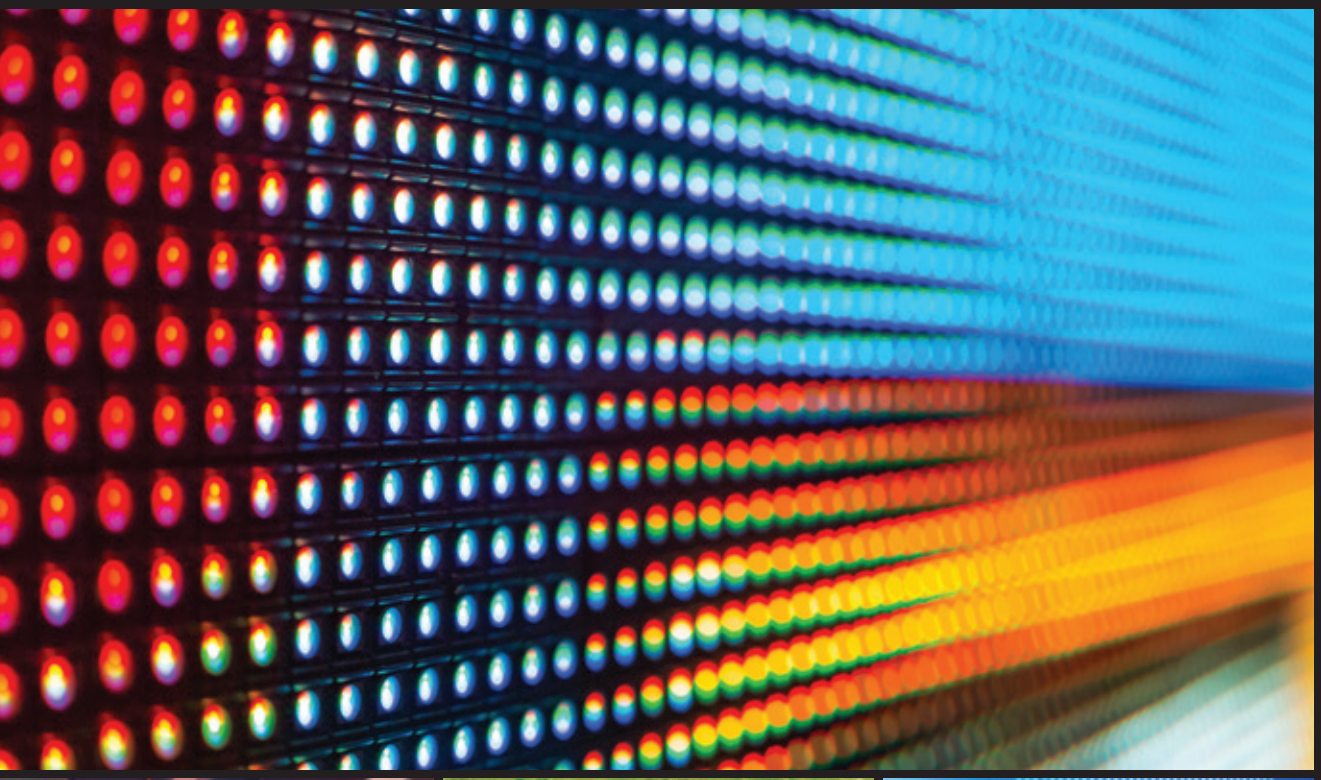
TPV TECHNOLOGY LIMITED



CORPORATE SUSTAINABILITY AND SOCIAL RESPONSIBILITY REPORT 2020

TABLE OF CONTENT

Message From Chairman 2

About This Report
Reporting basis 4

1. Company Profile
1.1 About TPV 6
1.2 Milestones 7
1.3 Global Network 7
1.4 Products and Services 7
1.5 Stakeholder Engagement and Materiality Assessment 14
1.6 Financial Performance 16
1.7 Corporate Governance 18
1.8 Chairman and Chief Executive Officer 20
1.9 Risk Management and Internal Control 20
1.10 Financial Risk Management 22
1.11 Anti-Corruption 22

2. Sustainable Development Goals 24

3. Commitment To Our People
3.1 Overview 25
3.2 Recruiting and Retaining Talent 25
3.3 Training and Development 27
3.4 Promoting Health, Safety and Well-being 28
3.5 Labor Standards 31
3.6 Employee Communication 32
3.7 Regulatory Compliance 33

4. Commitment To Our Business Partners
4.1 Overview 34
4.2 Supply Chain Management 34
4.3 Engaging Suppliers 36
4.4 Regulatory Compliance 36

5. Commitment To Our Environment
5.1 Overview 37
5.2 Emissions 37
5.3 Energy 38
5.4 Water 40
5.5 Materials 40
5.6 Waste 41
5.7 Environmentally friendly Product Design 43
5.8 The Environment and Natural Resources 45
5.9 Regulatory Compliance 45

6. Commitment To Our Community
6.1 Overview 46
6.2 Response to COVID-19 46
6.3 Supporting the Quality Education 47
6.4 CSR Foundation 48
6.5 Other Support 48

7. Sustainability Performance 51

8. List Of External Initiatives & Memberships Of Associations 57

9. GRI Content Index 58

MESSAGE FROM CHAIRMAN

Dear Stakeholders,

2020 was a challenging year, as we faced a global health crisis on an unprecedented scale. Despite the uncertainties that follow in its wake, I am proud of our response and achievements as a Group, as well as the dedication and determination with which we continue to forge forward together. TPV's purpose of 'supporting the development of a clean, sustainable and inclusive global society' has never been more pressing than it is today.

PLAYING OUR PART IN CURBING COVID-19

The health, safety and well-being of TPV employees has always been our top priority. As part of our ongoing efforts to prevent the contagion of COVID-19, we established an Epidemic Prevention Committee to curb the spread of the virus within our factories, protect our employees and maintain our supply to customers under safe conditions.

At the onset of the pandemic in 2020, all factory supervisors were required to formulate and deploy preventive measures, on top of purchasing protective equipment such as masks, ear thermometers and disinfectants to safeguard their teams. Our General Affairs Department in China also issued a "Preparedness and Response Plan for Infectious Disease for Factories in China", advocating for its strict implementation across all sites along with local regulations and practices.

In March, based on the disease prevention SOPs in our Chinese factories, we set similar procedures for our overseas factories and sales offices to follow, shipping masks over to them as additional support. A commendation conference for epidemic prevention was held to recognize 74 TPV employees for their outstanding contributions in our anti-epidemic endeavors.

Beyond our factories, we were driven to build a safe environment for the medical staff and patients in surrounding communities, drawing on our core operational competencies to ensure that testings and treatments could be carried out seamlessly. At the height of the COVID-19 outbreak, we provided 780 smart display devices and over 3,000 medical supply sets to Caidian in Wuhan, along with 30 sets of customized nursing station systems and monitoring screens to the Xiamen Fifth Hospital in September, so that the right care could be delivered to those in need. We also donated 300 monitors, 3,000 food packages and over 20,000 masks to local hospitals and communities in Brazil and Mexico.

REFLECTING AND RESETTING FOR THE YEAR AHEAD

Amid the backdrop of the pandemic, TPV made many big strides in 2020 business-wise, as well as in fulfilling our responsibilities towards building a better world — among them, committing to the UN Global Compact initiative in November and Science Based Targets in December. Besides reviewing current policies and developing new ones, we also reformed our CSR reporting standards to meet those set by GRI.

One of our key highlights of the year was starting our very own CSR Foundation in June to support TP Vision Europe B.V., AOC International (Europe) B.V. and MMD-Monitors & Displays Nederland B.V. in their activities. As we work towards expanding and developing the foundation's scope to cover more entities within the Group, we are proud to have helped Mercy Ships with their Hope and Healing initiatives for the forgotten poor. Besides enhancing the eLearning, simulation-based learning and eMentoring aspects of their Medical Capacity Building (MCB) efforts, we also aided in setting up their very first training centre in Guinea, supplying them with various products and equipping it for success.

As one of our long-term goals is to be seen as a leading company in sustainability efforts, TPV is approaching 2021 with a renewed focus. In addition to preparing and implementing sustainability policies across all of our sites, we will also be making sustainability a foundation of our product designs and decision-making processes — from testing prototypes and identifying the potential health/environmental implications of product launches more thoroughly to fulfilling specific gaps in the market with our products more meaningfully. We are also investing in new technology to develop products that are less energy consuming.

Our journey towards supply chain sustainability will require close collaborations with our suppliers. As such, we are promoting our responsible procurement policies to them by providing relevant training, setting up proper evaluation mechanisms and conducting ad-hoc audits to identify areas for improvement on all sides. Together with them and our business partners, we are also developing new packaging options and using new materials to lessen our environmental impact.

In terms of innovation, TPV is officially embarking on the 'intelligent' road by taking the first steps towards implementing Industry 4.0 and Smart Factories to improve quality and efficiency. In 2020, we invited two renowned consultancies in smart manufacturing to guide us, on business segments and functional units, in adopting all the required elements across the board, as well as to design a five-year overall implementation plan for TPV in accordance with the unified frameworks and standards.

IN CLOSING

Finally, I would like to express my deepest and sincerest gratitude to all our employees, customers, partners and shareholders for your great support and solidarity throughout 2020. Without your belief in our work and your passion in our purpose, we would not have overcome as much as we have. I am confident that the year ahead will bring new and exciting opportunities that will help us achieve more success, as we look towards a brighter future.

Dr Jason Hsuan
Chairman and Chief Executive Officer

Hong Kong, 30 March 2021

ABOUT THIS REPORT

Reporting basis

TPV Technology Limited ("TPV" or the "Group") is pleased to present its annual Sustainability Report in 2020 on its environmental, social and governance ("ESG") achievements and share with the Group's stakeholders. This report showcases our approach to managing various ESG issues as well as annual performance and achievements for the year ended 31st December 2020.

The reporting scope in this year continues to cover key functions of TVs and monitors of the Group, including innovation and development ("I&D"), procurement, manufacturing, sales, customer services and human resources ("HR"), with business operations spanning across the People's Republic of China ("PRC"), Europe, North and South America, Hong Kong and Taiwan.

Organizational entities covered in the report include[1]:

1. Top Victory Investments Limited
2. TPV Electronics (Fujian) Company Limited
3. TPV Display Technology (Xiamen) Co., Ltd.
4. Wuhan Admiral Technology Ltd.
5. TPV Display Technology (China) Co., Ltd.
6. TPV Display Technology (Wuhan) Co., Ltd.
7. TPV Technology (Qingdao) Co., Ltd.
8. PTC Technology Co., Ltd.
9. MMD (Shanghai) Electronics Technology Co., Ltd.
10. TP Vision Europe B.V.
11. TPV Displays Polska Sp.z.o.o.
12. Top Victory Electronics (Taiwan) Company Limited
13. Envision Indústria de Produtos Eletrônicos Ltda.
14. TPV International (USA), Inc.
15. Trend Smart America Limited

[1] We have included 3 new entities in the report this year, namely AOC International (Europe) B.V., MMD-Monitors & Displays Nederland B.V. and TPV Display Technology (Beihai) Co., Ltd.

16. AOC International (Europe) B.V.

17. MMD-Monitors & Displays Nederland B.V.

18. TPV Display Technology (Beihai) Co., Ltd.

This report was prepared in accordance with the GRI standards — Core option. It also includes our commitments and actions to the United Nations Sustainable Development Goals ("SDGs").

Feedback

We appreciate feedback from readers and welcome any suggestions to improve our sustainability commitments. Readers can write to our Group with the following company address, by facsimile, or by clicking "Contact Us" on the homepage of the company's website. The relevant address and facsimile number are as follows:

Units 1208–16, 12th Floor,
C-Bons International Center,
108 Wai Yip Street,
Kwun Tong, Kowloon, Hong Kong
Fax: (852) 2546 8884

1. COMPANY PROFILE

1.1 About TPV

TPV is an internationally renowned monitor and TV manufacturer operating as a private company incorporated in Bermuda. Over the last two decades, TPV has enjoyed significant growth by successfully leveraging its core competencies in manufacturing, operational efficiency, research and development ("R&D") as well as its exceptional commitment to quality.

TPV serves as an original design manufacturer ("ODM") for some of the best-known TV and PC brands, and also distributes products under its own brand names, "AOC" and "Envision", as well as licensed Philips monitors, TVs, mobile phones, tablets, and audio and video products in most regions of the world.

Supporting the development of a clean, sustainable and inclusive global society is at the heart of TPV's purpose. Being a global company experienced in R&D, manufacture, and sales of electronic displays, TPV is committed to achieving a harmony between economic development, social prosperity and protection of nature with the aid of innovation and technology. TPV believes that honesty, integrity and fairness are important values in helping the Group conduct its business in a responsible and sustainable manner and achieve its objective of delivering value to its stakeholders and broader society. The vision, mission and positioning of TPV are outlined below.

