



PINE TECHNOLOGY
HOLDINGS LIMITED

Stock Code 1079



ESG
REPORT | 2018

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About This Report

PINE Technology Holdings Limited (the “PINE”) and its subsidiaries (hereinafter collectively referred to as the “Group”) (Stock code 1079) are pleased to deliver the Group’s second Environmental, Social and Governance (the “ESG”) Report (the “Report”). The Report is prepared in accordance with the ESG Reporting Guide (the “ESG Guide”), issued under Appendix 27 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (the “Stock Exchange”).

The objective of this Report is to present the Group’s sustainability strategies, policies, practices, operational procedures and performances in the last financial year. All information disclosed in this Report is compiled by relevant departments based on existing policies, practices and official documents, as we strive to keep our disclosure accurate, transparent and responsible. The Board of Directors (the “Board”) is responsible for the Group’s ESG reporting, and endeavours to communicate our ESG performance through ESG reporting annually.

Reporting Scope

The scope of this Report includes the operations of our electronics manufacturing facility in Dongguan, China, as it contributes the most to the Group’s operations economically, environmentally and socially.

Reporting Period

The reporting period of this Report covers our last financial year, 1 July 2017 to 30 June 2018 (“the Reporting Period”), unless otherwise specified.

Reporting Framework

The Stock Exchange’s ESG Guide.

Feedback

Your feedback on this Report and our sustainability performance is highly valued. Please send us your comments by post to our head office and principal place of business at unit 1201, 12/F, 148 Electric Road, North Point, Hong Kong.

About PINE

PINE is one of the world's leading companies in the design, manufacturing and distribution of personal computer based products. It has two core business divisions, the XFX division and the distribution division. The core focus of the XFX division is specializing in the design and manufacturing of Video Graphics products for the PC and PC upgrade market under the XFX brand. Leveraging on the strong gamers' following of the XFX brand, XFX has extended its product family to the design and distribution of the Gaming Power Supply Unit (the "PSU") family to further enhance the gaming experience of XFX enthusiasts. The Distribution division distributes a wide range of name brand PC and non-PC products through its extensive distribution network.

The Group's strategy is to continue to leverage the success of its global XFX branding to expand its market share of the global PC gamers' market, and to collaborate with strategic partners to develop innovative products and deliver them to the market through its national and regional distributors, system builders, resellers, retailers and e-tailers.

The Group is headquartered in Hong Kong with its state-of-the-art manufacturing facilities located in mainland China. PINE has its research and development facilities set up in Asia, and its global distribution and service network located throughout North America, Europe and Asia.

Founded in 1989, PINE was listed on the Growth Enterprise Market of the Stock Exchange on 26 November 1999 and the listing of PINE's shares has been transferred to the Main Board of the Stock Exchange since 18 November 2010.

For details of our financial performance, please refer to our Annual Report 2018: http://www.pinegroup.com/en/investor_report.php?year=2018.

Engage with Our Stakeholders

Stakeholders are defined as a group of people who are influenced by, or are able to influence our Group's operations. Their Interests, concerns and satisfactory levels often intertwine with our performance and operation. Therefore, understanding and addressing stakeholders' expectations and concerns on an ongoing basis is core to continuously perfecting and improving of our operations. Stakeholders' insights are also essential to keep us informed and prepared about potential ESG risks. It is our goal to create a sustainable and long lasting future that is favourable to both corporate growth and stakeholders' well-being.

After careful review, we classified our key stakeholder groups as investors and shareholders, employees, customers, suppliers, community groups, media and regulatory organisations. We established effective communication channels to proactively engage our stakeholders in our sustainability journey, in order to maintain positive and stable relationships with them.

Stakeholder Groups	Engagement Channels	Expectations and Concerns
Investors and Shareholders	<ul style="list-style-type: none"> • Annual general meetings • Press releases • Annual and interim reports • Announcements and notices 	<ul style="list-style-type: none"> • Financial results • Operational risks • Corporate governance
Employees	<ul style="list-style-type: none"> • Surveys • New hire orientation programs • Training and development • Comment boxes 	<ul style="list-style-type: none"> • Occupational health and safety • Remuneration and welfare • Career development • Employee engagement
Customers	<ul style="list-style-type: none"> • Customer visits • Satisfaction surveys • Meetings and correspondences 	<ul style="list-style-type: none"> • Product and service quality • Product safety and responsibility • Technological developments • Market trends
Suppliers	<ul style="list-style-type: none"> • Assessment surveys • Site visits • Supplier audits 	<ul style="list-style-type: none"> • Regulatory compliance • Environmental standards and requirements • Respectful and fair procurement
Community Groups	<ul style="list-style-type: none"> • Charity activities • Volunteering activities 	<ul style="list-style-type: none"> • Sustainable development • Community engagement
Media	<ul style="list-style-type: none"> • Press releases • Meetings and correspondences 	<ul style="list-style-type: none"> • Corporate image and reputation • Product quality and safety
Regulatory Organisations	<ul style="list-style-type: none"> • Site visits • Compliance / non-compliance reports • Meetings and correspondences 	<ul style="list-style-type: none"> • Compliance with laws and regulations • Regulatory requirements • Environmental impacts • Employment practices

