

Risecomm Group Holdings Limited 瑞斯康集團控股有限公司

(Incorporated in the Cayman Islands with limited liability) Stock Code: 1679

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT **2018**

Content

Section	Pages
About This Report	2
About Risecomm Group	3
Stakeholders Engagement	4
Materiality Assessment	5
Environmental Protection	
Emissions	6
Use of Resources	10
The Environment and Natural Resources	12
Social Responsibility	
Employment and Labour Practices	13
Health and Safety	15
Development and Training	16
Labour Standards	17
Operating Practices	
Supply Chain Management	17
Product Responsibility	19
Anti-corruption	20
Community Investment	21

ABOUT THIS REPORT

Risecomm Group Holdings Limited (the "**Company**"), together with its subsidiaries (collectively, "**Risecomm Group**", the "**Group**" or "**we**"), is pleased to present the Environmental, Social and Governance Report (the "**Report**"). The purpose of this Report is to disclose to investors and other stakeholders the Group's strategies, policies and performance in the areas such as environmental protection, corporate management, talent training, supply chain management, social responsibility, social welfare undertakings in 2018.

REPORTING PERIOD AND SCOPE

Information contained in this Report covers the period from January 1, 2018 to December 31, 2018 (the "**Reporting Period**" or "**2018**"), which is consistent with the financial year covered by the Group's 2018 Annual Report ("**2018 Annual Report**"). Our main business operation areas include our headquarters in Nanshan, Shenzhen, the People's Republic of China ("**PRC**"), and our offices in Beijing, Wuxi, Changsha and Hong Kong, China. Since June 2018, our Product Assembly Hub in Yantian, Shenzhen, the PRC, has ceased operation, with production now being concentrated in our Production Assembly Hub in Changsha, Hunan. During the Reporting Period, the Group acquired two companies, namely North Mountain Information Technology Company Limited ("**NM Technology**") and Green Harmony Limited and its subsidiaries ("**Green Harmony**") in May 2018 and August 2018, respectively. Therefore, the scope of preparation of this Report has been changed.

This Report highlights that the Group fulfilled environmental and social responsibilities while carrying out operation. For details of the relevant information on corporate governance, please refer to pages 38 to 49 of the 2018 Annual Report. This Report is prepared in both Chinese and English versions. Should there be any discrepancy between the Chinese and the English versions, the English version shall prevail.

BASIS OF PREPARATION

This Report is prepared in accordance with Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Listing Rules**") — "Environmental, Social and Governance Reporting Guide" (the "**ESG Reporting Guide**") based on the principles of materiality, quantitative, balance and consistency, and has complied with the "comply or explain" provisions as set out in the Listing Rules. The data disclosed in this Report are from the Company's official documents and statistical reports.

OBJECTIVE OF THE REPORT

We believe that the integration of environmental, social and governance considerations into the Group's business operation has become an integral part of the Group's corporate development strategy. Meanwhile, we also focus on fostering closer connection with our stakeholders, listening to their voices, working openly with partners to overcome challenges, caring for and growing with employees, and taking on more social responsibilities, in order to seek continuous improvement.

HOW TO OBTAIN THE REPORT

This Report is part of the Group's annual report and is available on the Group's website. For more information about the Group, please visit http://www.risecomm.com.cn

CONTACT METHOD

We attach great importance to the valuable opinions of stakeholders and welcome suggestions on this Report or on the Group's overall performance on sustainable development, please contact us by email at ir@risecomm.com.hk.

ABOUT RISECOMM GROUP

Risecomm Group, is a High and New Technology Enterprise ("HNTE") which engages in scientific research, product development and the provision of technical services. The Group's headquarters is situated in Shenzhen, the PRC, with offices in Beijing, Wuxi, Changsha and Hong Kong, the PRC. The Group's production, research and development ("R&D") and sales businesses are carried out by its various subsidiaries, namely Risecomm Microelectronics (Shenzhen) Company Limited ("Risecomm WFOE"), Beijing Risecomm Communication Technology Company Limited ("Risecomm Beijing Comm"), Wuxi Risecomm Communication Technology Company Limited ("Risecomm Wuxi") and Changsha Risecomm Communication Technology Company Limited ("Risecomm Changsha"). In order to further balance the structure of sales sources, the Group acquired Green Harmony in August 2018 to expand its business to Smart Manufacturing and Industrial Automation ("SMIA"). As a High Technology Enterprise driven by research and development, Risecomm WFOE is honoured as a National HNTE, Shenzhen HNTE and National Integrated Circuit Design Enterprise.

Based on smart manufacturing, we use the power line chip design as the source, and form the strategic layout of smart grid and smart energy management applications in parallel. With its advanced R&D strength and ample industry experience, the Group provides two major businesses to the market. Firstly, through Power Line Communication ("**PLC**") technology, the Group provides: (i) Automatic Meter Reading ("**AMR**") business (including provision of PLC-related system-on-chip ("**SOC**") integrated circuit ("**IC**"), PLC modules and other AMR products), which has maintained a leading position in market application of State Grid Corporation of China over the years; and (ii) Smart Energy Management ("**SEM**") business (including streetlight control, building energy management and photovoltaic power management) which has been widely used in the market. In particular, we ranked high in terms of market share in the market of PLC technology adopted in smart streetlight remote control system, while the application of other smart management solutions also grow steadily. Secondly, the Group has expanded its business to SMIA business through the acquisition of Green Harmony, further providing software authorization, producing safety products, and software after-sales customer support services for maintenance and safety integrity systems applied in the petroleum and petrochemical industries.

In the future, the Group will continue to uphold the idea of upgrading industrial informatization through SEM research and the industrial Internet of Things so as to facilitate interconnection, intercommunication and inter-control among different SEM products in different industries and enterprises. Also, by applying PLC technology which seamlessly connects SEM business to the industrial Internet of Things through power line, the Group aims to achieve further extension of industrial network, thereby allowing the omnipresent industrial Internet of Things to contribute to the smart and integrated development of China's industry.

