

SUSTAINABILITY REPORT



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SUSTAINABILITY REPORT

ABOUT THE SUSTAINABILITY REPORT

Since our inception, Unisem (M) Bhd has strived to demonstrate our commitment to sustainability related issues - business growth, labour rights, management of workplace safety and monitoring our environment impacts – as seen from our programmes and reporting disclosures.

During the reporting year, we are pleased to be awarded the Industry Excellence Award in Asean Corporate Governance 2018 by the Minority Shareholders Watch Group (“MSWG”) Award, Excellence in Corporate Social Responsibility by the American Chamber of Commerce (“AMCHAM”) in 2019 and Transparency in Corporate Reporting 2019 by the Malaysian Institute of Corporate Governance (“MICG”).



BASIS OF PREPARATION

Reporting Period and Boundary

Information disclosed in the Sustainability Report (“the Report”) includes performance metrics and data from the period of 1st January 2019 to 31st December 2019, unless otherwise stated. There are no changes to the reporting boundary for FY 2019’s report. The following entities include:

Name of entity	Location of operations
Unisem (M) Berhad*	Ipoh, Malaysia
Unisem Advanced Technologies Sdn Bhd (“UAT”)*	Ipoh, Malaysia
Unisem Chengdu Co., Ltd. (“Unisem Chengdu”)	Chengdu, People’s Republic of China (“PRC”)

* hereinafter, collectively referred to as “Unisem Ipoh”

Policies, processes, programmes and the governance structure discussed in the Sustainability Report apply group-wide, unless specific reference is made to Unisem Ipoh and/ or Unisem Chengdu. Reported retrospective data has been updated to include information from Unisem Chengdu.

Basis Of Reporting

Responsible Business Alliance (“RBA”)

Since 2013, we have aligned our Report on top of our business practices to the RBA Code of Conduct (“RBA Code of Conduct”). The RBA Code of Conduct covers areas on Labour, Health and Safety, Environment, Ethics and Management systems – all of which are key components in the electronics supply chain. This has served as an encouragement to go beyond legal compliance, and to benchmark our business practices against recognised international standards to advance social and environmental responsibility and business ethics.

GRI Standards

Continuing our efforts from FY 2018, this Report is compiled according to the Global Reporting Initiative Sustainability Reporting Standards (“GRI Standards”) – Core Option to report on the impacts related to specific economic, social and environmental topics. The GRI Content Index can be found on pages 63 to 71.

Bursa’s Malaysia Listing Requirements

This Report is prepared in accordance to the Main Market Listing Requirements issued by Bursa Malaysia. In preparation of the Report, the Materiality Assessment, Stakeholders Engagement exercise and the selection of reporting indicators are guided by Bursa’s updated Sustainability Toolkits – 2nd Edition.

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SUSTAINABILITY GOVERNANCE

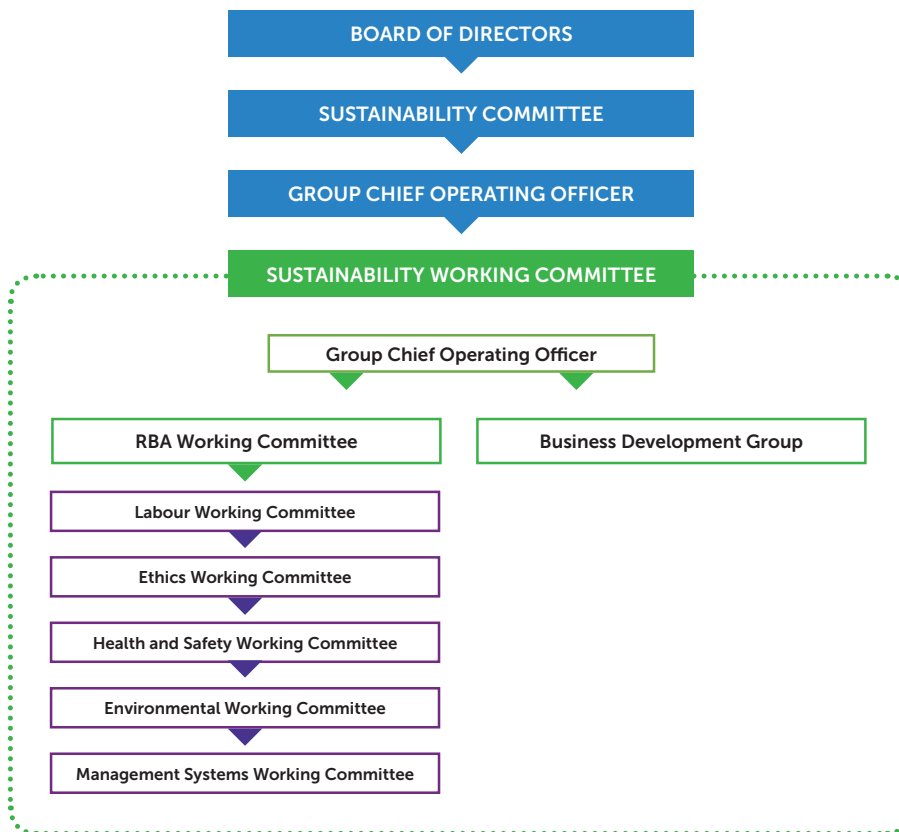


Diagram 1

Unisem's sustainability governance ensures the Group fulfils its social and environmental responsibilities. Established in 2017, the Board of Directors through the Board Sustainability Committee ("SC") is responsible to oversee the process of integrating sustainability practices into Unisem's daily operations, including setting strategic sustainability direction, the purpose and values of Unisem. It also monitors the implementation of sustainability-related policies, measures and actions in achieving Unisem's sustainability milestones and goals, including overseeing the preparation of the Sustainability Report. The SC is currently chaired by the Senior Independent Director of the Company.

Supporting the SC is the Group Chief Operating Officer, who is responsible for leading the Sustainability Working Committees ("SWC"). The SWC is chaired by the sites' Chief Operating Officers ("COOs") in conjunction with the RBA Working Committees ("RBA WCs") and Business Development Groups ("BDGs"). As an adopter of the RBA Code of Conduct, segmental working committees are established to manage and monitor the five elements – Labour, Ethics, Health and Safety, Environmental and Management Systems set forth by the RBA. For detailed responsibilities of each working committee please refer to Table 2.

To ensure a holistic sustainability culture across the Group, a SWC was also formalised in People's Republic of China ("PRC") in 2018. The SWC primarily provides oversight and monitors the daily operations, ranging from conflict-free mineral sourcing to ensuring a safe working environment for employees. The table below illustrates our governance structure for sustainability.

Working Committee/ Group	Responsibilities
Labour Working Committee	Monitoring and ensuring the following aspects of labour rights are upheld: <ul style="list-style-type: none"> • Freely chosen employment • Child labour avoidance • Working hours • Wages and benefits • Humane treatment • Non-discrimination • Freedom of association
Ethics Working Committee	Overseeing the systems and tools in place to ensure: <ul style="list-style-type: none"> • Privacy is upheld • Protection of identity and non-retaliation • Business integrity/appropriate disclosure of information is in place • Responsible sourcing of minerals • Fair business conduct, including in advertising and competition • Intellectual property is protected and respected
Health and Safety Working Committee	Overseeing the health and safety of the working environment: <ul style="list-style-type: none"> • Chemical/Protective Personal Equipment (“PPE”) management • Hazard Identification, Risk Assessment and Risk Control • Emergency response testing • Permit/test report • Accident complaint investigation • Workplace inspection/ Audit • Machinery/work instruction • Exposure to radiation/X-ray monitoring
Environmental Working Committee	Monitoring and ensuring the following aspects of environment management are upheld: <ul style="list-style-type: none"> • Management of chemical substances and chemical control • Waste management • Emergency response drills and procedures • Legal requirements, measurement and monitoring of waste and chemical substances • Environmental Management System, to ensure it is in accordance with ISO14001:2015 standard
Management Systems Working Committee	Overseeing the systems and controls in place that support the tasks of the other committees: <ul style="list-style-type: none"> • Monitor updates in applicable laws, regulations and customer requirements, including requirements of the RBA Code of Conduct • Establish and periodically assess objectives, targets and improvement programmes for social and environmental performance • Communicate policies and practices at Unisem • Conduct self-assessments, including internal audits
Business Development Group	Implements the Group’s and site’s business strategy by: <ul style="list-style-type: none"> • Attracting new customers • Expanding business with existing customers • Achieving annual revenue and business growth plans and objectives • Managing Regional Sales, Marketing, Technical Program Management (TPM) as well as Customer Service organisations • Research and development programmes

Table 2

SUSTAINABILITY REPORT

STAKEHOLDER INCLUSIVITY

Stakeholder Prioritisation

As a global provider of semiconductor assembly and test services provider, the operational success of our business is dependent on long-term relationships with our stakeholders. Regular engagement with our stakeholders allows us to understand stakeholders' expectations and areas of interest which influence their decisions towards us. Table 3 summarises our engagement platforms and sustainability concerns of identified key stakeholder groups.

Stakeholder Group	Engagement Approach	Sustainability Concerns
Shareholders	<ul style="list-style-type: none"> Annual general meetings Quarterly announcements Ad-hoc meetings 	<ul style="list-style-type: none"> Continuous business growth, including new market penetration
Directors*	<ul style="list-style-type: none"> Quarterly and ad-hoc Board and Board Committee meetings 	<ul style="list-style-type: none"> Continuous business and operational improvement Financial risk and company compliance to laws and regulations Financial results Interests of stakeholders and shareholders Continuous investment in research and development Environmental matters
Senior Management*	<ul style="list-style-type: none"> Management meetings Ad-hoc meetings 	<ul style="list-style-type: none"> Ensure safe and humane working environment Ensure customer requirements are met, including security of customer data Management of the supply chain, including eliminating conflict minerals Adherence to RoHs, REACH and environmental regulations Ensure talent retention by providing competitive compensation and benefit packages for employees, and ensuring human rights of all employees are respected Proper management and disposal of hazardous waste Management of energy efficiency and investment in research and development
Employee*	<ul style="list-style-type: none"> Annual Employee Climate Survey Quarterly forums held by the site COO with employees on financial and operational updates at Unisem Ipoh 'Open-door' practices to provide feedback Annual performance evaluation sessions 	<ul style="list-style-type: none"> Safe and humane working environment Nurturing culture, including provision of learning and development opportunities Ensure competitive compensation and benefit packages for employees, and human rights of all employees are respected Proper management and disposal of hazardous waste

Stakeholder Group	Engagement Approach	Sustainability Concerns
Customers*	<ul style="list-style-type: none"> Quarterly business reviews Annual customer satisfaction surveys Ad-hoc meetings and social audits 	<ul style="list-style-type: none"> Quality assurance and reliable products and services Competitive pricing and on-time delivery RBA compliant operations at Unisem, as well as compliance with local and international regulations (i.e. RoHS and REACH) Safe, humane working environment, respect human rights New products development projects
Suppliers/ Contractors	<ul style="list-style-type: none"> Annual supplier audits Supplier briefings Conduct of Self-Assessment Questionnaires Ad-hoc tender exercises and meetings Email communications Ethics queries/Whistle Blower 	<ul style="list-style-type: none"> Fair tender practices Competitive prices Business continuity Quality materials/parts/services Freely chosen labour Fair wages Responsible Mineral Initiative
In-house Union*	<ul style="list-style-type: none"> Monthly formalised union meetings Ad-hoc meetings 	<ul style="list-style-type: none"> Industrial harmony between Management and employee Employee's rights and Unisem's responsibility in providing welfare to employee Resolving misunderstanding and grievances Maintaining high level of productivity, efficiency and discipline
Law enforcers/ regulators	<ul style="list-style-type: none"> Annual air quality and waste disposal reports, workplace incident reports Quarterly announcements Ad-hoc report submissions as and when requested by regulators 	<ul style="list-style-type: none"> Adherence to relevant laws and regulations Corporate governance and compliances
Ministry/ local council	<ul style="list-style-type: none"> Annual council meetings 	<ul style="list-style-type: none"> Support towards local communities, including contributions on community matters Administrative management on foreign workers
Financial Institutions	<ul style="list-style-type: none"> Ad-hoc focus group discussions 	<ul style="list-style-type: none"> Business continuity opportunities
Rating agencies/ analysts	<ul style="list-style-type: none"> Quarterly credit reports and analyst briefings 	<ul style="list-style-type: none"> Business continuity, transparency and fair financial reporting
Local communities	<ul style="list-style-type: none"> On-going grievance channels and volunteering programmes 	<ul style="list-style-type: none"> Noise monitoring and contributions towards local communities, such as volunteering projects and donations, health, safety and environmental management

Table 3

SUSTAINABILITY REPORT

Stakeholder Engagement

This year we continue to engage additional internal and external representatives in our operations in Chengdu and Ipoh. Stakeholders were engaged directly through survey forms, where they rated the level of importance of significant economic, social and environmental topics to Unisem. We have engaged the following stakeholder groups during the stakeholder engagement exercise:

Unisem Ipoh and UAT	Unisem Chengdu
Director	Senior Management
Senior Management	Employees
Employees	Suppliers/ Contractors
Suppliers/ Contractors	In-house Union
In-house Union	

Table 4

Upon completion, the SWC presented feedback of the stakeholder engagement exercise to the Board Sustainability Committee for endorsement. Subsequently, this was presented to the Board for their endorsement and acknowledgement. The results from the stakeholder engagement were incorporated in the materiality assessment process detailed in the next section of this Report.

MATERIALITY ASSESSMENT

Review of Sustainability Matters

For FY 2019, the Group has undertaken a structured materiality process to update the Materiality Matrix. Firstly, the list of sustainability matters was reviewed by the SWC and deemed still relevant to the business and the current operating environment. The matters were reviewed to reflect our risks and opportunities, stakeholder feedback, focus areas of peer groups, global economic landscape and sector-specific information from international frameworks and reporting guidelines such as the RBA, GRI and Sustainability Accounting Standards Board ("SASB").

Prioritisation of Sustainability Matters

Guided by Bursa's Materiality Assessment Toolkit, the SWC performed the risk assessment exercise to gauge the level of importance of sustainability matters by considering its impact and likelihood on Unisem Ipoh and Unisem Chengdu. As a result of the prioritisation exercise, the sustainability matters - Customer Satisfaction and Occupational Health and Safety as well as Growing the Business remain to be most important to the business and stakeholders. Like FY 2018, our sustainability matters are clustered under four overarching themes: Managing Our Business, Our Focus on Customers, People and Environment. The results of the materiality assessment are then presented and validated by the Board. This is to ensure material economic, environment and social topics reflect the priorities of Unisem and its stakeholders for 2019. Below, we illustrate the outcome of our Materiality Matrix.

