

海隆控股有限公司*

Hilong Holding Limited

(Incorporated in the Cayman Islands with limited liability) Stock code: 1623

* For identification purpose only

2017 Environmental, Social and Governance Report



Content

INFOR	MATION ABOUT THE REPORT1
1 CO	MPANY PROFILE2
1.1	COMPANY BRIEF2
1.2	ESG CONCEPT AND MANAGEMENT
1.3	ESG ORGANIZATION STRUCTURE
1.4	MATERIALITY ASSESSMENT
2 EN	VIRONMENTAL PROTECTION 6
2.1	EMISSIONS
2.2	USE OF RESOURCES
2.3	ENVIRONMENT AND NATURAL RESOURCES
3 CAI	RE FOR EMPLOYEES15
3.1	LEGAL EMPLOYMENT 15
3.2	HEALTH AND SAFETY20
3.3	EMPLOYEE TRAINING
3.4	LABOUR STANDARDS
4 OP	ERATING PRACTICES24
4.1	PRODUCT RESPONSIBILITY
4.2	PROPERTY RIGHT PROTECTION
4.3	PARTNERS
4.4	ANTI-CORRUPTION
4.5	COMMUNITY INVESTMENT
	DIX I: ESG REPORTING GUIDANCE INDEX

Information about the Report

About this Report

Hilong Holding Limited (the "Company") (Stock Code: 1623) hereby presents the Environmental, Social and Governance Report 2017 of the Company and its subsidiaries (collectively, the "Group") to demonstrate the concepts and practices of the Group in environmental, social and governance areas to its stakeholders.

The Board of Directors of the Company assumes full responsibility for the environmental, social and governance strategy and reporting. The Board is responsible for evaluating and determining the Company's ESG-related risks and ensuring that the Company has developed an applicable and efficient system to manage and internally control ESG-related risks. Management of the Company is responsible for submitting a confirmation to the Board of Directors, stating whether the ESG system is effective.

Reporting Scope

This report primarily includes the Company and its subsidiaries, covering principal businesses such as oil equipment manufacture and services, oil services, tube technology and services, offshore engineering, etc. The reporting time period is from 1 January 2017 to 31 December 2017.

References

This 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. This report is organized into two subject areas (namely environmental and social areas), elaborating on the environmental and social impacts of the Group's businesses and operations according to the requirements explicitly listed in the ESG Reporting Guide.

Report Availability

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

Subject of Statement

Hilong Holding Limited is referred to as "Hilong", the "Company" or "We" for easy statement.

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1 Company Profile

1.1 Company Brief

Hilong was established in 2002. Since its inception, Hilong has achieved tremendous growth, deriving from the singular provision of petroleum tube coating services to a comprehensive oil equipment and services supplier with distinctive main lines of business and complete industry chain through horizontal extension and vertical integration development. Hilong has formed business segments covering oil equipment, oil services, line pipe technology and services, offshore engineering and professional research. Hilong continues to focus on technological innovation as a core development strategy, continually improving its international operational capabilities. Hilong entered international markets in 2005 and has since established a business network spanning the Americas, the Middle East, Russia, North Africa and Europe. In 2011, Hilong publicly listed on the main board of the Stock Exchange of Hong Kong Limited and stepped into the international arena for competition and development.

Hilong has seen more than ten years of development, extending horizontally from drilling, exploitation and transmission of petroleum and natural gas to oil services, oil equipment, line pipe technology and services as well as off shore engineering. At the same time, Hilong has comprehensively developed vertically, expanding its petroleum line pipe coating, hard banding and other complementary business. The Group has also developed petroleum line pipe coating materials, hard banding wire, drill pipe fittings, petroleum line pipe and other key upstream industry materials, as well as professional research institutes focusing on petroleum line pipe, petrochemical, and offshore petroleum engineering.

Hilong has developed into an organization with extensive geographic coverage. Professional industry enterprises and research institutes in fields such as oil equipment, line pipe technology and services, and offshore petroleum engineering are primarily concentrated in Shanghai and Jiangsu within the Yangtze River Delta. Hilong has also established production bases in Tianjin, Shandong, Shanxi, Shaanxi, Northeast China, and Sichuan. Oil services, core product manufacturing, petroleum investment, and domestic and overseas trade and cooperation have all been expanded into regions including the Americas, the Middle East, Russia, and Asia-Pacific.