There are major changes in energy management and control and energy usage pattern in the PRC and even the world which presents huge social responsibility and development opportunities for energy conservation and emission reduction. Risecomm Group has stay true to its original aspiration to actively fulfill its corporate social responsibility while achieving leapfrog development and sustained innovation, takes into account the various factors of sustainable development in the formulation and management of enterprise strategies and strives for a full understanding the social environmental impacts of measures and decisions before their implementation.

STAKEHOLDERS ENGAGEMENT

In addition to tireless efforts taken in business operation in providing returns for shareholders and protecting investors' interests, Risecomm Group has maintained effective communication with relevant stakeholders through various channels and paid particular attention to their feedbacks, in order to get a better understanding of their expectation and areas of concerns, which allows the Group to make appropriate improvement and implementation so as to further improve sustainable development strategy and reinforce the Group's contribution to society.

Stakeholders	Engagement Channels	Expectations
Government and Regulatory Authorities	 On-site inspection and checking Research through work conferences, work reports preparation and approval submission Information release on HKExnews and company's website, such as annual reports, interim reports and announcements 	 Compliance with laws and regulations Making tax payment, conducting operation in accordance with laws, under government supervision and evaluation Participating in the formulation of industry standards Promoting economic development and employment
Shareholders and Investors	 Annual general meeting and other shareholder meetings Information release on HKExnews and company's website, such as annual reports, interim reports and announcements Meeting with investors and analysts 	 Return on investment Information disclosure and transparency Protection of interests and fair treatment of shareholders
Employees	 Meetings Trainings, seminars and briefing sessions Cultural and sports activities Intranet and emails 	 Protection of rights and interests of employees Comfortable working environment Career development opportunities and self-realization Occupational health and safety
Customers	 Websites and brochures Emails and customer service hotlines Feedback forms Regular meetings Industry exhibitions 	 Safe and high-quality products Stable cooperation Information transparency Integrity Business ethics
Suppliers and Business Partners	 Regular meetings, supplier conferences, phone calls and interviews Review and assessment 	 Long-term partnership Honest cooperation, fairness and openness Information resources sharing Quality of supply Reduction of business risks
Peer and Industry Associations	Industry conferences and meetingsSite visits and field trips	Experience sharingFair competitionCooperation
Society and the Public	Volunteering activitiesCharity and social investment	 Community participation Social responsibilities Provision of career opportunities

MATERIALITY ASSESSMENT

On the basis of last year's stakeholder survey, we conducted several communications with various stakeholder representatives in 2018, including group discussions, telephone interviews and so on, in order to understand the stakeholders' concerns and expectations. We believe that the annual stakeholder communication is to help enterprises identify priorities and important work contents in areas where improvement is needed. We also expect to understand what the Group needs to improve from the results of each communication, and give a more targeted response in this Report in order to continuously improve the Group's reputation.

The following table is a summary of the Group's material Environmental, Social and Governance ("**ESG**") issues contained in this Report:

ESG Reporting Guide	Material ESG Issues	Mat	eriality to the G	roup
A. Environmental		Low	Medium	High
A1. Emissions	Harmful Exhaust Gas and Greenhouse Gas (" GHG ") Emissions Sewage Reduction Hazardous and Non-hazardous Waste]]]		
A2. Use of Resources	Energy Saving Water Saving Environmental Protection Packaging Material		<i>√</i>	√ √
A3. The Environment and Natural Resources	Assist Customers in Energy Saving and Emission Reduction Creating a Green Office Environment A Supplier of Environmental Protection Concepts		J	J J
B. Social		Low	Medium	High
B1. Employment	Protection of Employees Rights and Interests Welfare and Rewards Advocating Work-life Balance			5 5 5
B2. Health and Safety	Safe Production Occupational Health Training			\ \
B3. Development and Training	Training Management			\checkmark
B4. Labour Standards B5. Supply Chain Management	Prevention of Child or Forced Labour Supply Chain Management Sunshine Procurement	1	1	1
B6. Product Responsibility	Quality Control Green Products Intellectual Property Rights Privacy Protection		, ,	J J
B7. Anti-corruption B8. Community Investment	Anti-corruption Community Investment			<i>J</i>

We are a fabless research and development oriented PLC technology company specialized in the design, development and sale of proprietary PLC-related SOC IC, modules, devices and solutions. The Group adopts fabless production model, under which, instead of in-house manufacturing IC chipsets, we source integrated circuit chipsets, as our main raw materials, from IC chipsets suppliers which provide application-specific ICs based on our proprietary design we developed. Unlike general manufacturing enterprises, we assemble our products with the adoption of fabless production model, which greatly reduces the negative impacts on the environment during the course of operation and production.

ENVIRONMENTAL PROTECTION

With the development of the world industrial revolution and the rapid development of economy and technology, human society has begun to enter a new era, but at the same time, our environment has suffered unprecedented damage. In the 21st century, environmental problems have become a severe challenge for the world. Therefore, the Group has always regarded environmental protection as a prerequisite for the steady development of enterprises, so we shoulder the important mission of "sustainable development" and strive to ensure the ultimate goal of legitimate and compliance operation. We respect and conserve nature, strictly comply with national laws, regulations and standards, take the initiative to consider the impact of decision-making and activities on the environment as a whole, and strive to achieve a harmonious coexistence with the environment.

In 2018, the Group did not have any violation of relevant local environmental laws and regulations in relation to exhaust gas and GHG emissions, water and land discharge, and the generation of hazardous and non-hazardous wastes that have a significant impact on the Group, including but not limited to "Environmental Protection Law of the People's Republic of China" (中華人民共和國環境保護法), "Water Pollution Prevention Law of the People's Republic of China" (中華人民共和國大院院治法), "Air Pollution Prevention Law of the People's Republic of China" (中華人民共和國大氣污染防治法), "Environmental Noise Pollution Prevention Law of the People's Republic of China" (中華人民共和國大氣污染防治法), and "Environmental Prevention Law of the People's Republic of China" (中華人民共和國環境噪聲污染防治法) and "Environmental Prevention Law of the People's Republic of China" (中華人民共和國環境噪聲污染防治法).

