saving RMB 41,400 in natural gas costs each year.
	Replace the halogen lamps resulting in insufficient illumination in the workshop with LED mining lamps and install 18 mining lamps in total. After replacement, one LED lamp can produce the same illumination effect as 6 halogen lamps do, which reduces energy consumption while avoiding the occurrence of safety accidents caused by too dark light, saving about RMB 2,880 per year in electricity costs.
Hilong Drill Pipe (Wuxi) Co., Ltd.	Replace the air compressor in the machine workshop with frequency-conversion and energy-saving air compressor, saving about 95,040 kWh in electricity each year.

During the reporting period, the direct/indirect energy consumption in total and intensity are shown as bellow:

A2.1 Energy	2019	2018	2017	Unit
Natural gas	560	524	403	10,000 m ³
Diesel	79	84	111	tonnes
Gasoline	18	21	37	tonnes
Liquefied gas	8	18	2	tonnes
Total direct energy consumption	61,856	58,184	45,384	MWh
Electricity	46,970	47,010	44,406	MWh
Total indirect energy consumption	46,970	47,010	44,406	MWh
Total energy consumption	108,826	105,194	89,790	MWh
Energy consumption intensity	29.8	32.6	33.6	MWh /million RMB revenue

Note: 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 issued by the NDRC.

➤ Water Saving

Hilong strictly complies with relevant domestic and foreign laws and regulations, including but not limited to the “Water Law of the People’s Republic of China” (《中華人民共和國水法》), to use municipal water and local applicable water sources. It subjects itself to the requirements of “Environmental Protection and Energy Conservation Management Policy” (《環保節能管理制度》), requesting the relevant departments in charge to regularly calculate the water usage on a monthly basis and striving to promote water-saving. During production, Hilong recycles the reverse osmosis water and cooling water in workshops, and regularly inspects the water system to prevent leakage and to reduce the water consumption during production.

In 2019, Hilong launched a series of management rules and rectification efforts aiming to improve water-saving benefits in accordance with relevant national (local) water saving regulations and specific requirements of Shanghai Water Planning Office:

- Promote water-saving and give relevant educations, highlight the significance and importance of saving water, and mobilise employees to vigorously support, cooperate and participate in water-saving activities;
- Arrange regular maintenance for pipelines, valves and other facilities in the water supply system, check for leaks, solve problems detected in a timely manner, and repair the sudden failures of water pipes, valves and other facilities within regulated time limit, to reduce water loss to the minimum;
- Use water saving appliances for all domestic water facilities, organise inspections and maintenance, to ensure that water facilities function well;
- Regularly record and collect data from water meters for dynamic analysis of rationalised water utilisation; and
- Formulate the “Management Rules on Water Utilisation” (《用水管理制度》) based on actual situation that is to be supervised and implemented by relevant functional departments, ensuring the smooth launching and implementation of management on water utilisation and saving.



The implementation of above measures improved the management on water saving in Hilong and ensured the completion of 2019 enterprise water balance test that enabled Hilong to obtain the certificate for creation of a water-saving enterprise.

During the reporting period, the Group's water consumption in total and intensity are shown as below:

A2.2 Water	2019	2018	2017	Unit
Water Consumption	102,023	122,355	133,013	tonnes
Water Consumption Intensity	28.0	38.0	49.8	tonnes/million RMB revenue

➤ **Packaging Materials**

The packaging materials used by Hilong primarily include packing frames, iron packing belts, pipe protection ropes, wooden cases and paper cases, etc. the Group reused recyclable packaging materials and effectively reduced the consumption.

During the reporting period, the total amount of packaging materials used in the group's finished products is shown as below:

A2.5 Packaging Materials	2019	2018	2017	Unit
Packaging materials used	350.2	342.7	410.6	tonnes

4.3 The Environment and Natural Resources

➤ Environmental Emergency Management

Hilong has been improving emergency management mechanisms of the Company and enhancing the ability and coordination level in handling the emergency response and rescue of emergencies. In accordance with “Notice on Issuing the Interim Measures for the Administration of Contingency Plan for Environmental Emergencies” (《關於印發突發環境事件應急預案暫行管理辦法》), “National Contingency Plan for Environmental Emergencies” (《國家突發環境事故應急預案》) issued by the Ministry of Environmental Protection and other requirements of national and international laws and regulations, and based on production processes, pollution-generating sectors and environmental risks, each subsidiary developed corresponding contingency plans for environmental emergencies, such as “Special Contingency Plan for Environmental Emergencies of Hilong Oil Service & Engineering Co.,Ltd.” (《海隆石油技術服務有限公司環境突發事件專項應急預案》). Each subsidiary has established an Environmental Emergency Contingency Response Office, set up supporting emergency facilities and stocked sufficient backup emergency supplies. It regularly conducts emergency drills, and implements preventive, early-warning and emergency measures, for realizing the whole process control from the source to the end, effectively preventing the occurrence of environmental emergencies and reducing environmental risks.