1.2 ESG Concept and Management

Hilong upholds the concept of sustainable development and actively engaged in environmental protection, energy savings, taking care of employees and community harmony fostering. In addition, Hilong initiates listening to the opinions and aspirations of the stakeholders and then responds in various ways. Hilong pursues sound performance, advanced service and technology research and development while expects to be a leading example for the entire industry through

exercising corporate social responsibility with actions, to promote harmonious development of the Company, environment and the society.

1.3 ESG Organization Structure

To fully implement the concept of sustainable development and effectively promote ESG management of the Company, Hilong appoints the Board as the highest decision-making level of ESG management to provide the strategic guidance for the overall ESG management of the Group. Meanwhile, relying on the current management and organization structure, Hilong identifies and refines the management functions of various departments, and it pursues targeted management on various aspects of ESG through production safety and environmental protection department, human resources department, material management department, audit monitoring department, technology quality department and corporate culture department, etc.

1.4 Materiality Assessment

1.4.1 Communication with Stakeholders

The Group adopts a diversified communication mechanism to communicate with all the stakeholders involved and proactively respond to their expectations of the Group.







1.4.2 Materiality Assessment

In accordance with the "ESG Reporting Guide", the Group constructed the ESG materiality analysis model, which assesses, identifies, selects and determines significant issues appropriate for the Group to elaborate on and respond to taking into consideration impacts on stakeholders and sustainable development of the Group:



2 Environmental Protection

The Group 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.

The Group formulated Hilong Holding Environmental Protection & Energy Conservation Management Policy (《海隆控 股環保節能管理制度》) in accordance with Environmental Protection Law of the People's Republic of China (《中華人民共和 國環境保護法》) and other domestic and international laws and regulations for regulating environmental protection and energy conservation of its subsidiaries. The Group has established the Occupational Health, Safety and Environmental Protection Committee (the "HSE Committee") to centrally manage the Group's occupational health, safety and environmental protection. It has set up the Production Safety and Environmental Protection Department in charge of environmental supervision and management, energy use control as well as tracking and



Environmental Management System Certificate of Subsidiaries

assessing progress of environmental work plan of all subsidiaries, etc. It also has set up a safe environment office in each business division where there are dedicated employees taking charge of environmental protection.

2.1 Emissions

The Group requires its subsidiaries to establish a sound environmental management system according to the requirements of environmental management system GB/T24001 and ISO14001 and re-evaluate the system timely to ensure the healthy operation of the system, thus reducing environmental impacts of the Group.

The Group invites local regulatory authority in charge of environment monitoring to conduct test 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-thespot inspections. The Group 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.

2.1.1 Waste Gas and Waste Water

Our waste gas emissions mainly include volatile organic compounds ("VOCs") generated in the coating production process, 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. The Group has complied with the 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》) and other laws and regulations at home and abroad by installing corresponding purification facilities to collect and tackle such waste gases so as to ensure discharge to the atmosphere up to standard.

The waste water discharged by the Group mainly includes waste water due to production, 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 laws, regulations and discharge standards at home and abroad, 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.

A1.1 Emissions	Data (tonnes)
Volatile organic compounds(VOCs)	1.3
Nitrogen oxide(NOx)	1.9
Sulphur dioxide(SO2)	0.7
Particulate matter	14.6
Waste water	122,085.6

The types of emissions and respective emissions data within the reporting period is shown as below¹:

¹ The environmental KPIs disclosed in the Report cover all businesses of the Group within the territory of China and those outside will be disclosed at proper time in the future.

Case: VOCs treatment

In 2017, subsidiaries of the Group took various measures to treat VOCs emissions, such as setting up VOCs collection and purification facilities, optimizing end treatment devices, etc., which helped reduce VOCs emissions.



Shanxi Tube-Cote set up VOCs treatment devices which address more than 95% of waste gases.





End treatment facility renovation in Shanghai workshops and laboratories

Case: Oil services division effluent emission reduction

The Group's oil services division adopted the effluent spray and evaporation system: set up the spray and evaporation pool near the well sites, and transfer the unrecyclable waste water to the evaporation pool to be evaporated so as to reduce waste water emission. In 2017, the system contributed to reduction of 7,203.5 tonnes of waste water in total.