Emissions

The Group has obtained the ISO14001 environment management system certification, which indicates that our operation and management of R&D, production and sales have achieved internationally recognised standards. The Group has also formulated the Waste Management Policy to establish regulations and guidance on waste disposal and manage and monitor the effectiveness of targeted measures for different kinds of waste. Moreover, we act in accordance with the "Control Procedures for Monitoring and Measurement of Environment, Occupational Health and Safety", and regularly engage inspection bodies to conduct accurate monitoring of emissions and provide monitoring reports, so as to keep abreast of the Group's performance in environmental protection and formulate measures for improvement.

During the Reporting Period, the Group did not receive any notice or warning on pollution in respect of its production, nor had the Group been subject to any fines, penalties or other legal actions by government agencies in the PRC resulting from any non-compliance with any environmental protection laws and regulations in the PRC.

GHG emissions

The Group's production activities mainly use electricity to maintain machine operation, general lighting and indoor temperature control etc. As such, the main source of our carbon emission is GHG generated from electricity consumption. Meanwhile, our products are energy-saving and environmentally-friendly. We have installed our self-developed air conditioner controllers and energy-saving control switches in all office areas and plants. Such on-site application allows backstage control of the usage of lighting and air-conditioners and thus effectively saves electricity resources. The Group has promoted this series of energy-saving products to its customers and have achieved the desired energy-saving effect.

In 2018, in order to strengthen the control on operating cost, the Group took up the originally outsourced after-sales maintenance services on its own, resulting in an increase in vehicle utilization rate as compared with 2017.

Although direct GHG emissions (Scope 1) have increased due to the increase in vehicle usage in the Group, the total GHG emissions have decreased by approximately 68.80% from about 757.71 tCO₂e in 2017 to approximately 236.37 tCO₂e in 2018. This is mainly due to the discontinuation of the Group's operation of Product Assembly Hub in Yantian, Shenzhen from June 2018, with production now being concentrated in our Product Assembly Hub in Changsha, Hunan. Other power consumption is for general operation, therefore, combined with the Group's commitment to energy-saving measures, indirect GHG emissions (Scope 2) have been reduced. The following table provides an overview on GHG emissions:

GHG Emissions Indicator ¹	Unit	2018	2017
Direct GHG emissions (Scope 1)	tCO ₂ e	43.22	24.50
Indirect GHG emissions (Scope 2)	tCO ₂ e	193.15	733.21
Total GHG emissions (Scope 1 and 2) ²	tCO ₂ e	236.37	757.71
Intensity ³	tCO ₂ e/turnover (RMB'000)	0.0005	0.0024

Notes:

- 1. GHG emission data are presented in terms of carbon dioxide equivalent, with reference to, including but not limited to, the reporting requirements of "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standards" issued by the World Resources Institute and the World Business Council for Sustainable Development, "How to prepare an ESG Report Appendix II: Reporting Guidance on Environmental KPIs" issued by the Hong Kong Stock Exchange, latest released emission factors of China's regional power grid basis, the emission factor released by the Hong Kong Electric Investments in 2018 and "Global Warming Potential Values" from the IPCC Fifth Assessment Report, 2014.
- Scope 1: Direct GHG emissions from vehicles owned by the Group
 Scope 2: Indirect GHG emissions from the generation of purchased electricity consumed by the Group
- 3. As of December 31, 2018, the Group's turnover was about RMB475,793,000.

Treatment of exhaust gases

The Group's major air pollutant emissions are welding fumes produced in welding work stations.

Immaterial amount of fumes is produced during welding and will be discharged into high-altitude air after being collected and filtered according to the requirements from the environmental protection authority in the PRC. Discharging pipes are installed above each welding work station of production lines in the assembly hubs in Yantian, Shenzhen and Changsha, Hunan. Welding gas will be sucked into the pipes and discharged into high-altitude air after being filtered and purified. There is also testing facility for testing welding gas in the pipes. The Group has established a routine maintenance system. Discharging pipes in the factories are regularly cleaned.

In 2018, the Group had engaged Shenzhenshi Hongcai Detection Technology Co., Ltd. (深圳市虹彩檢測技術有限公司) ("**HCDT**") to conduct tests on exhaust gases in the assembly hubs located in Changsha, Hunan. The testing results indicated that the quantity of exhaust gas generated was insignificant and the discharge of which was qualified and complied with the requirements in the "Air Pollution Prevention Law of the PRC" (中華人民共和國大氣污染防治法) and were inspected by relevant regulatory authorities.

The Group outsourced its after-sales maintenance services in 2017. Since 2018, in order to strengthen the control on operating costs, the Group has taken up these services on its own, resulting in an increase in vehicle usage rate as compared with 2017, with data relating to vehicle gas emissions increased as well. During the Reporting Period, the Group's exhaust gas emissions were 0.0002 tonnes of sulphur dioxide, 0.0269 tonnes of nitrogen oxide and 0.0023 tonnes of Particulate Matter.

Sewage reduction

The Group does not generate industrial sewage as water is not required in its production process. Sewage generated by the Group is mainly domestic sewage, which will be discharged to municipal sewage system after primary treatment in regional septic tank, and then undergone advanced treatment in regional sewage treatment plant. We have also renovated our water-saving tanks installed in washrooms and carried out other measures to reduce domestic sewage discharge.

In 2018, the Group engaged Shenzhenshi Hongcai Detection Technology Co., Ltd. (深圳市虹彩檢測技術有限公司) ("HCDT") to conduct tests on domestic sewage in the assembly hubs located in Changsha, Hunan. The test results indicated that it is in compliance with the requirements of relevant national regulatory authorities.

Since June 2018, the Group's operation of the Product Assembly Hub in Yantian, Shenzhen has been discontinued. The total domestic sewage discharge of the Group has decreased by 80.57% from approximately 25,673.62 cubic meters in 2017 to approximately 4,988.74 cubic meters in 2018. The performance on sewage discharges during the Reporting Period was as follows:

Types of Sewage	Unit	2018	2017
Domestic sewage	Cubic metres	4,988.74	25,673.62
Intensity	Cubic metres/turnover (RMB'000)	0.010	0.081

Hazardous and non-hazardous wastes

Production Department

The Group strictly complies with the national regulations governing the management of electronic waste equipment, promotes the recycling and reuse of waste products, and reduces the rate of waste disposal. The solid wastes are mainly lead-free tin slag, metal and plastic waste, waste packaging materials and other recyclable wastes produced during the production process, as well as office waste generated during operation process, fluorescent lights and disposed batteries, a small amount of defective devices and semi-finished scrapped devices. The Group's general waste is contracted to professional recyclers for centralized recycling. Hazardous wastes are handed over to departments qualified for hazardous wastes disposal and registered with the Environmental Protection Bureau.