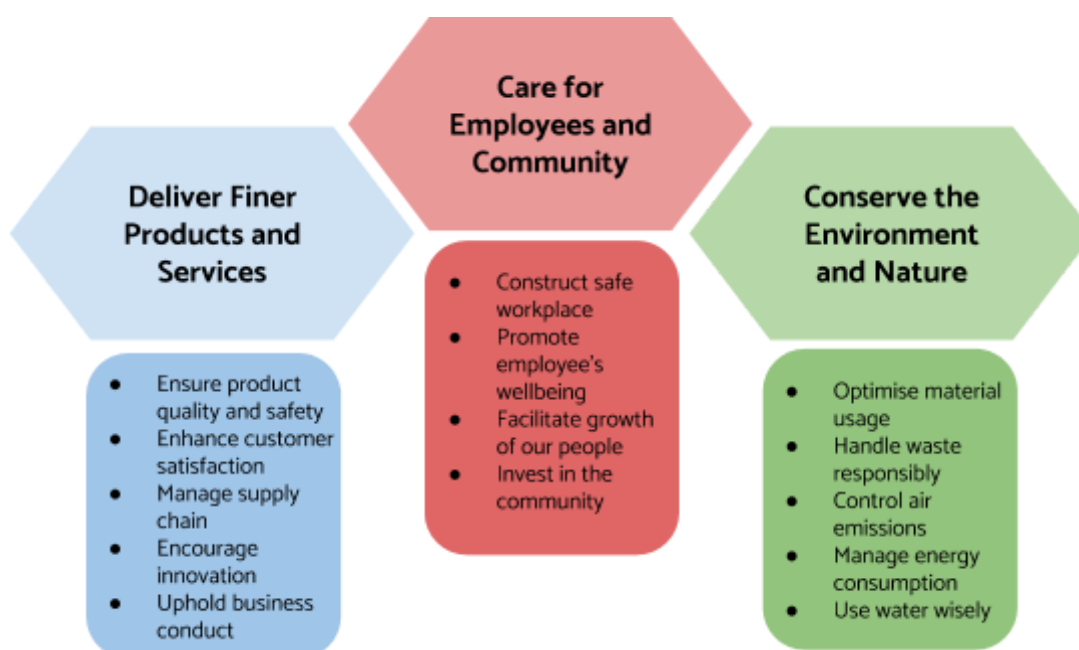
Sustainability Visions

It is our collective corporate passion to make the unimaginable possible, and we extend it to our commitments to sustainability. Dedicated to innovation, operational perfection and community well-being, the notion of sustainability is more than an empty talk at PINE.

Realising our sustainability commitments requires collective effort and support from external and internal stakeholders. It is a complex journey that can only be achieved with Board's commitment, comprehensive planning, constant system review and audit, employees' dedication, and collaboration from customers and suppliers.

To steadily march towards corporate sustainability, our Board is committed to the development and implementation of appropriate ESG strategies and effective corporate governance that is capable to mobilise our stakeholders in pursuit of corporate sustainability. They are also responsible for managing our ESG-related risks, which have been growing in the past decades. Through engaging with our stakeholders, our Board strives to identify, evaluate and manage ESG-related risks, and at the same time ensure an effective internal control system is in place to handle risks when discovered.

Apart from the Board, sustainability governance is also integrated into our operational business level. Committees are established to facilitate the management of different sustainability issues, including environmental material safety, pollution control and occupational health and safety. They oversee our daily operations to ensure we follow the fundamental principles of sustainability in every step of our business.



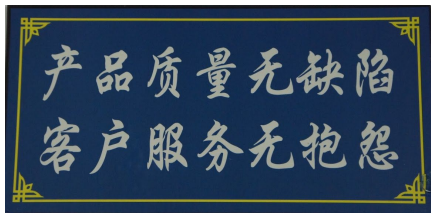
This Report is structured to follow the three core pillars of sustainability - economy, society and environment. Our strategies and practices that cater to key topics under the three cores of sustainability would help us visualise corporate sustainability.

Deliver Finer Products and Services

Our corporate vision is to continuously create and perfect. We value innovations, and aspire to bring the finest products to our customers. To firmly embed quality and safe production in our daily operations, we austere follow international standards on quality management. We also work with our suppliers and customers relentlessly to understand their expectations and handle their concerns with due care. Upholding quality is the building block to our operations, and we believe it is also the key to guide us through the evolving business environment.

Delivering Finer Products

Upholding high standard of quality in our products and services is key to customer preference, loyalty and trust. We have established an effective quality control procedure that aims not only to satisfy customer expectations, but also to exceed them. Our manufacturing facility has been accredited with ISO 9001 Quality Management System for over 15 years, and we performed both internal and external audit during the Reporting Period to verify our system's compliance to the standard requirements. Results indicated and assured perfect functionality of our quality control system, as well as its conformity to ISO 9001 standards. We shall continue to enhance our operation to achieve greater product and service satisfaction in the future.