2.1.2 Greenhouse Gases

The Group's greenhouse gas emissions primarily include Scope 1- direct greenhouse gas emissions and Scope 2 - energy indirect 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; energy indirect emissions mainly include the emissions from purchased electricity. Given that the greenhouse gas emissions are mainly from energy consumption, the Group 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.

A1.2 Greenhouse gases	Emissions	Unit
Scope 1: Direct emissions	9,175	tCO2e
Scope 2: Energy indirect emissions	32,157	tCO2e
Total emissions	41,332	tCO2e
Emission intensity	15.5	tCO2e/ million RMB revenue

The greenhouse gas emissions of the reporting period is shown below²:

2.1.3 Solid Waste

The Group'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, oil services, and off-shore engineering services.

According to the internal Waste Disposal Measures (《廢舊物資處理辦法》), the Group sells the recyclable

Case: efforts to reduce wastes by oil services division

The oil services division of the Group used high-frequency vibrating screens to dry drilling cuttings when drilling wells, which helped lower oil content of drilling cuttings, and reduce cuttings volume by 30% and thus the total waste emissions. parts of solid

wastes like scrap steel pipes, and other waste and idle assets to qualified enterprises for recycle and reuse. The Group entrusts qualified professional bodies to deal with other unrecyclable non-hazardous industrial wastes and the municipal sanitation department to collect and deal with domestic wastes. The Group entrusts local qualified bodies with the collection and disposal of hazardous and non-hazardous waste due to its service delivery in compliance with local laws and regulations.

The Group'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 national and international laws and regulations, the Group 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



Non-hazardous industrial wastes storage area

² The environmental KPIs disclosed in the Report cover all businesses of the Group within the territory of China and those outside will be disclosed at proper time in the future.

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.



Hazardous waste storage site

The total hazardous and non-hazardous wastes produced and the intensity of the Group of the reporting period are shown as below³:

A1.3&A1.4 Hazardous/non-hazardous wastes	Emissions	Unit
Total hazardous waste produced	135.5	tonnes
Hazardous waste intensity	0.051	tonnes/million RMB revenue
Total non-hazardous waste produced	555.1	tonnes
Non-hazardous waste intensity	0.208	tonnes/million RMB revenue

³ The environmental KPIs disclosed in the Report cover all businesses of the Group within the territory of China and those outside will be disclosed at proper time in the future.

2.2 Use of Resources

2.2.1 Energy Saving

The energy used by the Group mainly includes the natural gas used in the heat treatment process, the petrol and diesel consumed by forklifts, and the electricity used in production and office life. According to the "Energy Conservation Law of the People's Republic of China" (《中華人民共和國節約能源法》) and other relevant national and international laws and regulations, the Group is responsible for the energy-saving work of the whole Group through its production safety and environmental protection department, and has developed "Environmental Protection and Energy



Conservation Management System" (《環保節能管理制度》), to carry out unified management of the Company's energy-saving work. Each business division sets up an energy office and 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.

A2.1 Use of Resources	Consumption	Unit
Natural gas	403	10,000 m ³
Diesel	111	tonnes
Gasoline	37	tonnes
Liquefied gas	2	tonnes
Direct energy consumption	45,384	MWh
Electricity	44,406	MWh
Indirect energy consumption	44,406	MWh
Total energy consumption	89,790	MWh
Energy consumption intensity	33.6	MWh /million RMB revenue

The use of resources of the Group of the reporting period is shown as below4:

⁴ The environmental KPIs disclosed in the Report cover all businesses of the Group within the territory of China and those outside will be disclosed at proper time in the future.

Case: efforts to save energy by subsidiaries

In 2017, subsidiaries of the Group took various measures to cut down energy consumption:

- Shanghai Hilong Drill Pipe Co., Ltd:
 - Thickened the hydraulic system and upgraded 2 110kW motors, for the time being, to 70kW servo motors, which reduced electricity by 84%;
 - Upgraded heat processing, cut takt time, optimized heat processing temperature, and



Motor optimization Before (left) after (right)

increased energy efficiency, which helped reduce energy consumption of each drill pipe by 80%;

- Started air compressors properly based on output, reduced air leak points and cut back on air compressor energy consumption by 30%.
- Shanghai Hilong Shine New Material Co., Ltd. upgraded constant frequency air compressors to variable ones which helped reduce energy consumption by 20% in regular production;
- **The oil services division** reduced the use of diesel for non-production purpose and started less diesel motors when the work condition permitted.
- **The offshore engineering division** used lower power deck diesel generators during non-work time which helped reduce fuel consumption by 19% in 2017.