Our vision:
To become an industry leader and the largest electronic displays supplier globally

Our mission:
- Create unique value for our customers
- Create valuable opportunities for our employees
- Create sustainable benefits for our shareholders
- Create useful resources for our society

Our positioning:
- Excellence in technology
- Leading production capacity
- Business planning with foresight

1.2 Milestones

1.3 Global Network

While being headquartered in Taipei, Taiwan, TPV has businesses and operations in various regions around the world, spanning a total of 14 different countries and locations such as the PRC, the Netherlands, Poland, Brazil, the US, Hong Kong and Taiwan across the key regions and markets, TPV engages in various operations such as production, trading, sales and distribution, R&D and investment in industrial and commercial buildings, with a total of 24,040 employees across the organizational entities covered in this Report.

Globally, the Group has a total of 13 manufacturing bases, of which 7 are in mainland China and 1 each in Russia, Poland, Mexico, Brazil, Argentina and Thailand. Moreover, the Group has 6 innovation and development centers in locations such as Belgium, India and Xiamen, China. The center in Belgium is mainly responsible for future product development and the other centers are responsible for software development. The Group has over 3,500 sales offices and branches around the globe to serve customers from all corners of the world.

1.4 Products and Services

TPV endeavors to provide the best quality products and services and seeks to differentiate itself through innovation. We offer our customers a range of quality, effective and trusted products and services, including a one-stop service to customers from I&D, production, global logistic support to after sales services to meet their needs.

Products

We design and produce i) monitors, ii) TVs, iii) mobile phones, iv) tablets and v) audio and video products such as headphones and soundbars.

Product Quality Management

Effective and consistent control on product quality is crucial to the success of TPV in the marketplace. To this end, TPV continues to monitor its product and service quality by applying appropriate and effective management systems. For instance, quality management systems have been implemented for the Group's major production and trading operations, such as ISO9001, QC080000 and GB/T19001, which are certified by independent third parties.

We acknowledge the importance of product responsibility and aims to provide safe products to customers. Our manufacturing plants operate in accordance with safety and environmental requirements applicable to the target markets, such as the Restriction of Hazardous Substances ("RoHS") Directive, CE certification and the European Waste Electrical and Electronic Equipment (WEEE) Directive in the European Union ("EU"). Reviews on new relevant requirements and regulations as well as compliance standards of the plants are carried out regularly for better quality control.

In order to provide and improve close-to-life services, membership systems are established and integrated in the form of promotions, value-added services, interactive broadcasting and pre-and-post sales services.

Product Innovation

Continual innovation is essential in this fast-changing industry. Following a huge success on OLED technology under Philips-branded TVs in the past few years, we continue to optimize the technology by featuring the latest OLED panels and 3rd generation P5 processing suite which enhance picture quality through improved noise reduction, better sharpness, more accurate colors and skin tones, and improved contrast to all sources. In addition to picture quality, TPV also directed efforts in improving the audio performance level by incorporating many signature Brower & Wilkins acoustic technologies that are derived from the company's world-class loudspeakers, including Tweeter-on-Top enclosure.

During 2020, the Group had 1,028 patents relating to TVs, monitors and audio equipment (2019: 1,157).

TPV has set up innovation centers to foster and coordinate new ideas on product design and functional enhancement. For instance, Innovation Site Europe ("ISE") has a strong focus on various product domains including connectivity, displays, audio and video processing, and it also drives sustainability via innovative power and materials solutions. Through collaboration with research institutes and universities, ISE strengthens its capabilities in product enhancement.

In 2020, TPV's I&D team designed the iF Product Design Award-winning "Star Trail" creator working station, as well as various monitor models that won the Red Dot Design Awards. Star Trail is designed to meet the needs of modern content creators and improve their workstation experience with its ergonomic design. It consists of a professional stylus-enabled touchscreen, high-end monitor and a sliding track that enables a seamless transition of creative scenarios. Star Trail can be enhanced with an accessory, "Ring", that attaches magnetically to the screen to provide intuitive shortcuts and dial control to support the work of creators.

Awards

During 2020, the Group collected a collection of industry awards, including the iF Design Awards and Red Dot Design Awards.

Monitors

TPV Star Trail

Philips 279C9

Philips TAW8805

AOC PD49

Philips 328M1R

AOC 27U2

TVs

Philips Porsche Design 70PD9000 ELED

Philips 855 OLED

Others

Philips Fidelio X3 Headphones

Philips Fidelio S3 Headphones

Philips Fidelio L3 Headphones

Philips Core BT Speaker Range

Philips T8505 TWS Headphones

Sustainable Product Design

For TPV, sustainability plays an important role in decision-making for our product designs, ranging from considerations of the sources of raw materials and recycled content to the usage of packaging materials for our products. We aim to integrate more sustainable elements and considerations into our product design process as we understand that a product's design has a significant influence on its environmental footprint. To ensure our products are as green and safe as possible, we build prototypes that will be tested carefully and thoroughly to identify potential environmental and health issues for improvement prior to product launches. These product tests include, but are not limited to, electromagnetic interference, ergonomics, energy efficiency, flammability, explosion hazards and other quality controls. We also have established procedures for identifying, flagging and escalating any issues arising from these tests for appropriate follow up action.

Services

Customer satisfaction and service quality are among our priorities. We strive to diversify our customer base and expand the ODM business with a view to improving our ability to serve our customers. As a leading manufacturer for monitors and TVs, we continue to create and deliver value to stakeholders, including our customers, employees and shareholders, through innovation and technology.

Design

We provide comprehensive services to customers from product concept development through design to research and development, according to clients' specifications and requirements. From this early stage, we incorporate green and sustainable considerations with a view to minimizing impacts and potential hazards to nature.

Manufacturing

We provide one-stop manufacturing services, starting from material procurement and assembly to finished products and delivery. We have various procedures and standards in place for maintaining and assuring product quality and safety through tests and assessments.

Aftersales services

For ODM customers, we provide a global logistic service that provides for product delivery to designated warehouses upon the request of customers. For our own branded products, we provide post-sale customer services, which include guarantees of up to 120 days for repairs, replacements or other technical support.

Customer Satisfaction Management

We strive to continue improving our products and services for our customers to address their needs. Through ongoing dialog with our customers, we gather customer feedback from representative offices, dedicated call centers and hotlines, and questionnaire surveys. We will review and follow up the collected feedback to demonstrate our dedication to customer experience and satisfaction. Moreover, our after-sales team aims to provide customers with enhanced and customized customer services, such as engineering support for field applications, other technical support and training.

With a view to enhancing our interactions with customers and their experience with TPV, we aim to continually improve our customer service processes and standards. Our global customer support enables customers to conveniently access our service whenever they encounter product issues or have any enquiries. In addition, we have well-established mechanisms in place for labelling and advertising our products and services with a focus on giving complete and accurate information to customers. Where applicable, our products carry appropriate energy labels in accordance with energy efficiency standards defined by respective regulatory bodies, including the US Federal Trade Commission, US Environmental Protection Agency and the European Commission.

We have policies and procedures in place for ensuring customer health and safety as we attach significant importance to this matter. We have implemented product safety testing in accordance with IEC 60950 or IEC 60065 since our establishment. Following December 2020, we started to perform IEC 62368-1 product safety testing in EU and some countries. We also ensure that product safety instructions and other health-related information are made available to customers.

Privacy

We respect and attach great importance to customer data privacy and their rights to their personal information gathered by our products and in the course of our services. With a view to enhancing our practice and protecting customer data, data privacy and protection procedures are in place and communicated to our employees through regular training. Our dedication to data protection is also reflected in the Group's Code of Conduct which sets out guidelines for employees in handling data privacy matters. All personal data collected is handled carefully and confidentially, and is only accessible by authorized personnel of the Group. For our product development operations, we will adopt the non-disclosure agreement terms of our customers as the basis of data privacy and protection.

We continue to stay abreast of new regulatory changes, and aim to comply with all minimum requirements of relevant data protection laws and regulations in jurisdictions where we operate, such as the EU's General Data Protection Regulation ("GDPR"). To this end, we ensure that the right measures and policies are in place, and that data protection agreements are made with other companies that process our data to protect our customer's data privacy. In the future, we will continue to implement new policies to enhance how we manage and secure customer data. For example, we are in the process of designing a new system for data protection compliance, which includes a range of new policies, standard operating procedures, assessment forms, data retention schedule, training courses, security measures and audit procedures. Examples of the new data policies to be enforced include the Data Protection Impact Assessment Policy, Data Retention Policy and Data Breach Management Policy. For ensuring third-party data security, we will maintain an inspection list and conduct security assessments on third-party data processors. New guidelines and mechanism will also be put in place for ensuring IT security and preventing unauthorized access to our data. The Data Breach Management Policy will provide guidance for our staff in the event of data breaches. Training courses will be provided to employees to enhance awareness and knowledge of new regulatory changes. For example, we held training for our staff and senior managers on topics related to GDPR in 2020.

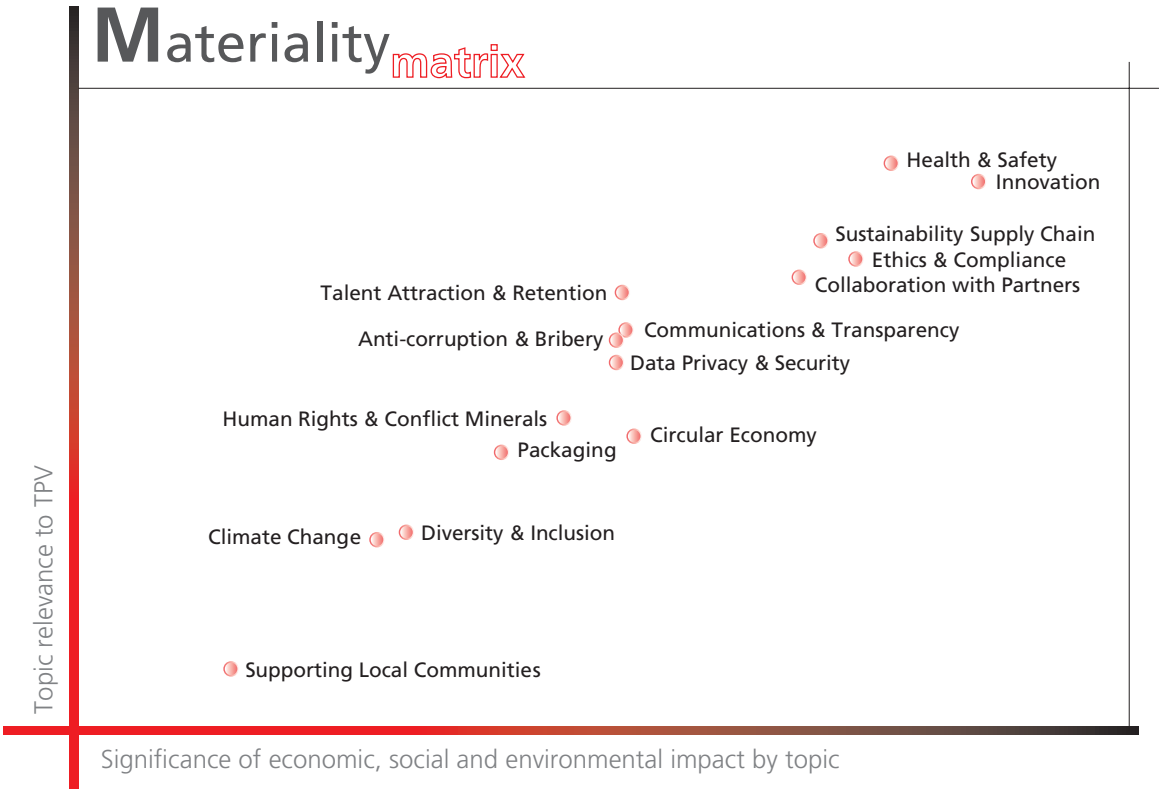
1.5 Stakeholder Engagement and Materiality Assessment

Stakeholder engagement forms a fundamental part of the Group's sustainability efforts. As we engage various stakeholders throughout the year, we aim to understand the expectations of stakeholders on different ESG issues and thus respond to such expectations with targeted initiatives across our operations. Our key stakeholders comprises customers, employees, shareholders, investors, suppliers, business partners, the community and more. Regular communication channels have been established for the Group to engage stakeholders. The detailed stakeholder engagement channel and outcome are as follows:

Stakeholder group	Topics and Issues of Interest	Communication Channels and Frequency	Outcomes
Customers	• Law-abiding operations • Product innovation • Operational integrity	Customer visits and audits, telephone conferences, customer satisfaction survey	TPV maintains effective communications with customers, protects their privacy and facilitates their on-site inspections. Our goal is to provide customers with high quality, innovative technology and services that are efficient and provide flexibility to meet their requirement
Employees	• Employee • Remuneration and benefits • Communication with and compassion for employees • Education and training • Occupational safety • Law-abiding operations	Employee hotline, comment boxes, internal audit box, counseling and corporate social responsibility (CSR) survey	We ensure that employees have avenues to share their views and provide feedback in order to provide a healthy and harmonious working environment and sense of belonging. In addition, TPV has established the Employee Assistance Program ("EAP") in China and Taiwan, helping employees to manage pressure from work, life and family. Also, we organize family activities in order to promote work-life balance

Stakeholder group	Topics and Issues of Interest	Communication Channels and Frequency	Outcomes
Shareholders/ investors	• Prospects of the Group and its financial performance • Corporate governance • Corporate transparency	Annual/special shareholder meeting, investors conference/ meeting, company visits, telephone conference	TPV uses a number of formal communication channels to account for its performance to its shareholders, including annual reports and interim reports, quarterly results announcements, annual general meeting and video conferencing. Also, we hold presentations, road shows and conference calls for the international investment community from time to time
Suppliers/ business partners	• Management of suppliers • Law-abiding operations • Price competitiveness • Technology/ innovation	Supplier conference	TPV organizes meetings with suppliers and conducts surprise audits to effectively convey TPV's requirements to our supply chain
Community	• Community care and charitable projects • Cultural promotion	Donation, participation in charitable activities with the CSR Foundation	Each sites organizes social and environmental activities according to the local community needs.