The Group has a strict classification system for different types of wastes. Wastes are stored, handled and recorded separately. Waste bins are set up according to the type of wastes and are placed in appropriate areas. Wastes generated by each department are classified and threw into designated waste bins according to the Waste Management Requirements, and engaged qualified recyclers for disposal. We have also put much efforts on recycling and reusing general or valuable components and parts (such as universal chip on printed circuit board ("**PCB**")) to reduce the impacts on nature.

Office Areas

Recyclable wastes are recycled, while hazardous wastes (e.g. end-of-life fluorescent lights and batteries) are collected in specific site, which will then be handed over to outsourced parties with appropriate qualification for disposal after reaching a certain amount.

The Group promotes the use of various electronic mobile office softwares to reduce paper usage. In 2017, electronic mobile system such as the R&D projects "Product Life Cycle Management" and "Enterprise Resource Planning" were used for internal approval procedure, which further expanded the paperless network and the coverage of mobile office. In 2018, paperless systems were established for internal communications such as employee learning and development. As a result, the amount of paper used in the office has been reduced and the results are satisfactory.

Since June 2018, the Group's operation of the Product Assembly Hub in Yantian, Shenzhen has been discontinued, and with the Group's promotion of waste reduction policies and measures, overall non-hazardous waste volume has been reduced by approximately 57.26% from approximately 3.51 tonnes in 2017 to approximately 1.50 tonnes in 2018. During the Reporting Period, the performance on non-hazardous waste emissions was summarized as follows:

Types of Wastes	Unit	2018	2017
Total amount of non-hazardous wastes	Tonnes	1.50	3.51
Intensity	Tonnes/turnover (RMB'000)	0.000003	0.000011

Use of Resources

Energy saving

We acknowledge that every enterprise should work towards the trend of low-carbon operation. Risecomm Group has been committed to environmental protection and invested substantial capital and human resources in environmental protection, striving to provide smart energy saving and emission reduction management solutions for the global market with PLC technology, and application of which includes streetlight control, building energy management and photovoltaic power management. Meanwhile, we have always been devoting our efforts to efficient use of energy in order to strike a balance between corporate development and environmental protection.

Since 2018, the Group has taken up the originally outsourced after-sales maintenance services on its own, resulting in an increase in the Group's vehicle usage rate. Therefore, overall petrol consumption has increased as compared with 2017. Since June 2018, the operation of the Product Assembly Hub in Yantian, Shenzhen has been suspended, while other power consumption is required for general operation. In addition, the Group is committed to energy-saving measures, resulting in a decrease in the number of purchased electricity. Overall energy consumption decreased significantly by approximately 58.08% from approximately 1,131,593.67 kWh in 2017 to approximately 474,352.08 kWh in 2018. The Group's energy consumption during the Reporting Period is as follows:

Types of Energy	Unit	2018	2017
Petrol ¹	kWh	151,528.64	99,831.05
Purchased electricity	kWh	322,823.44	1,031,762.62
Total	kWh	474,352.08	1,131,593.67
Intensity	kWh/turnover (RMB'000)	1.00	3.57

Note :

1. The conversion is based on the conversion provided by the Energy Conversion Calculator of the U. S. Energy Information Administration. The actual petrol consumption is approximately 16,248.23 litres.

Energy efficiency

We adopt our self-developed building energy management system to centralize the management of our internal air conditioners in a planned manner and remotely control the temperature and switching time of the working environment, which effectively reduces wear and tear and extend the service life of air conditioners. In 2018, these enhancement projects have allowed us to efficiently reduce energy usage of air conditioning system as well as the entire floors and cut down carbon dioxide emissions of the Group.

Example of application

Location: Risecomm WFOE 5th floor, Skyworth Building, Shenzhen

Year: At the beginning of 2018

Program: Since the installation of this system in the 4th floor of Risecomm WFOE in 2017, the energy-saving effect is beginning to show. This year, it has been extended to the 5th floor office area. The system allows the pre-setting of office temperature according to seasonal climate changes. Through energy-saving monitoring and control platform, parameters such as office environmental conditions, utilisation and power consumption can be collected for analysis. Remote Batch management enables air conditioners to operate under an intelligent planned mode and temperature, facilitating centralized management of power consumption of air conditioners.

Effect: It has yield satisfactory energy saving effect as compared with 2017.

The Group strives to save energy, improve energy efficiency and reduce the pressure on the environment caused by the use of energy, and works on energy conservation and emission reduction from three aspects, including management, technology and structure. We also perform energy-saving technological upgrade for certain customers.

Water efficiency

As always, internal energy-saving education to our employees is continuously carried out to develop the sense of energy conservation. For example, once the water pipeline leakage was discovered, timely reporting and repairing would be carried out. Visual energy-saving slogans for water-saving, energy-saving and paper-saving are posted in the area of office, pantry and toilet to raise environmental awareness of employees. Compared with the water consumption of the previous year, our efforts on saving water resources have been proven to be effective.

Since June 2018, the operation of the Product Assembly Hub in Yantian, Shenzhen has been discontinued, and with the Group's efforts to promote environmental protection and raise employees' awareness of environmental protection, overall water consumption has been reduced by approximately 80.57% from approximately 25,673.62 cubic metres in 2017 to approximately 4,988.74 cubic metres in 2018.

The amount of water used by the Group during the Reporting Period is as follows:

Water Consumption	Unit	2018	2017
Water consumption	Cubic metres	4,988.74	25,673.62
Intensity	Cubic metres/turnover (RMB'000)	0.010	0.081

Environmentally-friendly packaging materials

The Group has reduced the use of materials and prioritized recyclable and reusable materials without impairing the packaging quality. Also, the Group has increased the reusage rate of packaging materials, which greatly reduced the actual usage of packaging materials. For example, the Product Assembly Hub in Yantian, Shenzhen adopted reusable plastic materials in production cycle and temporary storage packaging, which significantly reduced the wastage on packaging cartons. Furthermore, in terms of product design, plastics have been replaced by recyclable aluminium alloy for certain products in order to reduce the damages to the environment.

