



China Display Optoelectronics Technology Holdings Limited

華顯光電技術控股有限公司

(Incorporated in Bermuda with limited liability)

(Stock Code: 334)

Environmental, Social and Governance Report

2018



Contents

01	Chairman's Statement	2	02	About the Group	3	03	Corporate Operation	10
			2.1	Corporate Profile		3.1	Market and Customers	
			2.2	Corporate Governance		3.2	Quality Control	
			2.3	Technology Innovation		3.3	Supply Chain Management	
			2.4	Social Responsibility		3.4	Toxic and Hazardous Substance Management	
			2.5	Communication with Stakeholders and Analysis of Material Issues				
			2.6	Honours and Recognition				
04	Environmental Report	16	05	Employee Report	20	06	Integrity Report	30
4.1	Energy and Resources Conservation		5.1	Health and Safety				
4.2	Emissions Reduction		5.2	Employment				
			5.3	Development and Training				
			5.4	Care for Employees				
07	Social Welfare Events	31	08	Appendix	32	09	Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange	33
7.1	Volunteer Activities		8.1	Statement of the Board				
7.2	Charity Activities		8.2	Reporting Scope				
			8.3	Basis of Preparation				
			8.4	Comments and Response				



01 Chairman's Statement

For the twelve months ended 31 December 2018 (the "Review Period"), the Group actively pushed forward reform and transformation to improve operational efficiency. During the Review Period, the Group successfully joined the direct supply chains of several top mobile phone brands, including Samsung, Xiaomi, Huawei, OPPO and vivo, which conducted to steady growth in the Group's overall sales volume and revenue. According to the statistics from IHS Markit, a market research institution, the Group ranked fourth in the PRC mobile phone display module industry in 2018 in terms of revenue. Its market share rose from 3.9% in 2017 to 5.3% in 2018.

In respect of production, the Group actively responded to the national strategy "Made in China 2025". In order to enhance the data collection and analysis capabilities of automated factories and meet the increasing customer demand for smart products, the Group continued to improve production technology. During the Review Period, the Group enhanced the data collection and analysis capabilities of equipment and developed big data applications on top of existing production lines to further strengthen the transparency of production line management, improve product quality and reduce costs effectively, thereby achieving sustainable business development.

During the Review Period, the Group strictly abided by the state laws and regulations on environmental protection, fire safety and employment, refined administrative systems, and vigorously conducted energy conservation and emission reduction activities in a socially responsible manner. The Group also carried out numerous activities for the betterment of employees and the community, so as to foster harmony between the Group and stakeholders.

Looking ahead to 2019, the Group will stay committed to its social responsibility and better reward our stakeholders.

LIAO Qian

Chairman

Hong Kong, 11 July 2019



02 About the Group

2.1 CORPORATE PROFILE

Founded in August 2004, China Display Optoelectronics Technology Holdings Limited (the “Company”) and its subsidiaries (collectively, the “Group”) are among the key suppliers of small and medium-sized display modules in the PRC, primarily engaged in the research and development, manufacturing, sale and distribution of LCD modules mainly for terminal products. The Group has its manufacturing plants in PRC and distributes its products in Asia, with focus on Hong Kong and PRC markets.

2.2 CORPORATE GOVERNANCE

Governance Structure

With the mission of developing into a leading LCD module enterprise, the Group has established the board of directors (the “Directors”) (the “Board”) to maintain sound corporate governance and business practices. There are four special committees under the Board, namely the audit committee, remuneration committee, nomination committee and executive committee. The Board is responsible for formulating business plans, long-term strategies and business development objectives of the Group. Matters relating to professional expertise are approved by the special committees before being submitted to the Board for consideration in accordance with its terms of reference.

About the Group

Corporate Governance

As at the date of this report, the Board comprises 7 Directors, all possessing professional background and/or extensive professional expertise specifically required to supervise and monitor the Group's strategy. For the year ended 31 December 2018 and as at the date of this report, the composition of the Board is detailed as follows:

Non-executive Director

Mr. LIAO Qian (*Chairman*)

Executive Directors

Mr. LI Jian (resigned on 7 March 2019)

Mr. OUYANG Hongping (re-designated as Chief Executive Officer on 7 March 2019)

Mr. WEN Xianzhen (appointed on 23 March 2018)

Ms. YANG Yunfang (resigned on 23 March 2018)

Mr. ZHAO Jun (appointed on 7 March 2019)

Mr. ZHAO Yong (resigned on 7 March 2019)

Independent Non-executive Directors

Ms. HSU Wai Man Helen

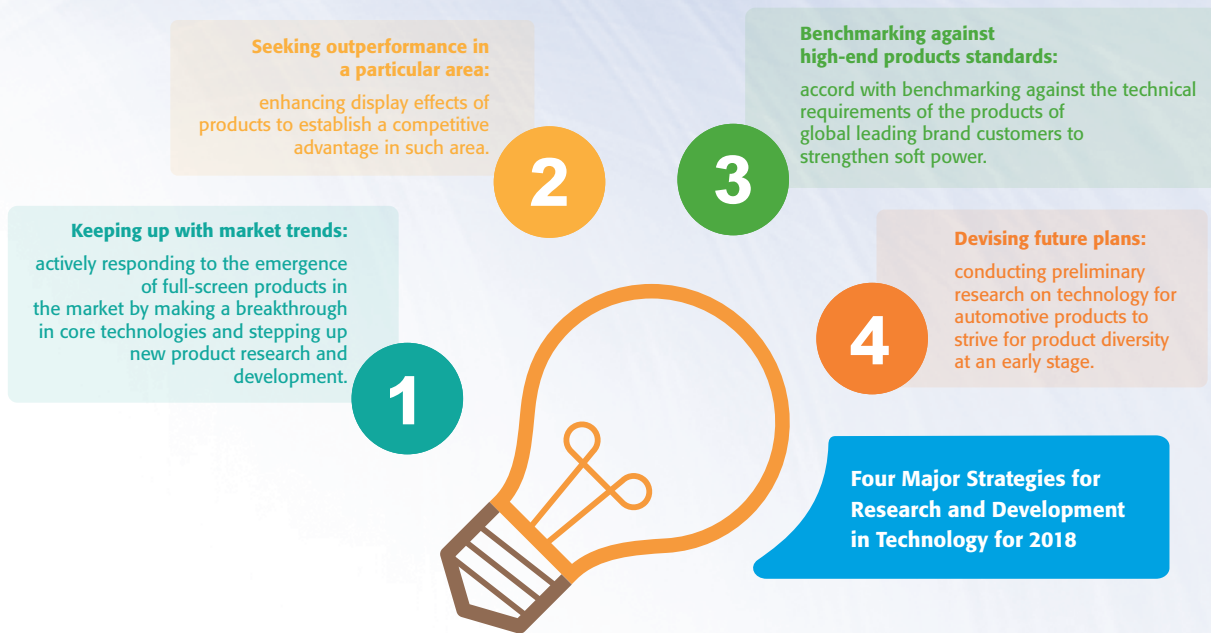
Mr. LI Yang

Mr. XU Yan

The Board of the Group holds regular Board meetings to review the Group's financial and operational performance, discuss and devise development plans, and monitor the undertaking of social responsibility. During the Review Period, the Board held four regular meetings and six additional meetings. For the year ended 31 December 2018, the Group held two general meetings. Members of the Board have performed their duties in accordance with their respective terms of reference and relevant laws and regulations, and, among others, reviewed the remuneration policy and structure, discussed the long-term incentive plan and compensation packages of Directors, assessed the completeness and accuracy of financial reports, monitored the Group's compliance with applicable laws in conducting its business, and evaluated the effectiveness of internal control and risk management systems. The Group has adopted a set of risk management and internal control policies and procedures to safeguard its assets and ensure the safekeeping of accounting records and the credibility of financial reports, so as to comply with relevant laws and regulations. For further details of the Group's corporate governance, please refer to the Group's Annual Report 2018.

2.3 TECHNOLOGY INNOVATION

Research and Development in Technology



The Group has a strong research and development (“R&D”) team. The R&D team is comprised of open-minded fast learners with an average age under 35. Approximately 80% of the R&D team possess a bachelor’s degree or above, and approximately 50% having over five years of extensive industrial experience and expertise in machinery, electronics, optics, informatisation and software application. The Group continually enhances its R&D capabilities to stay at the forefront of the display device industry. During the Review Period, the Group commenced technical cooperation with renowned Taiwanese, South Korean and Japanese market players. In addition, it formed a software development team for in-house research and development of the software testing platform to improve the product development process and enhance product testing efficiency.