In the reporting year, the Group has conducted a comprehensive survey with over 122 internal stakeholders to understand the significance and relevance of 15 selected ESG issues to the Group. 24 interviews with external and internal stakeholders, including customers, suppliers and non-governmental organizations (NGOs), are also conducted to obtain in-depth views on the sustainability efforts of the Group. Combining the inputs from our stakeholders, as well as management's view, rating agencies' expectations, peer practice and market trend, the Group has put forward a materiality matrix, showcasing a list of prioritized material ESG topics for our future sustainability development journey. In 2020, it is evident that the top material ESG topics are: Innovation, Health & Safety, Sustainability Supply Chain, Ethics & Compliance and Collaboration with Partners. Also, as we pay attention to the rising importance of climate change to our industry and stakeholders, we initiated our response to the CDP Climate Change module and disclosed relevant actions taken to contribute to resolving global warming.

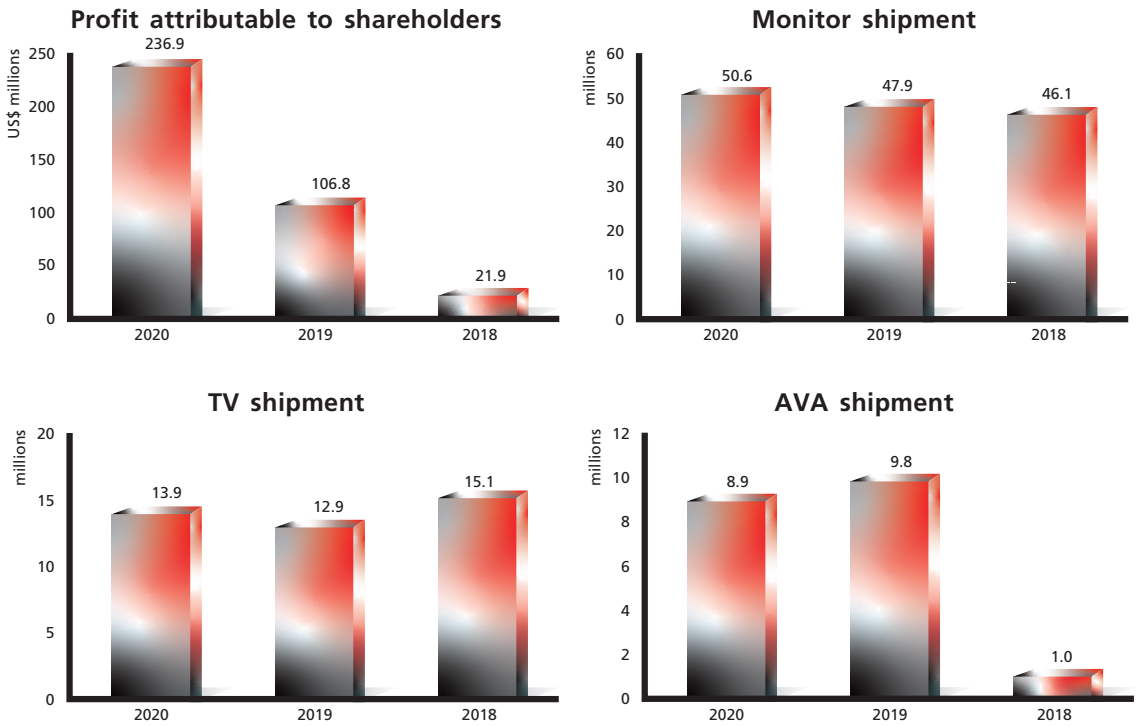


1.6 Financial Performance

The Group reported an impressive improvement in its financial performance amid uncertain global economic conditions in the year under review. For the year ended 31st December 2020, the Group recorded profit attributable to shareholder of US$236.9 million (2019: US$106.8 million), which was equivalent to an increase of approximately 122%. Despite the coronavirus pandemic slowing down the global economy in 2020, our consolidated revenue rose by 2.6% year on year to US$9.1 billion (2019: US$8.9 billion). The growth in profitability was achieved through a combination of stringent inventory management, optimized product mix (including TVs, monitors and AVA products[2]), and improved operational efficiency, which led to an improvement in our gross profit ("GP") margin. Compared to 2019, GP margin grew by 3.3 percentage points to 13.8% in 2020. Profit before tax also increased by 70% year-on-year, reaching US$330.1 million (2019: US$194.1 million).

[2] AVA products include headphones and other audio products such as soundbars and speakers.

In terms of regional performance, Europe continued to be the most important market for the Group, recording a 7% increase in revenue compared to a year ago. In 2020, sales in Europe contributed to 34% of the Group's overall revenue, followed by the PRC and North America which accounted for 27% and 22% of the Group's overall revenue respectively. Due to increasing demand on monitors and ODM TVs, sales in the PRC and North America grew by 3% and about 5% respectively. However, the Group's businesses in South America and the other regions where the Group operates were impacted by a drop in shipment orders over the past year. Sales in South America fell by 11% compared to 2019, accounting for less than 7% of overall revenue in 2020. For the other regions which contributed to a total of approximately 10% of overall revenue, the Group recorded a slight decline of about 6% in revenue compared to 2019. During the year, the Group shipped a total of 50.6 million monitors (2019: 47.9 million units), 13.9 million TV sets (2019: 12.9 million sets) and 8.9 million units of AVA products (2019: 9.8 million units).



1.7 Corporate Governance

The Group is committed to ensuring and maintaining high standards of corporate governance and will continue to review and further improve the Group's corporate governance practices and standards to ensure that its business activities and decision-making processes are regulated in a proper and prudent manner.

The Board

The Board is responsible for the leadership and control of the Group, and it oversees the Group's businesses, strategic decisions and performance. The Board has delegated authority and functions for managing the Group's day-to-day business to its management. In addition, the Board has delegated various functions to Board committees.

During the reporting year the Board consisted of one executive director, namely Dr Jason Hsuan (Chairman), five non-executive directors, namely Mr. Zhang Dongchen, Mr. Xu Guogei, Mr. Sun Jie, Dr Li Jun and Ms. Bi Xianghui, and two independent non-executive directors, namely Mr. Chan Boon Teong and Mr. Wong Chi Keung. The number of non-executive directors constitutes over half of the Board. With the aim of assisting the directors to discharge their duties effectively, the Board sets out to provide appropriate professional advice and guidance to the directors. Furthermore, the Group enables the directors to seek independent professional advice at the Group's expense in appropriate circumstances and upon reasonable request.

Board Committees

In order to discharge its functions in an efficient and effective manner, the Board has appointed several committees to handle various matters related to corporate governance, including the Audit Committee, Nomination Committee, Remuneration Committee, Investment Committee and ESG Steering Committee. In addition, the Board has set up an ESG Steering Committee. It is ensured that the Board committees are equipped with enough resources for undertaking their assigned roles and responsibilities.

Audit Committee

It is the responsibility of the Audit Committee to provide the Board with independent reviews of the effectiveness of the Group's financial reporting process, internal control and risk management systems, oversee the Group's audit process and perform other duties and responsibilities as assigned by the Board. The members appointed to the Audit Committee are all independent non-executive directors, who possess a wealth of management experience in the financial, accounting, commercial, industrial and real estate.

Nomination Committee

The Nomination Committee is responsible for reviewing the structure, size and composition of the Board, making recommendations in the event of proposed changes to the Board, and succession planning for the directors of the Board. Director appointments and removals shall first be reviewed by the Nomination Committee, followed by the approval of the Board. Pursuant to 102(B) of the Group's bye-laws, new directors shall be subject to an election by the Group's shareholders at the next annual general meeting held. The Nomination Committee has the right to seek independent professional advice at the Group's expense to discharge its responsibilities, where necessary and appropriate.

Remuneration Committee

The Board has delegated to the Remuneration Committee the responsibility for determining remuneration packages for individual executive directors and senior managements. During its meetings, the Remuneration Committee reviewed and discussed the Group's remuneration policy and structure for senior management and employees, as well as performance-linked remuneration packages for individual executive directors and senior management. To avoid conflicts of interest, the directors' fees of independent non-executive director shall be discussed and approved by the Board while the independent non-executive directors shall abstain from voting in this regard. Directors' remuneration is determined with reference to the prevailing market conditions and their duties and workload as directors and members of the Board committee.

Investment Committee

The Investment Committee is responsible for reviewing the Group's investment evaluation policies, evaluating investment proposals and making recommendations to the Board. The Investment Committee shall review and report to the Board investment performance, forecasts and business plans on a regular basis.

ESG Steering Committee

The ESG Steering Committee is responsible for strategizing on the Group's direction and making recommendations to the Board for environmental, social and governance matters. It consists of at least five members, including the Chairman of the Board, Chief Operating Officer, independent non-executive directors and the heads of the Group's business groups. The Chairman or an independent non-executive director will act as the Committee chairperson. The ESG Steering Committee shall meet as and when required and at least twice annually in any event.

While the Board has overall responsibility for the Group's ESG strategy and reporting, the ESG Steering Committee has the following responsibilities:

1. To identify ESG matters that are relevant and material to the operations of the Group and/or that affect shareholders and other key stakeholders;

2. To review and monitor the Group's policies, practices and performance in relation to the identified key ESG matters, and ensure that they are appropriate in the context of the size, business nature and scope of the Group;

3. To review and recommend the annual ESG report to the Board for approval;

4. To do any such things to enable the Committee to discharge its powers and functions conferred on it by the Board; and

5. To do any such things, as the Committee deem reasonable, to conform to any requirement, direction and regulation that may from time to time be prescribed by the Board, contained in the constitution of the Group or imposed by any applicable law.

In order to support its roles and functions, the Committee has set up an ESG Project Taskforce to help manage the day-to-day ESG issues of the Group, identify and execute on opportunities to enhance the Group's performance, respond to the evolving market landscape and meet customer requirements. This taskforce is composed of staff across different seniority levels and from different departments, including manufacturing, HR, procurement, R&D and public relations.

1.8 Chairman and Chief Executive Officer

Dr. Jason Hsuan currently serves as the Chairman and Chief Executive Officer of the Group. The Board believes that vesting such dual role in Dr. Hsuan provides the Group with strong and consistent leadership and enables more effective planning and execution of long-term business strategies. In addition, the Board believes that the Group already has a strong corporate governance structure in place to ensure effective supervision of the management.

1.9 Risk Management and Internal Control

The Board acknowledges its responsibility for overseeing and maintaining sound risk management and internal control systems for the Group and reviewing the effectiveness of these systems.

Given the manufacturing nature of TPV's business, the Group supports and adopts a precautionary approach towards designing and developing its products. According to the Group's Environmental Policy, management procedures have been created with the aim of reducing environmental impacts of its products and responding to global environmental regulations such as the RoHS and WEEE directives. Other processes are also established to help ensure environmental pollution is minimized during manufacturing and materials with harmful substances are avoided for environmental protection.

Risk management

The Group adopts a two-pronged approach for risk management, namely top-down and bottom-up. The Board has put in place an enterprise risk management ("ERM") system, the process of which is driven by the Risk Management Committee and monitored by the Audit Committee at the top while implemented in day-to-day operations by functional units at the bottom. Significant risks are monitored by functional units through an established mechanism in a timely and effective manner. The Risk Management Committee regularly reviews and assesses significant risks and mitigation plans, as well as reports them to the Audit Committee.