2.2.2 Water Saving

The Group strictly complies with the "Water Law of the People's Republic of China" (《中華人 民共和國水法》) and other relevant national and international laws and regulations, and it subjects itself to the requirements of Environmental Protection and Energy Conservation Management System (《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, the Group recycles the reverse osmosis water and cooling water in workshops, and it regularly inspects the water system to prevent leakage and to reduce the water consumption during production.

Total water consumption of the Group is 133,013 tonnes and the water consumption intensity is 49.8 tonnes/million RMB revenue during the reporting period⁵.

⁵ The environmental KPIs disclosed in the Report cover all businesses of the Group within the territory of China and those outside will be disclosed at proper time in the future.

Case: efforts to save water by the oil services division

The oil services division of the Group built waste water treatment stations on operation sites to increase water use efficiency and reduce fresh water consumption. In 2017, 25,888.7 tonnes of waste water was treated on site with 72% of which, i.e., 18,685.2 tonnes, reused.



2.2.3 Packaging Materials

The packaging materials used by the Group 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.

The Group used 410.6tonnes of packaging materials in total during the reporting period⁶.

2.3 Environment and Natural Resources

2.3.1 Environmental Emergency Management

The Group 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》) and "Contingency Disposal and Rescue Plan for Environmental Pollution Emergencies of Shanghai Hilong Shine New Material Co., Ltd." (《上海海隆賽能新材料有限公司環境污染事故應急 處理與救援預案》). 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.

⁶ The environmental KPIs disclosed in the Report cover all businesses of the Group within the territory of China and those outside will be disclosed at proper time in the future.

2.3.2 Noise Control

Noise from the Group 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.

As for metal collision noises, the Group tried its best to reduce noises generated by steel pipe processing by winding coarse hemp ropes in both sides and the middle of incoming steel pipes and enhancing onsite management and the workers' standardized operation during the loading and dropping of the steel pipes.

The Group employed a qualified third-party service agency to carry out regular monitoring on noises at boundary, which does not exceed the standard 3 limits set by Emission Standard for Industrial Enterprises Noise at Boundary (《工業企業廠界環境噪聲排放標準》) (GB12348-2008).

3 Care for Employees

The Group has been constantly improving the 3-level human resources management framework, namely, the Group, the Business Division and subsidiaries of Business Division, enhancing the Group's core management team and ability building. The Group emphasizes the leading role of technical innovation and talents in Group development, refines compensation and assessment policies, and protects legal rights and interest of employees. In 2017, the Group continued to create healthy and safe work environment for employees, provided sound promotion channels and training system, and arranged staff activities, so as to achieve co-development of employees and the company.

3.1 Legal Employment

3.1.1 Recruitment and Promotion

In compliance with the "Labour Law of the People's Republic of China" (《中華人民共和國勞動合同法》) 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 other relevant laws and regulations, the Group developed the "Employment Management System" (《員工聘用管理制度》) to regulate recruitment, induction, probation, employment after probation, dismissal, etc. The Group formulates an Annual On-Campus Recruitment Plan and an Annual Social Recruitment Plan at the beginning of each year, and recruits employees through online platform, talent market, professional intermediary, specialist recruitment companies, media and advertising, internal referrals etc., and intensifies its efforts to introduce into the Group outstanding managerial and technical talents in the industry who can contribute to the Group's new strategic businesses.

The Group sets up two major categories (management and marketing, and technical skills) and four sequences (management talent, marketing talent, professional and technical personnel, and operational skills) of career development channels and set corresponding ranks for the two major categories. In 2017, the Group formulated 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 further enhance the hierarchical management and compensation management system.

The Group 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 regulated the accreditation and appointment of professional and technical personnel. The Group also formulated "Management Measures for Skill Rating of Frontline Production Operators and Appointment of Technicians" (《一線生產操作員工技能等級評定及技師聘任管理辦法》), which improved the career development channel of frontline production operators. In 2017, the Group

made active efforts to enhance technician management and planned on recruiting proficient technicians to direct and train frontline operators.