At PINE, we pursue to deliver the finest product available in the world to our customers. We apply rigors in quality assurance of our products, which have to go through multiple quality inspections before being delivered to our customers. As required by our production inspection policy (產品測試大綱), every product type has its unique set of inspection procedure, which should be carried out with integrity under all circumstances. If a product shall fail our internal quality inspection, it will be isolated from the production line and repaired by our well-trained professional technicians. These subpar products will then be tested again to ensure it is of desirable quality. In general, all of our products are certified with international safety standards and the Printed Circuit Boards Assembly (PCBA) appearance inspections.

We continue to follow the corrective and preventive control procedures (矯正和預防措施控制程序) to analyse and report on the causes of known incidents and potential risks of product non-conformity to our internal and customers' standards. It helps us distinguish and resolve uncertainties and potential hazards on product quality in a timely manner.

Producing Safer Goods

Product safety is just as essential as product quality. Undeniably, the production and manufacturing of electronics are often associated with harmful substances. As a responsible corporate citizen, we are dedicated to reduce, or even eliminate, the use of hazardous substances in our value-adding process for the safety of the environment, our employees, and our product end users. Since 2008, we have transitioned all of our operations to comply with Restriction of Hazardous Substances (the "RoHS") regulation. During the Reporting Period, all sample products we sent for RoHS compliance

test showed full compliance to the regulation and we recalled no products for health and safety reasons.

To ensure proper management regarding the use of safe materials, we founded an Environmental Material Management Task Force (環境物質管理推行小組) (the “Force”) in 2009 to exclusively handle matters concerning environmental material safety and compliance. The Force is formed by a director, a management representative, and 10 committee members from different departments. Collectively they are responsible to plan, assess, evaluate and implement environmental material policies and targets, and to communicate with other departments the most up-to-date environmental material requirements and standards from both PINE and other regulatory organisations. We also organise annual management meetings to discuss and evaluate the effectiveness of our current environmental material management system, review past year’s performance, and formulate targets and improvement plans for the coming year.



A set of environmental material strategy was established within our Environmental Material Management Handbook (環境物質管理手冊) to serve as basic guidelines for our operations to follow. The principles and management policies of our environmental material management also align with the Waste Electrical and Electronic Equipment Directive (the “WEEE”). Not only do we aim to fulfil regulatory obligations, we also aspire to further improve on operational procedures, and to continuously create and innovate more green products.

Incoming Material Safety

As assurance to our product environmental safety, it is vital for us to perform due diligence to remain vigilant on the quality of our incoming material. Stringent control and regular monitoring are therefore applied to our qualified suppliers, such that our commitment to RoHS, customer’s customised hazardous substance free (the “HSF”) requirement and product safety can be maintained.

To achieve this, all qualified suppliers are required to sign a guarantee agreement, which restricts the use of six hazardous substances as listed out in RoHS for all materials they supply us. Relevant terms are also reiterated on the cooperation contract. In addition, the procurement department will grade our suppliers according to their risk levels on RoHS upon qualifying them. We will formulate customised audit plans for middle to high risk suppliers, and the audit of which will be conducted by multiple departments, including the procurement department and the quality control department. High risk suppliers are also required to submit a quality inspection report conducted by an independent consultancy every year to verify their compliance to our rigorous requirements on environmental material safety.

We have set strict targets and KPIs for our environmental material safety performances, in order to uphold our reputation as a safe electronics producer. At the environmental material management meeting conducted during the Reporting

Period, it is revealed that we achieved all KPIs relating to RoHS and environmental material safety as of May 2018, as a result of the tireless effort of our devoted management and dedicated staff.



Environmental Material Risk Identification and Control

We conduct environmental material safety risk assessment on a yearly basis to review environmental material risks emerged from different concerned departments. The assessment will also be examined whenever necessary to ensure its appropriateness in response to changes in operational procedures, environmental regulations or in the unlikely event of environmental incidents.



The risks are associated with six key categories, which are clearly recorded in the Environmental Material Hazard Identification Table (環境物質危害因素識別評價表). Similar to last year, all risks identified during the Reporting Period were classified as “low risks”. However, we shall continue to closely monitor the risks to prepare for timely responses.

Forging Positive Customer Relations

Gaining customer satisfaction is the essence and basis of our business. Since our establishment, we have been dedicated to provisioning high quality products in terms of functionality and safety to our customers.

To build a positive relationship with our customers, communication is fundamental. We strive to understand our customer’s expectations and needs, so as to supply them with satisfying services and products while resolving their concerns in a timely manner. Customer satisfaction survey is an useful and effective tool to help us understand how our customers perceive us in various aspects, including communications, price competitiveness, product quality and service level. Customers from different geographical locations were invited to participate in the satisfaction survey during the Reporting Period, and the average score we received was 164 out of 170. We will continue to use our best endeavours to maintain high level of customer satisfaction in the future.

Our manufacturing facility also issued a Customer Complaint Handling Procedure (客戶抱怨處理流程) for responding appropriately to complaints effectively and efficiently. It is our commitment that all customers concerns will be handled and resolved with care, sincerity and integrity. Upon receiving a valid complaint, our dedicated staff will follow a set of standard procedures to settle the concerns. Our steadfast effort in quality control and customer care were appreciated by our customers, and we received no material complaints during the Reporting Period.