For ensuring sound and effective risk management, the ERM system includes the following key features:

1. A distinct organizational structure for different responsible parties with defined authority, responsibilities and risk management roles; and

2. A robust ERM process developed for identifying, evaluating, managing and monitoring significant risks.

The Risk Management Committee facilitates ERM and supports business units in carrying out ERM procedures in accordance with the Group's Risk Management Manual on an annual basis. The Risk Management Manual includes a five-step procedure:

1. Risk identification — identify potential risks faced by the Group and its subsidiaries

2. Risk analysis — analyze the identified risks on two dimensions: potential impact and likelihood of occurrence; prioritize key risks and confirm top risks

3. Risk handling — select an appropriate risk treatment and develop the relevant risk management strategies for identified risks

4. Risk monitoring — perform ongoing and periodic monitoring of risks to ensure the risk management strategies are operating effectively

5. Risk reporting — consolidate the risk assessment results; establish detailed action plans and report to the Risk Management Committee and the Audit Committee

1.10 Financial Risk Management

The nature, locations and scale of the Group's business activities may expose the Group to several financial risks, namely credit risk, liquidity risk and market risk (e.g. risks relating to foreign exchange, market prices and interest rates). The Group seeks to avoid, reduce or mitigate the potentially adverse effects of these risks on the Group's financial performance through its overall risk management system that accounts for the unpredictability and uncertainty of financial markets. The Group has risk management policies in place that are approved by the Board while a central treasury department (the "Group Treasury") is responsible for financial risk management. The Group Treasury identifies, evaluates and mitigates material financial risks in close cooperation with the Group's operating units. In addition to approving relevant policies, the Board is also responsible for providing appropriate direction and principles on overall risk management, and in relation to areas such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and cash management.

1.11 Anti-Corruption

It is the Group's belief that responsible business conduct and integrity are essential for maintaining a strong presence in the global market, and that honesty and fairness are important assets in business. The Group has established policies and resources to support its commitment to ensuring the highest standards of ethical and responsible business practices and adopts zero tolerance for any form of bribery, corruption and fraud. During the reporting year, there were zero confirmed incidents or legal actions reported.[3]

The Group's anti-corruption principles are communicated to all staff and employees in various forms, including employee handbooks (which are distributed to every employee upon hiring, updated from time to time, and are accessible via the Group's intranet) and regular compliance and refresher training sessions. The Group's Code of Conduct is provided to establish a more effective supervisory system on corporate ethics, reinforce anti-corruption practices and protect corporate interest. The Code sets out standards of behavior and relevant guidelines for personnel of the Group, its subsidiaries, associated companies and TPV representatives in joint venture companies and applies to business and operations in all countries and regions in which the Group operates. Effective monitoring systems and management procedures have been developed to detect bribery, corruption, fraud and other malpractices. In addition, the Group has a transparent tendering process in place to ensure vendor selection and related activities are conducted in a fair, open and transparent manner. To further promote ethical business conduct, the Group requires current and prospective suppliers to sign an anti-corruption declaration form as a prerequisite for business transactions.

[3] For TPV, confirmed corruption incidents are defined as an incident that has been found to be a substantiated violation of the corruption-related code of conduct, company policies or law. Incidents that are still under investigation during the reporting period were not regarded as confirmed incidents.

For instances of suspected or observed misconduct, the Group sets out procedures and guidelines for reporting and complaint escalation in its Whistle Blower Policy. Staff and employees are encouraged to utilize the reporting channels available to escalate concerns and issues to an Independent Compliance Officer,[4] the corporate HR, the Group Internal Auditor or the CEO, depending on the nature of complaint. All reported cases and complaints will be followed up in a confidential and timely manner. Investigations will be carried out if it is deemed appropriate, and confirmed cases will be reported to the Audit Committee, who has oversight responsibility for ensuring that investigations are conducted in an independent, impartial and unbiased manner.

[4] The Independent Compliance Officer ("ICO") of each business unit is, by designation, the highest official in the Human Resource Department. However, if the business unit does not institute such position, the role of ICO should be taken up by the official who is appointed by the person-in-charge of that business unit. The ICO of each business unit should have at least one designated person. In case of any conflict of interest between the declaring staff and the ICO, that respective declaration should be processed and approved by the designated person.

2. SUSTAINABLE DEVELOPMENT GOALS

As a company with global operations and reach, we are taking a more intentional step in tackling global issues by integrating the SDGs (Sustainable Development Goals) into our strategy and business model. The common framework of the SDGs will also allow stakeholders to compare our actions and results with that of peers.

In addition to advancing the SDGs, we joined the United Nations Global Compact in November 2020. We commit to making the Ten Principles of the United Nations Global Compact on human rights, labor, environment and anti-corruption part of our everyday strategy and company culture.

To hone in on the SDGs where we could bring significant positive impact, we performed a peer and customer analysis to determine which were most relevant for TPV. We conducted interviews with stakeholders through an external consultant, followed by board validation of the results. We highlight examples of our contributions to SDGs 4 (Quality Education), 8 (Decent Work and Economic Growth) and 12 (Responsible Consumption and Production) in each overarching section of the report — Commitment to our People, Business Partners, Environment, and Community.

3. COMMITMENT TO OUR PEOPLE

3.1 Overview

We strive to be an employer of choice through the opportunities we provide for our people to grow as well as our competitive remuneration and benefits.

3.2 Recruiting and Retaining Talent

TPV's people are paramount to its success. In China, we collaborate with top universities to develop our talent pipelines. Fuzhou University and Xiamen University of Technology are among the institutions we work with, where selected students work closely with TPV in-house engineers on product innovation and development. Through these hands-on learning experiences, we support SDG 4.4 (Quality Education) to prepare university students with exposure to relevant technical and soft skills for employment. Outstanding students are also recruited to become part of the TPV family.

We host training programs with universities to train students and future talents on Android software and various manufacturing technology. Launched in 2009, these training programs have benefited 544 students to date. Separately, since 2015, TPV has cooperated with other companies in the photoelectric industry on joint classes covering optoelectronics and mechanical topics to upskill students, including students from Xiamen University of Technology and Taiwan's Zhonghua University.

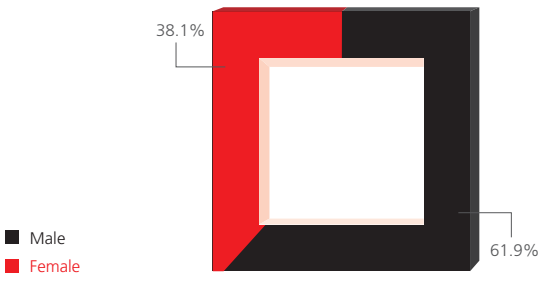
For training from the perspective of our staff, we provide training on topics such as effective communication and technical topics including Electrostatic discharge protection. The Training Program for Advanced Officials was paused in 2020 in light of the pandemic and is planned to be continued in 2021. In this program, selected staff receive training to supply them with the skills needed to be successful as our future management team, including in the areas of effective leadership and communication.

In our recruitment process, we treat all job applicants fairly and equally regardless of gender, sexual orientation, marital status, race, nationality, ethnic or national origin, religion, age, disability or union membership status. There is zero tolerance to any form of harassment or discrimination. This applies to the terms and conditions of employment, including but not limited to pay, promotion, training and transfers. Employment is offered based on applicants' merits, irrespective of whether individuals are referred or direct applicants. We frequently review recruitment and talent processes to ensure individuals are selected, promoted and treated in a fair and equal manner including undertaking a yearly review on our workforce demographic to create more equal opportunities for our employees.

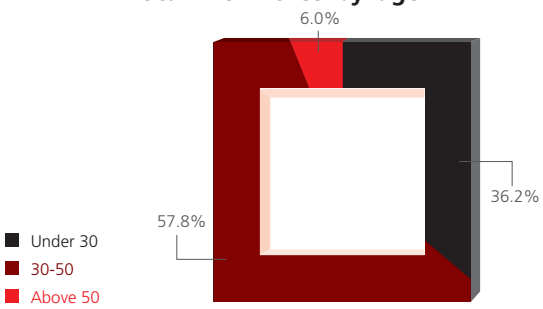
We are committed to workplace inclusivity. There is zero tolerance for harassment and discrimination on any grounds and we frequently review related procedures to promote diversity, equal opportunity, and decent work for all (SDG 8). We have internal grievance mechanisms in place, such as the CEO box, to facilitate staff in raising any work-related concerns or issues. We stand behind economic growth that is sustainable and commit to ethical practices that guide our company operations.

Regarding TPV's people and career progression, we reward and promote our people according to performance, capability and potential. A merit-based assessment approach allows clarity on potential career advancement expectations; clear career development avenues also facilitate the advancement and retention of our talent. We offer competitive remuneration packages following industry practices, where packages are regularly reviewed to remain competitive in the market.

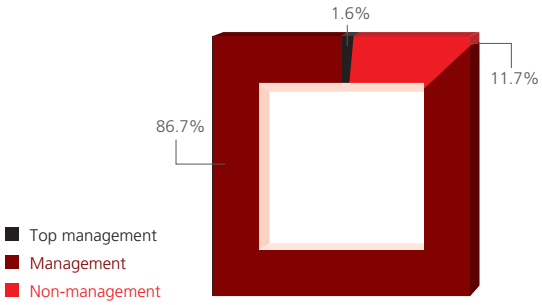
Total workforce by gender



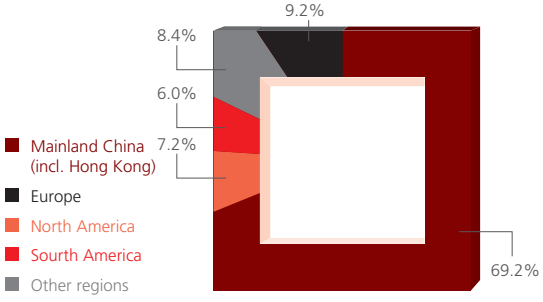
Total workforce by age



Total workforce by management level



Total workforce by geographical region



3.3 Training and Development

We champion our people's growth and realization of potential through our training and development opportunities. Our training consists of three focus areas:

Focus	Examples
Technical	• Computing technology development and future application trends • Business opportunities for 5G and Smart Healthcare • Global Smart Homes development trends • VR/AR industry development and application trends
Functional	• Project management • Occupational health and safety management system • Office software usage • Business English
Soft skills	• Effective presentation and writing • Active listening • Time management • Design thinking

In our Europe office, we increased the training budget to now provide Project Management, Personal & Team Development and Excel training across departments in 2020. This includes mandatory all staff trainings following local legislation, which is supplemented by biannual product related trainings. To take our trainings to the next level, one of our main priorities is to further customize the TPV E-learning platform. As of December 2020, there were 37 courses on the platform accessible to all AOC International and MMD-Monitors and Displays Holding employees and we aim to continue increasing the number of courses in the 2021 customized version. Customization is made to the use process and increasing user-friendliness. Alongside, we are strengthening detailed succession plans to facilitate internal promotions and build a robust internal succession pipeline.

When it comes to individual development and career plans for all employees, the annual "Employees Performance Appraisal" (EPA) is in place where employees are required to specify their annual goals. This tool supports employees and their managers to track career development and discuss progress.

3.4 Promoting Health, Safety and Well-being

Our people's health, safety and well-being are treated with the greatest priority. In response to COVID-19, we established the Epidemic Prevention Committee in our China factories to stand behind the health and safety of our staff and reduce health and economic risks to the company. Supervisors have been taking action since the pandemic's early stage in January 2020, where they deployed pandemic prevention and control measures, including the purchase of face masks and PPE. Throughout the pandemic period, we paid close attention to government guidance as well as kept up regular disinfection, face mask wearing, and temperature screening measures. We also created WeChat groups as a platform to allow efficient communication of the latest relevant pandemic news and actions.

To assess wider H&S-related risks across our operations, we have an established Employee, Health and Safety ("EHS") team to identify and mitigate these risks. We have implemented management systems in accordance with local regulatory requirements or international standards, including ISO 45001 and SA 8000. We have obtained the ISO 45001 and SA 8000 certification for 100%[5] and 50%[6] of our operational facilities, respectively. We use these certification to inform our health and safety policies and management plans.

All employees receive occupational health and safety training upon joining. This training is supplemented with job-specific health and safety trainings. Trainings are delivered by internal as well as external experts in the native language of workers. In addition to trainings, health and safety procedures are also set out in the native language of workers to ensure familiarity and understanding. Training participants are asked to rate content delivery and the trainer's effectiveness after each training session, and this feedback helps inform opportunities for improvement and the effectiveness of future trainings.

[5] Percentage based on 8 entities with ISO 45001 certification out of 8 in-scope production plants.

[6] Percentage based on 4 entities with SA 8000 certification out of 8 in-scope production plants.

An example of general training that employees across our sites take part in is the fire prevention training. These trainings seek to equip staff to effectively deal with fire emergencies. In our Beijing site for example, participants included not just our manufacturing staff but also firefighting rescue, warehouse management, restaurant and kitchen teams, to name a few. Topics covered include laws and regulations related to fire hazards and preventative measures for fires caused by electrical hazards. Through this and other safety trainings, we encourage our staff to adopt a proactive prevention attitude, as well as know that everyone plays a role in creating a safe environment.