About the Group

➤ Research and Development Achievements

The Group always keeps track of customer demand in order to transform technical capabilities into commercial value. During the Review Period, the Group achieved breakthroughs in various core technologies:

- The Group developed frontier technology such as bezel-less modules, 3D covers and curved surface lamination and modules for ultra-narrow bottom bezels, and conducted preliminary research on automotive products. During the Review Period, the Huizhou Production Base widely applied full-auto hue correction technology and full-lamination in-cell display technology.
- For new full-screen notch-cutting product technology, the Group has mass-produced products with bangs notch display (since 2017) and products with semi-circle notch display. The Group outpaced its industry peers in terms of mass production of full-screen display modules for ultra-narrow bottom bezels, with the widths of bottom bezels of laminated COG (Chip On Glass) reaching 3.3 mm and COF (Chip On Film) modules reaching 1.8 mm and 1.6 mm respectively. Moreover, the Group completed the blind hole display technology verification and successfully attracted international customers for mass production.
- For backlight technology, the Group completed the verification of bottom bezels of 2.0 mm wide. In particular, 1.8 mm narrow bezel technology and backlight light bar disassembly technology for COF modules have been introduced to customers, significantly enhancing the technical capabilities of modules.
- The Group actively developed the medium-sized smart terminal market and achieved a breakthrough in mass production of medium-sized full-lamination modules. During the Review Period, the Group filed 71 patents and was granted 36 of them.

➤ State-of-the-art Equipment and System

The engineering department of the Group has an exceptionally resilient and aggressive team comprised of experts in engineering technology in bonding, lamination and assembly. The team members' ability to work independently in equipment testing, repair, maintenance, hardware design and software enhancement enables the production of the Company to run smoothly.

The Group performed remarkably well in manufacturing capability enhancement. By upcycling and upgrading existing equipment, the Huizhou Production Base adopted in-cell technology instead of thin-film transistor (TFT) and on-cell technology in the product manufacturing process to ensure smooth mass production of products with ultra-thin and ultra-narrow bezels. The Group also broke through the capacity limitations of rounded corner full-screen display and switched over from bangs notch display to semi-circle notch display.

The Group's effort to enhance automation was proved to be effective. In the Huizhou Production Base, 19 production lines in the bonding workshop and 10 production lines in the lamination workshop became fully automated, and the module workshop recorded an automation rate of more than 70%. The production base has established a well-equipped and highly automated lamination production line and achieved smooth mass production in 6 fully automated production lines in two months' time. The **equipment usage rate** and the **first pass yield** amounted to over 80% and over 95% respectively. During the Review Period, the production capacity of a single production line hit a record high of 16,000 units per day.

Equipment usage rate

effective operating hours/
total operating hours

First pass yield

number of good units produced in
a process in a workshop/planned output

During the Review Period, the engineering department of the Huizhou Production Base was granted 527 in-house micro-innovation certifications by the Group, bringing innovative ideas to full bloom.

➤ Information-based Management

Placing importance on information-based management, the Group has allocated substantial resources to information management. In order to enhance the data collection and analysis capabilities of automated factories and meet the increasing customer demand for smart products, the Group continues to improve production technology. During the Review Period, the Group enhanced the data collection and analysis capabilities of equipment and developed big data applications on top of existing production lines to facilitate human-machinery interconnectivity.

- In 2018, the Huizhou Production Base not only made an effort to improve the existing IT management system, but also introduced a tailor-made manufacturing execution system and progressively developed smart factories to reinforce overall production capacity and enhance the Group's management innovation and decision-making capabilities. In an effort to comprehensively implement the manufacturing execution system, the Group has established a sample production line for system management and started extending the system coverage to strengthen the transparency of production line management. The Group has also established a product quality tracing system to improve product quality and reduce costs effectively, thereby achieving sustainable business development.
- The Wuhan Production Base managed the production, equipment and quality of factories through manufacturing execution, equipment module control, electronic design automation/statistical process control, reporting and other systems to reinforce overall production capacity and strengthen the transparency of production line management. The production base has also established a product quality tracing system to improve product quality and reduce costs effectively, thereby achieving sustainable business development.

2.4 SOCIAL RESPONSIBILITY

The Group integrated corporate governance into production operation in a flexible way, established corporate systems, improved the governance structure and set standards for business operations in strict compliance with laws and regulations. The Group has formulated and implemented a social responsibility management system highlighting the "customer-first approach and risk management; energy conservation & emission reduction and green production; caring for staff and compliance with laws and regulations; ongoing improvement and harmonious development". In order to meet stakeholders' requirements, undertake corporate responsibility and foster sustainable corporate development, the Group successively established and improved management systems in relation to social responsibility and obtained relevant certificates, including quality management (ISO9001), occupational health and safety (OHSAS18001), environmental (ISO14001: 2015), toxic and hazardous substance (QC080000: 2012), electrostatic discharge (ESD S20.2020: 2014), energy (ISO50001: 2011), greenhouse gas (ISO14064: 2006), social responsibility and other management systems. During the Review Period, the Group introduced a management system on integration of industry and information (GB/T23001:2017) and passed the certification during the year.

During the Review Period, there were no significant complaints or incidents relating to the Group's social responsibility, demonstrating the Group's active undertaking of its social responsibility.



Certificate for the Management System on Integration of Industry and Information

About the Group

2.5 COMMUNICATION WITH STAKEHOLDERS AND ANALYSIS OF MATERIAL ISSUES

Communication with Stakeholders

The Group has a wide range of stakeholders, including governments, customers, shareholders/investors, employees, suppliers and communities. The Group maintains two-way communication with stakeholders through channels such as financial reports, ESG reports, surveys, regular dialogue and meetings. Details are set out in the table below:

Stakeholders	Communication channels
Governments	Meetings, document studies, government inspections and information disclosure
Customers	Customer approval, business training, customer satisfaction surveys and day-to-day communication
Shareholders/Investors	General meetings, investor meetings and industry conferences
Employees	Employee communication meetings, opinion box, social media, hotline and mailbox
Suppliers	Supplier training, supplier audit, regular meetings and day-to-day communication
Communities	Volunteer activities, charity events and day-to-day communication

Material Issues

We aim to understand and address issues that are most material to stakeholders and the Group. The Group believes the following material issues are the most significant ones:

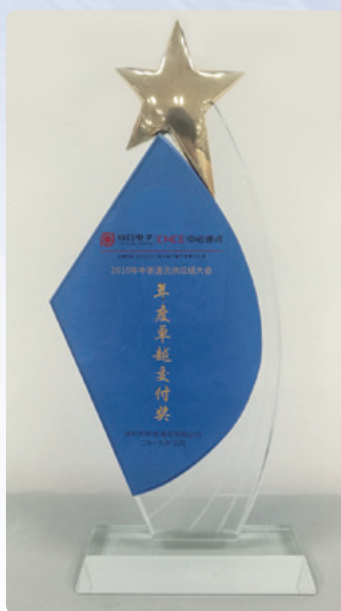
Most concerned issue	Category	Management indicator	Performance
Integrity and compliance in operations	Corporate governance	Complaints about non-compliance	Nil
Occupational health	Health and safety	Cases of occupational diseases	Nil
Production safety management	Health and safety	Serious casualties	Nil
Protection of intellectual property rights	Product responsibility	General work-related injury ¹	0.12%
Quality control	Product responsibility	Number of patents	36 patents
Hazardous substance management	Product responsibility	Occurrence rate of product safety accidents	0%
Anti-corruption	Product responsibility	Complaints about non-compliance with regulations on hazardous substances	Nil
	Anti-corruption	Cases of corruption	Nil

Note:

1. General work-related injury = Number of work-related injury for the year/Total number of employees

2.6 HONOURS AND RECOGNITION

During the Review Period, the Group received numerous awards from different stakeholders, including:



**Excellent Delivery Award
for the Year from Shenzhen Chino-E
Communication Co., Ltd.**



**Certificate of Honour from Huizhou
Corporate Social Credit System
Construction Coordination Office**



**New Display Module Engineering
Technology Research and
Development Centre in Huizhou
recognized by Huizhou Science and
Technology Bureau**



03 Corporate Operation

3.1 MARKET AND CUSTOMERS

The Group adopts a customer-oriented approach and places emphasis on brand and business development. While consolidating in-depth cooperation with customers, it seeks to explore business channels. It concentrates on high-end products, maintains product quality and responds quickly to the changing market. Through years of customer relationship management experience, the Group has established itself as the industry leader and laid a solid foundation for sustainable corporate development.

During the Review Period, the Group focused on high-end products in response to market demand. In terms of the rapid development of full-screen modules, the Group has always been in the leading position in the industry. In February 2018, the Group commenced the mass production of full-screen notch-cutting modules. The new products included ultra-narrow bezels and semi-circle displays, etc. In 2019, the Group will launch blind hole display modules whilst the flexible AMOLED (Active Matrix Organic Light Emitting Diode) products are under planning. In addition to mobile phone products, the Group has engaged in the smart home business. In the first quarter of 2018, “Xiaodu Home”, a new smart home product jointly developed by the Group and Baidu, has been widely commended and sold nationwide.