Based on the Performance Appraisal and Management Basic System (《績效考核管理基本制度》), the Group conducted performance appraisal and adjusted remuneration and positions based on the results.

3.1.2 Compensation and Dismissal

The Group has formulated "Basic System of Compensation Management" (《薪酬管理基本制 度》) according to the "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 other relevant laws and regulation, and based on principles of equal pay for equal work, fairness and reasonableness, incentive and ease. It develops scientific remuneration systems and provides competitive remuneration package for employees.

In 2017, 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》) to reform the Group's employee compensation incentive and evaluation fulfilment mechanism, and set up the Position, Ability and Performance oriented compensation management system, which bases management compensation on revenue proportionally, and provides more incentives by income differentiation, reward and punishment.

The Group has formulated the "Employee Termination Management System" (《員工離職管 理制度》), which specified the conditions of employee resignation and corporate dismissal as well as the specific termination procedures.

3.1.3 Working Hours and Rest Periods

In strict compliance with state and local regulations, the Group developed the "Attendance Management System" (《考勤管理制度》) and implemented a working hour system which regulates and enforces standard working hours, comprehensive working hours and irregular working hours. The policy is 5 working days per week and 8 working hours per day. Employees who work overtime shall apply to the department heads for approval, and the operation staff shall obtain their overtime pay within the same month; employees with general management and technical positions shall be given compensation. For those who cannot take leave, overtime pay shall be calculated and released at the end of the quarter.

Employees of the Group are entitled to statutory holidays, annual leaves and other holidays based on the "Holiday Management System (《假期管理制度》).

3.1.4 Benefits and Welfare

The Group signed the labour contract with and paid social insurance premiums for domestic employees based on the internal "Labour Contract Management Policy" (《勞動合同管理規定》). For employees dispatched overseas, contracts and insurances are governed by "Provisional Management Measures on Contract and Insurance of Employees Dispatched to Foreign Countries" (《海外外派人員合同及保險管理暫行辦法》). The Group also 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 employees with serious diseases and their families to cope with their troubles.

The Group offers benefits including birthday bonuses, festival bonuses, and annual body check-ups, free shuttle buses, and free work meals. The Group also organized various staff activities to enrich their leisure life.



"Happy Darts" an one hour noon break exercise in August 2017



Employees of Hilong Russia Jekaterina Company gathered beside the Ayatsk Lake to celebrate the company's 6th anniversary in August 2017.



In May 2017, the Group organized for young staff to attend the 2017 Party-themed youth staff fun games in Baoshan Stadium in Baoshan district.





Hilong's line pipe technology and services division attended the "High Temperature Challenge" barbecue in September 2017



The Group organized staff to attend the 2nd Baoshan Industrial Park 5 mile running event and received the "Outstanding Team Award" as well as other team and personal prizes in June 2017.

3.1.5 Anti-discrimination, Diversification and Equal Opportunities

The Group recruits employees in accordance with the principles of fairness, impartiality and openness. At the same time, the Group strictly abides by the national and local laws and regulations and respects all employees, irrespective of race, gender, skin color, age, family background, national tradition, religion, physical fitness and nationality, so that employees can enjoy fair treatment in recruitment, and in relation to salary, training, promotion and compensation. The Group strives to provide everyone with equal opportunities.



The workforce of the Group, by the end of 2017, is shown by gender, employment type, age and region as below:

3.2 Health and Safety

In strict compliance with "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》), "Regulations of Shanghai Municipality on Work Safety" (《上海市安全生產條例》), and other relevant laws and regulations both domestic and overseas, the Group devotes itself to providing the employees with a healthy, safe and comfortable working environment.

3.2.1 Work Safety

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

The Group has established the HSE committee, setting up a sound management and organization framework for work safety at all levels and strictly controlling work safety. Besides, the Group arranged safety trainings and emergency drills to avoid accidents.

Case: Safety training and fire drill

The Group conducted safety training and fire drill in Group office building in November 2017.



The Group's personnel in charge of safety provided information on types, locations, usage and reminders regarding fire extinguishers.



The Technology Department Head explained hazardous waste leakage emergency response plan.

The fire safety training included an explanation of the whole procedure, including fire detection, analysis of the situation, fire alarm, evacuation, first-aid and fire extinguishment, which helped staff further understand fire safety, enhance fire prevention awareness, and familiarize them with the use of fire extinguishers and facilities.