In assessment of work-related hazards, each manufacturing location conducts risk assessments annually. To improve working conditions for our people, we avert and mitigate harmful occupational health and safety ("OHS") impacts through prompt investigation of work-related hazards, incidents, and near-miss safety incidents, including workers involved in the investigation process, while the EHS team organizes and oversees corrective actions. To amplify best practices and prevent future potential OHS hazards, practices that are effective are shared with other manufacturing locations through internal communications channels. TPV's H&S policies apply to contractors, who are expected to report any H&S related incidents to its factories and sites.

Our occupational health services include hazard identification and assessments to ensure workplace safety and provision of free health examinations before, during and after jobs for individuals exposed to hazardous working conditions. We ensure the quality of these services through complying with relevant regulations under the "Occupational Disease Prevention and Control Law" as well as working with a qualified third party to perform the occupational health examinations. To facilitate accessibility, we ask the third party to conduct on-the-job health examinations on factory grounds for the convenience of our staff. In addition, we support employees to make appointments for pre-job and off-job health examinations. Employees' transportation expenses to attend to these examinations can be reimbursed.

Further actions regarding employee health and safety include preventative measures for stress and noise, such as the purchase and use of low-noise machinery, regular maintenance of machineries, noise detection tests to determine performance in comparison to standard, use of protective equipment. In parallel, we carry out EHS training and chemicals training for all relevant employees prior to and at the beginning of job commencement.

We engage employees in occupational health and safety through trainings where we support employees to understand how best to identify and react to potential hazards in their working environment. For example, TPV hosts workshop trainings for employees involved in high-risk operations. Employees also receive OHS information through intranet channels.

In terms of supporting our employees' access to non-occupational health services, we provide mandatory health checks and health insurance to employees. We operate several retirement schemes, including pension plans and post-employment medical plans in accordance with local rules and regulations. Severance pay is provided on a case-by-case basis. We also adopt several employee insurance and social insurance plans.

In tandem in Mainland China and Taiwan, we support our staff's mental health through the Employee Assistance Program ("EAP"). EAP facilitates access to professional counselors for advice in facing stress points from work and life and is made available to our staff 24 hours every day through hotline, Skype, email, and WeChat.

We organize sports activities including basketball games, badminton competitions, table tennis tournaments, and charity runs at multiple sites for employees to facilitate both team bonding and physical well-being. Considering the pandemic's effect on 2020, these activities were more often held at the later portion of the year when the pandemic was further under control and when it was deemed safe to have social gatherings with precautions in place.

All employees in TPV are entitled to rest in 7 days of work. Regarding remuneration and paid leave policies, each site has a specific policy in accordance with local regulations. With overtime hours, remuneration is in either payment or time off in lieu.

Number of work-related injuries	2020	2019	2018
High-consequence work-related injuries (excluding fatalities)	33	57	56
Recordable work-related injuries	34	57	56

3.5 Labor Standards

We have recently partnered with Pact, an international non-profit that hosts the Mines to Markets program to make artisanal and small-scale mining (ASM) safer and more productive for marginalized individuals. Our efforts will concentrate in the North Kivu Province of the Democratic Republic of Congo (DRC) where an estimated 2 million people directly depend on ASM activities for their livelihood. Through our partnership, we seek to advance the well-being of this demographic in practical ways: improving safety at mine sites, assisting mining communities to understand their rights, including implications on human rights, as well as knowledge upskilling, such as in the legal requirements of mining. The latter will facilitate more informed decision-making from a clearer understanding of mining's implications.

AOC International (Europe) B.V. and MMD-Monitors & Displays Nederland B.V. (Philips Monitors) will support Pact to train local mining stakeholders to make more informed decisions on legal requirements of mining. This raises awareness on DRC's new Mining Code and Regulations on ASM adopted in 2018 so that mining stakeholders including artisanal miners can operate in line with rules and avoid fines. The training will also help mining communities understand their rights, challenges with mining in conflict-affected and high-risk areas, possible implications for miners' security and human rights.

A second focus area of the partnership is improving OHS at mine sites. As ASM is often carried out informally and with minimal attention on health and safety, workers are exposed to a wide range of physical hazards. The partnership will support Pact to work with local mining cooperatives to assess OHS risks at artisanal sites and develop mitigation measures. Pact will also adopt a "train the trainers" approach to provide OHS training to mine managers, team leaders, cooperatives and government agents, to maximize health and safety awareness and improvement.

In the context of ethical employment, we fully respect the internationally recognized human rights of all individuals, and work to uphold the human rights of our staff and those who work in our supply chain in support of SDG 8.8. We joined the UN Global Compact in November 2020 and commit to making its principles, including that on human rights and labor, part of our strategy and operations. In line with ILO Conventions Nos. 29 and 105, we prohibit use of forced labor. Supplementing internal review efforts, TPV also conducts EICC or ECG audits to ensure no child and forced labor exists in any of our operations. Whistleblower procedures are in place for employees who would like to raise any potential concerns. Namely, staff can utilize the CEO box, overseen by the Group Internal Auditor, for anonymous submissions on any actions against the TPV Code of Conduct, including that of child or forced labor.

With suppliers, we also make explicit our expectations on child and forced labor. We require suppliers to acknowledge and implement the RBA Code, ISO14001, ISO45001, supplemented by our contract standards. Our Standard Purchasing Contract includes human rights related criteria, including explicit statements on the prohibition of child labor at any stage of manufacturing, and ensuring employees have free choice over their decision to work and freedom of association. Regarding forced labor, there is specific language detailing suppliers not to use forced or bonded labor under any circumstances in any form. Suppliers' annual audits also include social and human rights related criteria.

Through the launch of our Human Rights Policy and Modern Slavery Statement, we are taking steps to strengthen our commitment to human rights. Our current actions include strengthening due diligence to pro-actively identify potential risks of modern slavery, adding a selection criteria to the supplier selection process related to modern slavery, and equipping TPV procurement staff through trainings on modern slavery and trafficking. Our Code of Conduct references the standards of the Responsible Business Alliance (formerly the Electronic Industry Citizenship Coalition) and is in adherence with international and local labor standards.

When recruitment fees exist for sites that include immigrant workers, TPV bears all the recruitment costs in all cases. We ensure through internal processes that no payment is deducted from workers by the recruitment agency. Safeguards are in place to protect our people working at production sites from working risks include close supervision of experienced employees to new employees.

3.6 Employee Communication

We value our employees' voices and have several communication channels in place including comment boxes, hotlines and internal audit mailboxes. All communications received are kept strictly confidential and only disclosed to relevant personnel. We also have in place dedicated staff through the Employee Assistance Program responsible to talk with employees to support them on challenges encountered in work and life. In light of the pandemic and working from home measures, TPV expanded usage of tools such as WebEx and Team Room to facilitate ongoing employee communication.

3.7 Regulatory Compliance

In 2020, an incident occurred in one of the TPV factories regarding a violation of safety practices. Although safety SOPs (Safety Operational Processes) have been defined, the protocol was not followed. Because of this incident, the specific department and general managers have been disciplined. Measures were put in place to strengthen training on following the proper protocol and the importance of safety.

Besides the above, we are not aware of any non-compliance with laws and regulations that have had significant impact on the Group relating to employment, occupational health and safety or labor standards during the reporting period.

4.1 Overview

In 2020, our supply chain comprised over 30,000 around the world. To embrace sustainability in business, we consider our suppliers to be important business partners and consistently seek to forge and sustain strong and supportive relationships with them, through engagement and collaboration.

4.2 Supply Chain Management

CSR Code of Conduct

TPV is endeavoring to help all suppliers to abide by relevant environmental and social laws and regulations, and take immediate actions in accordance with our robust environmental and social policies, including but not limited to, the Environmental Policy, the Health and Safety policy, Code of Conduct, Corporate Procurement Agreement and our Social Standards. We have developed a comprehensive management system to ensure that each of our suppliers align with our expectations in respect of compliance, integrity and sustainability.

In March 2021, we introduced a CSR Code of Conduct to support our sustainability strategy and deliver more value to internal and external stakeholders while reducing our environmental footprint at the same time.

TPV itself and suppliers neither tolerate nor contribute to human rights abuses that include forced labor, child labor and environmental degradation. We are committed to ensuring the right of employees to freely choose their employment and freedom of association, providing humane treatment to employees, and protecting employees from harassment and discrimination.

To embed and integrate respect for human rights throughout our business process, every new supplier is required to sign a social responsibility agreement attached to the procurement agreement. Each supplier thereby receives an annual Quality System Audit (QSA) regarding human rights themes such as no forced labor, no child labor, minimum wage compliance, and anti-discrimination. After a comprehensive review of the results of the assessment, different levels of penalty will be imposed on disqualified suppliers.

More essentially, we have established comprehensive screening processes focusing on supplier selection and evaluation. When the new supplier is admitted, the supplier should provide ISO14001 certification and make self-assessment for environment. New suppliers are required to undertake a rigorous evaluation process which considers not only technical capability and quality, but also sustainability performance. Key suppliers are required to sign an agreement confirming their commitment to work with us in an environmentally and socially responsible manner.

To identify areas for enhancement, our dedicated teams conduct regular evaluations and ad-hoc audits of supplier performance. Suppliers are obliged to undertake corrective actions in a timely manner. Non-compliance with our assessment criteria can lead to the termination of the business relationship.

There is no doubt that sustainability in the supply chain calls for an industry-wide initiative. The Group has the Responsible Business Alliance Code of Conduct (RBA Code) and encourage its suppliers to do the same. Good practices are set out in RBA Code to guarantee that:

(a) the working conditions in the electronics industry supply chain are safe;

(b) those workers are treated with respect and dignity; and

(c) business operations are environmentally responsible and conducted ethically.

Conflict Minerals Management

TPV recognizes the significance concerning the procurement of raw materials from regions experiencing political and social conflicts, including the conflict minerals of tin, tantalum, tungsten, gold (3TG), cobalt and other rare earth elements from Congo-kinshasa or the surrounding countries.

To minimize the negative societal and environmental impacts including human rights infringements and environmental problems and in support to SDG 8, TPV has adopted industry-leading policies and monitoring practices and are broadening our vigilance beyond conflict minerals to a wider range of minerals and geographies. Being a member of the Responsible Minerals Initiative (RMI) since 2015, TPV has strived to control conflict minerals sourcing and has established the conflict minerals management system according to the Organization for Economic Co-operation and Development's (OECD) five-step framework for due diligence in the supply chain.

TPV's suppliers are required to adhere to conflict-free minerals policies, and ensure that no child or forced labor was engaged in any form. With suppliers, we insist upon anti-child and forced labor policies, as well as policies on the use of conflict-free minerals.

Since 2019, TPV has been devoted to having the Conflict Minerals Reporting Template (CMRT) investigation of cobalt and 3TG. TPV continues its engagement with industry programs. For instance, we actively attend seminar and summit launched by the RMI to obtain the latest information and share it with our suppliers. Furthermore, with the goal of maintaining more than 90% of our suppliers are Responsible Minerals Assurance Process (RMAP)-certified, we will constantly reach out to disqualified smelters and incentivize them to take immediate action wherever possible to fulfill the requirements. In addition, we will continue our work with priority suppliers helping them understand and meet the standard of TPV's conflict minerals management policy.

In 2020, TPV initiated a high-risk supplier survey, which the Group required all its suppliers to complete (100% response rate). In summary, as of 2020, there were 336 3TG smelters or refineries in TPV's supply chain, of which 243 (72%) were involved and certified in RMAP. The remaining non-certified smelters will have three months for improvement. If no further action is taken, TPV will request the supplier to remove the smelter from our supply chain within one month.

4.3 Engaging Suppliers

We believe that close collaboration with our suppliers is essential to achieve supply chain sustainability. To this end, we discuss our expectations with suppliers and assist them in fulfilling our requirements.

Since 2020, we have provided Responsible Business Alliance (RBA) trainings to our suppliers and employees, such as our procurement department and shared industry insights to forge mutual benefits. These awareness trainings are also related to child labor, slavery and/or human trafficking. By means of these trainings, our suppliers and employees are able to gain knowledge on environmental or social issues. We also hold seminars to engage our suppliers, at which we facilitate the exchange of experience sharing as well as provide visibility for major plans and updates. To further enforce our commitment to the code of conduct throughout the supply chain, we have collaborated with external party to conduct RBA program for our suppliers.

More importantly, we prioritize the suppliers who are consistently reliable during procurement and affirm their achievements through recognitions and awards, to incentivize better performance and foster long-term relationships.

4.4 Regulatory Compliance

The Group was not aware of any breach of laws and regulations that have a significant impact on the Group relating to bribery, extortion, fraud and money laundering during the reporting period.

5.1 Overview

Environmental sustainability is core to our business operations and sustainability strategy. As a leader in the monitor and TV manufacturing industry, it is both our responsibility and stakeholders' expectation to reduce our environmental footprint by enhancing operational efficiency and adopting sustainable product design. As set out in our Environmental Policy, we are committed to taking action to continually improve understanding of our potential environmental impacts; strengthen our environmental management system; enhance resource efficiency, including materials, energy and water; advocate green design, green production and green supply chain; and implement new initiatives to improve our overall environmental performance.