In terms of customers, in 2018, the Group established partnerships with five of the top six smart phone brands in the world, i.e. Samsung, Huawei, Xiaomi, OPPO and vivo, and became their direct supplier. Meanwhile, the Group has formed a strategic partnership focusing on high-end full-screen display modules with Shenzhen Transsion, which is well known as the “King of Africa”.

In terms of after-sales services, the Group adheres to a set of well-established after-sales procedures. Customer complaints are handled under the “2485 Principle”, and relevant guidelines on operations such as customer return **review** and packaging are provided.



In Huizhou Production Base, the product return rate decreased by 43.8% year-on-year in 2018. The Group has continuously enhanced the identification and judgement abilities of reviewers and arranged engineers to provide repeated training and guidance for the reviewers from time to time. During the Review Period, the false review rate decreased by 40% year-on-year and the **external quality failure cost** rate decreased by 10% year-on-year.

External quality failure cost

refers to the economic loss due to after-sales product quality issues

3.2 QUALITY CONTROL

➤ Implementing strategic planning and improving the system to meet the requirements of top brands

In early 2018, the Group carried out a strategic simulation of the internal and external environment as well as factors leading to the success of the Company, and formulated the “3063” three-year plan and quality scheme of the Group.

The Group has developed automotive display products and has established the IATF16949 automotive quality management system. During the Review Period, the Group passed the system certification. The Group took the opportunity to strengthen and promote five major system management tools, including “potential failure mode analysis” and “measurement system analysis”, company-wide to improve the system and prevent relevant risks.

During the Review Period, the Group met the requirements of new top brand customers in terms of quality, delivery and social responsibility by measures such as identifying differences, optimizing processes, site rectification, improving staff quality and enhancing execution.

Corporate Operation

➤ **Product quality improvement**

In 2018, the Group focused on adopting a major customer management model and established quality management teams for projects of individual customer to continuously improve service quality. The Group also aimed at refining internal quality management of all stages based on relevant customers' quality requirement, so as to improve product quality.

The Group set up quality improvement teams for different customers. By creating customer profiles, focusing on customer requirements and classifying customer quality objectives into assessment criteria of different internal units, the Group formulated a quality planning management plan and commenced a defective product improvement project in a progressive and orderly manner. During the Review Period, the performance of customer indicators of the Group's products met the customers' target requirements, and the Group was recognised by top international and domestic mobile phone brand customers, which laid the foundation for the continued increase in subsequent orders.

➤ **Product Safety**

To ensure product safety, the R&D department of the Group carries out the design tasks according to the standards and specifications. During the various stages such as new product development, trial production and mass production, each project team of the Group will conduct a number of reliability tests on product safety and various functions by phases.

The Group ensures the safety of the products according to the Group's Product Recall Management Process. If any product safety issues are spotted on unshipped products, the Group will immediately terminate the production of such products and analyse them separately for improvement. If shipped products are involved, the Group will report the spotted issues to customers and recall the products.

During the Review Period, there were no product recall or product safety incidents for the Group. In terms of customer satisfaction, the Group ranked among the top in the industry.

➤ **Advertising and Labelling**

As the Group's products are non-terminal products, they have no separate packaging and labels. According to customer requirements, information such as product model, name and quantity will be marked on the packaging boxes of products, and environmental protection labels such as RoHS/HF and other marks required by customers will be affixed to meet customer and relevant laws and regulations requirements. If customers find that there are no specified labels on the packing boxes for the Group's products, they may negotiate with the Group to return the products or allow the Group to re-affix relevant labels.

Meanwhile, the Group will not advertise to consumers. When the Group's staff introduce the products to customers, they will adhere to the principle of being honest and will not conduct false advertising. In case of false advertising, the Group will communicate with customers to correct the errors, and release statements through appropriate media within the same scope for rectification.

As the People's Republic of China and the industry currently have no relevant laws and regulations on module products' safety. To protect the environment and to reduce the hazardous material's harm to human body, the Group complies with the RoHS directive of the EU, namely Directive on Limiting the Use of Hazardous Substances in Electronic Products, the Registration, Evaluation, Authorization and Restriction of Chemicals of Reach, Ozone Depleting Substances (Montreal Protocol), EU POPs Directive and other regulatory requirements to conduct production activities.

➤ **Customer Privacy Protection**

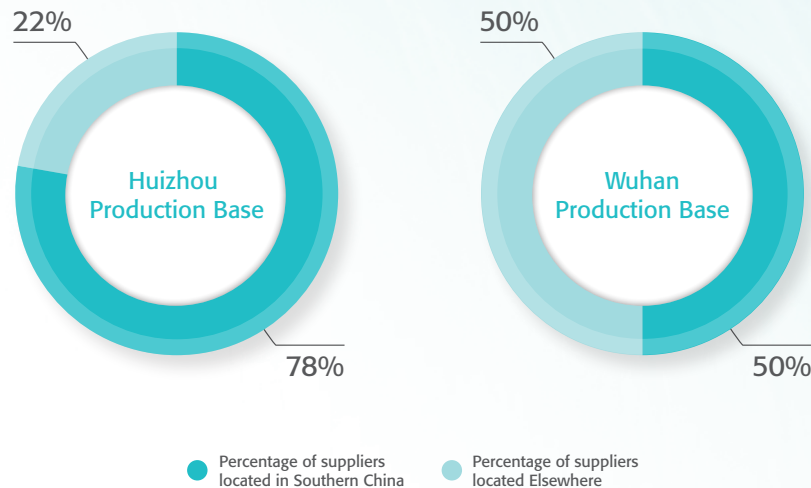
The Group complies with the Patent Law of the People's Republic of China, the Anti-Unfair Competition Law, and Several Provisions on Prohibiting Infringements upon Trade Secrets and formulates the customer information security management system to protect the information of customers. In case of any leakage of customer information, the Group will immediately report to the customer to minimize the impact.

3.3 SUPPLY CHAIN MANAGEMENT

The supply chain is not only integral to product quality, but also plays an important role in sustainable corporate development. Attaching great importance to supply chain management, the Group has established and improved the supply chain management system on an ongoing basis.

The Group carefully selects suppliers based on a well-established mechanism to meet sustainable development needs. When selecting suppliers, in addition to considering conditions such as suppliers' strength, quality, service and pricing, the Group also evaluates other factors such as suppliers' commitment to social responsibility and geographical locations, in order to assess the relevant social and environmental impact.

Most of the Group's suppliers were located in Southern China, near the two major production bases of the Group:

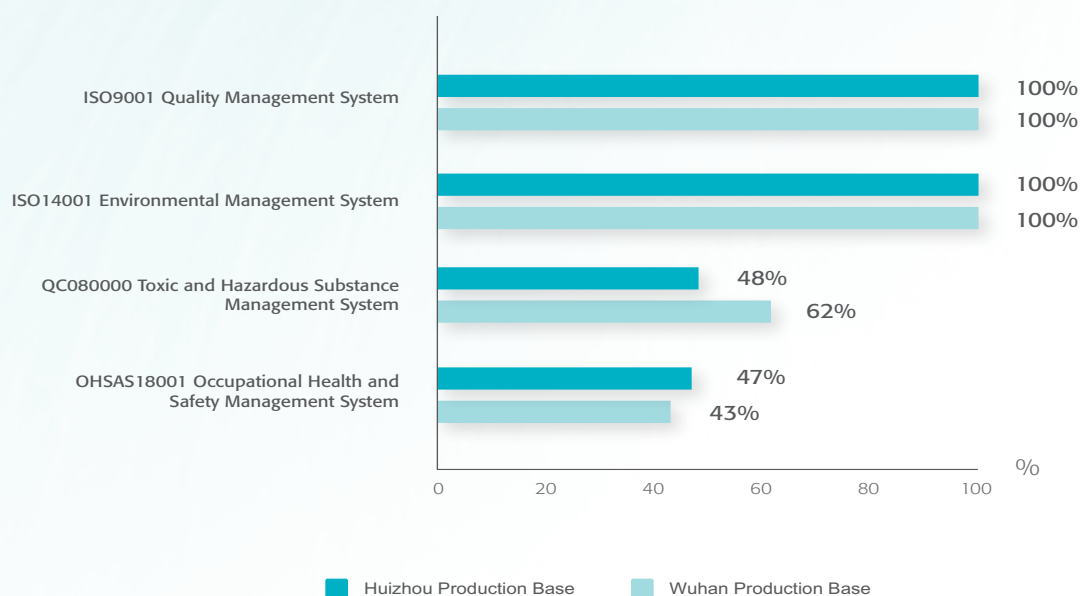


The Group adopts a target-oriented approach to supply chain supervision and improvement, arranges regular supplier assessment and consultation by experts from different component sectors, organises technical exchange meetings and maintains close communication, with the aim of promoting mutual growth. During the Review Period, the Group conducted up to 457 sessions of supplier assessment and consultation for continuous supply chain improvement, so as to keep incoming upstream materials in line with sustainable environmental and social development needs.