Managing Supply Chain

A well-managed and solid supply chain is essential to support corporate growth. Quality of suppliers greatly determines our production efficiency and product quality. At our manufacturing facility, we adopt a systematic approach in evaluating, selecting and managing our suppliers. We aim at maintaining the quality of our procured materials by closely collaborating and engaging with our suppliers. Among our approved suppliers, 93% of the suppliers are certified with ISO 9001.

All suppliers on the approved supplier list have to pass through various stringent selection and evaluation procedures, such that their ability to fulfil our rigorous safety and environmental standards on raw materials is ensured. Site inspections and audits would also be carried out by our procurement team to assess if the prospective suppliers' could meet our quality management standards. During the Reporting Period, we updated our supplier management procedure to clarify ambiguous items under the supplier grading system.

To effectively manage suppliers' performance, constant monitoring and engagement are crucial. Apart from day-to-day quality inspections, we also conduct annual supplier audits to assess if our supplier partners continue to satisfy our requirements. The audit references various international standards, including ISO 9001, RoHS and WEEE. Suppliers will be graded in multiple aspects, such as "quality management system", "procedural control" and "contractor / supplier management". The audit report is also accompanied by an improvement plan, of which our inspectors describe the safety, quality and environmental issues discovered, relevant preventive measures, and record results of follow up checks. Regular supplier audits are undoubtedly beneficial to facilitate our quality management.

Due to our relentless effort in controlling the performance of our suppliers, the annual return rate of incoming materials came out satisfactory at only 0.25% during the Reporting Period.

Encouraging Innovation and Respecting Intellectual Property

At PINE, we aspire to envision a world that is enriched and improved by our continued innovations. Operating in the technological industry, failure to innovate readily by anticipating the demand in the market can result in the loss of market presence and unsatisfactory financial performance. Therefore, we strive to encourage our skilled employees to make technological breakthroughs, for both the betterment of the society and our corporation.

We are proud to have been granted 17 utility model and design patents by the State Intellectual Property Office (SIPO) of the People's Republic of China (the "PRC") since 2014, 3 of which were the

utility patents we received during the Reporting Period. Most of our investment to innovation is dedicated to the creation of better performing products, which explains why most of our intellectual properties (the “IP”) are product-based. We endeavour to safeguard our IPs and respect other’s IP rights by strictly complying with the patent laws of the PRC.

During the Reporting Period, we observed no infringements to our IPs and violated no laws or regulations regarding the use of other’s IPs.

Upholding Business Conduct

It is our core value to uplift business integrity at PINE. We believe good corporate governance is the cornerstone for sustaining healthy corporate growth, and building friendly and trustworthy business relationships.

Anti-corruption

As a baseline, we do not tolerate any form of corruption and bribery under all circumstances. From our Board of Directors to our employees, each and every one of the PINE’s family is held accountable to recognise signs of bribery and corruptions, while being responsible not to participate in any of such activities. All employees are well-acknowledged on the company’s stance on anti-corruption, and are forbidden to offer or accept bribes or anything of value that could affect a business decision inappropriately. These are all clearly stated in the staff handbook, which all employees are ought to follow at all times of their employment.

In addition to the staff handbook, other policies are also in place to guarantee our zero corruption promise. All employees from the procurement department are obliged to sign an agreement code that explains their code of conduct when assessing and auditing suppliers, handling internal and confidential information, and communicating with suppliers and customers. It restricts any material or monetary exchange between our procurement staff and the suppliers in pursuit of personal interests. If any of our procurement staff is found to have violated the above code of conduct, we might terminate their employment contract with us depending on the severity of the breach.

Use of Trademarks and IP

As articulated on our cooperation contract with our suppliers, PINE’s or our customer’s trademarks can only be utilised on designated products listed on the contract exclusively. The contract also limits our use of our supplier’s trademarks for other business activities other than the contracted collaboration. We are committed to protecting trademarks of our own and our business partners by restraining its use to authorised and approved parties and activities only.

Confidentiality

We endeavour to safeguard all confidential and sensitive information from our operations to protect the business interests of both our Group and our business partners. Disclosure or theft of any confidential information is strictly prohibited as stated on our staff handbook. Such breach is considered as a severe violation to our company’s code of conduct and may result in immediate dismissal.

Care for Employees and Community

A company can never thrive without the support of its employees and the community. At PINE, we are determined to create rapport and trust within our operations and in the community where we operate in, by dedicating to employees' welfare and caring for the well-being of the greater community. Forging a friendly relationship with them will not only drive us towards corporate sustainability, it also implies better business climate, and greater financial gains.

Constructing a Safe Workplace

PINE invests immensely as an employer to construct a safe workplace with managed health risks and occupational hazards to our employees. Devoted to maintaining and promoting the highest degree of physical well-being of our employees, multiple health and safety policies and management plans are established for the effective governance of related matters. It is our long-term ambition to construct a zero-accident workplace.