The Group has established a robust environmental management system to guide our operations and identify improvement opportunities. This formal environmental management system is carefully crafted based on the international standard — ISO14001. To demonstrate our commitment, we have obtained ISO14001 certification, covering 62.5% of our operational facilities.[7] For example, the Environmental, Health and Safety ("EHS") Management Manual is developed to outline the Group's roles and responsibilities in environmental protection, relevant risks and opportunities as well as targets and indicators.

Ongoing monitoring and audits are also conducted to ensure that the environmental impacts of our operations are properly mitigated and in line with the stipulated discharge standards.

5.2 Emissions

We understand that air and greenhouse gas ("GHG") emissions, such as carbon dioxide, can have significant impacts on the environment and climate change, therefore we make ongoing efforts to manage and reduce emissions from our own operations. In 2017, the Group implemented its first initiative in setting an emission reduction target for all its factories in PRC. The target was later updated due to the addition of a new production site in Xianyang, China in 2018, which aims to reduce our combined scope 1 and 2 GHG emissions by 4% by 2022 based on 2018 levels. In the meantime, we are in the process of formulating the Science Based Targets we committed in December 2020.

Across our sites and facilities around the world, specific policies and procedures are in place to control emissions and air pollution from our operations. In China and Taiwan, we have replaced traditional lighting with LED panel lights at our sites. In Brazil, we aim to downsize our company vehicle fleet to reduce direct emissions from motor fuel use. In Xiamen, China we have installed fume purifiers in our facilities to process released flue gas and used specialized engineered fluids for our products to reduce emissions of waste gases.

[7] Percentage calculated based on 5 entities with ISO14001 certification out of 8 in-scope production plants.

Compared to 2019, the Group has recorded an increase in GHG emissions over 2020 due to increased production activity across our factories to meet the surge in demand for TVs and monitors. Despite the increase in production volume, we have achieved improvements in energy efficiency to better manage energy consumption across its sites. The Group will continue to identify improvement opportunities and new initiatives to control its GHG emissions in line with its emission reduction target. Our scope 1 and scope 2 GHG emissions during 2020 together with the comparative figures of the previous year are indicated as follows:

GHG emissions[8]	Unit	2020[9]	2019[10]	2018[10]
Total GHG emissions (Scope 1 & 2)	$MTCO_2e$	157,289	126,937	131,142
Scope 1	$MTCO_2e$	28,188	21,050	23,096
Scope 2	$MTCO_2e$	129,101	105,887	108,046
Intensity of total GHG emissions	$MTCO_2e$/ US$ million	17.26	14.29	14.34

To further our commitment to reducing GHG emissions, in December 2020, we began our new initiative to commit to setting a science-based target that will be aligned with the Paris Agreement, limiting global warming to well below 2°C.

5.3 Energy

Given the nature of our industry, we place great emphasis on the achievement of energy efficiency for environmental and cost-saving benefits. Policies and guidelines are established for energy efficiency and saving measures. For instance, in China, we have installed air-conditioning systems with intelligent controls at out sites and upgraded air-condition systems in the laboratories by using frequency converters for more efficient energy consumption and installed solar photovoltaic systems for on-site renewable energy generation. In Brazil, we aim to optimize floor area for our operations to save energy and implement solar energy installation projects. Motion sensors have been installed to automatically switch off lights at vacant rooms and timer controls have been employed in air conditioners for energy saving.

[8] For 2020, the scope of key environmental data covered the 18 organizational entities mentioned in the section of "About this Report", including 3 new entities. While the figures presented for 2019 and 2018 only covered 15 entities, the operations and associated environmental impacts of the 3 new entities were insignificant in 2019 and 2018, and therefore, no restatement was made with reference to these new entities.

[9] For 2020, TPV has revisited our approach towards data collection. TPV's GHG emission figures for 2020 have included direct emissions from refrigerants used during 2020 in the calculation methodology, while 2019 and 2018 has not. To provide a like-to-like comparison, the estimated direct emissions from refrigerants used was 9,490 MTCO2e during 2020 and 9,471 MTCO2e in 2019.

[10] The figures presented for 2018 and 2019 were not revised nor restated. Hence, they may not be directly comparable with the figures presented for 2020, and should only serve as reference.

When it comes to our production facilities and offices, we purchase renewable energy to meet our power consumption needs when possible. For example, in Europe, AOC International (Europe) B.V., MMD-Monitors & Displays Nederland B.V. and TP Vision Europe B.V. make use of energy generated from wind as part of their energy mix. By purchasing Guarantees of Origin recognized by the local government, we contribute to the consumption and production of sustainable energy and to limit the release of GHG emissions. To minimize our energy usage and to identify areas of improvement, we also engage external agencies to perform regular energy audits for our operations. Furthermore, our office in Amsterdam, the Netherlands already received the ISO 5001 certification for its energy management system, and we aim to attain such certification for more offices and production sites.

In Europe, we are implementing a new energy management system with a view to consuming energy for our business activities in a more sustainable way. The system will support the Electronic Product Environmental Assessment Tool ("EPEAT") benchmarks and facilitate compliance with the Dutch Energy Efficiency Directive. An external audit was completed on the system in November 2020 for the ISO50001 standard.

In the future, we will continue to explore and implement new energy saving initiatives and technologies in order to further reduce our energy consumption across our sites and operations. During 2020, our direct and indirect energy consumptions are indicated as follows:

Energy consumption	Unit	2020	2019	2018
Total energy consumption	MWh	254,251	251,462	263,795
Direct energy consumption	MWh	84,333	94,655	103,553
Gasoline/Petrol	MWh	2,118	1,808	1,969
Diesel	MWh	1,054	636	710
LPG	MWh	70,688	82,010	91,112
Natural gas	MWh	10,468	10,195	9,756
Other fuels	MWh	4	6	6
Indirect energy consumption	MWh	169,919	156,807	160,242
Purchased Electricity	MWh	169,919	156,807	160,242
Intensity of total energy consumption	MWh/ US$ million	27.90	28.31	28.84

5.4 Water

Water efficiency is an important environmental topic to the Group as it understands the challenges imposed by water scarcity and is committed to taking action to help conserve the limited water resources. We mainly consume water for our premises, including staff housing, offices and production plants. Our water usage is monitored as one of the key performance indicators for the Group.

To effectively manage our water consumption, we have put in place internal policies and instructions as guidance to our staff. Employees are encouraged to be more aware of their water use habits and to use water more efficiently. Topics on water conservation may be included in our training sessions to raise awareness and improve knowledge of practical ways to reduce water use. For our production operations where higher water usage occurs, we aim to set goals to limit water consumption for our factories. Other water-saving measures that have been taken include installing tap timers and more water efficient equipment for our office toilets. For our Brazil operations, we use groundwater from wells that licensed by local environmental protection agency. In 2020, we consumed a total of 1.90 million m^3 (2019: 1.81 million m^3) freshwater which was approximately 79.13 m^3 (2019: 66.83 m^3) per employee.

We manage wastewater generated from our premises in strict accordance with the local laws and regulations in areas where we operate. For example, in mainland China, wastewater is treated on-site at our own facilities prior to discharge or is discharged into municipal sewerage system for centralized treatment; and in Brazil, we have a dedicated effluent treatment plant to process wastewater before discharge. In 2020, we recycled 24,788 m^3 of wastewater (2019: 16,013 m^3) which was mainly used for watering the plants and flushing toilets.

Water consumption	Unit	2020	2019	2018
Total water consumption	m^3	1,902,331	1,806,794	1,972,211
Intensity of total water consumption	m^3/employee	79.13	66.83	71.11
Water recycled and reused	m^3	24,788	16,013	12,604
Recycling rate of total water consumed	%	1.3	0.9	0.6

5.5 Materials

We are committed to using environmentally responsible packaging materials for our products. For example, our production plants in Poland and Brazil recover and reuse packaging waste, such as cardboard, which saves thousands of trees each year. Our manufacturing operations in Qingdao, China encourage customers to reuse the packaging of the products they received.

For office administration, we encourage environmentally friendly practices and strengthen the control on the use of office paper for photocopying and printing. For example, internally used or unofficial documents are requested for double-sided printing. We also strictly control the procurement, management and use of office supplies and consumables to avoid and reduce waste.

During 2020, we consumed a total of 93,358 tons (2019: 97,686 tons) of materials for production with an intensity of 1.45 kg (2019: 1.73 kg) per unit of product.

Materials consumption[11]	Unit	2020	2019	2018
Total material used	metric ton	93,358	97,686	99,937
Intensity of material use	kg/unit of product	1.45	1.73	1.78
Total non-renewable material used	metric ton	12,412	—	—
	%	13.3	—	—
Total renewable material used	metric ton	80,946	—	—
	%	86.7	—	—

5.6 Waste

Given the nature of our business activities, we strive to manage waste generated from our operations and premises in a responsible manner to minimize the impact on the environment and surrounding neighborhoods. Our principles for waste management are to encourage reduction at source, reuse and recycling in support of SDG12. We aim to employ new and advanced technologies and identify improvement opportunities for our process efficiency to help achieve a more effective approach towards waste management. As part of the overall environmental management, policies and procedures are in place in conjunction with various measures focused on management of different wastes, including municipal solid waste, hazardous and non-hazardous waste. We have established dedicated processes for waste sorting, storage and treatment that strictly comply with relevant laws and regulations. For example, our operations in China report regularly to the local authorities on matters related to hazardous waste treatment.

For disposal of hazardous and non-hazardous waste, qualified third parties have been appointed to collect the waste generated from our premises. To facilitate orderly transportation of our hazardous waste to disposal facilities by trucks, we follow the trip-ticket system established by the respective local authorities in jurisdictions where we operate. Furthermore, we have strengthened our measures for preventing or reducing the potential hazards of seepage, leakage, fire and theft at places where we store our hazardous waste.

[11] For 2020, we have revisited and enhanced our approach collecting material used data in line with GRI requirements. "Total non-renewable material used" and "Total renewable material used" were not available for 2019 and 2018.

To reduce our waste generation, we encourage our suppliers for organic solvents to recycle and reuse empty solvent containers to avoid hazardous waste generation. We also aim to continually enhance our production techniques and processes in order to reduce resource consumption or use resources more efficiently, and to decrease the number of defective goods and the amount of production scrap. For example, we have introduced a nitrogen scheme for the production process of wave soldering at our plants in mainland China that can help reduce the amount of tin slag generated. Fluorinated electronic cleaning solutions are used to replace traditional stain removers to avoid the potential health hazards and lower the risk of occupational diseases to our employees, as well as to reduce the emission of organic waste gases.

Other measures are also taken to minimize the environmental impacts from our products when they reach their end of life. For example, we avoid or reduce including or using toxic or harmful raw and auxiliary materials in our product designs or during product developments, and endeavor to explore alternative materials that are harmless or less harmful. Furthermore, we are taking care of the environmental impacts from products end-of-life by means of our memberships with local recycling operators, such as Wecycle in the Netherlands. The products that we bring onto the market will be recycled in a responsible manner and the products do not end up in an illegal landfill site in the countries where we have such collaborations.

Where possible, we aim to increase the recycling rate of our waste generated. For example, our Brazilian plant returns cardboard packaging to suppliers for recycling. As an alternative to disposal, all wood waste from the Group's manufacturing processes is sold to external agents as biomass fuels for brick-making kilns. Our sales arm in Europe collects old or broken unwanted devices from customers in EU countries without charging, and arranges for the collected devices to be recycled in accordance with the European WEEE Directive.

In 2020, a total of 263 tons (2019: 241 tons) of hazardous waste and 21,795 tons (2019: 29,190 tons) of non-hazardous waste were generated.

Waste generated	Unit	2020	2019	2018
Non-hazardous waste generated	metric ton	21,795	29,190	32,053
Hazardous waste generated	metric ton	263	241	199
Total waste generated	metric ton	22,058	29,431	32,252

5.7 Environmentally friendly Product Design

As a leading manufacturer in monitors and TVs, we support and adopt sustainable design principle for environment protection and resource conservation. We see environmental protection as vital and aim to support SDG12 through identifying opportunities to implement sustainable design into the entire product cycle. TPV considers the product lifecycle during the design process, from raw materials selection, through manufacturing, to the use phase and recollection. The goal is to eliminate or reduce as far as possible any negative externalities of our products to the nature and environment. Building upon ISO9001, we also adopt the QC080000 management system to enhance control over hazardous materials throughout the manufacturing process. We have also established the green produce management system in response to the request of our customers.

All our products meet the standards and requirements as specified by international environmental protection regulations as well as those specified by our customers. Our products are made with circular design and energy efficiency in mind. For our operations, we adopt and follow the principles of "environmentally-friendly materials", "eco-design" and "easy dismantling" to reduce potential environmental impact from the source, such as connecting parts through welding or reducing the number of required parts with modular design. In addition, we mark all our electrical and electronic equipment ("EEE") products with the crossed-out wheeled bin symbol, a date mark and producer identification mark ("PIM") to signify environmentally sound disposal of separately collected EEE.