Corporate Operation

Adhering to the principles of fairness, openness and transparency in key supplier management, the Group adopts ISO9001 Quality Management System, ISO14001 Environmental Management System, QC080000 Toxic and Hazardous Substance Management System and OHSAS18001 Occupational Health and Safety Management System. During the supplier assessment, the assessment team conducts a strict assessment of the on-site process and management system to ensure that the supplier's quality system, process capability, supply capacity, personnel training and management meet the requirements of the Group. In order to meet the needs of environmental protection and sustainable development, the Wuhan Production Base promoted the signing of Supplier's Statement on Corporate Social Responsibility, encouraged and helped suppliers to raise their awareness and capabilities of social responsibility, and urged them to undertake their social responsibility.

Certification Pass rate of key suppliers for 2018



3.4 TOXIC AND HAZARDOUS SUBSTANCE MANAGEMENT

In terms of toxic and hazardous substance management, the Group continues to improve the production process in accordance with QC080000 Toxic and Hazardous Substance Management System. It strictly follows the operating standards and implements control over materials, auxiliary materials, tools and products in the course of design, procurement, production and finished products to ensure compliance with international laws and regulations including the EU's Restriction of Hazardous Substances (RoHS) Directive (a directive about the restriction of hazardous substances on electrical and electronic equipment), Halogen-free Legislation, REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals), the ban on using "conflict minerals" and the Montreal Protocol. During the Review Period, the Group made several amendments to the Standards for Control of Toxic and Hazardous Substances at customers' requests, which covered 214 toxic and hazardous substances and 4 kinds of conflict minerals. The Group performs regular supplier assessment and assigns dedicated staff to review and manage third-party test reports provided by suppliers.

➤ Green Procurement

The Group is committed to the concept of green procurement under sustainable development. To reduce the environmental impact of suppliers, the Group requires its business partners to comply with the standards set out in QC080000 Toxic and Hazardous Substance Management System. Suppliers are required to sign the Environmental Protection Agreement and the Environmental Compliance Statement and regularly provide third-party RoHS and halogen-free test reports so as to meet the Group's Control Standards of Toxic and Hazardous Substances. The quality control department regularly conducts X-ray fluorescence spectrometry inspection of incoming raw materials according to high, medium and low risk levels, and material suppliers are subject to annual QC080000 toxic and hazardous substance assessment according to the Group's Qualified Supplier Management Process. As at the end of 2018, the Company did not record any incidents relating to excessive hazardous substances, confirming the effective control of hazardous substances.

The Group's material control measures are set out by risk level as follows:

Risk Level	Frequency of X-ray Fluorescence Spectrometry Inspection	Management Measures						Frequency of Annual QC080000 Toxic and Hazardous Substance Assessment
		Third Party Test Report, Material Composition Table	REACH (SVHC) Survey	Conflict Minerals Survey	Environmental Compliance Statement	Declaration of Using Conflict-Free Minerals	Environmental Protection Agreement	
High	Once every month for the same model of the same supplier	✓	✓	✓	✓	✓	✓	Once a year
Medium	Once every two months for the same model of the same supplier	✓	✓	✓	✓	✓	✓	Once a year or written review
Low	Once every three months for the same model of the same supplier	✓	✓	✓	✓	✓	✓	Once a year when necessary

➤ Responsible Minerals

The Group avoids the use of minerals from regulated countries under its raw material procurement policy. Such minerals include but are not limited to tin, silver, gold and tantalum. Suppliers are required to carefully investigate, screen and trace the sources to ensure the legality of the sources of raw materials, and then truthfully fill out and submit the conflict minerals survey form and other data, so as to ensure that the minerals used in all raw material supplied to the Group and their packaging meet the requirements of avoiding conflict minerals. Production bases of the Group carry out supplier inspection using conflict minerals survey every year.

In 2018, the Group conducted supplier inspection of resistors, capacitors, ICs (integrated circuits), FPCs (flexible printed circuit boards), backlights, connectors and diodes, with a 100% survey response rate. The survey results showed that all of the tin, silver, gold and tantalum in the raw materials of the Group came from qualified smelters, which met the Group's and customers' requirements.

➤ Environmental Training

In addition to the strict supplier introduction and assessment mechanism, the Group develops targeted training programmes about toxic and hazardous substances for suppliers so as to improve suppliers' environmental management and control capabilities. In 2018, the Huizhou Production Base held two training sessions focusing on the hazardous substance process management system for suppliers. The training advocated the Group's hazardous substance management and control methods, the latest developments in environmental regulations and the principle and method of X-ray fluorescence test. 85 people from 45 suppliers attended the training sessions.

During the Review Period, the Group did not receive any complaints about toxic and hazardous substances.

04 Environmental Report

4.1 ENERGY AND RESOURCES CONSERVATION



Total power consumption (kWh)
30,653,000



Total water consumption (tonnes)
156,302



Environmental investment (RMB)
1,859,000



Electricity saved (kWh)
1,788,000



Water saved (tonnes)
104,800



Total CO2 emission (tonnes)
28,123



Consumption of packaging materials (tonnes)
2,395

In 2018, the Group continued to follow the principle of energy saving, emission reduction and green production. Faced with the challenges of energy control arising from the further improvement in the automation rate of production equipment, the Group implemented effective energy conservation and consumption reduction systems and regulations through strict management measures to strictly control the consumption of water and electricity. In 2018, the Group completed several energy-saving, water-saving and other transformation projects and measures. Meanwhile, the Group actively promoted energy efficiency awareness among employees, encouraged employees to explore different energy conservation measures and improvement ideas, and established an energy-saving and consumption-reduction assessment team in order to reduce the waste of electricity in the workshop. In addition, to reduce the waste of resources, the Group gave priority to high-quality packaging materials when deciding on packaging design and conducted more simulation experiments to confirm the quality of packaging materials, thereby reducing consumption.

➤ **In 2018, the Group mainly underwent the following energy saving and consumption reduction practices:**

- During the Review Period, the Group saved 1,788,000 kWh of electricity and 104,800 tonnes of water throughout the year.
- In terms of power saving, in Huizhou Production Base, the Group replaced two high energy-consuming washing machines with less energy-consuming and more efficient grinding washing machines, which reduced the energy consumption of the washing machines by 80%. A total of 600,000 kWh of electricity was saved after the replacement of washing machines. The Group improved the bonding process to reduce electricity consumption in the washing process before lamination, which saved 350,000 kWh of electricity after the retrofit. The exhaust system of the UV curing furnace in the lamination workshop of the Group was retrofitted with a timing device enabling the staff to set the start and stop time for the smoke extractor according to the production plan, which saved 20,000 kWh of electricity.
- In Wuhan Production Base, the Group advocated and regulated the energy-saving practices in the workshop by turning on lights only in certain areas during night shift hours and reducing the rotational speed of the air filter by 100 rpm, which saved 53,000 kWh and 258,000 kWh of electricity respectively.
- In terms of water saving, the Group collected and recovered the cooled water drained from the vacuum pumps in the automatic laminating lines of the lamination workshop and transferred the water to the central air-conditioning cooling tower as cooling water for air-conditioning systems. After the retrofit, the Group saved 6,000 tonnes of water throughout the year. Water used by the Group is treated properly such that the water consumption or water discharge will not cause any adverse impact to the water source.
- During the Review Period, the Group implemented clean production and passed the on-site clean production assessment conducted by experts. During the Review Period, the Huizhou Production Base obtained the Product Carbon Footprint Certificate granted by an independent third-party certification agency.



Product Carbon Footprint Certificate

Environmental Report



During the Review Period, the Wuhan Production Base commenced mass production and was included in the statistical scope of this report. As a result, the Group's electricity consumption per unit and packaging material consumption per unit both increased year-on-year in 2018, details of which are illustrated as above.

In 2019, adhering to the concept of energy conservation and consumption reduction, the Group will stay committed to energy saving and emission reduction, and continue to promote energy conservation and consumption reduction in production equipment, air-conditioning equipment and air pressure equipment.