3.2.2 Occupational Health

The Group attaches great importance to the health of its employees, and each business division and subsidiary has established management systems to safeguard the occupational health of its employees, such as the establishment of the "Occupational Health Management System" (《職業衛 生管理制度》) and the "Provisions on the Administration of Labour Protection Articles" (《勞動防 護用品管理規定》) by Shanghai Hilong Shine New Material Co., Ltd., with a view to guaranteeing staff occupational health.

The occupational health hazards of the Group mainly include the noise and dust produced in the process of production. The Group 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》), the Group commissions occupational health technical service organizations with relevant qualifications to assess the current condition of occupational disease hazards every three



Occupational health and safety lecture

years and implements the proposals and measures proposed in the assessment report; pursuant 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》), the Group conducts a comprehensive inspection on work sites where the occupational disease hazards exist on a yearly basis. If the test result show that the concentration or intensity of occupational disease hazards exceeds the occupational exposure limit, the Group would formulate proposals in a timely manner and rectify the situation immediately.

For employees whose jobs may expose them to occupational disease hazards, the Group has established occupational health records, informed them of occupational disease hazards prior to their joining the Group, arranged a physical examination before they start their jobs, an annual on-the-job occupational health physical examination and a physical examination after they leave the posts. All physical examination results were entered into occupational health records immediately and were



Inspection results of workplace occupational disease hazards, occupational health and safety knowledge were being put up

provided to the employees to provide them with a full understanding of their occupational health conditions. In addition, the Group carried out occupational health trainings regularly and set up a bulletin board at an obvious place on work site with information on 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.

3.3 Employee Training

The Group has formulated the "Staff Training Management Policy" (《員工培訓管理制度》), and formed a unique and hierarchical training system, where trainings are arranged for all employees at the Group, the various divisions and subsidiaries. Training includes management training, professional technician training, sales training, overseas talent training and operational technical training, etc. in form of lectures, practices, video watching, case analysis, discussion, selflearning and idea exchange, outside training, visits and technical contests, etc.

Case: Technician team training

In November 2017, the Group arranged a technician team training. Material engineers provided technical instructions to 30 staff including workshop supervisors, key post staff, team heads etc., which helped improve their technical skills.



Case: overseas worker training

In April 2017, the Group's oil services division arranged the 1st training in Puyang for overseas

onsite workers. This training provided guidance on HSE, risk management, contract implementation, client relations etc., based on on-site reality, troubles encountered during operation and weakness of onsite workers.



3.4 Labour Standards

In strict compliance with the laws and regulations such as the "Labour Law of the People's Republic of China" (《中華人民共和國勞動法》) and the "Provisions on the Prohibition of Using Child Labour" (《禁止使用童工規定》), the Group has formulated the "Employee Employment Management Policy" (《員工聘用管理制度》), stipulating in its appendix "Employment Standards for New Employee" (《新員工錄用標準》) that the Group prohibits the use of child labour and will not engage new employees under the age of 18. The Group strictly complies with the statutory working hours and controls the overtime work to ensure the rest and the 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, and such overtime wages during the statutory holidays are based on the local minimum standard wages and in compliance with national regulations. Forced labour is not allowed.

4 Operating Practices

4.1 Product Responsibility

4.1.1 Guarantee Product Quality

The Group sticks to "Quality First" and steps up efforts in quality control in compliance with the "Product Quality Law of the People's Republic of China" (《中華人民共和國產品質量法》) and other relevant laws and regulations at home and abroad. The Group continues to strengthen quality management system, standardization of quality and measurement, and upholds quality control guidelines so as to ensure product quality.

The Group continued to improve quality framework of all levels and clarified quality



management responsibility. The business divisions and subsidiaries of the Group have established sound quality management system according to ISO9001 and GB/T19001 quality management system and conducted annual internal and external audits as well as management evaluations, etc. to ensure the appropriateness, effectiveness and practicability of the system and that clients are provided with safe and high quality products and services.



In October 2017, the Shanghai Hilong Drill Pipe Co., Ltd obtained Shanghai Baoshan District Mayor Quality Award.



Quality management system certificate of subsidiaries of the Group

4.1.2 Improve Client Services

The Group established sales and services network in major oil production regions around the globe including Middle-East, Central Asia, Russia, Southern Asia, South East Asia, North America, South America, Central America, Africa and other countries or regions, and provides multiple products and services for a range of famous energy companies.