Environmentally friendly materials

According to international standards (e.g. RoHS, REACH, WEEE, etc.) and upon the request of our customers, we have established the "Management Standard For The Environment-Related Substance, RDEMS-01" for setting environmental standards for controlled substances and controlling chemical use in the materials we procure.

We take steps to utilize and incorporate more green and sustainable materials in our products. In 2020, approximately 8.5% of recycled materials by weight were used in our final products.

Materials consumption[12]	Unit	2020	2019	2018
Total material used	metric ton	93,358	97,686	99,937
Total recycled material used	metric ton	7,963	—	—
Recycled Plastic	metric ton	5,282	—	—
Recycled Metal	metric ton	113	—	—
Other recycled materials	metric ton	2,568	—	—
Intensity of recycled material use	kg/unit of product	0.12	—	—
Recycling rate of total material used	%	8.5	—	—

The concept of utilizing green and sustainable materials is also applied in packaging. For example, we use soy ink or water-based ink for carton box printing while the carton boxes are sourced from recycling companies. Moreover, we have simplified packaging, and unified sizes and printed materials to minimize packaging volume and surface area in order to reduce the number of delivery trips required and the associated emissions from transportation.

Eco-design

We attach great emphasis on energy-saving eco-designs. During the product design stage, we take into consideration the regulations on energy consumption in different jurisdictions, including the Americas, Europe, Asia, Australia and New Zealand. Furthermore, we are committed to exploring and creating new designs that balance sustainable productivity with excellent performance. For example, some of our monitor designs incorporate power-efficient features, such as the LED backlight technology that maintains brightness and color while delivering substantial energy savings, and other power-saving technologies that can detect user presence or absence via harmless infrared signals or measure ambient light intensity to adjust screen brightness automatically.

We perform product life-cycle assessments and product carbon footing on some of our monitor models to more fully understand the quality, impact and carbon footprint of our products. For our own AOC and MMD brands, we register every monitor for EPEAT and some of our business-to-business ("B2B") monitors have obtained the TCO certification.

[12] For 2020, we have revisited and enhanced our approach collecting material used data in line with GRI requirements. Certain data for recycled material used were not available for 2019 and 2018.

Easy dismantling

Our philosophy for product design is based on the concept of easy dismantling to avoid plastic use, welding, embedding, etc., in connecting parts. We make use of modular design techniques to achieve a reduced number of parts required and the card slot design for minimizing the use of screws for easy and convenient dismantling during disposal. With such design techniques, we enable customers to only upgrade and replace specific parts according to their needs rather than having to upgrade the entire product. The designs also help lengthen the average lifetime of products by facilitating repairs and maintenance over replacement. Other benefits also include reduced costs of recycling and increased ease and value of recycling electronic products in support of a circular economy. Furthermore, we ensure that all plastic parts we use contain no more than two blended materials for better recycling efficiency during the end-of-life stage. We also label finished products or specimens with 25g of plastic parts or more for increased product information transparency.

5.8 The Environment and Natural Resources

As a responsible manufacturer, we remain keenly aware of our impact on the environment and our consumption of natural resources. We endeavor to identify, assess and mitigate such impacts by embedding sustainable development in everything we do.

We undertake assessments of potential environmental impacts for our operations to identify, measure and manage our footprint at the site level. Our production operations have enforced stringent procedures to prevent chemical leakages and spillages into the environment. Emergency planning and drills are conducted regularly to reduce the risk of accidents and to maintain our business continuity.

We invest in making our facilities greener by adopting principles of land optimisation, energy and water conservation, material economization and green construction through incorporation of sustainable design features.

5.9 Regulatory Compliance

The Group was not aware of any non-compliance of laws and regulations that have a significant impact on the Group relating to air and GHG emissions, discharges into water and land, and generation of hazardous and non-hazardous waste during 2020.

6. TO OUR COMMUNITY COMMITMENT

6.1 Overview

Community involvement is one of TPV's core values. We aspire to share our business success with local communities through responding to COVID-19, supporting quality education, establishing CSR Foundation, and other supports to release poverty. Our employees are strongly encouraged to participate in and contribute to TPV's community outreach programs.

We uphold our commitment to the community through employee volunteering and donations in kind or in cash. In view of the COVID-19 pandemic, our employees contributed more than 600 hours (2019: 1,600 hours) in delivering community services and the Group has donated more than US$ 424,000 (2019: US$143,400) to support various community initiatives during the year.

6.2 Response to COVID-19

As said by our chairman Dr. Jason Hsuan, "The COVID-19 pandemic has brought challenges for all globally. Since the COVID-19 virus began to spread within communities, actions from all parties were and continue to be needed to fight the disease and slow its spread. As a responsible corporate citizen, TPV proactively supported COVID-19 health developments and contributed to finding a solution to the pandemic."

To help those affected individuals in returning to everyday lives, the medical system needs to be maintained in a stable manner. As a result, we use technology for good to provide infrastructure and products, such as smart devices and medical supplies, to hospitals, schools, charities and local government.

Case study: Product Support for Hospitals

TPV is committed to building a safe environment for medical staffs and patients so that inspections and treatments will be smoothly conducted. We firmly believe that we can help maintain a smooth operation of the health system through providing smart devices and medical supplies to hospitals. Particularly, we provided 780 display devices and more than 3,000 sets of medical supplies to Caidian, Wuhan at the time of the COVID-19 outbreak.

In a similar vein, in September 2020, TPV donated 30 sets of customized nursing station systems and monitoring screens to Xiamen Fifth Hospital. This advanced system helped the hospital deliver medical care and epidemic prevention.

6.3 Supporting the Quality Education

In support of Sustainable Development Goal 4 (Quality Education), since 2019, the TPV Group has been developing a social project at the "Mamãe Margarida" shelter in Brazil, in order to promote citizenship to girls in situations of personal and social risk through youth protagonism. We helped serve 200 girls (children and adolescents) seeking to promote citizenship through dynamic activities, as well as encouraging their personal growth and professional development through conveying ethical values. In 2019, we held monthly lectures on ethics, mental health and citizenship. In 2020, we remain steadfast in our commitment to help in their personal and professional growth. We started the informatics project which consists of including and accompany the in the digital world, promote the search for new knowledge of each student, through technological skills. The TPV Group also donated computers and printers to add to the girls' study. In addition to imparting knowledge, we donated useful materials for the Institution, such as food, hygiene products and cleaning products to help with maintenance. Due to the pandemic, we had to suspend classes for a few months, but the plan is to return soon.

In the PRC, we support local schools by setting up high-schools scholarships and donation of different display products to primary schools and kindergartens.

6.4 CSR Foundation

To better support NGOs that are aligned with our business model, material topics and SDGs, we started the CSR Foundation in June 2020 to support the CSR activities of TP Vision Europe B.V., AOC International (Europe) B.V. and MMD-Monitors & Displays Nederland B.V. In the future, we plan to expand the scope of the CSR Foundation to cover more entities and develop it into the CSR Foundation of TPV.

People are more than twice as likely to die from surgery complications in Africa. At the same time, millions experience health, social and economic decline due to a lack of access to quality surgery. By partnering up with Mercy Ships, we contribute to their mission to provide free surgeries and medical care to thousands of people where healthcare is scarce. Mercy Ships' mission is to bring hope and healing to the forgotten poor, both through direct patient care and Medical Capacity Building (MCB). eLearning represents a relatively new and fundamental training component offered by Mercy Ships to support and complement its existing MCB-activities. Building infrastructures for telecommunications will enhance the opportunities for eLearning, simulation-based learning and eMentoring. An important part of the programs is to set up training centers, of which Gamal Training Center in Guinea is the first. We supported Mercy Ships with displays, monitors, headphones and soundbars for their eLearning program.

6.5 Other Support

To continuously render full support for those in need, the Group has collaborated with a multitude of organizations. During the past years, we continually support certain social projects to give back to our society.

In 2020, we collaborated with the government and an NGO in Manaus, Brazil, SÃO VICENTE DE PAULO, to provide elder people with homes. Through provision of daily supplies such as food, hygiene and cleaning materials, we were committed to enhancing healthy lives and promote well-being for all at all ages.

In the same spirit, TPV contributed to supporting local elder residents. Volunteers from TPV have become a special force to support Food Angel by Bo Charity Foundation and prepared veggies and food packs for serving the underprivileged communities in Hong Kong.

TPV strongly encouraged staffs to proactively engage in community and environmental conservation matters. We arranged blood donation events in Xiamen, Qingdao and Fuqing to encourage our colleagues to be regular donors.

Environmental conservation is an important part of sustainable development. In March From March to May 2020, Beihai, Xiamen and Fuqing and Beijing operations arranged a tree planting programs in celebration of Arbor Day in China.

Going forward, TPV will continue its unrelenting efforts in supporting and empowering the community, with a view of creating sustained value for our society.

7. SUSTAINABILITY PERFORMANCE

To enhance transparency and disclosures on our ESG performance, we have revisited our approach towards data collection and expanded the scope of environmental and social key performance indicators ("KPI") relevant and material to our business operations. This year, we conducted our internal processes to gather information and data to meet GRI Core requirements. As a result, our key environmental and social data are summarized and presented in the below data tables as an overview of our efforts and progress for the past year. Since it is our first year preparing our annual Sustainability Report in accordance with GRI Core standards, some specific KPIs or data may not be available as it is our first-year collecting them. We hope to set out the appropriate KPIs and data for the first year in this report, and will continue to collect and, if applicable, enhance our data collection in the future for better and more transparent disclosures.

Key Environmental Data[13]

GHG Emissions and Energy Consumption

Environmental KPIs	Unit	2020	2019[14]	2018[15]
GHG emissions				
Total GHG emissions (Scope 1 & 2)	$MTCO_2e$	157,289	126,937	131,142
Scope 1	$MTCO_2e$	28,188	21,050	23,096
Scope 2	$MTCO_2e$	129,101	105,887	108,046
Intensity of total GHG emissions	$MTCO_2e$/ US$ million	17.26	14.29	14.34

[13] For 2020, TPV has revisited our approach towards data collection. TPV's GHG emission figures for 2020 have included direct emissions from refrigerants used during 2020 in the calculation methodology, while 2019 and 2018 has not. To provide a like-to-like comparison, the estimated direct emissions from refrigerants used was 9,490 MTCO2e during 2020 and 9,471 MTCO2e in 2019.

[14] For 2020, the scope of key environmental data covered the 18 organizational entities mentioned in the section of "About this Report", including 3 new entities. While the figures presented for 2019 and 2018 only covered 15 entities, the operations and associated environmental impacts of the 3 new entities were insignificant in 2019 and 2018, and therefore, no restatement was made with reference to these new entities.

[15] The figures presented for 2018 and 2019 were not revised nor restated. Hence, they may not be directly comparable with the figures presented for 2020, and should only serve as reference.

Environmental KPIs	Unit	2020	2019	2018
Energy consumption				
Total energy consumption	MWh	254,251	251,462	263,795
Direct energy consumption[16]	MWh	84,333	94,655	103,553
Gasoline/petrol	MWh	2,118	1,808	1,969
Diesel	MWh	1,054	636	710
LPG	MWh	70,688	82,010	91,112
Natural gas	MWh	10,468	10,195	9,756
Other fuel	MWh	4	6	6
Indirect energy consumption	MWh	169,919	156,807	160,242
Purchased electricity	MWh	169,919	156,807	160,242
Intensity of total energy consumption	MWh/ US$ million	27.90	28.31	28.84

Water Use

Environmental KPIs	Unit	2020	2019	2018
Water consumption[17]				
Total water consumption	m^3	1,902,331	1,806,794	1,972,211
	megalitre	1,902.3	1,806.8	1,972.2
From surface water	m^3	219,941	—	—
From groundwater	m^3	82,353	—	—
From third-party water	m^3	1,600,037	—	—
Intensity of total water consumption	m^3/employee	79.13	66.83	71.11
Water recycled and reused	m^3	24,788	16,013	12,604
Recycling rate of total water consumed	%	1.3	0.9	0.6

[16] In order to provide a like-to-like comparison, energy data under "Direct energy consumption" including "Gasoline/Petrol", "Diesel", "LPG", "Natural gas" and "Other fuel" were converted to MWh.

[17] For 2020, we have revisited and enhanced our approach collecting water used data in line with GRI requirements. Certain data for water consumption were not available for 2019 and 2018.