Materiality Matrix

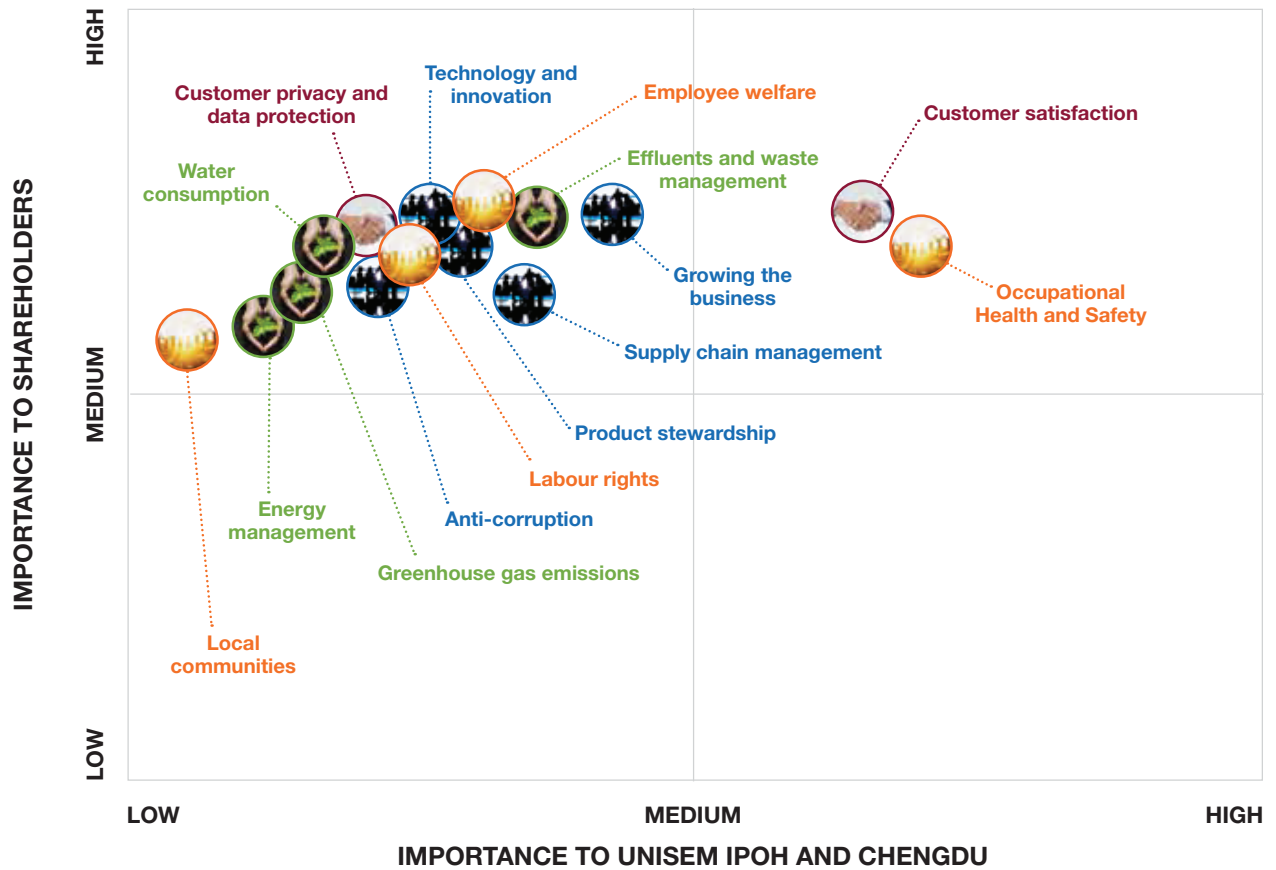


Diagram 2

Our Sustainability Matters

1	Customer satisfaction	6	Technology and innovation	11	Greenhouse gas emissions
2	Occupational health and safety	7	Product stewardship	12	Anti-corruption
3	Growing the business	8	Customer privacy and data protection	13	Energy management
4	Effluents and waste management	9	Supply chain management	14	Water consumption
5	Employee welfare	10	Labour rights	15	Local communities

Table 5

SUSTAINABILITY REPORT

IMPACT ON THE SDGs

Set by the United Nations General Assembly (“UN”), the UN Sustainable Development Goals (“SDGs”) are a set of 17 Goals with respective targets to be achieved by 2030, with the broad aim to create a better world. We acknowledge that our business is able to contribute to the SDGs. Below, we illustrate the way Unisem’s Mission and our six (6) most material matters relate to the SDGs.





























SUSTAINABILITY MATTERS	UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS	UNISEM’S MISSION
Customer Satisfaction	 	 
Occupational Health & Safety	 	 
Growing the Business	 	   
Technology & Innovation		 
Employee Welfare	 	 
Effluents & Waste Management	   	 

Table 6

Legend - Unisem’s Mission

- | | |
|--|---|
|  Provide total customer satisfaction |  Adhere to good corporate governance and support environmental, social and economical development of the Community |
|  Be a caring company and employer of choice |  Uphold and live our core values |
|  Generate profits and accelerate growth | |
|  Develop long term win-win partnership with our business associates | |

VALUE CREATION MODEL

We create value from managing our resources efficiently, such as financial stability, our skilled workforce, manufacturing capabilities and relationships with our stakeholders. While we utilise our resources, we ensure our business activities are aligned with our Mission and Core Values. Our business activities and initiatives are communicated across four themes - Managing Our Business, Our Focus on Customers, People and Environment - is a demonstration of Unisem’s holistic business management, incorporating environmental, societal and governance considerations alongside financial ones, to become a global multinational company. This is depicted in the Diagram 3 below.

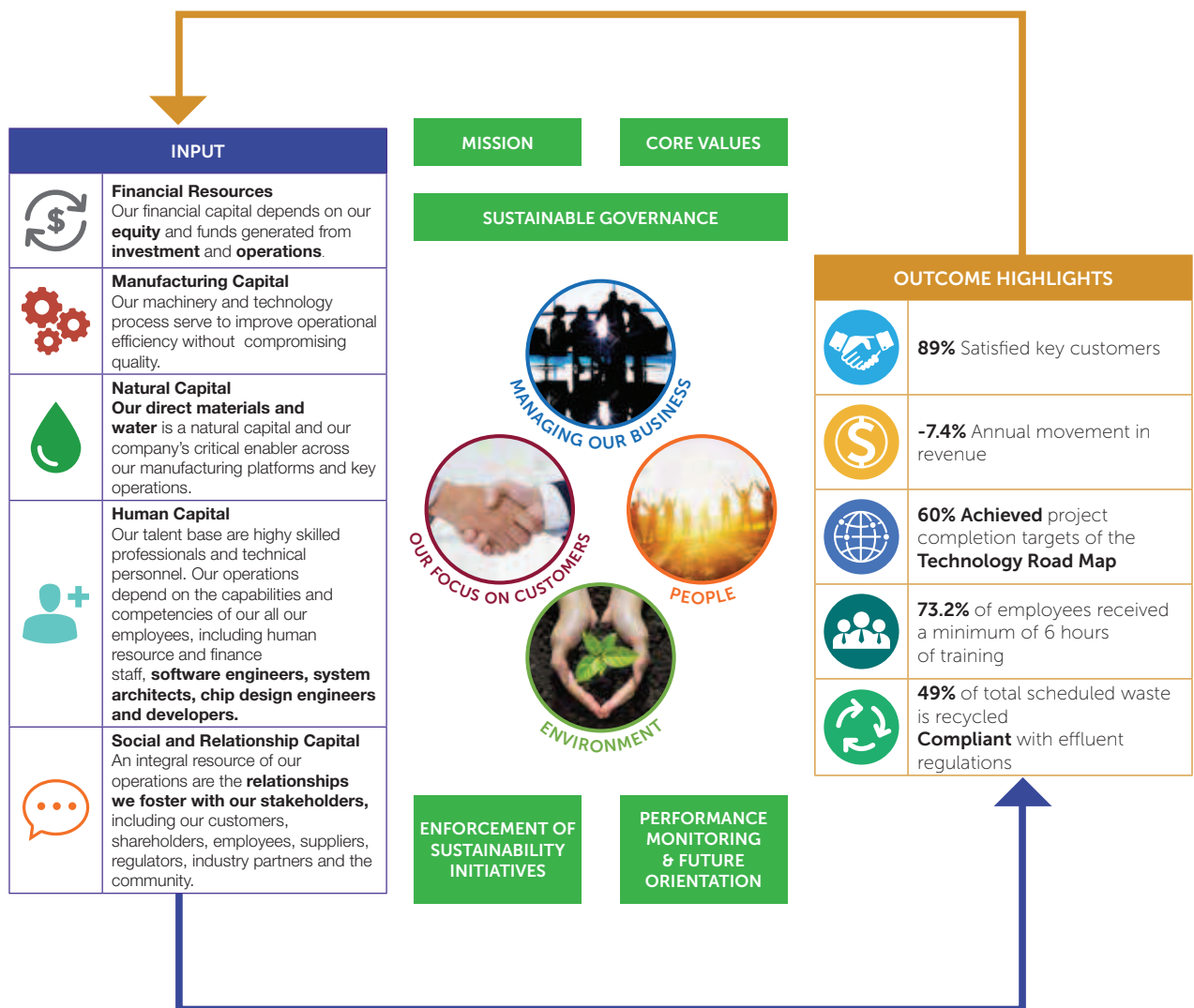


Diagram 3

SUSTAINABILITY REPORT

SUSTAINABILITY PERFORMANCE HIGHLIGHTS



89%
satisfied key
customers



1.80
injury frequency rate for
industrial accidents



-7.4% MYR
annual movement
of revenue



Achieved
project completion targets of
the Technology Road Map



73.2% of employees received a minimum
of 6 hours of training



Compliant
with effluents
regulations



49%
total scheduled
waste recycled

Top 6 Sustainability Matters	KPI	2019 Target	2019 Performance	Status
Customer Satisfaction	Satisfied key customers rate	85%	89%	✓
Occupational Health and Safety	Injury frequency rate for industrial accidents	<2.00	1.80	✓
Growing the Business	Revenue growth	To achieve revenue growth	-7.4%	✗
Technology and Innovation	Technology growth and development as per Technology Road Map	To achieve target project completion dates	Achieved	✓
Employee Welfare	Average training hours per employee	60% of employees received a minimum of 6 hours of training per year	73.2%	✓
Effluents and Waste Management	Compliance with regulatory standards	Compliance	Compliant	✓
	Total scheduled (hazardous) waste recycling rate	50%	49%	✗

LEGEND: ✓ Achieved ✗ Challenging



MANAGING OUR BUSINESS

From everyday business management to strategic decision-making for the Group, Unisem focuses on long-term value creation via our differentiation factors. We keep abreast to trends in the industry and market, as well as key stakeholders' interests and expectations.

GROWING THE BUSINESS

KPI	To achieve revenue growth		
Target	On-going growth of revenue		
Performance	+10.8% in 2017	-7.8% in 2018	-7.4% in 2019

The global semiconductor industry faced a challenging year due to economic uncertainties such as the US-China trade war and large supply chain shifts. Nonetheless, demand within the industry persists, which is driven mainly by advancement in technology such as 5G, artificial intelligence, green technology, as well as opportunities for expansion in industrial electronics for security, automation, solid-state lighting, transportation and energy management.

This year we recorded a decrease of 7.4% in revenue primarily due to the reduction in sales volume caused by adverse market conditions.

For a detailed discussion on changes in our operating environment and business growth, please refer to the Management Discussion & Analysis of this Annual Report 2019.

Unisem Group	Revenue generated by customers' region (RM '000)		
	2017	2018	2019
United States of America	661,095	635,066	606,887
Europe	208,044	223,247	190,241
Asia	596,588	492,963	454,077
Total Group Revenue	1,465,727	1,351,276	1,251,205

Our customers are predominantly located in US and Asia. For more information on how we manage our customers' expectations, please refer to page 29 – 31.

For more information on the Group's growth and strategic decision-making, please refer to the Chairman's Letter to Shareholders, the Management Discussion & Analysis and the Financial Statements in this Annual Report.

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SUPPLY CHAIN MANAGEMENT

We are aware of our responsibility to ensure our sourcing strategy enables us to deliver products on time and allow us to remain compliant with relevant laws and regulations. In applying the RBA Code of Conduct, we extend our practices to our supply chain to improve the integrity of the supply chain.

Governing our supply chain with RBA Code of Conduct

Provisions of our Group CSR Policy and Unisem Code of Ethics (“COE”) are developed closely based on the RBA Code of Conduct. This ensures our supply chain management practices are aligned with industry and customer expectations, and we are able to adhere to industry best practice.

Our Group CSR Policy stipulates that we engage suppliers whose CSR policies are in line with provisions within Unisem’s Group CSR Policy. Key direct material suppliers and service providers are required to comply with the provisions of the RBA Code of Conduct by signing a Letter of Conformance. Furthermore, our Business Ethics letter is sent to these suppliers.

We also assist key direct material suppliers and service providers in keeping abreast with latest sustainability best practices and RBA requirements through: annual updates on latest RBA requirements, regular briefings on the RBA Code of Conduct, Anti-Corruption and Bribery Policy and Unisem COE. With other suppliers, we practice continuous engagement as guided by Unisem COE and the RBA Code of Conduct to encourage good practice.

Supplier Screening and Audits

Assessments of sustainability performance of our key direct material suppliers and service providers are performed using the RBA tools, such as the Validated Audit Program (“VAP”) Operations Manual 6.0 (“VAP Manual”) and RBA Self-Assessment Questionnaire (“SAQ”). Our shared key direct material suppliers comprise 25 suppliers, covering 85% of our total direct material spending.

As part of our due diligence process, all key direct material suppliers are required to complete the SAQ on their own sites. The results of the questionnaire identify high-risk areas in labour, ethics, health, safety and environmental management systems, and potential gaps against the RBA Code of Conduct. This is part of our effort to integrate our suppliers within our Environmental Management System (“EMS”).