➤ Noise Control

Noise from Hilong primarily includes operation noise from machinery and equipment, aerodynamic noise from machines like blowers and air compressors, and transient high-decibel metal collision noise from loading and unloading of steel pipes. In order to reduce the impact of noise on employees, the Group provided them with personal protective equipment and controlled the sources of noise pollution through adoption of low-noise equipment, proper layout of equipment in workshops, installation of vibration pads or vibration dampers, equipment of blowers silencers and wrapping of ducts etc.

Appendix I: ESG Reporting Guidance Index

Aspect	General Disclosure	Index
A1 Emissions	<p>Information on: the policies; and</p> <p>compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.</p> <p><i>Note: Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations.</i></p> <p><i>Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.</i></p> <p><i>Hazardous wastes are those defined by national regulations.</i></p>	4.1 Emission Management
KPI A1.1	The types of emissions and respective emissions data.	4.1 Emission Management
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.1 Emission Management
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.1 Emission Management
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.1 Emission Management
KPI A1.5	Description of measures to mitigate emissions and results achieved.	4.1 Emission Management
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	4.1 Emission Management
A2 Use of Resources	Policies on the efficient use of resources, including energy, water and other raw materials.	4.2 Use of Resources

	<i>Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.</i>	
KPI 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 Use of Resources
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	4.2 Use of Resources
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	4.2 Use of Resources
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	4.2 Use of Resources
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	4.2 Use of Resources
A3 The Environment and Natural Resources	Policies on minimising the issuer's significant impact on the environment and natural resources.	4.3 The Environment and Natural Resources
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	
B1 Employment	Information on: the policies; and compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	3.2 Employees' Rights and benefits
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	3.2 Employees' Rights and benefits
B2 Health and Safety	Information on: the policies; and	3.1 Safety and Health

	<p>compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to providing a safe working environment and protecting employees from occupational hazards.</p>	
B3 Development and Training	<p>Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.</p> <p><i>Note: Training refers to vocational training. It may include internal and external courses paid by the employer.</i></p>	3.3 Cultivation and Development
B4 Labour Standards	<p>Information on:</p> <p>the policies; and</p> <p>compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to preventing child and forced labour.</p>	3.2 Employees' Rights and benefits
B5 Supply Chain Management	<p>Policies on managing environmental and social risks of the supply chain.</p>	2.2 Supply Chain Management
B6 Product Responsibility	<p>Information on:</p> <p>the policies; and</p> <p>compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.</p>	2.1 Products Responsibility
B7 Anti-corruption	<p>Information on:</p> <p>the policies; and</p> <p>compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to bribery, extortion, fraud and money laundering.</p>	2.3 Anti-corruption
B8 Community Investment	<p>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.</p>	2.4 Public Welfare

Appendix II: Reader's Feedback Form

Thank you for reading the “2019 Environmental, Social and Governance (ESG) Report” of Hilong Holding Limited. In order to provide more valuable information to the Group’s stakeholders and improve its ability and level of fulfilling social responsibilities, we would welcome any feedback or suggestions you might have about this report.

You can send this form to any of the following:

Fax: +8621-33851886

Postal address: No.1825, Luodong Road, Baoshan Industrial Zone, Shanghai, PRC

1. How would you rate your opinion of the Hilong Holding 2018 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	<input type="checkbox"/> Very High	<input type="checkbox"/> High	<input type="checkbox"/> Neutral	<input type="checkbox"/> Low	<input type="checkbox"/> Very Low
Social responsibility	<input type="checkbox"/> Very High	<input type="checkbox"/> High	<input type="checkbox"/> Neutral	<input type="checkbox"/> Low	<input type="checkbox"/> Very Low
Environmental responsibility	<input type="checkbox"/> Very High	<input type="checkbox"/> High	<input type="checkbox"/> Neutral	<input type="checkbox"/> Low	<input type="checkbox"/> 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	<input type="checkbox"/> Very High	<input type="checkbox"/> High	<input type="checkbox"/> Neutral	<input type="checkbox"/> Low	<input type="checkbox"/> Very Low
Accuracy	<input type="checkbox"/> Very High	<input type="checkbox"/> High	<input type="checkbox"/> Neutral	<input type="checkbox"/> Low	<input type="checkbox"/> Very Low
Completeness	<input type="checkbox"/> Very High	<input type="checkbox"/> High	<input type="checkbox"/> Neutral	<input type="checkbox"/> Low	<input type="checkbox"/> 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:

Thank you very much for your gracious gesture and valuable time!