Health and Safety Task Force

To prevent, control and eliminate occupational risks, and to safeguard the health and safety of all employees, a Health and Safety Task Force (職業衛生工作領導小組) was set up. They are tasked to maintain oversight of our regulatory compliance, conduct trainings and inspections, implement and monitor measures, and improve existing policies in relation to occupational health and safety. It is a cross-functional committee that collaborates closely with other departments on the collective goal of creating a safer workplace.

The Health and Safety Task Force is also responsible to implement the occupational disease prevention plan, which is formulated with reference to national law. The implementation plan is announced and renewed every 3 years to ensure all policies and measures can cater to recent business situations and current regulatory requirements. Goals are also set up within the plan to keep our pledge of maintaining a workplace that is free from danger on track.

Health and Safety Management Systems and Measures

We developed numerous health and safety management systems in accordance with the Law of the PRC on the Prevention and Control of Occupational Diseases (中華人民共和國職業病防治法) to govern different sub-aspects of occupational health and safety at our manufacturing plant. These management systems are interrelated and interdependent to each other.



Prevention is always preferred over cure. Several management systems that aim at educating our employees, maintaining our safety equipment and employing safety labels are issued to reduce the occurrence of accidents. All employees have to attend compulsory safety trainings prior to the commencement of work to embed a safety culture throughout our operation. Continuous safety trainings in the form of lecture, field exercises and talks are also mandatory for no less than 20 hours per year. These ongoing trainings are supplemented by the proper adoption of personal safety protection gears, regular maintenance and repair of the safety equipment, and annual body check for affected employees. To further enhance the occupational safety of our workplaces, employees who are exposed to health risks have to sign an agreement to prove their acknowledgement on their respective rights and obligations in prevention of health hazards. In addition, we have adopted a reward and punishment mechanism for reporting and troubleshooting potential risks, which provide incentives and drive for our employees to improve the safety conditions of our workplaces. All of the above measures were executed meticulously during the Reporting Period.

In the coming year, we will commission an independent service provider to evaluate and assess the occupational safety risks of our workplace. The assessment allows us to review on current hardware safety conditions and practices to resolve potential crises and foster continuous improvement.

Apart from the above measures, we declare all workstations and projects that possess potential or proven occupational health risks to the regional health department. Such workstations are also closely monitored as required by our management system. Whenever a nonconformity to internal or national standards is discovered, we enforce immediate rectifications diligently.

Fire safety is also a major concern for most manufacturing plants. To prevent fire outbreak, we have prohibited smoking in all workstations and restricted it to the designated outdoor smoking area since 2007. Offenders will be fined and immediately dismissed as a deterrent. Our technicians will also inspect and treat potential fire risks regularly to minimise the risk of fire outbreak.

Our comprehensive safety management systems also prepare us for the unlikely events of emergency and accident. Our safety management policies detail the responsibilities of different departments to mitigate and resolve safety accidents. After the occurrence of a safety incident,

careful and comprehensive inspections will be carried out to investigate the cause of the accident, in order to prevent similar hazards from happening in the future.

During the Reporting Period, no work-related fatalities were reported in our operations. We shall continue our commitment to safeguard the health and safety of all employees by constantly reviewing the appropriateness of our existing policies and meticulously monitoring the execution of safety measures.

Promoting Employees' Well-Being

At PINE, we understand the importance of quality human resources to corporate success. To attract and retain talents, we must protect the rights of all who work with us, while providing competitive remuneration that not only follow, but go beyond local labour regulations.

Protecting Human Right

Protecting human rights is one of our key priorities in human resource management. The manufacturing industry is notorious on its practices to suppress human rights, and we use our best endeavours to distinguish ourselves apart. We adhere to all local and national labour regulations, and strictly forbid the hiring of child or forced labour in our operation. Prior to employment, all prospective employees must present their identity proofs and other relevant proofs for identity verification. In protection of human rights, employment contracts with the employees who violate the following terms will be terminated immediately:

- Individuals who are below legal working age
- Individuals who used fake identities during recruitment

We are also an equal opportunity employer, who upholds the principle of “fairness” in all matters related to human resources management. Recruitment and promotion are all competence-based, while unfavourable treatments to individuals on the grounds on age, gender, nationality, religion or physical capabilities, among others, are not tolerated. We strongly encourage employees who encounter any unfair treatment at the workplace to report to management for investigation and internal disciplinary actions.

Employment Benefits

Our employees receive attractive employment benefits, which are all transparently described on the staff handbook for easy reference. Basic benefits include paid leaves, marriage leaves, compassionate leaves, in-house medical services, overtime work payment, continuous trainings, right to stay in staff hostel and access to recreational facilities. Rest time and other benefits are all commensurate as legally required.

Adequate incentives are also provided to motivate employees to pursue excellence in their work. Every month, our employees will be fairly graded by their respective department managers according to their work performance. Cash prizes with the amount that reflects the grading results will be distributed to our employees to serve as a recognition to their contribution, and role model to others.



As a caring employer, we also organise activities to promote work life balance of employees. During the Reporting Period, an annual dinner was held for employees to enjoy and celebrate our corporate success. It is also a means for us to show our gratitude to the hard work and dedication of our employees in the past year.