Notes:

1. Electricity consumption per unit = Total electricity consumption/Total sales volume
2. Water consumption per unit = Total water consumption/Total sales volume
3. Packaging material consumption per unit = Total packaging material consumption/Total sales volume
4. In the 2017 ESG Report, the Group adopted "water (electricity) consumption per value" (i.e. total water (electricity) consumption/revenue) as the indicator of water and electricity consumption. In 2018, there was a significant change in the order structure of the Group that OEM (incoming material processing) orders took up a larger proportion while their sales volume was lower than that of ODM (original development) orders. Thus, the Group adopted "water (electricity) consumption per unit" (i.e. total water (electricity) consumption/total sales volume) in 2018 to better reflect the change during the Review Period.

4.2 EMISSIONS REDUCTION

The Group manages the emission of industrial wastewater, waste and greenhouse gases in accordance with laws and regulations. During the Review Period, the Group further reduced the emissions of “three wastes” (wastewater, waste and waste gas). Professional tests conducted by independent third parties showed that the emissions and treatment of wastewater, waste and waste gas met the national standards of the People’s Republic of China during the Review Period.

Industrial Wastewater and Waste

The Group does not consume any natural resources directly during the production process. The Group’s impact on the environment mainly comes from the industrial wastewater. Specific management measures are as follows:

Significant impact on the environment and natural resources	Management measure
Industrial wastewater	Before discharging, the Group will process the industrial wastewater to ensure it meets the discharge standards. Discharge amount and indicators have been installed with warning system and will be monitored by the environmental protection departments in real-time.
<ul style="list-style-type: none"> Industrial wastewater of the Group mainly comes from the cleaning process of the Huizhou Production Base. As the Wuhan Production Base is located in the panel factory which is responsible for the cleaning process, it does not produce industrial wastewater. During the Review Period, the Huizhou Production Base applied ultrasonic cleaning in place of chemical water in the cleaning process, so as to meet the production requirements of high-end laminated module products. As a result, the amount of sludge generated from industrial wastewater and sewage treatment substantially decreased year-on-year. In 2018, the Huizhou Production Base invested RMB1.76 million in dealing with the direct disposal of hazardous waste. In addition, in order to reduce the amount of sludge generated from sewage disposal, the Huizhou Production Base invested nearly RMB2 million in the introduction of ultrasonic cleaning equipment and switched the product cleaning process from using cleaning solution to ultrasonic cleaning, which reduced the amount of sludge by 73%. The following table sets out the Group’s overall wastewater and hazardous waste discharge: 	

Indicator	Unit	2018
Total hazardous waste	tonnes	21
Hazardous waste per unit	g/unit	0.3
Total industrial wastewater	tonnes	20,009
Industrial wastewater per unit	g/unit	331.4

Details of other non-hazardous waste are as follows:

Indicator	Unit	2018
Total non-hazardous waste	tonnes	173
Non-hazardous waste per unit	g/unit	2.9

Note: The Wuhan Production Base did not measure wastes separately in 2017.

Greenhouse Gas Emission

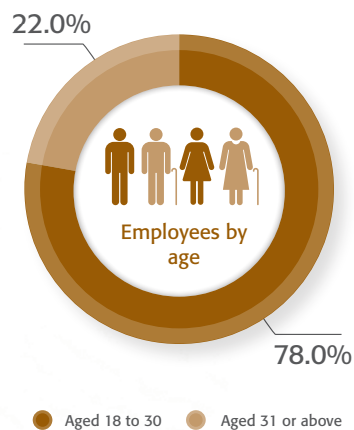
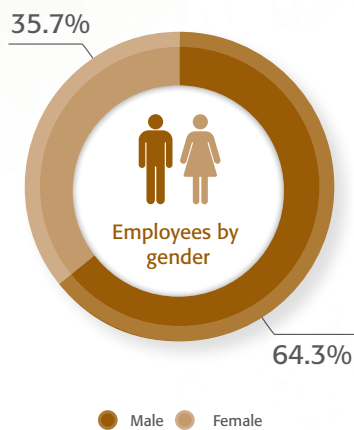
During the Review Period, the Group established a greenhouse gas management system in accordance with the ISO14064-1 standard. During the Review Period, in order to meet the order demand of major customers, the Group set up more automated production lines, which increased the electricity consumption of equipment. As a result, the CO2 emissions per unit slightly decreased from 473.2 g/unit in 2017 to 465.7 g/unit in 2018. The total CO2 emission was 28,123 tonnes.

05 Employee Report

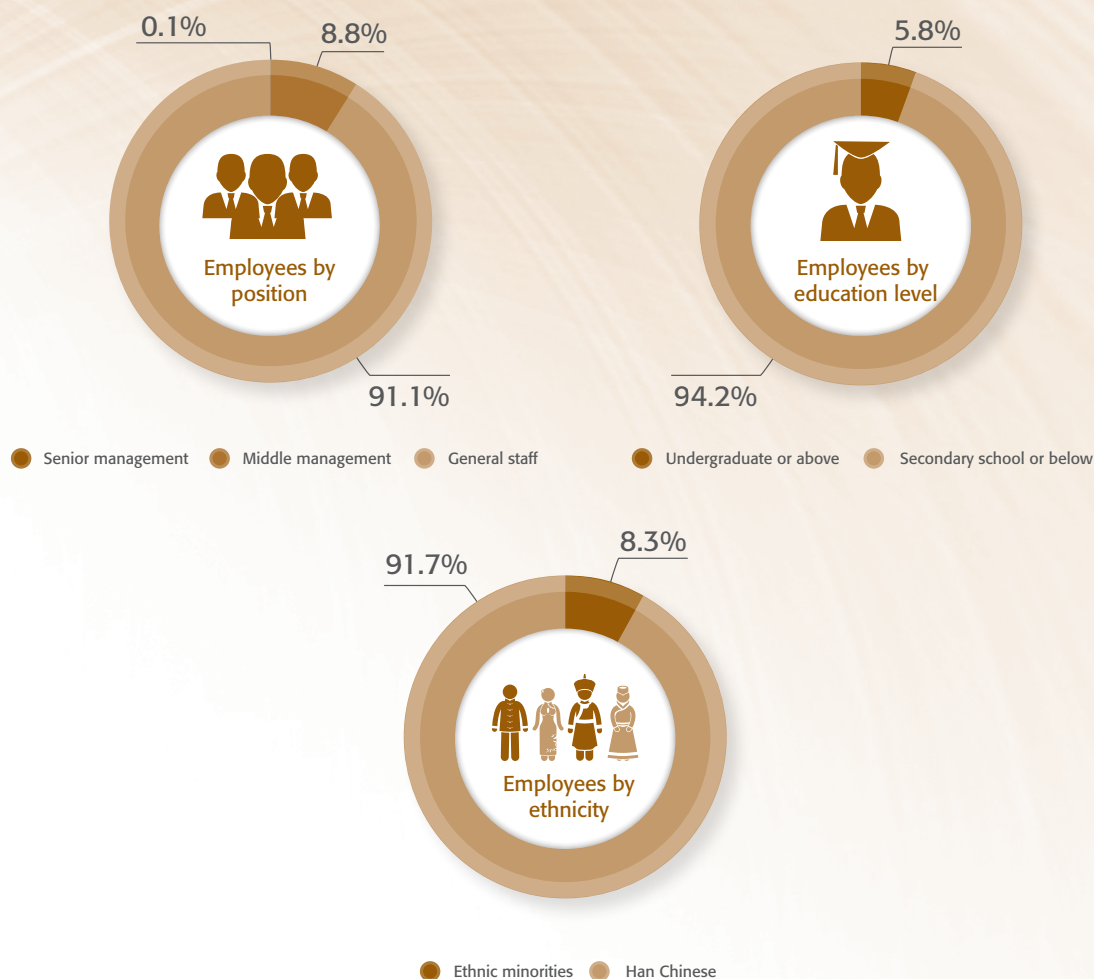


5,983

As at 31 December 2018, the Group had **5,983** employees. During the Reporting Period, the Group's total staff turnover was 11%, of which the turnover of employees under 30 years old was 10% and the turnover of employees at 31 years old or above was 14%. The turnover of male employees was 11% and the turnover of female employees was 9%.



Employee Report



5.1 HEALTH AND SAFETY

The Group attaches great importance to workplace safety and employees' occupational health. The Group has established the OHSAS18001 Occupational Health Management System and passed the SGS certification. The Group has formed a special safety management team for occupational health and safety management of the staff, and formulated a comprehensive set of procedures to provide guidance for relevant initiatives. Each of the management members has signed a "safety responsibility statement", which stipulates that promoting health and safety are their main tasks and will be appraised. The Group conducts safety training and emergency drills on a regular basis, with a view to raising occupational health and safety awareness among the management, risk-prone employees and general staff and improving their relevant skills. Through regular safety checks, the Group has identified potential hazards and rectified them in a timely manner.