All key direct material suppliers will be physically audited periodically based on their levels of conformance and overall performance in line with RBA and Unisem’s requirements. Included in the supplier audit scope, we will verify the effectiveness and impacts of their environmental programs, objectives and targets. Below is our supplier audit plan for physical on-site audits of key direct material suppliers. On-site audits are carried out using the RBA Validated Audit Program (“VAP”) Operations Manual 6.0 (“VAP Manual”). The VAP Manual is based on the five sections of the RBA Code of Conduct: Labour, Health and Safety, Ethics, Environmental, and Management Systems.

Moving forward, we are aiming to complete 10 key direct material supplier audits in the year 2020.

Year	Target	Performance
2017	Perform 8 key direct material suppliers audit	Completed 9 audits
2018	Perform 8 key direct material suppliers audit	Completed 9 audits
2019	Perform 9 key direct material suppliers audit	Completed 10 audits
2020	Perform 10 key direct material suppliers audit	Target to complete 10 audits

Table 8

We have positioned the Suppliers Audits as a tool to develop and educate our key suppliers on RBA standards and best practises in line with Manufacturing Excellence.

Suppliers are provided with the CAPA (Corrective Action and Preventive Action) process template to complete and submit their responses to our audit findings within 7 working days. Implementation of agreed upon corrective action was verified by the Unisem audit team for closure. Below is a summary list of key corrective actions from suppliers for audits performed in 2019.

RBA Category	Summary of key corrective actions
Labour	<ul style="list-style-type: none"> • Prepare employment contract according to employee native language • Establish policy and procedure for hiring of apprentice/ intern/ student workers • Removal of unfair employment clauses from Employee Handbook • Removal of personal information and data in recruitment documents • No evidence of monitoring for compliance to 60 working hours per weeks
Occupational safety and health	<ul style="list-style-type: none"> • Carry out risk assessment of working conditions for pregnant women and nursing mothers • Conduct periodic work inspections and enhance awareness on emergency exits and evacuation plan • Place emergency exit signage at focal locations • To conduct fire drill twice a year for all employees • To conduct first-aid training once every two years
Environmental	<ul style="list-style-type: none"> • To provide designated scheduled waste and non-scheduled waste area according to standard • To revise the current monitoring system for water effluent discharge to every 2 years. This will be updated in the monitoring & measurement analysis master list
Ethics	<ul style="list-style-type: none"> • Establish policy and procedure on gifts and entertainment • Establish policy and procedure for whistle-blowing
Management Systems	<ul style="list-style-type: none"> • Include risk assessment exercise into RBA checklist as a mandatory activity • Prepare internal audit schedule to conduct audit assessments

Table 9

Following the issuance of corrective actions plans for supplier audits performed in 2019, 85% of supplier audits and implementation of respective corrective action plans have been completed by the end of the year.

New Supplier Screenings

As part of Unisem's quality system management and BCP (Business Continuity Plan) process requirements, sourcing and selection of new suppliers continue to receive greater focus and attention by our sourcing team. New suppliers undergo a stringent due diligence process, conducted by the Quality Assurance/ Procurement Department.

Cross functional team members from the Quality Assurance, Procurement, Engineering and Technology departments conduct on-site audits per the RBA SAQ framework for all new direct material suppliers. This practice is standardized across all Unisem sites. Refer to page 31 for further information on Unisem's application of RBA and its Code of Conduct.

SUSTAINABILITY REPORT

Conflict-free Minerals

Unisem's Group Policy on Conflict Minerals upholds our commitment to prohibit suppliers from sourcing conflict minerals and to work with our suppliers to identify the metals sourced from conflict minerals in the supply chain. These metals are tin, tantalum, tungsten and gold. Our Conflict Mineral Policy is available on our website.

In support of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict- Affected and High- Risk Areas, Unisem exercises due diligence on suppliers of products containing these metals to determine whether they are sourced from the Democratic Republic of the Congo ("DRC"), or any adjoining country, and if those metals directly or indirectly financed or benefited armed groups that are perpetrators of human rights abuse in the DRC or an adjoining countries. As part of our due diligence process, Unisem utilises the Responsible Minerals Initiative ("RMI") Conflict Mineral Reporting Template ("CMRT") as a data tool to report and review the smelter list in our supply chain. In addition, we communicate our Policy on Conflict Minerals to suppliers, obtain a written confirmation as part of the due diligence program, and require suppliers to complete the RMI Conflict Mineral Reporting Template.

Fair Procurement Practices

Our Group Procurement Policy and tender procedures guide the business conduct of our employees to ensure all suppliers are treated fairly and in the best interest of Unisem, void of collusion and price fixing. Our Policy seeks to upkeep confidentiality and avoid conflicts of interest in transactions with our suppliers.

Local suppliers based in Malaysia and Chengdu, account for 29.20% of Unisem Ipoh and Chengdu's direct material spending in 2019, as illustrated below.

	Proportion of direct material spending on local suppliers (%)		
	Unisem Ipoh	Unisem Chengdu	Group Total
Local suppliers	30.16%	27.99%	29.20%

Table 10

Our ability to expand and increase local direct material spending is impacted by the lack of and suitability of valuable natural resources in the countries we operate in. Nonetheless, we actively continue to seek out business opportunities where appropriate and possible such as general goods and services. Our support towards the local community is further described on pages 46 - 48.

¹ <https://www.unisemgroup.com/wp-content/uploads/2017/06/Conflict-Minerals-Policy-2017.pdf>



OUR FOCUS ON CUSTOMERS

We have always promoted a customer-centric business that identifies the true value of our products to different customers. Therefore, we have created a value-driven pricing model that reflects main elements of our value proposition: value pricing, robust management systems, trained personnel, delivering quality, meeting our social and environmental obligations through RBA, and promoting open and transparent relationships.

CUSTOMER SATISFACTION

KPI	Satisfaction of key customers		
Group Target	To achieve 85% of satisfied key customers		
Performance	89% in 2017	89% in 2018	89% in 2019

Delivering Customer Value

Our dedicated personnel at Quality Assurance and Marketing teams closely monitor and manage customer satisfaction rates by identifying and delivering on the expectations of different customers. In 2019, we reviewed our performance trends against our previous target of 80% satisfied key customers and revised our target to 85% of satisfied key customers. This year, we have achieved 89% satisfied key customers.

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We emphasise a proactive approach towards customer management, where feedback from customers are reviewed and shared with Senior Management. Feedback is fed into strategic decision making, where action plans are developed to meet customers' needs:

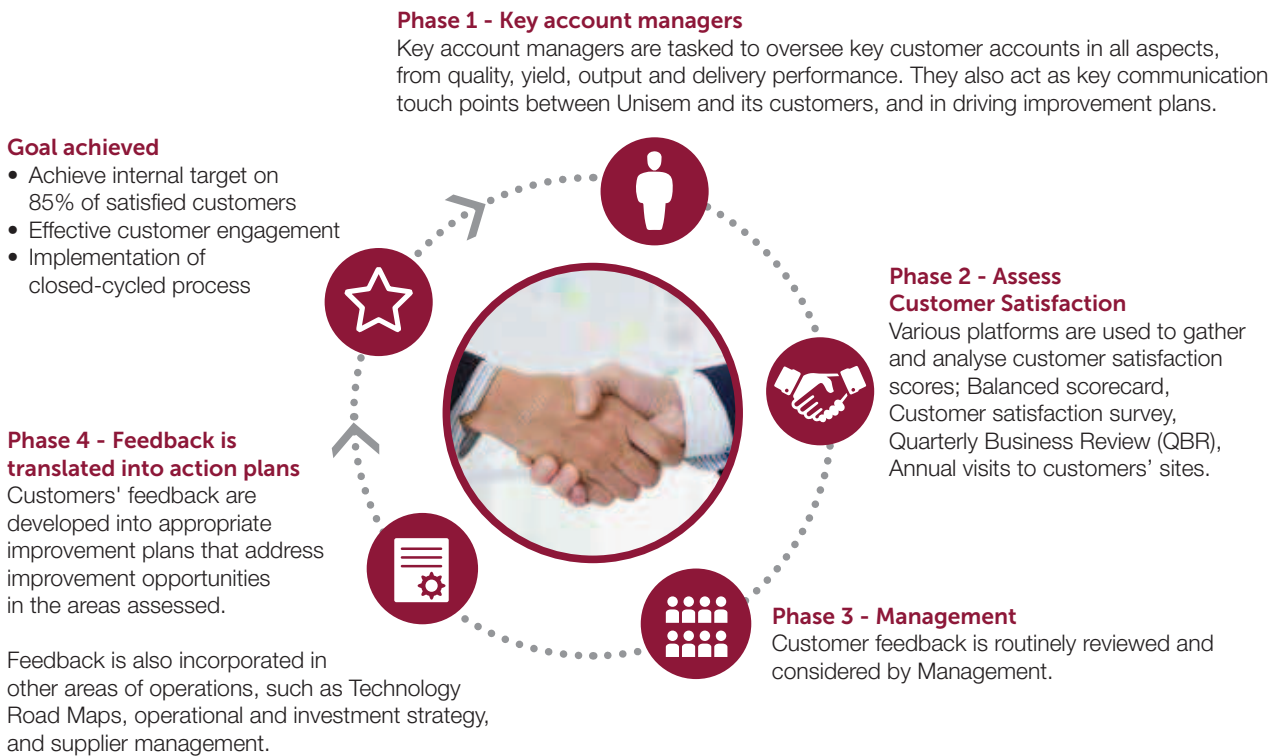


Diagram 4

Different platforms used to actively engage customers, and analyse customer feedback are shown below:

Modes of Assessing Customer Satisfaction	Frequency	Details
Balanced scorecard	Quarterly	Approximately 85% of key customers evaluated their satisfaction on Unisem's services using balanced scorecard. There is no general satisfaction target set due to the different targets defined by each key customer.
Customer satisfaction survey	Yearly	Unisem provides its own survey form to around 20% of its key customers who do not use balanced scorecard.
Quarterly Business Review (QBR)	Quarterly	Quality Business Review ("QBR") is conducted by the key customers so that key customers can give feedback to Unisem.
Annual visits to customers' premises	Annually	Top management, technology and marketing teams visit key customers located in the United States of America, Europe and Asia to strengthen customer relationships and align technology road maps.

Over the years, our customers have acknowledged our value proposition, and awarded us with Supplier of the Year / Outstanding Supplier Award by various customers. Refer to the Annual Report for our awards and recognitions from suppliers.

Quality and Lean Operations

Operations in Ipoh and Chengdu are certified with internationally-recognised Quality and Environmental standards. Refer to our Company Profile in the Annual Report for the list of certifications.

In embracing the pursuit of operational excellence in our business, we have implemented Kaizen initiatives across all our manufacturing sites. Kaizen focuses on increasing productivity by applying various Lean tools and techniques, Plan-Do-Check-Act (“PDCA”) techniques, Design Of Experiment, Technical Excellence, Poka Yoke, RCA (Root Cause Analysis) tools to eliminate non value added processes and activities.

To further enhance effectiveness, Unisem practices teamwork to encourage high levels of cross functional employee engagement on the shop-floor in continuous improvement activities. This employee engagement activity has been very successful in developing a positive workplace culture and enhancing employees’ competencies to meet the highly competitive demands of a fast pace business environment.

Incentives are given out annually to all employees for participating in Kaizen, Technical Excellence projects and Lean Big Win initiatives. These initiatives provide a platform for employees to demonstrate innovative thinking and problem-solving capabilities.

Our RBA Obligations

As a member of the supply chain in the electronics industry, we acknowledge our responsibility to meet the requirements as stipulated in the RBA Code of Conduct, as well as our obligation towards applying the same expectations in our supply chain. Measuring ourselves against RBA produces standardised and comparable results for our customers and other stakeholders.

To monitor and manage our performance, we develop appropriate governance structures and programmes. The RBA WCs assess the Group’s facilities on risks relating to labour issues, human rights issues and corruption issues. Unisem RBA WCs’ representatives also participate in public workshops and forums, which includes discussions on topics related to labour, society, environment, and other matters highlighted by the RBA. One of the events attended this year is the RBA Outreach Meeting in Guangzhou, China.

In addition, all facilities at Unisem are required to be assessed for the RBA Self-Assessment Questionnaire (“SAQ”) every year to identify social, environmental, safety and ethical risks and implement improvement plans or to update responses. After the assessments are completed, any required corrective action plans are put in place and monitored.

Furthermore, every 2 years, Unisem Ipoh undergoes the RBA Validated Audit Process (VAP), performed by a third-party auditor appointed by RBA, following the initial VAP in November 2014. The findings were communicated to the respective departments and corrective action plans were put in place. Unisem Chengdu underwent its first VAP in 2019. Further information on our VAP and SAQ scores available under Labour Rights on pages 42 – 43.

SUSTAINABILITY REPORT

TECHNOLOGY AND INNOVATION

KPI	Technology growth and development as per Unisem Group Technology Road Map
Target	To achieve target completion dates of our projects as per Technology Road Map
Performance	Refer to Table 13 for progress of our projects as per our Technology Road Map

To stay ahead of competitors, technology and innovation is key to achieving business synergies and gain competitive edge. In view of this, we continuously invest in innovation and technology to enhance our manufacturing capabilities, improve cost performance and upgrade the quality of our intellectual property.

Annual Investment in R&D

To capture business opportunities in the semiconductor market, we have invested RM8,115,000 on R&D expenditure into programmes that promote innovation and strengthen product performance.

Unisem Group	Unisem Group research and development expenditure		
	2017	2018	2019
Unisem Group Research and development expenditure (RM '000)	8,401	8,847	8,115
Research and development expenditure as a percentage of Unisem Group revenue (%)	1%	1%	1%

Table 12

Key Technology Achievements

This year we continue to collaborate closely with our customers to meet their business objectives and needs. Some of our noteworthy achievements include:

1. Developed a Metal Lid Module LGA with high power and package size up to 23x18mm. This package solution drives assembly process flow simplification, high assembly ASP and excellent product performance. A series of products with higher power product performance is currently in its engineering phase.
2. Another key customer collaboration achievement is to develop an ultra-thin SLP package, with further package footprint reduction with the invention of routable lead frame capability.