The Group formulated the "Customer Service

Management System" (《客戶服務管理制度》), which effectively controls the customer service work and provides satisfactory services to customers by defining the service standards and handling customers' complaints in a timely manner. Subsidiaries of the Group conduct regular customer satisfactory surveys and occasional survey based on "Customer Satisfaction Control Procedures" (《顧客滿意度控制程序》) to collect customer opinions and thus maintain their level of satisfaction. The Group protects customers' privacy by regarding their information as company secret and keeping it secure through proper measures.

4.1.3 Product Innovation

The Group set up institutes such as oil tubular goods pipe research institute, petrochemical research institute and offshore oil engineering and technical services company, and installed highend experiment facilities, created favourable R&D conditions, and established strong and professional R&D platform in oil technical services.

The Group has been active in exchange and collaboration with R&D institutes at home and abroad, and forged cooperative relations with many research academies in multiple areas. It set up a post-doctoral station, the Shanghai Oil Pipe Engineering and Research Center, etc. and a competitive innovative talent team.

Case: Product innovation

The Group has been constantly developing environmentally friendly products. In 2017, the Group continued to conduct research in water-based coating and formed a product line including water-based epoxy coating, water-based acrylic coating, waterbased epoxy zinc rich primer, water-based polyurethane finishing coating, and water-based alcoholic acid



coating. Adoption of this product line instead of organic solvent coating caused no VOCs emission, which helped improve air quality.



The Group developed high precision MFL detectors for long oil and natural gas pipeline inspection. This detector obtained information and data about weaknesses of the system such as pipeline and metallic corrosion, implemented pipeline analysis and management, identified and assessed potential risk factors, predicted hazards and risk levels, and reduced

occurrences of pollution, economic losses, and social accidents caused by pipeline corrosion and failure.

4.2 Property Right Protection

Trademark is an important asset of the Group. The Group has formulated the "Management System for Trademark Use" (《商標使用管理制度》) to carry out the registration, maintenance and utilization of trademarks in compliance with 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》) and other relevant domestic and overseas laws and regulations, in order to regulate trademark registration, protect rights and interests of consumers and the Group and fully safeguard its trademarks.

To maintain and consistency and stability of corporate image, and regulate and promote corporate visual image system, the Group 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. which specifies roles & responsibilities of the Corporate Culture Department and other departments of the Group, as well as requirements of corporate image usage.

The sales of the Group's products were mainly conducted through direct visits to customers and participation in exhibitions without advertising, therefore there was no policy concerning advertising management.

4.3 Partners

The Group formulated the "Supplier Management System"(《供應商管理制度》) to regulate procedures such as supplier qualification, assessment and disqualification, so as to improve supplier product and service quality. The Group strives to build a sustainable and responsible supply chain by delivering the concepts of environment and social risks, safety and health and anticorruption, etc. The Group requires suppliers to have adequate production ability, stable quality, punctual delivery according to contract, possession of conformity certificate of products supplied, good service method and channel, initiative to timely feedback on quality, delivery and other issues put forward by the Company, possession of warranty/ qualification certificate issued by relevant authorities, and trustworthiness, etc., thus ensuring produce and service quality, and ultimately consumer safety and health.

The Group requires suppliers to provide ISO14001 environmental management system certificate when filing application and the Group conducts on-site inspection and regular assessment as one of considerations for supplier access. The Group requires suppliers to comply with local laws and industrial standards related to environment. No supplier will be accepted if it fails to comply with those requirements.

"Regulations for the Implementation of the Supplier Management"(《供應商管理實施細則》) provides that in an event of fraud, forgery and bidder collusion, and bribery in the names of commission, rebates, consulting fees, intermediary fees and others to the materials management department of the Group and other departments and their employees, and other violations of national laws and regulations and related requirements committed by the suppliers, the Group should cancel their supplier qualifications, so as to strengthen the fairness, transparency, and healthy growth of the industry.

4.4 Anti-Corruption

The Group complied with 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 "Interim Provisions on the Prohibition of Commercial Bribery" (《關於禁止商業賄賂行為的暫行規定》) and the "Anti-money Laundering Law of the People's Republic of China"(《中華人民共和國反洗錢法》) and other relevant national laws and regulations, and formulated a series of audit monitoring systems. According to "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》), "Clean Government Self-Discipline Standard"(《廉政自律規範》), the Group set up an Audit and Supervision Department which was responsible for internal audit work, and it prohibited employees from bribery, extortion, fraud and money laundering behaviour, so as to promote the Group's continuous heathy development.