Employee Report

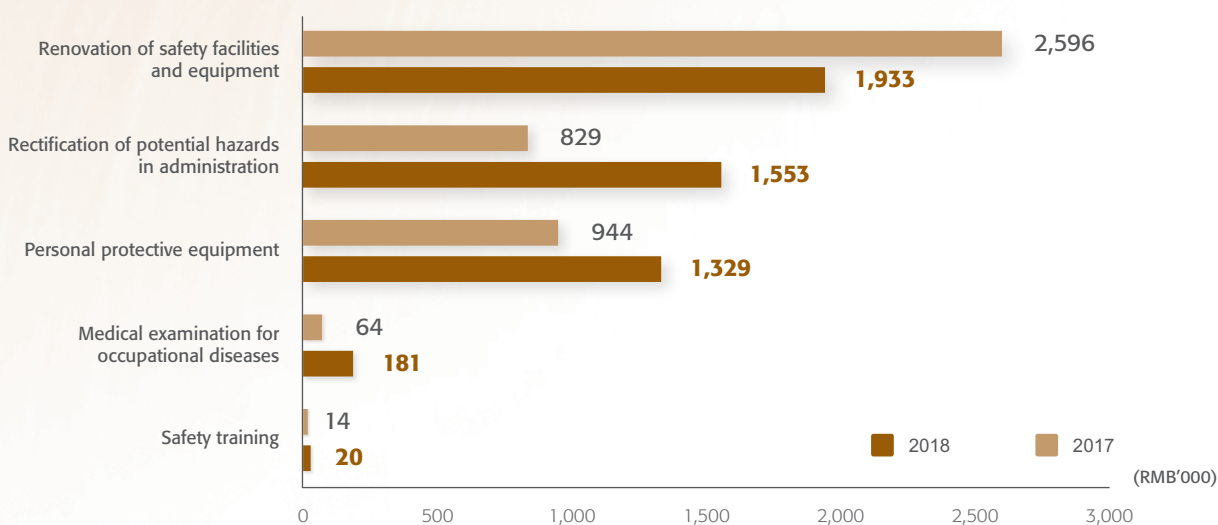
Management Measures

> Comprehensive Safety System

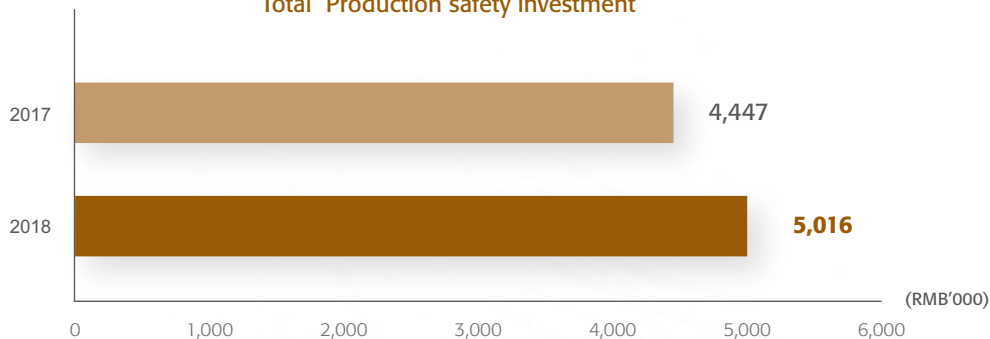
The Group constantly enhances the safety management organisation and improves the safety management protection system. Specifically, the Group implemented the national production safety policy of “giving first place to safety, laying stress on prevention and taking comprehensive measures” earnestly; strictly executed production safety policies, orders, regulations, standards, systems and rules issued by the state and other higher authorities; performed requirements prescribed by the “production safety accountability system” under which the general manager and the safety director of each division are jointly responsible for the leadership, adopted the measure of “one leader taking on two responsibilities” for production safety, clarified the production safety management responsibilities for each level, and required members of each level to sign a production safety responsibility statement. In addition, the Group withdrew and used production safety funds for improving production safety conditions and facilitating production safety initiatives in accordance with relevant regulations; formulated production safety rules and regulations and operational procedures for the unit, developed and implemented production safety education and training plans for the unit to equip practitioners with production safety knowledge necessary for their roles and acquaint them with relevant production safety rules and regulations and operational procedures through production safety education and training; provided practitioners with personal protective equipment that meets national or industrial standards, taught them to use the equipment according to instructions and monitored whether they used the equipment properly.

- In Wuhan Production Base, the Group introduced safe design standards and acceptance systems for processes and equipment, and 100% of the equipment passed the safety inspection, which ensured safety of equipment. The Group also educated its staff about safety precautions to raise their safety awareness, and improved the preventive system for safeguarding internal security to create good security conditions for the development of the Wuhan Production Base.
- The Group spares no effort to promote and improve production safety on an ongoing basis. During the Review Period, the Group invested over RMB5.00 million in enhancing production safety.

Various Production safety investment



Total Production safety investment



Safety Inspection

- During the Review Period, members of the management, safety officers, volunteer safety officers and firefighters of each level of the Group conducted fire safety inspection and supervised the progress of rectification projects.
- In Wuhan Production Base, the Group arranges (i) more than 4 integrated safety inspections led by general managers and factory directors; (ii) more than 12 special safety inspections; (iii) safety inspections prior to statutory holidays; (iv) quarterly safety inspections; (v) daily inspections conducted by the safety management unit and other internal and external inspections every year. The Group uses the information system to track and rectify potential safety hazards. Generally, over 99% of potential safety hazards can be rectified in a timely manner.

Production Safety Training, Promotion and Education

Production safety training is crucial to safe production, enhancing staff's safety performance and reducing human error.

- In Huizhou Production Base, over 5,200 participations are recorded in safety training and passed the assessment during the Review Period. The safety training aims to reduce production safety accidents by equipping employees with safety knowledge and raising their prevention awareness.
- In Wuhan Production Base, the Group mainly adopts a hierarchical approach to the introduction of training. During the Review Period, around 16,811 participations are recorded in three-level safety education training, safety management capability enhancement training, special safety training, self-safety training and other forms of training and passed the assessment. Employees spent an average of 24 hours on training per year. The safety training aims to reduce production safety accidents by setting up standards for safety practices and skills of employees and equipping them with production safety knowledge necessary for their roles.

During the Review Period, special operation personnel of the Group are all licensed. Unlicensed personnel are prevented from engaging in such kind of work.

Risk-prone Operation Control

- In Huizhou Production Base, the Office of the Work Safety Commission maintains strict control over risk-prone operations. Prior to the operation, safety inspection must be carried out to confirm compliance with safety conditions. In the course of the operation, safety officers must follow the process up on site to ensure smooth operation. During the Review Period, the Huizhou Production Base recorded a general work-related injury rate of 0.12% and zero serious casualties of employees.
- In Wuhan Production Base, the Work Safety Commission, the emergency rescue division and the responsible management department maintain strict control over risk-prone operations. Advance application must be made for all such operations, which are subject to approval by leaders at various levels. Prior to the operation, the responsible management department must carry out safety inspection on site to confirm compliance with operation safety conditions. In the course of the operation, safety officers must follow the whole process up on site to ensure smooth operation. During the Review Period, the Wuhan Production Base did not record a general work-related injury incident and serious casualties of employees.

During the Review Period, the number of work-related injury leave recorded by the Group is 76 days.

Employee Report

Emergency Drills

During the Review Period, in order to raise employees' fire safety awareness, boost their abilities to handle fire accidents and examine the operability of emergency plans of the Company, the Huizhou Production Base conducted 3 fire evacuation drills and 1 chemical accident drill and the Wuhan Production Base conducted 12 emergency drills, mostly related to chemical leakage, fire, water leakage and equipment-related injury. During the Review Period, the Group did not record any fire and chemical spill accidents.

Information-based Safety Management

During the Review Period, the Group introduced production safety management software to promote information-based management. The software serves to regulate the management of production safety information, strengthen production safety analysis, and keep abreast of developments in production safety of the Group, thereby preventing production safety issues due to management deficiency.

Occupational Health Management Policy and Measures

In accordance with the requirements of the "Law on Prevention and Control of Occupational Diseases of the People's Republic of China" and relevant laws and regulations, the Group established a comprehensive occupational health and safety management system and strictly enforced the requirements under the system, for example, conducting regular inspection and analysis of occupational hazards, conducting occupational disease education and training schemes and examining workers' safety performance.

In 2018, the Group introduced fully automatic equipment and improved ventilation of stations so as to reduce employees' exposure to occupational hazards. The Group also isolated workshops with a higher level of chemical consumption from other workshops in order to limit employees' active and passive exposure to occupational hazards. As at 31 December 2018, the total number of the Group's employees exposed to occupational hazards was 210, with a year-on-year decrease of 36% in the number of employees exposed to occupational hazards in the Huizhou Production Base on the back of the above measures.