Key Projects and R&D Achievements during the Year:

1. Developed X4MIS 0.3mm max package thickness for mobile application. – Internal & customer qualification has been completed. Technology capability is in place. Pending for customer product introduction and launching.
2. Enhanced Air Cavity Package in MIS for high frequency RF application is completed and currently in volume production.
3. Developed a thin WLCSP Capability for mobile application. Technology capability is in place. Pending for customer product introduction and launching.
4. A total of five new processes/materials were qualified in 2019. To date, Unisem has obtained 31 patents with another 4 patents in progress.
5. Implementation of AOI (Automatic Optical Inspection) for 2nd & 3rd Optical inspection on critical products to replace human dependence visual inspection. This process will reduce the risk of human induced error and reduce operator resources through automation and cycle-time reduction. This is one of the few efforts to embrace Industry 4.0 to achieve quality enhancement and automotive excellence.

Our R&D Awards & Recognitions

We are pleased to announce the recognition awards we have received for our R & D successes from our customers and recognition bodies.:

1. Business award on Intel Metal Lid Module LGA package, which introduced 3D solder paste printing process on 2nd pass reflow. This process has better assembly yield and faster throughput than other players in the industry.
2. Recognition from Skyworks Solutions Inc., for introducing MIS package as one of the alternatives for EMI Shielded solution for high RF module application.

Technology Road Map

We aspire to effectively organise and prioritise our resources and manpower to meet short, medium and long-term technological investment goals. In 2019, we continue to monitor our technology roadmap to ensure projects are delivered on time and in accordance with industry demands.

Projects	Descriptions	Challenges	Target for Production Readiness**	Completion date
12" Wafer Bumping*	Establish the capability for wafer bumping on 12" wafer size. The objective is to align with customers' technology roadmap and demands. With this capability, wider range of business opportunity is available for current as well as new customers.	<ul style="list-style-type: none"> • High Capex investment • Cost competitive • Technical challenges e.g. automation handling 	2019	Deferred to Quarter 1 of 2020. All 12" equipment has been installed in UAT. Currently in progress for internal buyoff.
Package Level EMI Shielding*	Establish capability of package level EMI shielding, a requirement especially for RF devices due to upcoming sub-5G / 5G & IoT.	<ul style="list-style-type: none"> • High Capex investment • High maintenance cost • Single tool 	Quarter 1 of 2020	Completed. Ready for customer qualification & production
Pre-molded Lead Frame with Wettable Flank	To get ready MIS package into one of the key automotive requirements – Wettable Flank.	<ul style="list-style-type: none"> • Higher frame cost • Technical challenge is etching depth control, package sawing burr at the etched dimples 	Quarter 3 of 2019	Completed. Ready for customer qualification & production.
High Thermal Conductive DAF	For assembly design rules & reliability enhancement e.g. die / paddle size ratio, consistent BLT, better MSL etc.	<ul style="list-style-type: none"> • High material cost • Temperature cycling test performance due to high material modulus 	Quarter 3 of 2019	Completed. Ready for customer qualification & production
008004 passive	With the trend of package miniaturisation, smaller passive components are required.	<ul style="list-style-type: none"> • High material cost i.e. passive & solder paste • New equipment is required • Technical challenges are high risk of SMT defects e.g. tombstone, solder bridge 	2019	Deferred to Quarter 4 of 2020. Completed paper technical assessment. Need new investment on equipment. Hence, currently on-hold.

SUSTAINABILITY REPORT

Projects	Descriptions	Challenges	Target for Production Readiness**	Completion date
Fan-out Wafer Level Packages	As an alternative of Fan-In WLP, Laminate Substrate Based Flip chip and System in Package ("SiP") integration, as well as driving for higher package functionality, better product performance & competitive cost.	<ul style="list-style-type: none"> • High Capex investment • Cost competitive • Technical challenges e.g. carrier warpage 	2018	Deferred to end of 2020 due to some unsolved technical challenges & more focus on 12" bumping readiness, the project target completion date will be deferred.
Super High Thermal Epoxy	Higher thermal dissipation for better product performance	<ul style="list-style-type: none"> • High material cost • Narrow process window e.g. epoxy fast dry off • High modulus, thus it is not appropriate for long term reliability test. 	End of 2019	Completed. Ready for customer qualification & production
Low Cost Pre-molded Frame*	As an alternative solution to have low cost pre-molded frames as compare to standard MIS, which is costlier	<ul style="list-style-type: none"> • Currently single source 	Quarter 1 of 2020	In progress of assembly evaluation
High RF Performance Compound	Introduce & assess the key material to enable sub-6GHz & mm Wave product (key for 5G)	<ul style="list-style-type: none"> • High material cost • Unknown material assembly performance 	Quarter 2 of 2020	In progress of assembly evaluation
High RF Performance Laminate Substrate	Introduce & assess the key material to enable sub-6GHz & mm Wave product (key for 5G)	<ul style="list-style-type: none"> • High material cost • Unknown material assembly performance 	Quarter 2 of 2020	In progress of tooling up laminate substrate with high RF performance

** As reported in Unisem's 2018 Sustainability Statement, Annual Report 2018

* New projects commenced in 2019

Table 13

ANTI CORRUPTION

Unisem's COE² and Anti-Corruption and Bribery Policy³ governs the professional and business conduct of employees across all levels in the Group. These policies aim to shape Unisem's culture of honesty and responsibility to committing to the highest ethical standards in all its business activities. Under the COE, general business practices and legal requirements are detailed to guide decision making and business activities. It emphasises integrity and trust when dealing with third parties, accurate financial reporting, the responsible use and management of Unisem's assets and promotes a culture of diversity, cooperation and productivity. On the other hand, the Anti-Corruption and Bribery Policy clearly states Unisem's zero tolerance stance and prohibits all Unisem employees from engaging in any form of bribery, anti-corruption, fraud, extortion or embezzlement in business relationships and dealings. The COE and Anti-Corruption and Bribery Policy is communicated annually to all employees across the Group and on our corporate website.

² <https://www.unisemgroup.com/wp-content/uploads/2016/05/Code-of-Ethics.pdf>

³ https://www.unisemgroup.com/wp-content/uploads/2016/04/Anti-corruption_WebsiteVersion.pdf

Unisem's COE and Anti-Corruption and Bribery Policy had been reviewed and approved by the Board during the year.

In 2019, 3,568 employees in Unisem Ipoh and 1,590 employees in Unisem Chengdu have received training on anti-corruption through our annual COE briefings. Additionally, there were no cases of non-compliance with our Anti-Corruption and Bribery Policy as well as laws and regulations against acts of corruption. In addition, Unisem does not make charitable contributions to political parties, while employees are permitted to make personal political contributions. Further details are available in our Policy.

CUSTOMER PRIVACY & DATA PROTECTION

To safeguard our customer's proprietary information, we have in place robust security management systems and the "IT Acceptable Use Policy" to strengthen internal security controls. The policy defines the standard operating procedures of accessing, transferring and managing information and data in a responsible manner. The table below details our key internal controls of the Group.

Key internal controls implemented by Unisem to protect customer privacy and data

To protect the confidentiality of proprietary information, all employees are required to comply with the Unisem Code of Business Conduct and sign a Non-Disclosure Agreement

Ensuring secured scrap unit disposal of defective products to be in line with internal scrap procedures

Securing all computers, laptops and workstations with password-protected screensaver, anti-virus software, Security Endpoint Protection Software and firewall

Creating a confidential relationship between Unisem and its contractors, suppliers and service providers with the signing of Non-Disclosure Agreements

Attending trainings to enhance skillset on data protection and security

Table 15

There were no complaints received from outside parties and regulatory bodies. We have also not identified any cases of leaks, theft, and loss of consumer data.

SUSTAINABILITY REPORT



PEOPLE

At Unisem, we endeavour to create a safe and healthy work space that provides employees a conducive and productive environment to perform their job responsibilities. We do this by ensuring our operations and processes are compliant to local health and safety regulations, in addition to following industry best practices. We embrace a diverse pool of talent and provide fair and equal opportunities in areas of career development, compensation, and welfare benefits. We are committed to our social responsibility of engaging and developing the communities we operate in.

Group employee diversity

	Male	Female	
Employee category – by gender			
Senior Management	44	4	
Management	68	14	
Executives	428	269	
Operators	400	3,187	
Non-Operators	1,271	426	
Employee category – by age group			
	under 30 years old	30-50 years old	over 50 years old
Senior Management	-	18	30
Management	-	58	24
Executives	119	555	23
Operators	2,422	1,065	100
Non-Operators	705	951	41
Local Employment			
	Senior Management	Non-senior Management	
Unisem Ipoh	67%	47%	
Unisem Chengdu	50%	86%	

Table 14

EMPLOYEE WELFARE

As Unisem continues to grow, investing in the well-being of our employees is necessary to enable us to maintain our innovative momentum and competitive edge. To achieve this, we provide competitive compensation, employee benefits and a working environment that promotes employee morale and productivity.

COMPENSATION AND BENEFITS

Unisem's compensation and benefits are based on industry benchmarks and annual reviews. At Unisem Ipoh, collective bargaining agreements are reviewed with our in-house union every three years. As part of the review, salary scales are benchmarked against employees' views, other companies in the area and multinational companies.

Benefits Required by Law		Insurance / Medical Coverage	
Unisem Chengdu	Unisem Ipoh	Unisem Chengdu	Unisem Ipoh
<ul style="list-style-type: none"> social insurance housing funds annual, sick, marriage, funeral, maternity and paternity leave 	<ul style="list-style-type: none"> minimum wages order contribution to the employees' provident fund contribution to employees' social security provision of annual leave 	<ul style="list-style-type: none"> social insurance commercial insurance 	<ul style="list-style-type: none"> personal accident insurance coverage child delivery subsidies medical benefits for outpatient, specialist and hospitalisation

FACILITIES & PRIVILEGES

At Unisem Ipoh, employees are entitled to a salary advance of up to 35% of their monthly salary during festive periods. Flexible working hours are also made available to support a health work-life balance.

Facilities	Privileges
Unisem Ipoh	
<ul style="list-style-type: none"> surau 24-hour canteen mini sundry shop operated by Koperasi Pekerja-Pekerja Unisem (M) Berhad gated parking space library in-house clinic with full-time industrial nurses dedicated lactation room for breastfeeding mothers hostel for operators who do not have homes in Ipoh 	<ul style="list-style-type: none"> dedicated parking spaces for our special needs employees (those with disabilities) and pregnant women dedicated rest area for female workers

SUSTAINABILITY REPORT

SPORTS & RECREATION List of Activities / Events Organised in 2019	
Unisem Ipoh	
<ul style="list-style-type: none"> • Congkak Competition • Fun Ride • Bowling Tournament • Self Defense Workshop • Henna Art Competition • Wall Climbing Challenge • Archery Competition 	<ul style="list-style-type: none"> • Mystery Box Guessing • Football League Final Match • Fishing Competition • Knee Pain Management Workshop • Ipoh Car Free Day Fun Run • Futsal Tournament • Badminton Tournament
Unisem Chengdu	
<ul style="list-style-type: none"> • Tug of war • Annual dinner • Football league 	<ul style="list-style-type: none"> • Badminton Competition • Parent-child campaign

Table 15

Employee Learning and Talent Development

KPI	Average training hours per employee ⁴		
Group Target	60% of employees have minimum 6 hours training per year		
Performance	76.9% in 2017	86.8% in 2018	73.2% in 2019

To attract and retain an ensemble of talents, we cultivate a working environment that encourages lifelong learning, sharing and innovation.

For the year, Unisem continues to invest in comprehensive training programmes for employees. We emphasise on developing employees' technical skillsets and compliance to standard operating procedures in addition to sharpening soft skills required in team work and leadership.

At Unisem, the Training Department is responsible of monitoring annual training hours per employee for operators and non-operators. Employees are required to complete a minimum of 6 hours of training annually. The charts below demonstrate our employee learning and talent development performance indicators for non-operators.

⁴ The performance indicator excludes operators.

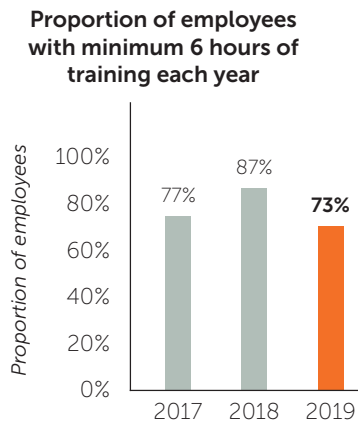


Chart 1

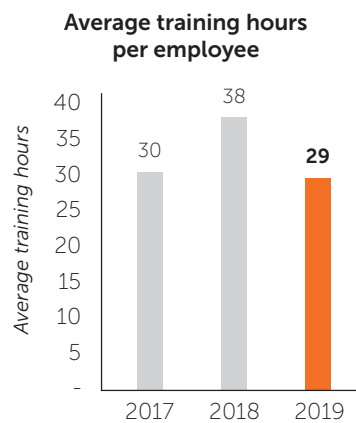


Chart 2

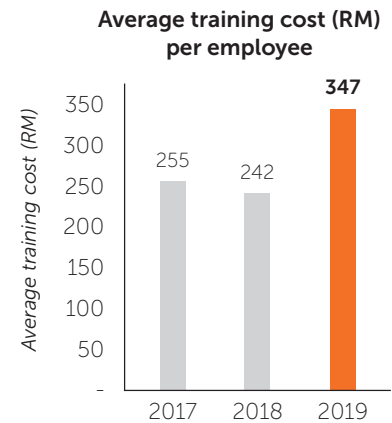


Chart 3

Training programmes provided include an array of technical and non-technical offerings, which aims to equip employees with relevant functional skills and knowledge that are aligned with professional needs, job specifications and industry demands. These trainings typically take the form of on-the-job training and development programme series. The table below details the types of training programmes offered at Unisem.

Types of Training Programmes	Description of Training
New Employee Program	To familiarise new employees with all aspects of the business, including operations, strategies and expectations. This programme also includes quality, environmental, health and safety awareness as well as our expectations for ethical conduct.
Quality Courses	Focusing on the need to build quality and reliable products and subsequently on-time delivery to customers.
Technical Courses	Keeping abreast with the latest, state-of-the-art equipment and methodologies.
Safety and Health	Complying with legal and occupational regulation and workplace safety and health.
Environmental	Heightening awareness and caring for the environment to make our surroundings a better place to live-in.
Ethics, Anti-Corruption & Disciplinary	Educating employees on our code of ethics, anti-corruption and disciplinary measures
Soft Skills - Motivational/ Leadership/ Supervisory	Development of leadership skills and personal effectiveness of our staff to better manage the complex and diverse people management challenges.
Statistical – Design of Experiment, Statistical Process Control, Statistical Method etc.	Performing statistical techniques and analysis to promote engineering excellence in process and product development for engineering staff.
Team Building	To reinforce the strong teamwork culture, relationship building, and to build a positive work environment.
IT Courses - Network Security, Programming	Continuous enhancement of IT security platforms and systems.
Special Requirements (e.g. RBA / TS16949 / ISO14001 / ISO45001 / SST / X-Ray etc.)	Catering to the needs of customers, regulatory agency/government and international standards.