We shall refine our employment benefits to continue establishing ourselves as an employer of choice in the market.

Facilitating the Growth of our People

We seek to encourage our employees to grow alongside with us. Through holistic and ongoing trainings, we aspire to engage our employees in our mission to make the unimaginable possible.

At our manufacturing facility, all new recruits have to undergo compulsory orientation trainings before the commencement of their work. They will be briefed on our general company profile, rules and regulations at the plant, occupational safety, and the basics on RoHS and ISO standards. All new hires had attended the orientation training during the Reporting Period.

Ongoing trainings are provided to cultivate our employees' skills and unleash their potentials. Development programs that cater to employees' specific roles and duties are organised all year round to enable continuous growth of our people. During the Reporting Period, a handful of courses on production, technical product repairing, quality inspection, reporting and international standards were provisioned to concerned employees. All internal trainings are carefully planned with considerations to current corporate needs and past employee performances. Through comprehensive trainings, it is our objective to enhance our human resources capacity, and to inspire our employees to realise strides in their personal development. During the Reporting Period, the average training hours committed per our employees is approximately 13 hours.

Engaging the Community

At PINE, not only are we passionate about our employees, we also care about people who are indirectly involved in our operations, including the community where we operate in. We strive to minimise our environmental impacts to the surroundings, while actively explore opportunities to invest in and empower the community to maximise our positive societal influence.

In order to minimise our manufacturing plant's impact on the neighbourhood, we have been applying stringent control on our environmental emissions. Appropriate measures have been adopted to manage our air, dust and noise emissions such that their nuisance to the surrounding communities are minimal. Please refer to section "Controlling Air Emissions" for more details on how we control our emissions.

PINE also leverages its profession as a personal computer products manufacturer to support and promote the growth of local e-sports, a relatively new and underdeveloped sports in Hong Kong. As a corporation specialises in the field, we provide resources to local e-sports events in order to strengthen and nurture the sports development. In the coming year, PINE will be the title sponsor of a local e-sports

competition “AMD XFX League of Legend Triathlon”, one of the larger-scale e-sports events of the year. The event allows general public to better understand the industry and give passionate individuals a valuable opportunity to work in the field. We look forward to sharing the success of the event next year.



Conserve the Environment and Nature

Environmental protection and conservation are one of the key pillars for sustainable development. At PINE, we treat our environmental responsibility as an electronics manufacturer seriously to mitigate our impacts on the surroundings. We emphasise material safety and strictly forbid the use of hazardous material within our value chain. In our daily operations, we strive to manage our pollutions and emissions, while endeavour to improve the energy and resource efficiency of our production activities at the same time.

Optimising Material Usage

It is our corporate goal to always advance towards higher production efficiency. We have been innovating on product designs and perfecting on operational processes to minimise our resource consumption on an ongoing basis.

Repair and Reuse

In our production line, we have implemented a “repair and reuse” policy on our defective items. Our dedicated repair team is responsible to carry out tests to determine the root cause of the defect and the specific defective components, which enables us to re-utilise functional items in defective goods. With this system in place, we can replace specific defective components instead of discarding the entire faulty product.

Packaging

Packaging materials play a vital role in protecting our accurately calibrated electronic products. In fact, most of our product packaging is customly specified by our customers while the packaging methods depend greatly on the product nature. During the Reporting Period, we consumed approximately 600 tonnes of packaging material.

In light of the limited opportunity to reduce our consumption of raw packaging materials, our bright employees from the storage department had initiated a carton boxes and cardboard boxes (板紙箱) reusing campaign - reusing used carton and cardboard boxes as a transitional containers for internal use. The number of carton and cardboard boxes that were reused and repurposed under this campaign exceeded 2,700 sets during the Reporting Period.

Handling Waste

Waste is an inevitable by-product of our manufacturing activities. We are dedicated to reducing the amount of waste generated by our operations, and diverting useful resources from landfilling to recycling or repurposing in every single step. Multiple operational practices are implemented to assist us in accomplishing our waste reduction goal.

Our Waste Classification



Waste produced by our operation can be divided into 5 categories. We commissioned an external waste collector to collect and handle our production waste and scrap waste for responsible disposal. After collection, the waste collector is accountable to treat and handle the waste properly, including recycling, reusing or disposing. During the Reporting Period, we gathered and sent approximately 55 tonnes of carton boxes to our waste collector to be recycled.

We are committed to treating our waste in the most appropriate manner. With environmental considerations, we sent 5 air-conditioners to a waste collector specialised in e-waste handling. 133 used plastic buckets were also returned to the respective suppliers for further repurposing within the supplier's internal operations.