In 2017, our main production line was in Yantian. Most of the packaging accessories, such as cartons and polyethylene ("**PE**") bags, are provided by outsourcing manufacturers. However, we have started to reduce the assistance in production provided by outsourcing manufacturers and make procurement on our own, resulting in a larger amount of packaging materials being used as compared with 2017. Since June 2018, the operation of the Product Assembly Hub in Yantian, Shenzhen has discontinued, with most of the Group's production being concentrated in the plant in Changsha, Hunan Province, and a small portion in Nanshan, Shenzhen. All packaging materials are purchased on our own. Compared with 2017, usage in all packaging accessories have been increased. Packing materials used by the Group during the Reporting Period are as follows:

Types of Packaging Material	Unit	2018	2017
PE plastic bag	Tonnes	3.53	0.99
Paper carton	Tonnes	15.48	9.49
Pearl cotton	Tonnes	0.86	8.78

The Environment and Natural Resources

Assisting customers in energy conservation and emission reduction

The Group continues to save energy, improve energy efficiency and reduce the pressure of energy use on the environment. Through its self-developed PLC technology and in-depth integration with the new generation of information technology (such as the Internet of Things, big data and cloud computing), the Group strives to provide users with integrated energy management solutions and equipment and develops the Internet of Things for energy, with a view to facilitate energy conservation and emission reduction, while providing a safe, comfortable and efficient working environment. Many of our customers have started to adopt the Risecomm Building Energy Management Equipment extensively in workshops, dormitories, offices, and indoor work and study space in schools. Compared with that before the installation of the system, the energy saving effect is significant.

Creating a green workplace

In 2018, the Group, according to its pre-determined schedule, implemented the concept of green environmental protection in the operation of office areas, focusing on improving the office environment, which aims at reducing the emissions of its own office operations and improving the efficiency of the use of resources and energy. In terms of emission reduction awareness, as in the previous year, the Group has continued to organise "Walking for health" activities to encourage employees to embrace low carbon footprint travel. There is no significant waste of natural resources in the Group's business. We also introduce energy-saving equipment in our office, such as multi-functional photocopiers (with printing, scanning and fax functions) that meet efficiency standards to promote green office and reduce energy consumption.

Environmental-friendly suppliers

In 2018, the Group adopted established principles to select suppliers and gave priority to environmental-friendly printing materials and recycled papers when printing its leaflets, brochures, greeting cards etc. and collaborated with environmentally-friendly publishers and advertising companies, in order to promote environmental awareness and social responsibility among all suppliers. In terms of supply of production materials, the Group has developed the Procurement Management Procedures and, when screening suppliers, prioritized environmentally-conscious suppliers who are in compliance with national environmental standards.

SOCIAL RESPONSIBILITY

Risecomm Group takes initiative to fulfil its social responsibility in corporate development, insists on sustainable development, humanistic care and environmental protection and applied the concept of social responsibility consistently throughout the entire supply chain, and has created an efficient supply chain platform for mutual benefit and better carried forward corporate social responsibility on this basis. During the Reporting Period, the Group has established, continuously operated and updated, a strong social responsibility management system through the following initiatives.

Employment and Labour Practices

Employment

Risecomm Group puts the core values of "people-oriented" and "investing in people" into practice and emphasizes to have "mutual commitment" with its employees, incorporating the pursuit of individual employee into long term corporate development. Through sharing the growth with its employees, the Group develops its business together with the staff.

Analysis of human resources

As of December 31, 2018, Risecomm Group and its subsidiaries had total of 355 employees, 251 of whom were male and 104 were female, representing 71% and 29% of the total number of employees respectively. Among all employees, 19 employees held doctorate and postgraduate degree, 156 employees held university degree and 180 employees were below degree level, representing 5%, 44% and 51% of the total number of employees respectively.

Breakdowns of the employees by gender, age group and employee category as at December 31, 2018 are set out below:

	2	018	20	017
		Approximate		Approximate
	Number of	percentage of	Number of	percentage of
Number of employees	employees	the total number	employees	the total number
By gender				
Male	251	71	258	63
Female	104	29	152	37
Total	355	100	410	100
By age group				
Aged below 30	163	46	199	49
Aged 31-40	130	37	164	40
Aged 41-50	42	12	33	8
Aged above 51	20	5	14	3
Total	355	100	410	100
By employee category				
General	240	67	326	80
Middle Management	98	28	68	16
Senior Management	17	5	16	4
Total	355	100	410	100

Protection of employees' right

Employees are the foundation of corporate development. The Group has been actively protecting the basic rights of employees. In terms of employment, the Company has strictly complied with "Labour Law of the PRC" (中華人民共和國勞動法), "Law on the Protection of Rights and Interests of Women and Children of the PRC" (中華人民共和國婦女兒童權益保護法) and other relevant requirements of the places where our overseas companies operate. The Group has also developed a human resources management system, with the Human Resources Control Procedures being established in a scientific and reasonable manner and applied in the areas of recruitment, promotion, payscale, benefit, assessment, training, employee relations and communication etc. of the Company, so as to ensure the fairness of employment conditions, without discrimination in age, gender, place of origin, ethnicity, customs, religion, social hierarchy, physical disability, political affiliation and so on. Child labour and enforced labour are explicitly forbidden.

Benefits and remuneration

The Group provides competitive remuneration and benefit for all employees and contributes to various kinds of social insurance in accordance with local policies, such as pension, medical care, work-related injuries, maternity, unemployment insurance and housing provident funds. In order to attract, retain and motivate employees, the Company conducts comprehensive assessment of employees according to annual performance appraisal. Key performance indicators of employees will be recorded through the system, and the superior department will evaluate employees' performance based on the completion time and quality of work as well as their contribution to the Company. Performance assessment results are divided into 5 levels, and are in line with annual performance pay, bonuses, and promotions, thereby generating employees' enthusiasm for working.