Table 16

SUSTAINABILITY REPORT

Based on employee performance, peer-to-peer feedback and performance reviews are conducted at least once a year between managers and team members. The performance evaluation sessions encourage open communication and transparency of employee performance results and discuss career aspirations and plans. This platform also ensures employees remain driven, motivated and aligned with organisational direction and goals.

Employee Communication

Unisem takes on an active role in building an open communication culture among its employees. Our platforms which include our Ethics Hotline, Employee Climate Survey and 'Open Door' policy encourages employees to provide constructive feedback and report grievances in a safe and confidential manner.

Unisem's Group Ethics Hotline

At Unisem, an Ethics Hotline is available to internal and external parties to report inappropriate or unethical behaviour and workplace grievance. Cases reported in 2019 have been investigated and resolved without consequential action on suspected parties.

Additionally, our Whistle Blowing policy stipulates the process and procedures for employees to report any improper conduct and malpractice in a safe and confidential manner. We are committed to keeping the whistle blower's identity and reporting contents confidential and providing protection from any unfair treatment or retaliation as a result of the violation reporting. Please refer to our website for further details of this policy⁵.

Types of cases	No. of cases	
	2018	2019
Workplace grievances from employees	14	8
Whistleblowing from employees	1	4
Whistleblowing from external parties	0	0

Table 17

Cases in 2019		
Types of cases	Description of cases	Actions taken by Management
Whistleblowing from employees	Unprofessional conduct	Investigation conducted and employee was temporarily suspended.
	Sexual harassment	Investigation conducted and employee was temporarily suspended.
	Discrimination based on nationality	Investigation conducted and found no discrimination.

Table 18

⁵ https://www.unisemgroup.com/wp-content/uploads/2019/10/Whistleblower-and-Hotline_withlogo_24Oct2019.pdf

Employee Climate Survey (“Survey”)

To better understand the needs and concerns of our employees, the survey is participated by employees of all levels across the Group. Where Unisem Ipoh conducts its survey annually, Unisem Chengdu conducts its survey bi-annually. Topics covered in the survey include leadership by management, job satisfaction, career development and top-down communication. Feedback received are then analysed and discussed with the Management to address employee concerns with appropriate improvement measures. Following this, the survey outcome and improvement measures are communicated to employees.

Employee Retention

KPI	Annual turnover rate			
Target	Unisem Ipoh	Annual turnover rate below 25%		
	Unisem Chengdu	Annual turnover rate below 45%		
Performance	Unisem Ipoh	21.0% in 2017	21.9% in 2018	20.6% in 2019
	Unisem Chengdu	44.2% in 2017	58.9% in 2018	57.9% in 2019

Turnover rates at Unisem Ipoh is primarily attributable to the completion of contracts with our foreign workforce, who do not intend to renew the contract as they have decided to return home. At Unisem Chengdu, we observe a higher turnover rate – a common trend across all Chinese industrial sites and in the semiconductor industry in China, primarily due to mismatch of employee experience and job roles.

To retain our employees, the Group will continue to align compensation and benefits against local offerings and applicable local regulations in addition to creating safe and healthy working environments. We also continue to emphasise employee engagement and the recruitment of skilled talents as the crux of our human resource function. In 2019, employees entering managerial and supervisory roles are required to attend Unisem Core Values workshop that develops their skills in organisational management by understanding and implementing Unisem’s core values into day-to-day operations. A total of 55 employees have benefitted from this programme. This is an effort to groom managers to go beyond the conventional role of just managing employees, but also build a supportive culture that inspires and motivate employees to grow and contribute to the organisation.

SUSTAINABILITY REPORT

LABOUR RIGHTS

Unisem places great emphasis on fair labour practices. As adopters of the RBA Code of Conduct, our employees across the Group are expected to comply with standards of international labour rights. This applies the same to the suppliers, customers and business partners we work with along our supply chain. Our commitment to upholding and respecting human rights are incorporated in the COE and Group CSR Policy, which have been aligned with the RBA Code of Conduct.

Protecting our Operations



Diagram 5

To ensure our operations are free from labour rights issues, we conduct risk assessments guided by the RBA. We conduct risk assessments through RBA's Self-Assessment Questionnaire ("SAQ") and Validated Assessment Program ("VAP") at all operating sites. For Unisem Ipoh, the VAP is conducted every 2 years by a third-party auditor appointed by RBA. These assessments have proven to be an important business practice to Unisem as it monitors the social, environmental and ethical risks within our supply chains and identifies measures to mitigate these risks.

Location	SAQ Performed in 2019	SAQ Score*	VAP Performed in 2018/2019	VAP Score*	Level of Risk?
Malaysia	Completed in Mar 2019	91.3	Completed in Sept 2018	151.6	Low
China	Completed in Mar 2019	94.6	Completed in Nov 2019	134.8	Low

* SAQ full score is 100, and VAP full score is 200

Table 19

In 2019, Unisem Ipoh and Unisem Chengdu continued to improve its SAQ results. Additionally, Unisem Chengdu's reported satisfactory VAP results. Based on the audit findings, improvement opportunities were identified in relation to supplier's management of working hours for their workers. In response to this, Unisem Chengdu's RBA Chairman has directed the RBA committee to collaborate with the identified supplier to resolve this issue. We are pleased to report no incidences of human rights violations nor violations of labour standards within the Group.

OCCUPATIONAL HEALTH & SAFETY

The safety culture of our work environment is an important element to the Group's success. Via our Safety and Health Policy, Unisem COE and Group CSR Policy, Unisem aims to create a safe, healthy and conducive work environment.

Our management systems are implemented based on local requirements and recognised international standards and apply to all our employees and stakeholders who visit our sites. In 2019, Unisem Ipoh is working towards being certified ISO 45001. To date, we have successfully passed stage 1 audit and is scheduled to undergo stage 2 audit next year to obtain full certification. This is an ongoing initiative in addition to achieving the highest level (5 - excellent) of implementation of the Systematic Occupational Health Enhancement Level Programme ("SOHELP") in 2016. Designed by the Department of Occupational Health and Safety Malaysia ("DOSHS"), SOHELP is an enhancement programme focused on occupational health in areas including noise control, chemical handling and management as well as ergonomics issues. At Unisem Chengdu, OHS management systems are OHSAS18001:2007 certified and compliant with local health and safety regulations.

The Safety and Health Committees ("Committees") headed by the senior manager of the respective Facility Departments are tasked with the responsibility of daily monitoring and implementation of action plans and initiatives.

Ensuring Workplace Safety

KPI	Injury frequency rate for industrial accidents		
Group Target	Injury frequency rate for industrial accidents below 2 accidents per million hours worked ⁶		
Performance	1.78 in 2017	1.69 in 2018	1.80 in 2019
	2017	2018	2019
Fatality rate	0	0	0

Table 20

⁶ Injury frequency rate is calculated as [total no. of work-related accidents/ total no. of man-hours worked] *1,000,000, as in line with definition by the Malaysian Department of Occupational Safety and Health (DOSHS)

SUSTAINABILITY REPORT

Among safety performance indicators monitored by the Safety and Health committee are work-related accidents categorised as 'major' and 'minor' work-related accidents. Major work-related accidents are defined as accidents which cause employees to be on medical leave for more than four days. The number of major and minor work-related accidents in the last three years is shown below.

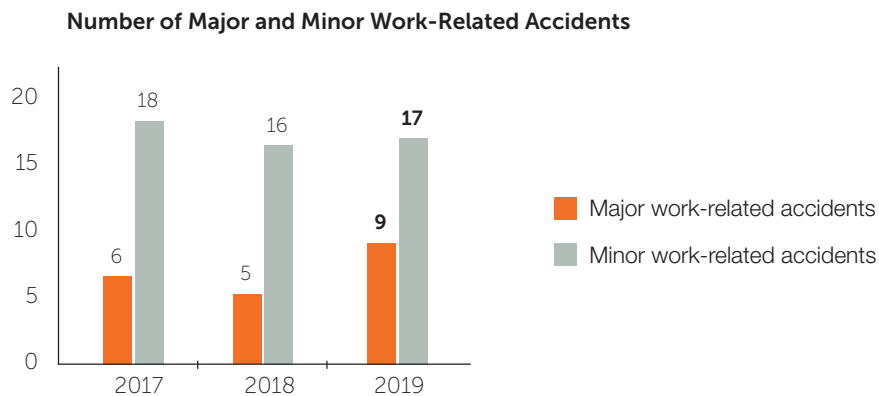


Chart 4

In 2019, the number of work-related accidents has increased from the year 2018. Minor work-related accidents were mainly trip and falls arising from safety negligence. The Management continues to emphasise safety awareness via safety trainings, briefings and placing safety signs. Reported incidents primarily result in physical injuries, a majority of which are minor accidents. These accidents usually occur as a result of trip and fall cases, causing employees to be away from work for a short period of time. We are also pleased to report no recorded incidents of work-related ill health or cases with high consequence injury during the reporting period.

Among other initiatives conducted to strengthen our safety environment include: on-site chemical and personal protective equipment management and storage, workplace inspection, machinery and work instruction and inspection, and radiation monitoring. Another important element to our safety practices is the Hazard Identification Risk Assessment and Risk Control ("HIRARC") process, which aims to identify hazards and risk factors arising from our operating sites and establish control procedures where needed. Safety findings from these initiatives are reported to the site COO and Management at meetings where remedial action plans are established to resolve these issues.

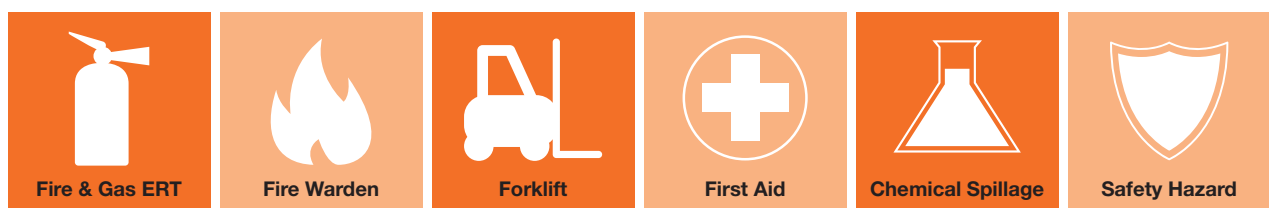
Our operating sites have established incident reporting and management procedures to provide a structured and accessible platform for employees to report any potentially unsafe act or workplace condition arising from unsafe or unhealthy work conditions and processes. The diagram below illustrates Unisem's incident reporting process.



Diagram 6

Health and Safety Training

To enhance employee safety awareness and prevent workplace accidents, Unisem provides ongoing training programmes that are tailored to meet the requirements of specific types of work, and its associated health and safety risks. The Facility Departments are responsible of reviewing and developing annual training programme schedules to ensure programmes conducted reflect any operational, industry, regulatory changes and changes to health and safety performance within the Group. The types of training programmes conducted during the reporting year is illustrated below.



Promoting Workplace Health

We promote workplace health by providing healthcare benefits such as regular health screenings, and access to medical treatments from panel clinics on top of conducting health and safety talks. Where Unisem Chengdu is located closely to medical facilities, Unisem Ipoh provides an in-house 24-hour clinic with experienced industrial nurses and visiting doctors to provide medical consultation and treatment.

SUSTAINABILITY REPORT

LOCAL COMMUNITIES

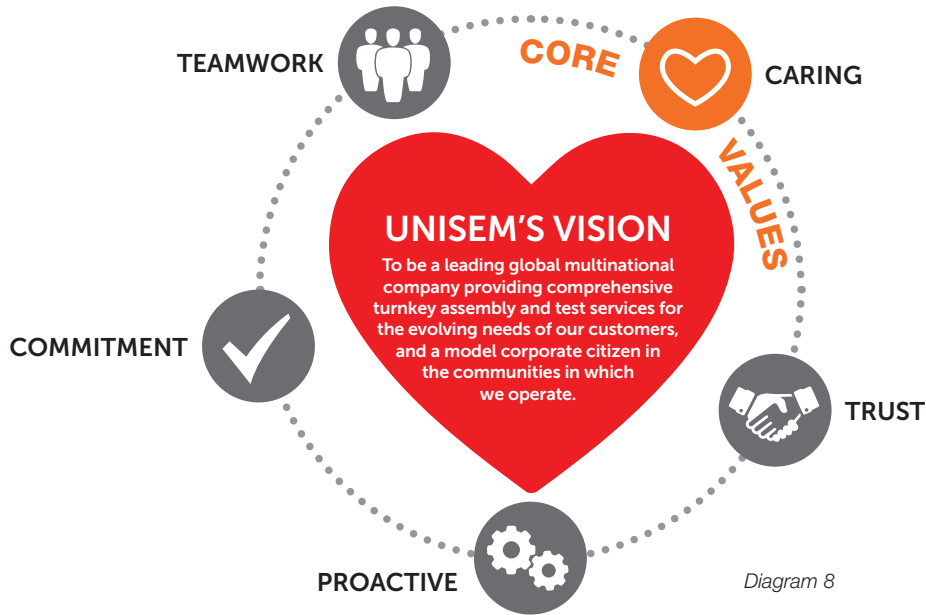


Diagram 8

Our Vision, Mission and Core Values guide the way we conduct our business and the relationships we have with our stakeholders. We recognise our obligations to our local communities to create shared value and reduce negative impacts.

Our local community engagement framework is represented by our three objectives:

- 1 Be recognised as a responsible corporate citizen that reinvests in the society and communities it operates in;
- 2 Promote recognition and awareness of the less fortunate in the community; and
- 3 Support programmes that promote the well-being of the community in general and for our employees living in the community.

Supporting Local and National Economic Development

Local hiring

In the countries we operate, we understand the value of supporting local job creation as it empowers households and contributes to national economic development. The people we hire are given access to a supportive work environment and career development opportunities, as described in this report. In Ipoh, Malaysia, we are one of the largest private sector employers.