During the Review Period, the Group arranged for all current and former employees to have occupational health checks. No employees were diagnosed with occupational diseases in the medical examination.

5.2 EMPLOYMENT

The Group regards employees as the cornerstone of sustainable development and believes that every one of them deserves respect.

Adhering to the principles of "compliance with laws and regulations, fairness and impartiality, nepotism avoidance and meritocracy", the Group implements a recruitment and selection policy aiming at offering equal opportunities. The Group provides job applicants with equal opportunities, regardless of race, skin colour, religious belief, disability, political affiliation, age and gender.

The Group's recruitment policy also attaches importance to care and support for people with disabilities. Actively recruiting them, the Group hired a total of 21 persons with disabilities in 2018.

Labour Standards

The Group is well aware that child labour and forced labour violate basic human rights and international labour conventions, and affect sustainable corporate and social development. The Group complies with the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Implementation Regulation for the Labor Contract Law of the People's Republic of China, the Provisions on the Prohibition of Using Child Labor, the Social Insurance Law of the People's Republic of China and SA8000 Social Responsibility Management System Standards and other laws and regulations. The Group constantly improves recruitment and prevention of child labour and under-age labour management procedures. Specifically, the Group conducts age verification through background investigation, identity document validation and some other methods to prevent inadvertent recruitment of child labour, and adopts an approach stressing both education and protection for underage labour to support their healthy physical and mental development.

The Group respects employees' will and rights. Hence, it enforces the requirements prescribed in the standard labour contract only and will not impose any unfair restrictions on the employment relationship between employees and enterprises by any means, such as withholding deposits or identification documents. Employees are entitled to terminate the labour contract at liberty in accordance with laws and regulations.

According to internal records, the Group did not identify any illegal cases of child labour or forced labour during the Review Period.

5.3 DEVELOPMENT AND TRAINING

Career Development Path

To nurture and promote talent, the Group has developed a "career development path" for each position, improved the criteria for performance appraisal, and encouraged employees to upgrade themselves. During the Review Period, the Group held a number of vocational certification sessions:

- In Huizhou Production Base, 44 employees from departments including the research and development department, engineering department, manufacturing department, quality control department, product management department participated in career path certification sessions. Upon accreditation and verification by a professional adjudicating panel, 40 of the participants met the required competency standards for their corresponding career levels and passed the certification.
- In Wuhan Production Base, 54 employees participated in certification sessions for different career levels. Upon accreditation and verification by a professional adjudicating panel, 48 of the participants met the required competency standards for their corresponding career levels and passed the certification.

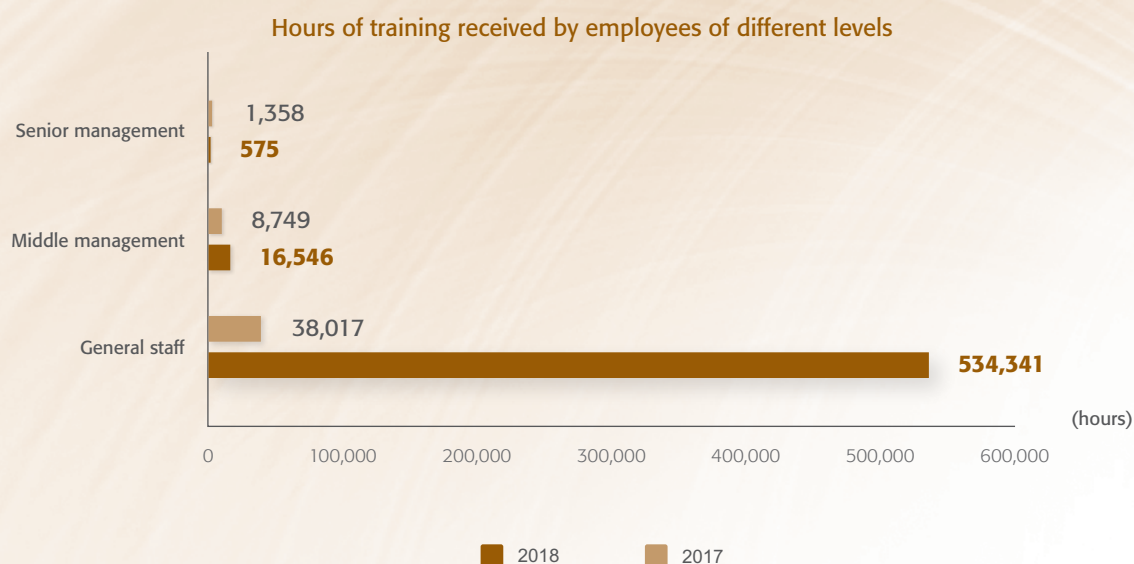
Training

For employees, an enterprise mirrors a university where their growth is closely related to training provided by the enterprise. During the Review Period, employees of the Group spent over 550,000 hours on training.

- During the Review Period, in addition to providing various internal professional training schemes for employees, the Group sponsored 53 employees to take open courses as external professional training in Huizhou Production Base. Meanwhile, the Group engaged external professional tutors to hold 9 training sessions, which covered four major aspects, i.e. safety, quality, professional management/technology, and general matters, with 328 employees participating in the training sessions and a total of nearly 4,000 training hours. Training by experts enabled the technical management staff to be more professional and competent. During the Review Period, employees in the Huizhou Production Base spent approximately 250,000 hours on training. The ratio of male to female participants in the trainings in Huizhou Production Base of the Group is 1.7:1.
- In Wuhan Production Base, the Group conducted leadership training, technical training and general training to enhance the Company's technical and management standards by making full use of the excellent training resources offered by China Star College. Employees in Wuhan Production Base of the Group received over 300,000 hours of training in total and the ratio of male to female participants in the trainings is 3:1.

Employee Report

Details of training of the Group are set out as follows:



➤ Monthly Lectures

During the Review Period, the Group conducted a training course of 6 sessions offering lectures on marketing, public speaking, project management and professional expertise, with 252 participants receiving the training and over 3,000 hours of courses. Course tutors included members of the senior management of the Group, external professional tutors and teachers of higher institutions.

➤ Outbound Training

This training was designed to facilitate the implementation of the Group's general strategic plan, enable employees to understand and agree with the Company's goals, strengthen cohesion and team spirit within the Company, and create a positive corporate atmosphere. In 2018, the Group conducted outbound training activities for the delivery centre and the R&D centre. During the outbound training, participants put the workplace values of "resilience" and "solidarity" into action.

➤ Six Sigma Training

In late 2018, the Group engaged external professional trainers to provide “Six Sigma” training and project coaching sessions for employees in Huizhou Production Base. “Six Sigma” is an outstanding management approach with international recognition, which aims to eliminate defects in products and services mainly through lofty goals, data collection and result analysis. In 2018, 24 technicians from various departments participated in systematic training sessions and initiated a “Six Sigma” project, which was expected to be completed in mid-2019. As at the end of 2018, the Group has conducted several “Six Sigma” training and project coaching sessions in Huizhou Production Base. As one of the key annual training projects, this project will be followed up by the Huizhou Production Base on an ongoing basis to ensure that the training project will be effective and bear fruit for the lean improvement of the Group.

5.4 CARE FOR EMPLOYEES

Cultural and Leisure Activities

To enrich employees’ leisure life and build up cohesion and a sense of belonging, the Group has established various clubs such as yoga, fishing, photography, hiking, mountaineering and swimming club. These clubs hold activities and competitions regularly and the employee participation rate exceeds 80%.



Yoga activity



Football match

Employee Report



Basketball match



Table tennis match

Employee Benefits

In compliance with national laws and regulations on labour, social security and other aspects concerning human resources, the Group not only grants employees statutory benefits, including “five kinds of insurance and one fund”, social insurance, marriage and compassionate leave and maternity leave, but also offers them special allowances, such as care allowances for employees with disabilities and children education allowances for employees. The Group believes that comprehensive welfare system enables employees to work more relaxingly.



Birthday party



Employee Communication

In Huizhou Production Base, the “Employee Communication Meeting” held by the Group is one of the most important channels of collecting staff opinions. Staff representatives are responsible for collecting staff opinions and reporting the opinions to the management and the human resources department of the Company at the “Employee Communication Meeting”. During the Review Period, the Huizhou Production Base held 10 “Employee Communication Meetings”, at which a total of 127 participants attended and raised 197 suggestions. Approximately 83% of the suggestions led to significant improvement in the relevant areas.