Encouraging work-life balance

As always, we attach great importance to occupational health of each employee and strictly abide by national policies on holidays and working hours, encourage employees to balance work and life, and ensure that employees enjoy benefits such as sick leave, marriage leave, maternity leave and annual leave. We advocate entrepreneurial spirit in the Company, encourage the team to share their successful experience and happiness in office, and have established an "internal trainer" incentive scheme to encourage technological innovation and experience sharing. In addition, we have organized various types of entertainment and leisure activities for employees and established recreation and sports groups such as basketball club, badminton club, table tennis club and reading club, so as to enrich employees' leisure time. Team activities and social activities are regularly organised as well, allowing employees to enjoy their lives in a stressful working atmosphere.

Caring for employees' families

The Group cares not only about the daily work of employees, but also their families. The Company presents warm gifts and expresses its concern for employees during birthdays, marriages, next of kin deaths and traditional festivals. Also, Risecomm Group cares about the family members of employees. "Family Day Picnic" and "Family Open Day" have been our signature projects of employee care. We have organised "Family Day Picnic" for 13 times since 2006. According to the wish of employees, the Company may arrange their family members to visit Risecomm working place on a specific day each year and find out more about the nature and scope of work of the employed. Through family days, employees and their family members may gather together in the warm big family of Risecomm, which enhances employees' sense of identity and belonging to the Group.

During the Reporting Period, the Group actively complied with requirements in "Labor Law of the People's Republic of China" (中華人民共和國勞動合同法) and other laws and regulations, and no major violation matters against human resources laws and regulations have been found.

Health and Safety

The Group attaches great importance to the safety and health of its employees in the course of operation, and strives to create a safe and comfortable working atmosphere. The Group has purchased commercial insurance for employees who travel frequently and arranged body check for all employees to ensure their physical and mental health.

We have built a clear organizational structure of safety production management and established a safety management committee. The Group fully applied the "OHSAS18001 Occupational Health and Safety Management System" and "ISO14001 Environmental Management System". Based on the actual condition of the Company, we have established 29 procedures and management documents in various categories, covering emergency management, fire control management, dangerous goods management, construction management, safety training and safety production inspection, so as to implement safety management in all aspects. At the same time, we have dedicated personnel to manage these systems and files, and conduct regular assessment, maintenance, updating and upgrading.

Safety seminars and drills

We have a designated team specially responsible for organizing various types of training for employees, and also organizing health lectures, occupational safety training and drills from time to time, so as to continuously improve the safety responsibility consciousness of employees.

On October 9, 2018, the Group organized and arranged fire drills, which improved the ability of workers to prevent and resist disasters in emergencies.

Occupational health training

On April 18, 2018, the Group commissioned senior training instructor of Shenzhen Nanshan Safety Production Association (深圳南 山區安全生產協會) to conduct special training on occupational noise hazards for our occupational health management personnel through award-winning quizzes, listening tests, live demonstrations and so on. The class was well-attended with an active learning atomsphere and achieved a high level of teaching effectiveness.

On August 19, 2018, we invited a professional fire safety training instructor to provide professional fire safety training for the employees of the Group. There were 24 participants. Through the training, they learned the importance of fire safety and the usage of fire safety equipment, which helps to prevent fire and reinforce their own fire safety awareness. During the training, there was a random quiz for the staff and 100% pass rate was achieved.

On October 22, 2018, the Group invited a professional senior training instructor to conduct training in respect of self-inspection for potential corporate safety hazards and establishment of prevention system. There were 18 participants and they achieved 100% pass rate on the random quiz. Through the training, employees developed an understanding on the aspects that potential safety hazard might occur and the potential safety hazards which should be aware of during daily life and corresponding preventive measures.

Female employees' rights

With respect to the protection of female employees' rights, we also comply with the relevant state laws and regulations to provide our female employees in all branch offices around the country with a maternity leave of at least 98 days and maternity allowances. In the meantime, we also provide pregnant or breastfeeding female employees with suitable work positions, breaks and pregnancy-friendly facilities. Pregnant employees are entitled to paid maternity leave and lactating mothers are allowed to have 1 hour breast feeding leave per day. These initiatives allow them to continue to develop their career and professional skills at any time regardless of their physical conditions or family status.

During the Report Period, the Group strictly enforced relevant laws and regulations such as "Labor Law of the People's Republic of China" (中華人民共和國勞動法), "Safety Production Law of the People's Republic of China" (中華人民共和國安全生產法), "Occupational Disease Prevention and Control Law of the People's Republic of China" (中華人民共和國職業病防治法) and "Fire Protection Law of the People's Republic of China" (中華人民共和國職業病防治法) and "Fire Protection Law of the People's Republic of China" (中華人民共和國職業病防治法) and "Fire Protection Law of the People's Republic of China" (中華人民共和國消防法). No violation against laws and regulations related to health and safety in the workplace has been found, and no cases of death due to work relationship and serious injuries at work occurred.

Development and Training

The Group has established the diversified career development paths to help staffs development, which is expressly stated in the Human Resources Procedures, Training Management Measures, and Management Measures for Job Qualification and Performance Evaluation, and has implemented a continuous improvement model to promote training:



The Group's training methods include tutorials, meetings and discussions, technical exchanges and industry forums, information learning, etc. Employees can set goals and upgrade themselves according to their actual situation and get fair promotion.

By Gender	Average Training Hours (Hours)
Male Female	14 12
By Employee Category	Average Training Hours (Hours)

In order to give full play to employees' potential and abilities to fulfil their duties and handle challenges in work, the Group has provided training for employees at all levels to help them to achieve self-improvement. We firmly believes that, every employee is our most precious asset. In terms of training contents, the Group has designed professional, general and project-based courses. Among these, professional courses are provided to employees working in R&D centre, sales centre, production centre, quality control, finance and various departments and positions. General courses and project-based courses cover a wider range of topics, including fire safety, occupational health and professional ethics. We design different training programs for different levels of employees, for example, for advanced management level, we will design training from the junior to the senior level.

We provide room for each employee to grow and develop, and set up a proper training system to ensure that every employee in Risecomm will remain competitive and attractive in the highly competitive industry development.