Materials Use

Environmental KPIs	Unit	2020	2019	2018
Materials consumption[18]				
Total material used	metric ton	93,358	97,686	99,937
Total non-renewable material used	metric ton	12,412	—	—
	%	13.3	—	—
Plastic	metric ton	126	—	—
Paper	metric ton	3,227	—	—
Metal	metric ton	3,569	—	—
Other non-renewable material	metric ton	5,510	—	—
Total renewable material used	metric ton	80,946	—	—
	%	86.7	—	—
Plastic	metric ton	25,070	—	—
Paper	metric ton	49,370	—	—
Other renewable material	metric ton	6,506	—	—
Total recycled material used	metric ton	7,963	—	—
	%	8.5	—	—
Recycled Plastic	metric ton	5,282	—	
Recycled Metal	metric ton	113	—	—
Other recycled materials	metric ton	2,568	—	—
Intensity of recycled material use	kg/unit of product	0.12	—	—
Intensity of material use	kg/unit of product	1.45	1.73	1.78

[18] For 2020, we have revisited and enhanced our approach collecting material used data in line with GRI requirements. Certain data for non-renewable material used, renewable material used and recycled material used were not available for 2019 and 2018.

Waste Generation

Environmental KPIs	Unit	2020	2019	2018
Waste generated[19]				
Non-hazardous waste generated	metric ton	21,795	29,190	32,053
Total non-recyclable waste	metric ton	366	—	—
Total recyclable waste	metric ton	21,429	—	—
Hazardous waste generated	metric ton	263	241	199
Total non-recyclable waste	metric ton	62	—	—
Total recyclable waste	metric ton	201	—	—
Total waste generated	metric ton	22,058	29,431	32,252

Key Social Data

Social KPIs	2020	2019	2018
Workforce profile			
Total workforce	24,040	22,079	22,377
By employment contract type			
Permanent	4,815	4,079	3,623
Temporary	19,225	18,000	18,754
By employment nature			
Full-time	24,026	22,060	22,356
Part-time	14	19	21
By gender			
Male	14,881	13,675	14,013
Female	9,159	8,404	8,364
By age group			
Aged under 30	8,697	7,817	9,142
Aged 30–50	13,896	13,145	12,232
Aged above 50	1,447	1,117	1,003

[19] For 2020, we have revisited and enhanced our approach collecting waste generated data in line with GRI requirements. Certain data for non-hazardous waste generated and hazardous waste generated were not available for 2019 and 2018.

Social KPIs	2020	2019	2018
By management level			
Top management	395	375	358
Management	2,808	2,590	2,635
Non-management	20,837	19,114	19,384
By geographical region			
Hong Kong	42	21	23
Mainland China	16,589	14,983	16,112
Europe	2,207	2,240	2,278
North America	1,732	1,413	515
South America	1,438	1,493	1,550
Other regions	2,032	1,929	1,899
Total number of board members	8	8	9
By gender			
Male	7	7	8
Female	1	1	1
By age group			
Aged under 30	0	0	0
Aged 30–50	2	2	2
Aged above 50	6	6	7
Percentage of women employed			
Board level	13%	13%	11%
Top management level	15%	14%	13%
Group level	38%	38%	37%
Training and development			
Total training hours — overall	1,154,729	726,182	769,128
Average training hours			
Per employee	48.0	32.89	34.37
Per male employee	51.6	34.42	36.02
Per female employee	42.2	30.39	31.61
Per top management employee	13.7	33.59	35.70
Per management employee	26.7	29.98	27.15
Per non-management employee	51.6	17.49	15.59
Total training hours — environmentally related	51,259	22,983	10,629
Percentage of environmentally related training	4.4%	3.16%	1.38%

Social KPIs	2020	2019	2018
Work-related injuries			
Total hours worked[17]	48,080,000	43,981,368	44,933,016
Fatalities			
Number of instances	1	0	0
Rate of occurrence[18]	0.02	0	0
High-consequence work-related injuries (excl. fatalities)			
Number of instances	33	57	56
Rate of occurrence[19]	0.69	1.30	1.25
Recordable work-related injuries			
Number of instances	34	57	56
Rate of occurrence[20]	0.71	1.30	1.25
Lost time injury frequency rate[21]	0.71	1.30	1.25
Lost time injury severity rate[21]	0.03	0.03	0.05
Suppliers			
Total number of suppliers	30,876	29,100	26,098
By geographical region			
Mainland China	8,245	7,690	6,673
Europe	14,375	13,596	12,242
North America	811	710	644
South America	6,939	6,636	6,105
Other regions	506	468	434

[17] The total number of hours worked was estimated based on the number of full-time workers, and on the assumption that one full-time worker works 2,000 hours annually.

[18] The rate of occurrence was calculated based on every 1,000,000 hours worked, i.e. (number of work-related fatalities ÷ total hours worked) × 1,000,000. It indicates the number of fatalities for every 500 full-time workers over a one-year timeframe.

[19] The rate of occurrence of high-consequence work-related injuries was calculated in a similar manner to the rate of occurrence of fatalities.

[20] The rate of occurrence of recordable work-related injuries was calculated in a similar manner to the rate of occurrence of fatalities.

[21] Lost time injury ("LTI") is defined as any work-related injury that resulted in direct employees being unable to return to work. LTI frequency rate was calculated by the following method: (total number of LTI injuries ÷ total hours worked) × 1,000,000.

[22] LTI severity rate was calculated by the following method: (total number of days lost due to LTI injuries ÷ total hours worked) × 1,000.

We see collaboration as an important impetus in advancing sustainability. Through our partnerships with other organizations and memberships in external initiatives, we hope to strengthen our sustainability work. Below we share an overview of current organizations we are involved with.

China Video Industry Association (CVIA)

Responsible Business Alliance (RBA)

Please refer to 4.2 Supply Chain Management and 4.3 Engaging Suppliers for more on our work with RBA.

Responsible Minerals Initiative (RMI)

We joined RMI in 2015. For further details, please see 4.2 Supply Chain Management — Conflict Minerals Management.

Science Based Targets initiative (SBTi)

We made our commitment to the Science Based Targets initiative in December 2020.

United Nations Global Compact (UNGC)

We joined the United Nations Global Compact as a participant in November 2020.

9. GRI CONTENT INDEX

Disclosure		Section	Page
Universal Standards			
GRI 102: General Disclosures (2016)			
102–1	Name of organization	About This Report	4
102–2	Activities, brands, products, and services	Company Profile	6, 7-13
102–3	Location of headquarters	Company Profile	7
102–4	Location of operations	Company Profile	7
102–5	Ownership and legal form	Company Profile	6
102–6	Markets served	Company Profile	4, 7
102–7	Scale of the organization	Company Profile, Sustainability Performance	16-17, 54-56
102–8	Information on employees and other workers	Commitment to Our People, Sustainability Performance	25-26, 54-56
102–9	Supply chain	Commitment to Our Business Partners	34-36
102–10	Significant changes to the organization and its supply chain	Commitment to Our Business Partners, Sustainability Performance	34-36, 56
102–11	Precautionary Principle or approach	Company Profile	20
102–12	External initiatives	List of External Initiatives and Memberships of Associations	57
102–13	Membership of associations	List of External Initiatives and Memberships of Associations	57
102–14	Statement from senior decision-maker	Message from Chairman	2-3
102–16	Values, principles, standards, and norms of behavior	Company Profile	6
102–18	Governance structure	Company Profile	18-20
102–19	Delegating Authority	Company Profile	18-20
102–22	Composition of the highest governance body and its committees	Company Profile	18-20
102–23	Chair of the highest governance body	Company Profile	20

Disclosure		Section	Page
102–24	Nominating and selecting the highest governance body	Company Profile	18-20
102–26	Role of highest governance body in setting purpose, values and strategy	Company Profile	18-20
102–30	Effectiveness of risk management processes	Company Profile	20-22
102–35	Remuneration policies	Company Profile	18-20
102–36	Process for determining remuneration	Company Profile	18-20
102–40	List of stakeholder groups	Company Profile	14-16
102–41	Collective bargaining agreements	Collective bargaining agreements (CBA) are managed at the entity level. As of 31 December 2020, the following entities have employees covered by CBAs and the percentages of employees covered are 100% for all these entities: • TPV Display Technology (China) Co., Ltd • TPV Display Technology (Wuhan) Co., Ltd • TP Vision Europe B.V. • Envision Indústria de Produtos Eletrônicos Ltda. • TPV Display Technology (Beihai) Co., Ltd.	
102–42	Identifying and selecting stakeholders	Company Profile	14-16
102–43	Approach to stakeholder engagement	Company Profile	14-16
102–44	Key topics and concerns raised	Company Profile	14-16
102–45	Entities included in the consolidated financial statements	About this Report	4-5
102–46	Defining report content and topic Boundaries	About this Report	4-5
102–47	List of material topics	Company Profile	14-16
102–48	Restatements of information	Sustainability Performance	51-54

Disclosure		Section	Page
102–49	Changes in reporting	There were no significant changes from the previous reporting periods	
102–50	Reporting period	About this Report	4
102–51	Date of most recent report	Our Corporate Sustainability and Social Responsibility Report 2019 was published in March 2020	
102–52	Reporting cycle	About this Report	4
102–53	Contact point for questions regarding the report	About this Report	5
102–54	Claims of reporting in accordance with the GRI Standards	About this Report	5
102–55	GRI content index	GRI Content Index	58-63
102–56	External assurance	We did not seek external assurance for this Report	
GRI 103: Management Approach (2016)			
103–1	Explanation of the material topic and its Boundary	Company Profile, Commitment to Our People, Commitment to Our Business Partners	7-9, 14-16, 22-23, 28-31, 34-36
103–2	The management approach and its component	Company Profile, Commitment to Our People, Commitment to Our Business Partners	7-9, 22-23, 28-31, 34-36
103–3	Evaluation of the management approach	Company Profile, Commitment to Our People, Commitment to Our Business Partners	7-9, 22-23, 28-31, 34-36
Material Topic Standards			
GRI 200: Economic			
GRI 201: Economic Performance (2016)			
201–1	Direct economic value generated and distributed	Company Profile	16-17

Disclosure		Section	Page
GRI 205: Anti-corruption (2016)			
205–2	Communication and training about anti-corruption policies and procedures	Company Profile	22-23
GRI 300: Environmental			
GRI 301: Materials (2016)			
301–1	Materials used by weight or volume	Commitment to Our Environment, Sustainability Performance	40-41, 53
301–2	Recycled input materials used	Commitment to Our Environment, Sustainability Performance	43-45, 53
GRI 302: Energy (2016)			
302–1	Energy consumption within the organization	Commitment to Our Environment, Sustainability Performance	38-39, 52
302–3	Energy intensity	Commitment to Our Environment, Sustainability Performance	38-39, 52
GRI 303: Water and Effluent (2018)			
303–1	Interactions with water as a shared resource	Commitment to Our Environment	37, 40
303–2	Management of water discharge-related impacts	Commitment to Our Environment	37, 40
303–3	Water withdrawal	Commitment to Our Environment, Sustainability Performance	40, 52
303–5	Water consumption	Commitment to Our Environment, Sustainability Performance	40, 52

Disclosure		Section	Page
GRI 305: Emissions (2016)			
305–1	Direct (Scope 1) GHG emissions	Commitment to Our Environment, Sustainability Performance	37-38, 51
305–2	Energy indirect (Scope 2) GHG emissions	Commitment to Our Environment, Sustainability Performance	37-38, 51
305–4	GHG emissions intensity	Commitment to Our Environment, Sustainability Performance	37-38, 51
GRI 306: Waste (2020)			
306–2	Management of significant waste-related impacts	Commitment to Our Environment	37, 41-43
306–3	Waste generated	Commitment to Our Environment, Sustainability Performance	41-43, 54
GRI 307: Environmental Compliance (2016)			
307–1	Non-compliance with environmental laws and regulations	Commitment to Our Environment	45
GRI 400: Social			
GRI 403: Occupational Health and Safety (2018)			
403–1	Occupational health and safety management system	Commitment to Our People	28-32
403–2	Hazard identification, risk assessment, and incident investigation	Commitment to Our People	28-32
403–3	Occupational health services	Commitment to Our People	28-32
403–4	Worker participation, consultation, and communication on occupational health and safety	Commitment to Our People	28-32
403–5	Worker training on occupational health and safety	Commitment to Our People	28-32
403–6	Promotion of worker health	Commitment to Our People	28-32

Disclosure		Section	Page
403–7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Commitment to Our People	28-32
403–9	Work-related injuries	Commitment to Our People, Sustainability Performance	28-32, 56
GRI 404: Training and Education (2016)			
404–1	Average hours of training per year per employee	Sustainability Performance	55
404–2	Programs for upgrading employee skills and transition assistance programs	Commitment to Our People	27
GRI 405: Diversity and Equal Opportunity (2016)			
405–1	Diversity of governance bodies and employees	Company Profile, Commitment to Our People, Sustainability Performance	18-20, 54-55
GRI 407: Freedom of Association and Collective Bargaining (2016)			
407–1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Commitment to Our Business Partners	34-36
GRI 408: Child Labor (2016)			
408–1	Operations and suppliers at significant risk for incidents of child labor	Commitment to Our People	31-32
GRI 409: Forced or Compulsory Labor (2016)			
409–1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Commitment to Our People	31-32
GRI 413: Local Communities (2016)			
413–1	Operations with local community engagement, impact assessments, and development programs	Commitment to Our Community	46-50