The Group has a set of comprehensive staff communication procedures consisting of a staff hotline and a complaint mailbox regularly checked and handled by designated personnel.



06 Integrity Report

Business integrity is the foundation of corporate social responsibility, as well as the core of corporate competitiveness and sustainability. The Group steps up anti-corruption efforts and enhances the procurement system and internal audit in compliance with laws and regulations including the Law of the People's Republic of China Against Unfair Competition and the Interim Provisions on Banning Commercial Bribery.

The Group carries out integrity training on a regular basis with an aim to promote anti-corruption awareness. Directors of the Group also participate actively in integrity training. In 2018, members of the Board received training on integrity jointly conducted by the Group and the Independent Commission Against Corruption of Hong Kong.

- In Huizhou Production Base, the Group requires employees to comply with the code of integrity of “prohibiting six practices and keeping commitments”, which stipulates that nepotism, bribery, presenting substandard products as quality ones, jerry-building, deception and commercial fraud are prohibited and business commitments shall be kept. Integrity performance evaluation is regularly conducted. Moreover, the Group assigns certain employees to anti-corruption positions and requires such employees to sign the Integrity Commitment, undertaking not to accept commercial bribery, embezzle, misappropriate or misuse company property, nor divulge trade secrets. The Group has entered into the Related Party Undertaking with suppliers, who undertook not to bribe employees of the Group, so as to avoid corruption, protect legal rights of both parties and establish a long-term, healthy and mutually beneficial partnership with suppliers.
- In Wuhan Production Base, the Group works on the integrity principle that “everything is sheer void if integrity is in question”. In order to promote the Company's integrity in business activities, set integrity standards for employees, guide the Company's employees and stakeholders to act in accordance with laws and protect against unfair competition on their own initiative, and thus foster healthy and sustainable business development, the Group has formulated an Integrity Management System specifying the widely applicable code of integrity and integrity standards for key positions to set a model of integrity. Meanwhile, employees are required to sign a personal integrity undertaking and receive training in integrity for new hires and the whistleblowing mechanism. The Group has also entered into the Integrity Agreement with stakeholders or added integrity-related terms to the contract. Ways and channels of reporting or complaining about corruption are specified in the Integrity Agreement or integrity-related terms. Integrity performance self-evaluation is regularly conducted.

During the Review Period, the Group did not identify any violations relating to bribery, extortion, fraud, money laundering, integrity and unfair competition.



07 Social Welfare Events

7.1 VOLUNTEER ACTIVITIES

The Group takes the initiative to undertake its social responsibility. During the Review Period, the Group continued to expand its volunteer team and carried out various volunteer activities, such as tree planting, blood donation, elderly care (celebrating Mid-Autumn Festival with seniors and sending regards in Double Ninth Festival) and financial assistance to impoverished, orphaned and disabled children. The Group will provide volunteer social services on a regular basis.

7.2 CHARITY ACTIVITIES

During the Review Period, to promote employees' environmental protection awareness, the Group called for all staff to participate in the Tree Planting Activity in Honghua Lake Scenic Area in Huizhou. The staff rendered great support to protecting the environment through active participation in the activity, making contributions to Huizhou's environmental protection initiatives.

In 2018, the Group actively engaged in charitable causes, for example, sponsoring charity events held by Lions Clubs such as "Helping Women Check for Two Common Female Cancers" (providing free cervical cancer and breast cancer screening services for women in impoverished regions) and "Caring for Children with Intellectual Disabilities". During the Review Period, the Group donated RMB28,000 to Lions Clubs in Shenzhen.



08 Appendix

8.1 STATEMENT OF THE BOARD

The Board acknowledges its responsibility to ensure the truthfulness of this sustainability report and to the best of its knowledge, this report has disclosed material issues, and gives a fair view of the Group's performance in environmental, social and governance aspects and the relevant impact. This report has been reviewed and approved by the Board.

8.2 REPORTING SCOPE

This report is published on an annual basis and its reporting period covers the financial year of 2018 (i.e. 1 January 2018 to 31 December 2018). During the Review Period, the principal places of business of the Group were the production base in Huizhou (the "Huizhou Production Base") and the head office of China Display Optoelectronics Technology (Huizhou) Company Limited (a wholly-owned subsidiary of the Group), and the production base in Wuhan (the "Wuhan Production Base") of Wuhan China Display Optoelectronics Technology Co., Ltd. (a joint venture jointly founded by the Group and Wuhan China Star Optoelectronics Technology Co., Ltd.).

The operating branches of the Group located in other places such as Xi'an and Hong Kong, which support business operations, are not covered in this report as their activities did not have any significant impact on social and environmental safety aspects.

8.3 BASIS OF PREPARATION

This is the 2018 Environmental, Social and Governance Report of the Group prepared in accordance with the disclosure requirements set out in the Environmental, Social and Governance Reporting Guide in Appendix 27 to the Listing Rules of the Hong Kong Stock Exchange to reflect the Group's performance in environmental, social and governance responsibilities in 2018 in a truthful manner. This report was prepared in Chinese and translated into English. In the event of any inconsistency or conflict between the English version and the Chinese version, the Chinese version shall prevail. To protect the environment, no printed copies will be provided.

8.4 COMMENTS AND RESPONSE

We welcome suggestions from stakeholders on the management strategy and performance of the Group in promoting sustainable development. You may contact us via:

Tel: (852)2437 7610
Email: ir.cdott@ctl.com

9. Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

The following indicators take into account the “comply or explain provisions and recommended disclosures” under the Guide, relevant data of which are set out in this report.

Subject Areas, Aspects, General Disclosures and KPIs

	“Comply or explain”	Recommended disclosures	Pages
A. Environmental			
Aspect A1: Emissions	General Disclosure		16-19
	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 NO_x, SO_x, and other pollutants regulated under national laws and regulations.</i>		
	<i>Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.</i>		
	<i>Hazardous wastes are those defined by national regulations.</i>		
KPI A1.1	The types of emissions and respective emissions data.		16
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).		16-19
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).		19
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).		19
KPI A1.5	Description of measures to mitigate emissions and results achieved.		19
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.		15, 19

9. Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

	"Comply or explain"	Recommended disclosures	Pages
Aspect A2: Use of Resources	General Disclosure		17
	Policies on the efficient use of resources, including energy, water and other raw materials.		
	<i>Note: Resources may be used in production, storage, transportation, buildings, electronic equipment, etc.</i>		
	KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	16, 18
	KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	16
	KPI A2.3	Description of energy efficiency initiatives and results achieved.	17
Aspect A3: The Environment and Natural Resources	KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	17
	KPI A2.5	Total packaging materials used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	16, 18
	General Disclosure		19
	Policies on minimising the issuer's significant impact on the environment and natural resources.		
	KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	19

9. Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

"Comply or explain"		Recommended disclosures	Pages
B. Social			
Employment and Labour Practices			
Aspect B1: Employment	General Disclosure		24-25
	Information on:		
	(a) the policies; and		
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.		
		KPI B1.1 Total workforce by gender, employment type, age group and geographical region.	20-21
		KPI B1.2 Employee turnover rate by gender, age group and geographical region.	20
Aspect B2: Health and Safety	General Disclosure		21-24
	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.		
		KPI B2.1 Number and rate of work-related fatalities.	23
		KPI B2.2 Lost days due to work injury.	23
		KPI B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.	22, 24

9. Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

	"Comply or explain"	Recommended disclosures	Pages
Aspect B3: Development and Training	General Disclosure		25-26
	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.		
	<i>Note: Training refers to vocational training. It may include internal and external courses paid by the employer.</i>		
	KPI B3.1	Percentage of employees trained by gender and employee category (e.g. senior management, middle management).	25-26
	KPI B3.2	Average training hours completed per employee by gender and employee category.	25-26
Aspect B4: Labour Standards	General Disclosure		25
	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.		
	KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	25
	KPI B4.2	Description of steps taken to eliminate such practices when discovered.	25

9. Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

“Comply or explain”		Recommended disclosures	Pages
Operating Practices			
Aspect B5: Supply Chain Management	General Disclosure		13-14
	Policies on managing environmental and social risks of the supply chain.		
	KPI B5.1	Number of suppliers by geographical region.	13
	KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	13-15
Aspect B6: Product Responsibility	General Disclosure		12
	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.		
	KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	12
	KPI B6.2	Number of product- and service-related complaints received and how they are dealt with.	11
	KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	6
	KPI B6.4	Description of quality assurance process and recall procedures.	12
	KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	12

9. Content Index of the Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange

	"Comply or explain"	Recommended disclosures	Pages
Aspect B7: Anti-corruption	General Disclosure		30
	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.		
	KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	30
	KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	30
Community Aspect B8: Community Investment	General Disclosure		31
	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.		
	KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	27-29
	KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	27, 29, 31