Training in 2018

Labour Standards

Risecomm Group employs staff in accordance with "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), "Special Rules on the Labour Protection of Female Employees" (女職工勞動保護特別規定) and "Regulations of the Shenzhen Special Economic Zone on the Promotion of the Harmonious Labour Relationship" (深圳經濟特區和諧勞動關係促進條例), actively complies with relevant labour laws and regulations, safeguards the labour interests of employees, creates a safe and stable working environment, ensures workplace hygiene and safety and properly takes care of employees' physical and mental health.

The Group strictly prohibits the employment of any child or forced labour in its business. We review our employment practices from time to time and inspect the employment status of suppliers and business partners to prevent potential irregularities. In addition, we require employees to fill in the entry form and provide personal data (including resume, academic certificates, career background check, etc.) in a honest manner upon joining. The Human Resources Department and the Project Office will review before hiring to ensure that the recruitment complies with regulations and laws. During the Reporting Period, the Group did not find any significant violations against laws and regulations relating to the prevention of child and forced labour.

OPERATING PRACTICES

Supply Chain Management

To better perform corporate social responsibilities, the Company has established a supply chain management system which is managed by the supply chain management team of the Group in a centralized manner. Suppliers are selected and evaluated on the basis of fairness, impartiality, objectivity and information transparency. All existing and potential suppliers will be informed of the requirements of Risecomm Group on the social responsibility of suppliers, so as to promote suppliers' greater commitment to social responsibilities and environmental protection awareness. The Company has developed the Supplier Management, environment management, occupational safety, intellectual property, materials management, quality control and other aspects. All suppliers are required to discharge their social responsibilities.

The following table shows the distribution of the Group's suppliers during the Reporting Period:

Distribution area	Number of suppliers
The PRC	264
Overseas	3

Supplier management process:



Selection and assessment

Risecomm Group emphasizes social responsibility during the resources collection, evaluation, selection and development process of suppliers under the premise of guaranteeing the quality and cost-performance, and prefers high-quality potential suppliers which comply with national requirements on environmental protection and social responsibility. The process is designed to guarantee equal opportunities for suppliers as well as fair and impartial evaluation and selection.

Supplier assessment is conducted by a team. A list specifying the scope of assessment is provided by category. In order to be qualified, a supplier must meet the requirements of the Company in respect of product quality, safety, environmental protection, management responsibility, social obligations and risk management. Our assessment team will assess and ascertain the qualification of supplier in an objective and fair manner and in strict compliance with the requirements of the process.

Based on the principle of "quality first, mutual benefits, joint development", Risecomm Group has built a solid foundation for winwin cooperation with its suppliers. The Group has the right to request for continuous quality improvement and the suppliers has the obligation to continuously improve the quality of their products.

Monitoring of improvement

The Corporate Resources Planning, Supplier Management Procedures and Supplier Database System allow the Group to conduct supplier management categorised by different supplies or different classifications of service qualification. The database system records suppliers' comprehensive information on business registration, on-time delivery, quality level, price management and performance evaluation score, etc. Risecomm Group has adopted supplier resource sharing strategies to conduct joint tendering and centralized procurement for projects at different places, which enhances the quality of products and reduces the cost of procurement in a dramatic way.

Risecomm Group requires suppliers to establish comprehensive quality and environment management system with reference to ISO9001, ISO14001 and OHSAS18001. Our supplier quality assurance team will conduct regular review and evaluation on the level of attainment in respect of their implementation and management. Suppliers failed to meet our requirements will be required to make improvement and receive counselling for the establishment of comprehensive management system.

Sunshine procurement

In respect of supply chain management and procurement, Risecomm Group has adhered to the philosophy of "sunshine procurement", and has also been committed to its environment management and social responsibilities, so as to ensure that the corporate social responsibilities are fulfilled throughout the process of supply chain management and procurement and such process is "fair, open and equitable". Management personnel of suppliers are required to exercise strict self-discipline and supervise their subordinates to create an ethical business environment within the Company with self-awareness to protect and ensure that their team members who work with us are aware of and abide by the requirements of "sunshine procurement". Any form of bribery shall be prohibited, and any improper business practices or unethical behaviour shall be disclosed to the Group proactively.

Product Responsibility

The Group adheres to the principle that "Quality is the life of Risecomm and the dignity of every employee". In order to constantly provide customers with satisfactory products and services, we have been devoting our efforts to establish and improve our quality management system. We place importance on the reliability of product design, failure analysis and comprehensive reliability verification. All products would undergo strict system testing before they are finalized. R&D, pilot production, mass production, pre-sale technical support and after-sales service are all carried out by specialized quality control personnel.

During the Reporting Period, the Group did not find any major violation against the health and safety, advertising, label and privacy of the products and services provided, and had strictly complying with relevant laws and regulations, including but not limited to, "Product Quality Law of the People's Republic of China" (中華人民共和國產品質量法), "Consumer Rights Protection Law of the People's Republic of China" (中華人民共和國消費者權益保護法), "Advertising Law of the People's Republic of China" (中華人民共和國廣告法), "Patent Law of the People's Republic of China" (中華人民共和國著作權法), "Patent Law of the People's Republic of China" (中華人民共和國著作權法), "Patent Law of the People's Republic of China" (中華人民共和國著作權法), "Patent Law of the People's Republic of China" (中華人民共和國

The Group has obtained the ISO9001 quality management system certificate. We have also established a specialized quality control team responsible for carrying out Quality Control Procedures based on the ISO9001 standard. Risecomm Group carries out quality control measures at various stages of the procurement and product manufacturing process. All suppliers must undergo different inspections before we approve their engagement, including on-site examinations and assessments, as well as sample tests, to ensure that the raw materials purchased by the Group and services outsourced by the Group would meet our quality standards and customer's product requirements.

The Group has entered into quality assurance agreements with most of its suppliers, which set out the specific quality standards that suppliers must comply with and the pass rates required for quality inspection. We conduct internal checks on the raw materials received from our suppliers and deliver them for production afterwards. In particular, all the raw materials needed for outsourced production are purchased by us and passed our internal quality inspection before delivered to the outsourced manufacturers to ensure the quality of the raw materials of the products.