Proportion (%) of local hires in Senior Management and Non-Senior Management roles		
	Senior Management	Non-Senior Management
Unisem Ipoh	67%	47%
Unisem Chengdu	50%	86%

Table 21

Youth development

In addition to permanent hires, we invest in youth development by providing them with career opportunities via our training programmes. Unisem Ipoh currently runs an annual training programme for industrial trainees from various universities and polytechnic institutions. As part of the programme, trainees are provided with career opportunities in various departments at Unisem Ipoh, such as Assembly, Final Test, Quality Assurance, Engineering, Maintenance, Finance, Management Information Systems and Human Resources.

In 2019, Unisem Ipoh provided opportunities to a total of 127 students from various local polytechnics and universities in Malaysia as trainees, of which 105 are pursuing Engineering Studies and 22 are from Non-Engineering backgrounds. 6 students have received permanent placements with Unisem.

Noise Monitoring

All sites practice open communications with local communities, and regular engagements via grievance channels and volunteering programmes. Operations in Unisem Ipoh⁷ and Unisem Chengdu are both located at local industrial parks with residential areas surrounding our operating facilities.

We are cognisant of our potential negative impact to the local community due to the noise levels of our plants. In the past, we have received feedback from local communities on noise pollution. Since then we have implemented stringent noise monitoring programmes, including designating the responsibility to our dedicated facilities team, conducting Boundary Noise Monitoring exercise annually, and monitoring and reviewing reported noise levels regularly against local regulations.

Levels of noise pollution are maintained below thresholds as permitted by the guidelines on noise limits set by local authorities. Below, we disclose our performance against these parameters.

Regulatory limit on boundary noise levels (dB(A))		
	Day	Night
Unisem Ipoh	70	60
Unisem Chengdu	65	55

Table 22

Average Boundary Noise Levels (dB(A)) - Unisem Ipoh		
	Day	Night
2017	60	58
2018	60	58
2019	60	58

Table 23

⁷ According to the Guidelines for Siting and Zoning of Industry and Residential Areas (2012) issued by the Department of Environment, semiconductor industries are permitted to operate within a primary and overall buffer of 80 meters and 100 meters respectively. In the case of Unisem Ipoh, primary buffer is 40 meters. As residential areas were developed approximately 17 years after the commencement of our business activities in 1992, we have established monitoring and mitigation measures to ensure noise impact from our operations does not exceed the applicable and permitted noise levels (regulated by the relevant local authorities) at the most sensitive point of reception.

SUSTAINABILITY REPORT

Average Boundary Noise Levels (dB(A)) - Unisem Chengdu		
	Day	Night
2017	54	49
2018	52	49
2019	51	49

Table 24

Community Investment

Donation programmes are reviewed annually to ensure that distribution of corporate contributions continues to effectively address the community's changing needs. These community investment decisions are made after engagements with municipal bodies and local communities. We have contributed to many facets of local development, including education, municipal infrastructure, underprivileged communities, and festive celebrations.

Unisem Ipoh donated RM106,547 this year, which includes cash, daily necessities and sponsorship to the local schools, children's and special needs' homes, the local fire and rescue association, festive events, local unions and special events.

Long-term volunteer programmes continued this year, including the annual blood donation drive, visits to local orphanages, old folks' homes and physically challenged centres during festive periods. Every year we conduct these programmes to support the local organisations. The blood donation drive was held at Unisem Ipoh with 339 employees volunteering.

In addition, our employees participated in numerous charity drives in conjunction with major festivities such as Thaipusam, Chinese New Year, Hari Raya and Deepavali. Other charitable activities organised during the year include monetary and non-monetary contributions to Sekolah Agama Serdang Permai, Sekolah Tabika Kemas Kamping Serdang Permai, and Good Shepherd Services.



ENVIRONMENT

As global agenda strives towards a sustainable future for generations to come, the semiconductor industry continues to be cognisant of environmental management through the introduction of low-energy-consumption products, utilising resource efficient technology and equipment, improving usage of ultra-pure water, pollution prevent and waste management.

We continue to manage and reduce environmental impact of our operations and our value chain, as well as improve our reported disclosure. In this section of the report, we discuss our measures and performance across our material matters.

Governing Our Environmental Management

Our environmental management systems are centred on the requirements of the RBA Code of Conduct and ISO 14001, an international standard with specific requirements for an effective environmental management system (EMS). All Unisem sites are ISO 14001:2015 certified, and annually perform the SAQ with biannual VAP. For more information on SAQ and VAP, please refer to page 43.

Performance of environmental management systems at all our sites are monitored by our Environmental Working Committees. This includes ensuring environmental management policies, processes, programmes, and performance are legally compliant, adhere to the RBA Code of Conduct, and that each site implements the requirements of ISO 14001. Outcomes are reviewed annually by our site COO and GM, who are responsible for sustainability initiatives and reporting to the Board.

The Unisem COE, Environmental Policy and Health & Safety Policy formalise our commitments towards environmental management. These are publicly available on our website⁸.

EFFLUENTS AND WASTE MANAGEMENT

Hazardous waste management

KPI	Recycling rate of hazardous waste generated		
Target	To achieve 50% recycling rate of total scheduled (hazardous) waste generated		
Performance	49% in 2017	50% in 2018	49% in 2019

In 2019, 49% of hazardous waste generated was recycled by our waste contractors. We marginally missed the 50% recycling rate of total hazardous waste generated target due to lower electronic waste generated. This is due to lower sales volume during the reporting year. Types of hazardous waste generated in our operations are primarily electronic waste, spent solvents, spent cleaning solutions, sludges from wastewater treatment, and spent cyanide solutions.

⁸ <https://www.unisemgroup.com/wp-content/uploads/2017/05/Environmental-Policy.pdf>
<https://www.unisemgroup.com/wp-content/uploads/2016/05/Safety-and-Health-Policy.pdf>

SUSTAINABILITY REPORT

Inappropriate handling or disposal of our hazardous waste would negatively affect the environment, health and safety of our workplace, and our surrounding communities. Therefore, all our sites practice stringent management of hazardous waste based on local laws and regulations. This includes measures taken to ensure appropriate storage, safe handling, movement and disposal of waste generated. In addition, our sites are regularly visited and audited by regulators to review the thoroughness of our measures.

To ensure proper disposal of hazardous waste Unisem only appoints licensed waste disposal contractors, as authorised by local regulators. Waste contractors are preferred based on their ability to perform high rates of recovery or recycling. Waste contractors are regularly audited to ensure their compliance to local laws and regulations concerning environmental, health and safety aspects.

Total Hazardous Waste Generated (MT)			
	2017	2018	2019
Unisem Ipoh	280	263	233
Unisem Chengdu	113	118	115

Table 25

E-waste management

Electrical and electronic waste, known as waste electrical and electronic equipment (WEEE) or e-waste, is one of the fastest growing waste streams in modern society. Both a challenge and opportunity; handling of e-waste is costly and hazardous, but appropriately recovering valuable substances and ensuring ethical disposal contributes towards global goals, such as SDG 12 for Responsible Consumption and Production.

E-waste primarily comprises defective wafers, ICs, frames, and waste gold wires. We follow strict protocol in ensuring that all proprietary information of our customers is scrapped prior to disposal. All our sites comply to local environmental laws and regulations on e-waste handling and disposal practices. While 60% of total hazardous waste are e-waste generated at Unisem Ipoh, 35% of total hazardous waste generated at Unisem Chengdu are e-waste. In 2019, we report a recovery rate of 81% and 99% of our e-waste by waste contractors for Unisem Ipoh and Unisem Chengdu respectively. The movement in e-waste generated is primarily in tandem with overall production activity in each site.

Total e-waste Generated (MT)			
	2017	2018	2019
Unisem Ipoh	162	151	139
Unisem Chengdu	31	38	40

Table 26

% of e-waste recovered			
	2017	2018	2019
Unisem Ipoh	82.9	81.3	81.3
Unisem Chengdu	98.8	98.8	98.9

Table 27

Non-hazardous waste management

Types of non-hazardous waste generated includes domestic trash, such as paper, plastic, cardboard boxes, etc. In 2019, we generated 1,059 MT where 51% of which were recycled by our licensed waste contractors. In Unisem Ipoh and Chengdu, we have improved our data collection and reporting process by refining and standardizing our classification of hazardous and non-hazardous waste material. As a result of the standardized, we saw an increase in quantity in the total non-hazardous waste during the reporting year.

Total Non-hazardous Waste Generated (MT)			
	2017	2018	2019
Unisem Ipoh	577	621	695
Unisem Chengdu	205	257	364

Recycling and Reuse Rate of Non-Hazardous Waste (MT)			
	2017	2018	2019
	52%	48%	51%

Table 28

We closely engage our employees to encourage domestic waste reduction, such as discouraging food waste, increasing consciousness of waste generated, and encouraging use of recycle bins. Furthermore, we practice reduction of new materials consumption at our operations. This includes new materials used for shipping tubes, canister cans and wafer carriers or containers. Consumption of these materials have significantly reduced since we embarked on the programme more than five years ago. Benefits reaped were significant cost savings, and effective use of resources. During the reporting year also, we have organised a reuse programme in collaboration with our vendors to encourage the use of reusable plastic reels instead of paper reels.

Effluents management

KPI & Target	Compliance with effluents and wastewater discharge regulations:		
	<ul style="list-style-type: none"> Standard B under EQA (Industrial Effluents) Regulation 2009 Integrated Wastewater Discharge Standard (GB8978-1996) 		
Unisem Ipoh	Compliant in 2017	Compliant in 2018	Compliant in 2019

Effluents generated by our processes are impacted by organic and inorganic compounds. Therefore, measures are taken to ensure quality of wastewater discharge are legally compliant, and to prevent wastewater run-offs. Effluents treatment and discharge methods in 2019 remain compliant to the legal requirements in the areas we operate.

At Unisem Ipoh, effluents are treated at our on-site wastewater treatment plants before being released through the municipal drainage system. Trained employees regularly conduct preventive maintenance of our wastewater treatment facilities. While Unisem Chengdu sites discharge wastewater to wastewater treatment plants located at the Industrial Park where we operate.

SUSTAINABILITY REPORT

Furthermore, wastewater quality is monitored daily by our facilities team, in addition to the periodic monitoring by external accredited laboratories or government-appointed third party. In both operations, we closely monitor more than 20 wastewater quality indicators for compliance to legally set parameters, this includes, but not limited to, pH, COD and BOD concentration, total suspended solids, Cu²⁺ concentration, Ni²⁺ concentration and ammonia concentrations.

Total wastewater discharged (million m ³ /year)		
2017	2018	2019
1.519	1.743	1.689

Table 29

WATER MANAGEMENT

Security of water sources is vital to the sustainable development of current and future ecosystems and societies. As a responsible corporate citizen, we remain cognisant of water use in our operations.

In all our wet-processing steps we utilise purified water, known as Ultra-Pure Water ("UPW"). Water is also consumed in our operations for domestic purposes. The primary source of water withdrawal at all our sites is municipal water. We maintain close engagements with municipal governments to make sure our withdrawal limits and sources are within permissible range. In 2019, our total water withdrawal was 3 million m³ with 1.3 million m³ consumed in our operations. The increase was mainly due to plant expansion works at Unisem Ipoh and Unisem Chengdu that required larger amounts of water consumed.

Total water withdrawal (million m ³)		
2017	2018	2019
2.795	2.881	3.016

Table 30

Total water consumption (million m ³)		
2017	2018	2019
1.276	1.138	1.327

Table 31

We are constantly exploring opportunities to recycle and reuse water at our sites. Most initiatives require significant investments; therefore, it requires resource and strategic planning before decisions are made.

A primary initiative to reduce water withdrawal is the reuse of lightly-contaminated UPW for other industrial purposes and irrigation. Our facilities are equipped with complex rinse water collection systems as well as a dedicated separate drainage, to ensure that lightly-contaminated water is properly collected and reused.

Unisem Chengdu adopts a reverse osmosis system which allows water coming out of our process to be reused, in addition to the heat recovery system. Recycle rates of water withdrawn are illustrated below:

Proportion of water recycled over water withdrawn (%)			
	2017	2018	2019
Unisem Ipoh	3%	3%	3%
Unisem Chengdu	8%	7%	9%

Table 32

GREENHOUSE GAS EMISSIONS, OTHER AIR EMISSIONS AND ENERGY CONSUMPTION

Greenhouse Gas (“GHG”) Emissions

KPI	Reduction of GHG emissions (Scope 1 and 2) per unit produced ⁹ i.e. GHG Intensity		
Target	To achieve 10% reduction in GHG emissions intensity (baseline 2011)		
Performance	Reduced 22% in 2017	Reduced 10% in 2018	Increased 4% in 2019

Despite the absence of GHG-specific legislation at our areas of operations, Unisem, as a participant of the RBA Code of Conduct, is required to document and track Scope 1 and Scope 2 GHG emissions and look for cost-effective methods to improve energy efficiency and minimise energy consumption and GHG emissions. Over the last two years, we invested in data collection and monitoring measures to improve the quality of the reported data, as we pursued greater transparency of our disclosure by reporting against GRI Standards – Core Option and report data as guided by the GHG Protocol.

Primary source of our Scope 1 emissions is fuel consumption, while our electricity consumption is the primary contributor to our Energy Indirect (Scope 2) emissions. Annually, our facility team at Unisem Ipoh monitors reductions of our GHG intensity against 2011 baseline. For the reporting year, we were unsuccessful in achieving the our GHG emissions intensity target mainly due to the expansion of new bumping area and machinery space at Unisem Chengdu and Unisem Ipoh. Furthermore, we observed a reduction in sales volume reported in 2019, compared to 2018, primarily due to adverse market condition such as the US-China trade war. For more information on the impact of the market trends on our operations, please refer to the MD&A Section of this Annual Report.

Our facility team will continue to monitor and manage our GHG emissions intensity. We plan to install an energy optimisation control system for our plant chillers and compressors. This project will reduce 40% of plant chillers and compressors energy consumption thereby significantly reducing GHG emissions intensity.