The Group provides staff with various whistle-blower channels such as hotline and email and encourages them to report behaviours in violation against laws, regulations and company code of conducts and ethics to the Audit and Supervision Department timely. The Audit and Supervision Department conducts an investigation into the reported case and reports to the management or the Board of Directors. With regard to employees who were proven to have committed corrupt conduct, the Group should, in accordance with the relevant provisions, impose corresponding administrative disciplinary actions. In case of violation of the laws, the case should be referred to a judicial organ for handling according to laws.

The Group formulated the "Tendering and Bidding Management Policy" (《招標管理制度》) and procured goods and services through fair and open tendering and bidding procedures. Besides, when signing contract with partner, the Group also signed "Integrity Agreement" (《廉潔協議》) or presented "Integrity Notice" (《廉潔告知書》) discouraging corruptive behaviours.

4.5 Community Investment

The Group has formulated the "Measures for the Administration of Charity and Public Welfare Activities" (《慈善與公益活動管理辦法》), which stipulated the source of fund, fund management, main forms, summary and publicity, assessment, etc. in respect of charity and public welfare activities in detail, so that the charity and public welfare activities were conducted by the Group under a unified specification. In 2017, the Group carried out various activities so as to fulfil the social responsibility that the Group should bear.

In June 2017, the Group collaborated with the Luojing Town Disabled Persons' Federation. The Group visited two families of this project that are impoverished due to disability in Tangwan Village and Baoyue Home Community in Luojing Town and sent cooking oil, rice etc.





In August 2017, in active response to the "Build Library and Share Knowledge" book donation initiative launched by Baoshan Industrial Park, the Group collected old books from employees, and donated these books to Hongfan Harbour Party-Masses Instruction Station of the park as an effort to build the community library.



In 2017, the Group arranged for 48 employees to participate in voluntary blood donation activities in Baoshan District.

Appendix I: ESG Reporting Guidance Index

Aspect	General Disclosure	Index
A1 Emissions	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. <i>Note: Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations.</i> <i>Greenhouse gases include carbon dioxide, methane, nitrous</i> 	2.1. Emissions
KPI A1.1	oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations. The types of emissions and respective emissions data.	2.1.1 Waste Gas and
		Waste Water
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	2.1.2 Greenhouse Gases
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	2.1.3 Solid Waste
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	2.1.3 Solid Waste
KPI A1.5	Description of measures to mitigate emissions and results achieved.	2.1.1 Waste Gas and Waste Water
KPI A1.6	KPI A1.6Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	
A2 Use of Resources	Policies on the efficient use of resources, including energy, water and other raw materials.Note:Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	2.2. Use of Resources
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in 'ooos) and intensity (e.g. per unit of production volume, per facility).	2.2.1 Energy Saving
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	2.2.2 Water Saving
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	2.2.1 Energy Saving
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	2.2.2 Water Saving
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	2.2.3 Packaging Materials
A3TheEnvironmentandNaturalResources	Policies on minimising the issuer's significant impact on the environment and natural resources.	2.3. 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: (a) the policies; and (b) compliance with relevant laws and regulations that have a	3.1. Legal Employment
	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.	
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	3.1.5 Anti- discrimination, Diversification and Equal Opportunities
B2 Health and Safety	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards. 	3.2. Health and Safety
B3 Development and Training	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer.	3.3. Employee Training
B4 Labour Standards	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour. 	3.4. Labour Standards
B5 Supply Chain Management	Policies on managing environmental and social risks of the supply chain.	4.3. Partners
B6 Product Responsibility	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. 	4.1. ProductResponsibility4.2. Property RightProtection
B7 Anti- corruption	 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering. 	4.4. Anti-Corruption
B8 Community Investment	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.	4.5. Community Investment

Appendix II: Reader's Feedback Form

Thank you for reading the "2017 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: +86 21-33851886 Postal address: No.1825, Luodong Road, Baoshan Industrial Zone, Shanghai, PRC

1. How would you rate your opinion of the Hilong Holding 2017 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?

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:

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