The Group also regularly sends quality control personnel to outsourced manufacturers to perform standard Quality Control Procedures and closely monitor outsourced production processes. For integrated circuit chipsets, upon receipt of integrated circuit chipsets from integrated circuit chipset suppliers, we will conduct a series of internal inspections. For example, our warehousing and procurement personnel will first check the quantity and model of the integrated circuit chipsets, and our quality control team will check the vacuum packaging, function and quality of the integrated circuit chipsets as well as related quality control reports provided by suppliers. Any inferior products identified during the acceptance process will be returned to the supplier.

Our integrated circuit chipset inventory will be managed in accordance with the "first-in-first-out" policy. We will conduct quality reviews on integrated circuit chipsets aged over six months to ensure that the chipsets are qualified for production use. We also operate internal testing and quality control systems to ensure consistent quality of finished products and application of proprietary technologies. These procedures mainly include functional and product safety tests, as well as packaging inspections. Due to our business nature, the Group considers information relating to advertising and labelling is immaterial.

Green product

Provision of energy-efficient green products and solutions to reduce carbon emission is the main objective of product development of Risecomm Group. Our smart energy control products have been in compliance with the energy-efficient requirements throughout the development, production and delivery process. Through advanced technology, optimised design of standby consumption of products and streamlined product packaging, we have been improving the management of our energy-saving control system, enhancing management efficiency, and facilitating operation.

Intellectual property rights

In order to protect the intellectual properties of the Group, we have formulated the Management Measures for Intellectual Property to regulate the requirements of protection and supervision in accordance with the "Patent Law of the PRC" (中華人民共和國專利法), the "Detailed Rules for the Implementation of the Patent Law of the PRC" (中華人民共和國專利法實施細則) and the "Provisions of Patent of Guangdong Province" (廣東省專利條例), etc. Also, we have established an intellectual property rights management system in accordance with the national requirements under GB/T 29490-2013 "Enterprise Intellectual Property Management Practice" (企業智慧財產權管理規範), so as to protect the intellectual property rights of the Group.

As of December 31, 2018, the Group held an important intellectual property portfolio comprising 42 patents, 101 computer software copyrights and 8 registered integrated circuit layout designs, and 14 patents pending registration in the relevant jurisdiction, signifying the Group's achievements in research and development in PLC technology and the maintenance and safety integrity system of the petroleum and petrochemical industries.

Privacy protection

Furthermore, the Group places great importance to the privacy protection of customers, employees and suppliers, and is committed to maintaining and safeguarding its relevant information, including brand-related intellectual property and confidential information and any form of confidential information of potential property or economic value. At the same time, cooperating suppliers are required to sign relating provisions to prevent leakage of confidential information and prevent the relevant information from unauthorized use through appropriate technical means and processes. Any leakage of supplier or staff information will be strictly investigated and processed in accordance with the effective provisions signed or internal regulations.

Anti-corruption

In respect of staff management, the management and all employees in Risecomm Group are required to strictly follow the principle of "being a man of integrity and working with integrity" and comply with the "Code of Conduct for Employees", the "Management Rules of Motivation and Discipline", the "Management Rules of Anti-corruption and Reporting and Complaint" and related national laws and regulations. In the event that an employee's interests are found to be infringed as a result of internal frauds, unethical business practice, violation against laws and regulations or professional misconduct, complaints and reports may be made directly to the supervisor or relevant department.

In order to further prevent fraudulent practices, enhance the governance and internal control and protect the legitimate interests of the Group and shareholders, the Group has also created an email address specialized for reporting, through which employees may directly report illegal or irregularities in work or operation to the top management. Investigation will be taken to the extent permitted by laws.

Subsidiaries are required to strictly implement the Accounting Standards for Business Enterprises and strengthen random financial audit to prevent financial risks. Also, we have made clear our anti-corruption management requirements, expanded internal and external reporting channels and established a smooth and efficient management system to support employees to report directly on any suspected violation against integrity regulations. The identity of whistle-blower will be protected.

Supply management

The Group requires its suppliers to include anti-bribery provisions in contracts so as to guarantee that their personnel (company employees, agents, negotiators or other designated personnel) will not make any direct or indirect bribery or other improper payments to the Group's employees and not engage in activities which are in contravention with business ethics and the "Anti-unfair Competition Law" (反不正當競爭法) and other laws and regulations. If a supplier is found to have violated any laws or commitments in the contract, Risecomm Group has the right to terminate any transaction with the suppliers involved.

The Group have authorized the human resources department to set up reporting telephone hotline and email address for external parties (including suppliers and customers) and to monitor violation against laws or regulations which involves individual unlawful profits and damage to the Group's reputable and economic benefits.

During the Reporting Period, the Group strictly complied with the relevant laws and regulations to prevent bribery, extortion, fraud and money laundering, including but not limited to, "Company Law of the People's Republic of China (中華人民共和國公司法)", "Tender and Bidding Law of the People's Republic of China (中華人民共和國招標投標法)", "Criminal Law of the People's Republic of China (中華人民共和國不正當競爭法)" and "Interim Provisions on the Prohibition of Commercial Bribery (關於禁止商業賄賂行為的暫行規定)". The Group was not aware of any case related to corruption and bribery. There is no concluded legal cases regarding corrupt practices brought against the Group or its employees.

Community Investment

Since its establishment, the Group has been actively devoted to social-charitable services. We have invested resources in various fields to provide funding and resource support to the disadvantaged, the disabled and other groups. We hope that Risecomm Group will bring positive influence to more people in the community. As of the end of 2018, the Group has carried out a series of activities, focusing on themes such as "Love and Care" and "Thanks for you, Tomorrow for us", and achieved the desired result. These practical actions have satisfied the needs of certain disadvantaged groups. The Group has fulfilled its social responsibility through continuous social investment and established a good corporate image. At the same time, we are able to enhance our integration with society, deliver care and concern, and actively give back to the community.

The Group bears in mind its social responsibility, actively building up good relationship with the neighboring communities where it operates, and participates in the promotion of exchanges among enterprises in high-tech parks. In 2018, our employees actively participated in the weekly regular badminton and basketball activities arranged by Risecomm Group in Nanshan District Cultural and Sports Center of Shenzhen (深圳南山區文體中心), which enhanced their interaction with other scientific research enterprises in the park and enriched their leisure life.