GHG Intensity (tCO ₂ -e/unit produced)		
2017	2018	2019
0.013	0.015	0.017

Table 33

⁹ No. of wafers produced by UAT was converted to units produced based on an estimation of 10,000 units per wafer

SUSTAINABILITY REPORT

Total Scope 1 and Scope 2 GHG emissions ('000 tCO ₂ e)			
	2017	2018	2019
Direct (Scope 1) GHG emissions ('000 tCO ₂ e)	1.19	1.45	1.70
Indirect (Scope 2) GHG emissions ('000 tCO ₂ e)	108.73	114.81	120.92
Total (Scope 1 and Scope 2) ('000 tCO₂e)	109.92	116.26	122.62

Table 34

Total Scope 1 and Scope 2 GHG emissions ('000 tCO ₂ e) by site			
	2017	2018	2019
Unisem Ipoh	69.3	70.8	73.6
Unisem Chengdu	40.6	45.4	49.0

Table 35

Direct (Scope 1) GHG Emissions

Scope 1 GHG emissions comprise 1% of our total GHG emissions. Sources of emissions are primarily fleet fuel consumption, such as petrol and diesel forklifts and company-owned cars, as well as natural gas used in our boilers and generator sets.

Direct (Scope 1) GHG Emissions by site			
	2017	2018	2019
Unisem Ipoh	0.12	0.13	0.11
Unisem Chengdu	1.07	1.32	1.59

Table 36

We have taken several measures to reduce our fuel consumption. In 2015, we installed a heat recovery system at our site in Chengdu, amongst other measures to reduce our natural gas consumption. Additionally, we are in the process of converting our forklifts to electric forklifts to reduce our dependency on diesel at Unisem Ipoh. As at December 2019, we have successfully replaced all diesel forklifts to electric forklifts at Unisem Ipoh.

Indirect (Scope 2) GHG Emissions

Electricity consumption is a primary contributor to our Scope 2 emissions, and the main source of energy at all our sites.

Direct (Scope 2) GHG Emissions by site			
	2017	2018	2019
Unisem Ipoh	69.2	70.7	73.5
Unisem Chengdu	39.5	44.1	47.4

Table 37

Key energy consumption reduction initiatives currently performed at our sites, are as follows:

Initiative	Description	Reduction Achieved in 2019
Installation of Ultra Performance Plant Controller ("UPPC") system i.e. P1 UPPC and P2 UPPC	The control system allows the optimisation of energy use in plant chillers.	Electricity: 1,058,567.9 kwh
Installation of Heat Recovery System	The heat recovery system allows for heating demand to be reduced.	Water: 9,331 ton Electricity: 460,080 kwh Natural Gas: 96,960 m ³
Conversion of conventional lighting to LED lighting	Conventional lighting is progressively converted to a more energy-efficient alternative i.e. LED lighting.	Electricity: 703,160 kwh
Hot Water Pipe Exchanger Transformation Project	The transformation project allows for a more efficient use of medium temperature hot water coming from boiler, where it is used to supply heat for the heating system.	Electricity: 228,600 kwh
Plant 2 RO Water Recycle	Level 2 RO water recycle in RO system.	Water: 64,800 ton

Other Indirect (Scope 3) GHG Emissions

Sources of Scope 3 emissions are all indirect emissions, aside from Scope 2 emissions. This usually includes employee travel and commuting, and value chain data. Unisem's data is currently being standardised and reviewed for reporting. We plan to report Scope 3 emissions when the quality of data meets our internal standards. Some of the initiatives we practise to reduce our carbon footprint are to avoid all non-essential air or ground travel. Furthermore, management of our supply chain is practised against the RBA Code of Conduct. Thus, our supply chain management efforts focus on raising awareness on sustainability matters amongst our suppliers, as well as requiring our direct material suppliers to complete the SAQ. Refer to pages 26 – 28 for more information on our supply chain management.

SUSTAINABILITY REPORT

Energy Consumption

Our energy intensity in 2019 is 92 MJ/unit produced. This is due to expansion programme at Unisem Chengdu and Unisem Ipoh facilities.

Total Energy Intensity (MJ/unit produced)		
2017	2018	2019
69	80	92

Table 39

Total Energy Consumption (GJ) by site			
	2017	2018	2019
Unisem Ipoh	372,974	381,173	395,944
Unisem Chengdu	212,824	239,602	260,658

Table 40

Fuel consumed in our operations are primarily from non-renewable sources.

Type of Energy Source	2017	2018	2019
Purchased Electricity (GJ)	564,890	595,365	626,636
Diesel (GJ)	273	455	160
Petrol (GJ)	2,478	2,506	2,424
Natural Gas (GJ)	18,157	22,449	27,382
Total Energy Consumed (GJ)	585,798	620,775	656,602

Table 41

Other Air Emissions

In aligning our practices with the environmental standards of the RBA Code of Conduct, we strictly monitor, control and treat air emissions prior to discharge to maintain legal compliance, and to reduce our environmental impact. Air emissions stipulated in the RBA Code of Conduct are volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated from operations.

Scrubbers and carbon absorption treatment systems monitor and improve the quality of our air emissions. Dedicated teams conduct regular maintenance of our facilities and treatment systems to ensure their effectiveness in limiting harmful emissions. Furthermore, quality of our air emissions is reviewed and verified by a third-party contractor annually.

Below, we report air emissions at both our sites based on the data as required by local environmental regulations in the areas we operate. All sites remain compliant to relevant local regulations.

Unisem Ipoh					
Type of Air Emissions	Unit	Malaysian Standards	2017	2018	2019
Nitric acid	mg SO ₃ /Nm ³	200	1.00	1.53	1.25
Sulphuric acid	mg SO ₃ /Nm ³	200	0.32	1.48	1.19
Lead	mg/Nm ³	25	Insignificant	Insignificant	Insignificant
Hydrochloric acid	mg HCl/Nm ³	400	1.20	0.83	0.60
Hydrofluoric acid	mg HF /Nm ³	100	Insignificant	0.71	1.01
Hydrogen sulphide	ppm	5	Insignificant	Insignificant	Insignificant
Chlorine	mg HCl /Nm ³	200	6.20	Insignificant	Insignificant
Oxides of nitrogen	mg SO ₃ /Nm ³	200	Insignificant	133.00	105
Sulphur dioxide	mg SO ₂ /Nm ³	-	Insignificant	Insignificant	Insignificant
Solid particles	g/Nm ³	0.4	0.01	0.18	0.05

Table 42

Unisem Chengdu					
Type of Air Emissions	Unit	China Standards	2017	2018	2019
Volatile Organic Compounds (VOCs)	mg/m ³	60	0.6	3.4	4.5
Sulphur oxides (SOX)	mg/m ³	45	6.7	12.6	1.7
Sulphur dioxide (SO ₂)	mg/m ³	50	0.0	0.7	11.2
Nitrous oxides (NO _x)	mg/m ³	150	55.0	83.0	59.8
Hydrogen fluoride (HF)	mg/m ³	9	0.4	3.3	0.2

Table 43

SUSTAINABILITY REPORT

PRODUCT STEWARDSHIP

We owe an obligation to our customers, end consumers and other stakeholders on the quality, safety and ethical production processes of the products we deliver. As represented in the measures and actions described in this Sustainability Report, we are cognisant of the social and environmental impacts of our operations in product delivery. We also demonstrate our commitment to ethical practices as a participant of the RBA Code of Conduct.

In addition to the abovementioned, assessing stages of our product life cycle as well as executing our responsibility on the health and safety of materials used in our products represent product stewardship.

Regulations and customer requirements & description	Measures taken by Unisem
<p>Unisem complies to European Union Restriction of Hazardous Substances (“RoHS”) Directive, which sets limitations on the use of ten substances, including lead.</p>	<ul style="list-style-type: none"> • Through analysis report conducted on a yearly basis, the compliance to RoHS is measured. Supporting documents such as declaration letter, Certificate of Compliance (“CoC”) and Safety Data Sheet (“SDS”) are also used to verify the compliance. • We also ensure our suppliers comply with RoHS by communicating with them and facilitating their own compliance. Every two years, suppliers are required to complete the self-assessment forms and submit the acknowledgement of compliance with specification. • Test reports and certificates of conformance are also obtained from suppliers for each product supplied.
<p>Restriction on the use of hazardous substances, including lead and lead compound.</p>	<ul style="list-style-type: none"> • Each Unisem site has achieved third party certification on the Sony Green Partner and Samsung Eco Partner certification schemes.

Table 44

DATA FOR THE SUSTAINABILITY REPORT

	2017	2018	2019
Turnover rate			
Unisem Ipoh			
Turnover no. – by gender			
Male	105	122	119
Female	780	788	702
Turnover rate – by gender			
Male	11.9%	13.4%	13.1%
Female	88.1%	86.6%	77.1%
Turnover no. – by age group			
Under 30	693	705	612
30 – 50	184	189	188
50 and above	8	16	21
Turnover rate – by age group			
Under 30	78.3%	77.5%	74.5%
30 – 50	20.8%	20.7%	22.9%
50 and above	0.9%	1.8%	2.6%
Unisem Chengdu			
Turnover no. – by gender			
Male	467	648	757
Female	450	499	473
Turnover rate – by gender			
Male	50.9%	56.5%	61.5%
Female	49.1%	43.5%	38.5%
Turnover no. – by age group			
Under 30	782	1,041	1,004
30 – 50	134	105	224
50 and above	1	1	2
Turnover rate – by age group			
Under 30	85.3%	89.4%	81.6%
30 – 50	14.6%	10.4%	18.2%
50 and above	0.1%	0.2%	0.2%

SUSTAINABILITY REPORT

	2017	2018	2019
New employees hire			
Unisem Ipoh			
New employees hire no. – by gender			
Male	119	98	83
Female	581	646	530
New employees hire rate – by gender			
Male	17.0%	13.2%	13.5%
Female	83.0%	86.8%	86.5%
New employees hire no. – by age group			
Under 30	633	695	571
30 – 50	67	49	42
50 and above	0	0	0
New employees hire rate – by age group			
Under 30	90.4%	93.4%	93.1%
30 – 50	9.6%	6.6%	6.9%
50 and above	0.0%	0.0%	0.0%
Unisem Chengdu			
New employees hire no. – by gender			
Male	467	648	880
Female	450	499	492
New employees hire rate – by gender			
Male	50.9%	56.5%	64.1%
Female	49.1%	43.5%	35.9%
New employees hire no. – by age group			
Under 30	782	1,069	1,129
30 – 50	134	125	242
50 and above	1	2	1
New employees hire rate – by age group			
Under 30	85.3%	89.3%	82.3%
30 – 50	14.6%	10.5%	17.6%
50 and above	0.1%	0.2%	0.1%

	2017	2018	2019
Parental leave			
Unisem – Ipoh and Chengdu			
Total number of employees that were entitled to parental leave - by gender			
Male	1,231	1,324	1,469
Female	1,427	1,475	1,617
Total number of employees that took parental leave - by gender			
Male	145	146	153
Female	154	174	191
Total number of employees that returned to work in the reporting period after parental leave ended - by gender			
Male	138	146	153
Female	154	148	150
Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work - by gender			
Male	108	138	129
Female	141	147	120
Return to work rates of employees that took parental leave - by gender			
Male	100%	100%	100%
Female	95%	85%	79%
Retention rates of employees that took parental leave and were still employed 12 months after their return to work - by gender			
Male	100%	100%	88%
Female	82%	95%	81%
Training hours			
Unisem – Ipoh and Chengdu			
Total training hours	190,549	234,580	176,006
Average hours of training that the organization's employees have undertaken during the reporting period - by employee category			
Management	26	25	39
Executives	23	25	23
Non-Operators	28	32	26
Operators	40	47	39
Man-hours worked			
Unisem – Ipoh and Chengdu			
Total no. of man-hours worked	13,696,601	13,629,284	15,009,287

SUSTAINABILITY REPORT

	2017	2018	2019
Employment Contract			
Employees by employment contract			
% of employees that are on fixed-term contract	51%	50%	50%
Employees by employment contract – by gender			
Permanent			
Male	1,386	1,440	1,422
Female	1,645	1,692	1,640
Fixed-term contract			
Male	742	678	789
Female	2,420	2,421	2,260
Employees by employment contract – by region			
Permanent			
Ipoh	2,524	2,520	2,408
Chengdu	507	612	654
Fixed-term contract			
Ipoh	1,594	1,681	1,578
Chengdu	1,568	1,418	1,471
Group Employee diversity			
Unisem – Ipoh and Chengdu			
Employee category – by gender			
		Male	Female
Senior Management		44	4
Management		68	14
Executives		428	269
Operators		400	3,187
Non-Operators		1,271	426
Employee category – by age group			
	under 30 years old	30-50 years old	over 50 years old
Senior Management	-	18	30
Management	-	58	24
Executives	119	555	23
Operators	2,422	1,065	100
Non-Operators	705	951	41

GLOBAL REPORTING INITIATIVE SUSTAINABILITY REPORTING STANDARDS ("GRI" INDEX)

GRI Standards Content Index				
#	Disclosure Number	Disclosure Title	Response	Page Number
GRI 102 General Disclosures				
1	102-1	Name of the organization	Company Profile	1
2	102-2	Activities, brands, products, and services	Company Profile - Unisem Group	2 - 3
3	102-3	Location of headquarters	Company Profile - Unisem Group	2 - 3
4	102-4	Location of operations	Company Profile - Unisem Group	2 - 3
5	102-5	Ownership and legal form	Company Profile & Shareholders' Statistics	1/183
6	102-6	Markets served	Company Profile	1
7	102-7	Scale of the organization	Company Profile & Audited Financial Statements	1/103
8	102-8	Information on employees and other workers	Refer to Data table in the Sustainability Report for more information. We do not hire any part-time employees.	59
9	102-9	Supply chain	Supply Chain Management - Sustainability Report	26
10	102-10	Significant changes to the organization and its supply chain	Refer to Management Discussion & Analysis for changes in our shareholding structure, as part of our business partnership.	9
11	102-11	Precautionary Principle or approach	Statement on Risk Management and Internal Controls	97
12	102-12	External initiatives	Basis of preparation - Sustainability Report	15
13	102-13	Membership of associations	Basis of preparation - Sustainability Report	15
14	102-14	Statement from senior decision-maker	Chairman's Letter to the Shareholders	6
16	102-16	Values, principles, standards, and norms of behavior	Value Creation Model Anti-Corruption Supply Chain Management	23 34 26
18	102-18	Governance structure	Profile of Directors, Profile of Senior Management, and Corporate Governance Overview Statement Sustainability Governance	72 - 91 16
40	102-40	List of stakeholder groups	Stakeholder Inclusivity	18
41	102-41	Collective bargaining agreements	27% of Unisem Ipoh's employees are covered by collective bargaining agreements. Unisem Chengdu does not have collectiev bargaining agreements.	
42	102-42	Identifying and selecting stakeholders	Stakeholder Inclusivity	18
43	102-43	Approach to stakeholder engagement	Stakeholder Inclusivity	18
44	102-44	Key topics and concerns raised	Stakeholder Inclusivity	18
45	102-45	Entities included in the consolidated financial statements	Audited Financial Statements	103 - 182
46	102-46	Defining report content and topic Boundaries	Basis of preparation - Sustainability Report	15
47	102-47	List of material topics	Materiality Assessment	20
48	102-48	Restatements of information	Certain reported key performance indicators have been restated in this year's Sustainability Statement to better reflect the expansion of the reporting scope	
49	102-49	Changes in reporting	Basis of preparation - Sustainability Report	15
50	102-50	Reporting period	Basis of preparation - Sustainability Report	15
51	102-51	Date of most recent report	About the Sustainability Report	14