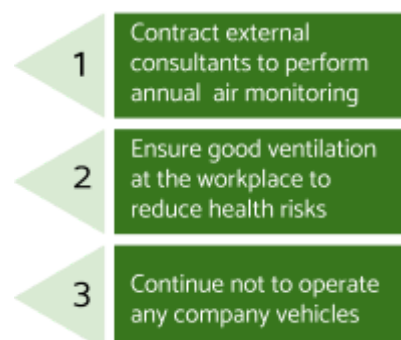
We produced limited environmentally harmful waste during the Reporting Period. The only hazardous waste we generated was the used plate washer water utilised for cleaning electric plates in our manufacturing facility. Its collection and treatment are conducted by professional supplier with care and caution. During the Reporting Period, all hazardous waste are processed responsibly.

Controlling Air Emissions

Air emissions from our manufacturing activities are not only harmful to our employees' health, they can also contaminate the environment if diffused to the atmosphere. Devoted to the alleviation of our air pollution, several measures are adopted to manage our air polluting activities.

As our operation principally involves the assembly of electronics, the amount of air pollutant arises from our production is limited. However, we are still committed to protecting our employees' health from the harmful impacts of the air pollutants. Four centrifugal ventilation fans are installed in the workstations to facilitate air circulation and the dispersal of harmful air pollutants. In addition, we contract external environmental consultancies periodically to assess and evaluate our air emissions in an effort to assure our pollution levels lie within the desirable range.

Our Approach to Manage Air Pollution



Greenhouse Gas Emissions

Global concerns on greenhouse gas (the “GHG”) emissions have been growing and intensifying in the past decades, due to Carbon Dioxide’s (CO₂) vast potential in affecting the global climate. As a responsible corporate citizen, we endeavour to manage our GHG emissions in a way to continuously mitigate them, and to transparently disclose them.

This year, an independent consultancy, CKP Sustainability Consultants, was contracted to professionally assess our GHG emissions. The calculation of which was evaluated in accordance with international standards and guidelines, including the Greenhouse Gas Protocol developed by the World Resources Institute and World Business Council for Sustainable Development and ISO 14064 - GHG Emissions Inventories and Verification. During the Reporting Period, we emitted approximately 3,300 tCO₂e of GHG in total, with 4% being direct emissions, and 96% being energy indirect emissions.

GHG Emissions	Emissions (tCO ₂ e)
Scope 1 - Direct Emissions	146.06
Scope 2 - Energy Indirect Emissions	3,195.82
Total	3,341.88

Our direct emissions originate from the combustion of gas for cooking activities in the manufacturing facility, which accounted for only 4% of our total emissions. On the other hand, energy indirect emissions, which are positively correlated with our energy consumption, contributed 96% of our total emissions. Given the fact that the majority of our GHG emissions come from energy indirect emissions, we implemented energy reduction policies and adopted energy efficient appliances to curtail our GHG emissions at source. For details of our energy management, please refer to section “Managing Energy Consumption”.

Managing Energy Consumption

We place high priority on optimising our energy consumption as it is part of our devotion to operational excellence. Not only does achieving optimal energy usage boost our environmental performance by improving resource efficiency and lessening pollution, it also has significant financial implication to lower our expenditure on energy purchase.

Within our Group, energy efficient policies and initiatives are highly promoted as we strive to popularise a robust energy saving culture among our employees. Employees are required to turn off all energy-consuming equipment or appliances when they are off duty.

Machinery upgrades also possess great potential in enhancing our energy efficiency. When procuring new equipment and machineries, energy efficiency has always been one of our major considerations in addition to cost and supplier reliability. Last year, we transitioned our lighting system from fluorescent to LED, which was estimated to save approximately 90,000 kWh of electricity annually. During the Reporting Period, we also performed an equipment upgrade to increase the energy

efficiency of our air-conditioning system. We replaced 12 fan coil air handling units with 16 energy-efficient ceiling concealed air handling units. It is predicted that the replacement can save up to approximately 20,000 kWh of electricity annually.

It is our long-term dedication to cut down our energy consumption. We shall continue to search for more energy efficient alternatives in our production, and innovate to produce less energy-intensive products.

Using Water Wisely

Climate change is destabilising our freshwater supply. It is our duty as a corporate citizen to minimise our water consumption to the best of our capabilities to conserve our common water resources. The main uses of water in our operations are for domestic purposes.

In fact, the use of water in our operation is negligible and immaterial when compared to our consumption to other resources, such as energy and other raw materials. However, we are committed to encouraging the reasonable use of water within our operations. All employees staying in the staff quarter are advised to use water wisely. During the Reporting Period, PINE consumed 44,050 m³ of freshwater resources.

ESG Performance Table

Key Performance Indicators	Unit	FY 2018
Environmental		
GHG Emission - Scope 1	tCO ₂ e ⁻	146.06
GHG Emission - Scope 2	tCO ₂ e ⁻	3,195.82
Total GHG Emissions (Scope 1 & 2)	tCO ₂ e ⁻	3,341.88
GHG Emission Intensity by Number of FTE ¹	tCO ₂ e ⁻ / Person	13.31
GHG Emission Intensity by GFA ²	tCO ₂ e ⁻ / m ²	0.62
Energy Usage	MJ	14,052,033.90
Energy Usage Intensity by Number of FTE	MJ / Person	55,984.20
Energy Usage Intensity by GFA	MJ / m ²	2,602.23
Electricity Usage	kWh	3,567,159.00
Gas Usage	m ³	25,614.00
Water Usage	m ³	44,050.00
Water Usage Intensity by Number of FTE	m ³ / Person	175.50
Packaging Material Used	Tonnes	605.46
Carton Box Reused	Set	559.00
Cardboard Box Reused	Set	2,200.00
Plastic Bucket Recycled	Piece	133.00
Social		
Total Workforce	Person	251
- Women	Person	136
- Men	Person	115
Average Training Hours by Employee	Hours	12.68
Work Fatalities	Case	0

¹ FTE refers to full-time employee.