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GRI Standards Content Index				
#	Disclosure Number	Disclosure Title	Response	Page Number
GRI 102 General Disclosures				
52	102-52	Reporting cycle	Basis of preparation - Sustainability Report	15
53	102-53	Contact point for questions regarding the report	Y.Bhg. Dato' Gregory Wong Guang Seng, as Senior Independent Director to answer any queries or clarify any matters concerning the Company. Y.Bhg. Dato' Gregory Wong Guang Seng can be contacted at the following correspondence address: Letter Box #95, 9th Floor UBN Tower, 10 Jalan P. Ramlee, 50250 Kuala Lumpur Tel : (603) 2072 3760 Fax: (603) 2072 4018	
54	102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option	
55	102-55	GRI content index	Sustainability Report	63
56	102-56	External assurance	Financial statements have been externally audited by our auditors, Deloitte PLT. Although we are yet to seek external assurance on our non-financial information, our reporting process is supported by our internal controls and reporting team. Processes relevant to the reporting structure is reviewed by our internal audit function. Our sites are also subject to external verification, such as visits from customers and RBA VAP and SAQ.	
GRI 103 Management Approach				
57	103-1	Explanation of the material topic and its Boundary	Basis of preparation - Sustainability Report Materiality Assessment	20
58	103-2	The management approach and its components	Managing Our Business Our Focus On Customers People Environment	
59	103-3	Evaluation of the management approach	Managing Our Business Our Focus On Customers People Environment	
GRI 201 Economic Performance				
60	201-1	Direct economic value generated and distributed	Audited Financial Statements	103 - 182
61	201-2	Financial implications and other risks and opportunities due to climate change	-	
62	201-3	Defined benefit plan obligations and other retirement plans	Audited Financial Statements	103 - 182
63	201-4	Financial assistance received from government	Audited Financial Statements	103 - 182

GRI Standards Content Index				
#	Disclosure Number	Disclosure Title	Response	Page Number
GRI 202 Market Presence				
64	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	-	
65	202-2	Proportion of senior management hired from the local community	<p>Senior management are full-time employees at the highest-level of managers at Unisem, immediately below the members of the Board of Directors.</p> <p>Local communities are the communities in the surrounding vicinity of our operations. For Unisem Ipoh, this refers to the state of Perak. For Unisem Chengdu, this refers to the city of Chengdu.</p> <p>For information on our proportion, please refer to the Local Communities section.</p>	46
GRI 203 Indirect Economic Impacts				
66	203-1	Infrastructure investments and services supported	-	
67	203-2	Significant indirect economic impacts	Local Communities	46
GRI 204 Procurement Practices				
68	204-1	Proportion of spending on local suppliers	<p>Local suppliers are suppliers who are based in the same countries as our operations. For Unisem Ipoh, this refers to Malaysia. For Unisem Chengdu, this refers to China.</p> <p>For information on our proportion, please refer to the Supply Chain Management section.</p>	26
GRI 205 Anti-Corruption				
69	205-1	Operations assessed for risks related to corruption	-	
70	205-2	Communication and training about anti-corruption policies and procedures	<p>Employees in Unisem Ipoh and Chengdu receive anti-corruption training.</p> <p>For information on anti-corruption training, please refer to the Anti-Corruption section.</p>	34
71	205-3	Confirmed incidents of corruption and actions taken	Anti-Corruption	34
GRI 206 Anti-Competitive Behaviour				
72	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	N/A	

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GRI 301 Materials				
73	301-1	Materials used by weight or volume	N/A	
74	301-2	Recycled input materials used	N/A	
75	301-3	Reclaimed products and their packaging materials	N/A	
GRI 302 Energy				
76	302-1	Energy consumption within the organization	Energy consumption is calculated according to 2006 IPCC Guidelines for National Greenhouse Gas Inventories. For more information on energy consumption, please refer to Greenhouse Gas Emissions, Other Air Emissions and Energy Consumption section.	53
77	302-2	Energy consumption outside of the organization	-	
78	302-3	Energy intensity	Greenhouse Gas Emissions, Other Air Emissions and Energy Consumption	53
79	302-4	Reduction of energy consumption	Greenhouse Gas Emissions, Other Air Emissions and Energy Consumption	53
80	302-5	Reductions in energy requirements of products and services	-	
GRI 303 Water and Effluents				
81	303-1	Interactions with water as a shared resource	-	
82	303-2	Management of water discharge-related impacts	Effluents and Waste Management	49
83	303-3	Water withdrawal	Unisem does not operate in water-stressed areas, and only withdraws from municipal water line. For more information on water withdrawal, please refer to Water Management section.	52
84	303-4	Water discharge	Unisem does not operate in water-stressed areas. The information on the destination of treated wastewater released to the municipal drainage by Unisem Ipoh is not available in the current report. We will work towards monitoring data for future reporting. For more information on our water discharge, please refer to Effluents and Waste Management section.	49
85	303-5	Water consumption	Unisem does not operate in water-stressed areas. For more information on our water consumption, please refer to Water Management section.	52

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#	Disclosure Number	Disclosure Title	Response	Page Number
GRI 305 Emissions				
86	305-1	Direct (Scope 1) GHG emissions	GHG emissions are calculated using GHG Protocol tools, using Global Warming Potential ("GWP") values from 2014 IPCC Fifth Assessment Report. For more information on energy consumption, please refer to Greenhouse Gas Emissions and Energy Consumption section.	53
87	305-2	Energy indirect (Scope 2) GHG emissions	GHG emissions are calculated using GHG Protocol tools, using Global Warming Potential ("GWP") values from 2014 IPCC Fifth Assessment Report. For more information on energy consumption, please refer to Greenhouse Gas Emissions and Energy Consumption section.	53
88	305-3	Other indirect (Scope 3) GHG emissions	-	
89	305-4	GHG emissions intensity	Greenhouse Gas Emissions, Other Air Emissions and Energy Consumption	53
90	305-5	Reduction of GHG emissions	Greenhouse Gas Emissions, Other Air Emissions and Energy Consumption	53
91	305-6	Emissions of ozone-depleting substances (ODS)	-	
92	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	The data on particulate matter for Unisem Ipoh is currently not available. Data collection will begin this year for future reporting. Unisem Ipoh does not emit NOx or VOCs in its operations, while Unisem Chengdu does not emit particulate matter. For more information on other significant air emissions, please refer to Greenhouse Gas Emissions, Other Air Emissions and Energy Consumption section.	53
GRI 306 Effluents and Waste				
95	306-1	Water discharge by quality and destination	Effluents and Waste Management	49
96	306-2	Waste by type and disposal method	Information on other disposal methods of hazardous and non-hazardous waste, apart from recycling for Unisem Ipoh and Unisem Chengdu, is not available in the current report. For more information on our waste management, please refer to Effluents and Waste Management section.	49
97	306-3	Significant spills	No significant spill occurred in FYE 2019.	
98	306-4	Transport of hazardous waste	-	
99	306-5	Water bodies affected by water discharges and/or runoff	-	

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#	Disclosure Number	Disclosure Title	Response	Page Number
GRI 307 Environmental Compliance				
100	307-1	Non-compliance with environmental laws and regulations	We have not identified any non-compliance with environmental laws and/or regulations.	
GRI 308 Supplier Environmental Assessment				
101	308-1	New suppliers that were screened using environmental criteria	Supply Chain Management	26
102	308-2	Negative environmental impacts in the supply chain and actions taken	Supply Chain Management	26
GRI 401 Employment				
103	401-1	New employee hires and employee turnover	Data table - Sustainability Report	59
104	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	The country Labour Laws shall be complied for temporary or part-time employees. Unisem does not hire temporary or part-time employees in 2019.	
105	401-3	Parental leave	Data table - Sustainability Report	59
GRI 402 Labour Management/ Relations				
106	402-1	Minimum notice periods regarding operational changes	Prior to the implementation of significant operational changes that could substantially affect employees, Unisem ensures that all employees are informed within an appropriate time frame. Embedded in Unisem COE, we uphold the labour rights of all our employees.	
GRI 403 Occupational Health and Safety				
107	403-1	Occupational health and safety management system	Occupational Safety and Health	43
108	403-2	Hazard identification, risk assessment, and incident investigation	Occupational Safety and Health	43
109	403-3	Occupational health services	Occupational Safety and Health	43
110	403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Safety and Health	43
111	403-5	Worker training on occupational health and safety	Occupational Safety and Health	43
112	403-6	Promotion of worker health	Occupational Safety and Health	43
113	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Product Stewardship, Supply Chain Management	57/26
114	403-8	Workers covered by an occupational health and safety management system	Occupational Safety and Health	43
115	403-9	Work-related injuries	Occupational Safety and Health	43
116	403-10	Work-related ill health	Occupational Safety and Health	43

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#	Disclosure Number	Disclosure Title	Response	Page Number
GRI 404 Training and Education				
111	404-1	Average hours of training per year per employee	Data table - Sustainability Report We have not collected data for average training hours by gender and for senior management. Data collection will begin this year for future reporting.	59
112	404-2	Programs for upgrading employee skills and transition assistance programs	Employee Welfare - Employee Learning and Development	37
113	404-3	Percentage of employees receiving regular performance and career development reviews	Annual Performance Appraisals conducted for all employees	
GRI 405 Diversity and Equal Opportunity				
114	405-1	Diversity of governance bodies and employees	Profile of Directors and Profile of Senior Management Employee Welfare Data table - Sustainability Report	72 - 79 37 59
115	405-2	Ratio of basic salary and remuneration of women to men	Ratio of women to men : 1:1.26 for Unisem	
GRI 406 Non-discrimination				
116	406-1	Incidents of discrimination and corrective actions taken	Labour rights	42
GRI 407 Freedom of Association and Collective Bargaining				
117	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	We operate in two areas - Ipoh, Malaysia and Chengdu, China. All our operations are assessed using RBA SAQ, which considers the RBA Code of Conduct. In addition, our operations in Unisem Ipoh and Unisem Chengdu are audited under the RBA VAP by an external party. All our operations are subject to the Unisem COE and RBA Code of Conduct. Whistle-blowing and grievance channels are available for reporting of cases, without reprisal. Key direct material suppliers are required to perform the RBA SAQ. We emphasise that we will engage with suppliers whose CSR policies are in line with provisions within Unisem's Group CSR Policy. For more information, refer to the Labour Rights and Supply Chain Management section	42/26

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#	Disclosure Number	Disclosure Title	Response	Page Number
GRI 408 Child Labour				
118	408-1	Operations and suppliers at significant risk for incidents of child labor	<p>We operate in two areas - Ipoh, Malaysia and Chengdu, China. All our operations are assessed using RBA SAQ, which considers the RBA Code of Conduct. In addition, our operations in Unisem Ipoh and Chengdu are audited under the RBA VAP by an external party. All our operations are subject to the Unisem COE and RBA Code of Conduct. Whistle-blowing and grievance channels are available for reporting of cases, without reprisal.</p> <p>Key direct material suppliers are required to perform the RBA SAQ. We emphasise that we will engage with suppliers whose CSR policies are in line with provisions within Unisem's Group CSR Policy. For more information, refer to the Labour Rights and Supply Chain Management section</p>	42/26
GRI 409 Forced or Compulsory Labour				
119	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	<p>We operate in two areas - Ipoh, Malaysia and Chengdu, China. All our operations are assessed using RBA SAQ, which considers the RBA Code of Conduct. In addition, our operations in Unisem Ipoh and Chengdu are audited under the RBA VAP by an external party. All our operations are subject to the Unisem COE and RBA Code of Conduct. Whistle-blowing and grievance channels are available for reporting of cases, without reprisal.</p> <p>Key direct material suppliers are required to perform the RBA SAQ. We emphasise that we will engage with suppliers whose CSR policies are in line with provisions within Unisem's Group CSR Policy. For more information, refer to the Labour Rights and Supply Chain Management section</p>	42/26
GRI 412 Human Rights Assessment				
122	412-1	Operations that have been subject to human rights reviews or impact assessments	<p>We operate in two areas - Ipoh, Malaysia and Chengdu, China. All our operations are assessed using RBA SAQ, which considers the RBA Code of Conduct. In addition, our operations in Unisem Ipoh and Chengdu are audited under the RBA VAP by an external party. All our operations are subject to the Unisem COE and RBA Code of Conduct. Whistle-blowing and grievance channels are available for reporting of cases, without reprisal.</p> <p>Key direct material suppliers are required to perform the RBA SAQ. We emphasise that we will engage with suppliers whose CSR policies are in line with provisions within Unisem's Group CSR Policy. For more information, refer to the Labour Rights and Supply Chain Management section</p>	42/26
123	412-2	Employee training on human rights policies or procedures	-	
124	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	-	

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#	Disclosure Number	Disclosure Title	Response	Page Number
GRI 413 Local Communities				
125	413-1	Operations with local community engagement, impact assessments, and development programs	-	
126	413-2	Operations with significant actual and potential negative impacts on local communities	Local Communities	46
GRI 414 Supplier Social Assessment				
127	414-1	New suppliers that were screened using social criteria	Supply Chain Management	26
128	414-2	Negative social impacts in the supply chain and actions taken	Supply Chain Management	26
GRI 415 Public Policy				
129	415-1	Political contributions	Anti-Corruption	34
GRI 418 Customer Privacy				
136	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Customer Privacy and Data Protection	35
GRI 419 Socioeconomic Compliance				
137	419-1	Non-compliance with laws and regulations in the social and economic area	Unisem has not identified any non-compliance with laws and/or regulations in the social and economic area	