² GFA refers to gross floor meter.

ESG Guide Content Index

Aspects, General Disclosures and KPIs	Description	Relevant Chapter, Reference Page(s) or Explanation
A. Environmental		
Aspect A1: Emissions		
General Disclosure	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>Conserve the Environment and Nature</i> - Optimising Material Usage, Handling Waste, Controlling Air Emissions, Managing Energy Consumption, Using Water Wisely
KPI A1.1	The types of emissions and respective emissions data.	<i>Conserve the Environment and Nature</i> - Handling Waste, Controlling Air Emissions
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	<i>Conserve the Environment and Nature</i> - Controlling Air Emissions; ESG Performance Table
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Due to the insignificant amount of hazardous waste we generate, the amount of total hazardous waste produced was not recorded in the Reporting Period.
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	ESG Performance Table
KPI A1.5	Description of measures to mitigate emissions and results achieved.	<i>Conserve the Environment and Nature</i> - Handling Waste, Controlling Air Emissions
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	<i>Conserve the Environment and Nature</i> - Handling Waste
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	<i>Conserve the Environment and Nature</i> - Optimising Material Usage, Managing Energy Consumption, Using Water Wisely
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).	ESG Performance Table

KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	<i>Conserve the Environment and Nature - Using Water Wisely; ESG Performance Table</i>
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	<i>Conserve the Environment and Nature - Managing Energy Consumption</i>
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	<i>Conserve the Environment and Nature - Using Water Wisely</i>
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	<i>Conserve the Environment and Nature - Optimising Material Usage</i>
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	<i>Conserve the Environment and Nature - Optimising Material Usage, Handling Waste, Controlling Air Emissions, Managing Energy Consumption, Using Water Wisely</i>
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	<i>Conserve the Environment and Nature - Optimising Material Usage, Handling Waste, Controlling Air Emissions, Managing Energy Consumption, Using Water Wisely</i>
B. Social		
Employment and Labour Practices		
Aspect B1: Employment		
General Disclosure	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.	<i>Care for Employees and Community - Promoting Employees' Well-being</i>
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	ESG Performance Table
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	N/A
Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating	<i>Care for Employees and Community - Constructing a Safe Workplace</i>

	to providing a safe working environment and protecting employees from occupational hazards.	
KPI B2.1	Number and rate of work-related fatalities.	Nil
KPI B2.2	Lost days due to work injury.	N/A
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	<i>Care for Employees and Community</i> - Constructing a Safe Workplace
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	<i>Care for Employees and Community</i> - Facilitating the Growth of our People
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	N/A
KPI B3.2	The average training hours completed per employee by gender and employee category.	ESG Performance Table
Aspect B4: Labour Standards		
General Disclosure	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.	<i>Care for Employees and Community</i> - Promoting Employees' Well-being
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	<i>Care for Employees and Community</i> - Promoting Employees' Well-being
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	<i>Care for Employees and Community</i> - Promoting Employees' Well-being
Operating Practices		
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	<i>Deliver Finer Products and Services</i> - Managing Supply Chain, Upholding Business Conduct
KPI B5.1	Number of suppliers by geographical region.	N/A
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.	<i>Deliver Finer Products and Services</i> - Managing Supply Chain, Upholding Business Conduct
Aspect B6: Product Responsibility		

General Disclosure	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.	<i>Deliver Finer Products and Services</i> - Delivering Finer Products, Producing Safer Goods, Forging Positive Customer Relations, Encouraging Innovation and Respecting Intellectual Property, Upholding Business Conduct
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Nil
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	N/A
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	<i>Deliver Finer Products and Services</i> - Encouraging Innovation and Respecting Intellectual Property, Upholding Business Conduct
KPI B6.4	Description of quality assurance process and recall procedures.	<i>Deliver Finer Products and Services</i> - Delivering Finer Products, Producing Safer Goods
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	<i>Deliver Finer Products and Services</i> - Upholding Business Conduct
Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	<i>Deliver Finer Products and Services</i> - Upholding Business Conduct
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.	Nil
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	<i>Deliver Finer Products and Services</i> - Upholding Business Conduct
Community		
Aspect B8: Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	<i>Care for Employees and Community</i> - Engaging the Community
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	N/A

KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	N/A
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PINE TECHNOLOGY HOLDINGS LIMITED

松景科技控股有限公司

(INCORPORATED IN BERMUDA WITH LIMITED LIABILITY)

(於百慕達註冊成立之有限公司)

STOCK CODE 股份代號 1079

ESG REPORT 2018 環境、社會及管治報告

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