

2021



ESG Report

Environment
Social
Governance

2021



Global Unichip Corporation

ESG Rrport



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GUC Sustainability Performance 2021

In this report, we explain the Company's corporate social responsibility performance in 2021. Through the compilation of the sustainability report, we disclose the Company's key information in a transparent and detailed manner, respond to issues that stakeholders are concerned about, and then introduce the Company's sustainable management philosophy, creating a friendly society with a positive cycle. The following are our major sustainability-related performances this year:

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Environment

186,246 kWh of electricity saved
 In 2021, a total of 24 energy conservation projects were promoted to continuously improve the energy conservation performance.

0.0420%
 Compared to the previous year, 2021 electricity energy intensity decreased by 0.0052%, and energy usage decreased by 1% (62,800 kWh).

Water use was reduced by 523,000 liters.
 The water resource intensity in 2021 was 0.107%, down 0.016% from the previous year.

ISO 14064-1
 Greenhouse gas inventory and external verification have been conducted since 2021.

ISO 14001 or QC080000
 More than 90% of the 54 suppliers of GUC have obtained at least one of the above two verifications.

100%
 Since 2021, all 6 key suppliers have complied with the ISO 14001 environmental management system.

NT\$4.03 million
 Amount invested in energy conservation items in 2021

531 thousand sheets of paper
 The number of electronic signatures reached 241,532, saving more than 530 thousand sheets of paper annually.

100% BPA-free
 The key components of BPA-free substrate are fully introduced in new products, implementing the sustainable operation of the enterprise.

87.04% - The proportion of laser marking shipments
 We continue to increase the proportion of laser marking products to protect the safety of the industrial supply chain and the health of supply chain partners.

100% lead-free bump
 It is expected to be fully introduced in 2022, to comply with international regulatory trends in advance.

Society

270 million
 In 2022, GUC is cooperating with Mega Bank and Bank SinoPac to take the lead in promoting green and sustainable certificate of deposit.

Setting up a volunteer club
 This club was established in 2022. With its support, every employee of the Company can participate in charitable events more actively and organized.

98.1%
 Proportion of local procurement of raw materials in 2021

41 desktop computers, 79 notebook computers, 14 LCD monitors
 In 2021, computers and six boxes of consumables (e.g. mouse, keyboard, power cord) were donated to the "Your old computer, his new hope" event organized by Triple-E Institute.

15 days of sick leave with full pay + **15 days** of sick leave with half pay
 15 days of sick leave with full pay and 15 days of sick leave with half pay upon coming on board

12 weeks of maternity leave
 It is applicable to those who give birth with over 6 months of pregnancy so that employees can get better rest and family arrangements.

10%
 The growth rate of the average training hours per employee in 2021 compared to 2020

100%
 The winning rate in year-end parties in recognition of the employees' hard work over the past year

501
 Contracted vendors in 2021 for employees to enjoy more benefits

54 people
 In 2021, a total of 54 people participated and 76 bags of blood were collected.

NT\$120,000
 Donated to Harmony Home Taiwan in 2021

Governance

NT\$15.108 billion
 2021 consolidated net operating revenue increased by 11% compared to the previous year's revenue.

NT\$1.46 billion
 Net profit after tax in 2021 went up 72% compared to the previous year

9.7%
 Profit margin after tax in 2021 increased by 3.4% compared to the previous year's value (6.3%).

The Promising Product
 GLink IP receives inaugural EE Awards - Asia for Diversity Policy

KPI
 ESG is incorporated into the managers' KPIs to be combined with the Company's sustainability strategy goals.

HBM2/CoWoS
 Very large SoC chips with HBM2/CoWoS have been mass produced for 4 customers, and integration with 2 to 4 HBM2 memories has been successful.

NT\$11.8 billion
 In 2021, the purchase amount of local raw materials accounted for 98.1% of the total purchase amount.

237
 GUC uses 100% Responsible Minerals approved smelters.



Five Aspects of Environmental Sustainability

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The Sustainability Management Targets and Annual Performance

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ISO management systems

Target

Maintaining the existing ISO certification and incorporating new ISO systems depending on sustainability policies

Actions

1. Being ISO 9001 compliant and adopting third-party audits.
2. GUC has passed the ISO 14064-1 GHG inventory Standard and acquired the certificate.
3. Complied with ISO 27001 Standard for Information Security Management and got the certificate in 2021.
4. Got ISO 13485 Quality Management for Medical Devices certification in 2017.

Performance

Get ISO 9001, ISO 14064-1, ISO 27001 and ISO 13485 certified.



Energy management

Target

Annually saving 1% of the total electricity consumption in the previous year and implementing the long term planning for using renewable energy to reduce carbon emissions.

Actions

1. Take control of the energy usage status, get ISO 14064-1 certified, and implement the energy management plan.
2. Actively promote various energy efficiency management schemes through the energy-saving solutions, such as building lighting and air-conditioning equipment.

Performance

2021 electricity energy intensity was 0.0420%, which decreased by 0.0052% compared to that in the previous year, and energy usage decreased by 1% (62,800 kWh).



Water resource management

Target

To accommodate the policy of the science park allied association , reinforce the measures of water saving during the time of low water availability, and record daily water consumption to achieve the 10% water saving goal monthly.

Actions

1. Installing a Rainwater Collection System.
2. Ensure the availability of water equipment, faucets and toilets.
3. Keep popularizing the measures of water conservation.

Performance

In 2021, the water resource intensity was 0.107%, which decreased by 523 thousand liters or 0.016% compared to that in the previous year.



Waste management

Target

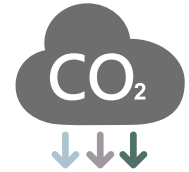
Dedicated to implementing the process inspection of the raw material supply and reinforcing the internal raw material management system as the long-term goal. Conducting environmentally responsible manufacturing.

Actions

Adopting the 3R principle of green design, namely Reduce, Reuse and Recycle, in the initial stage of product design, which involves numerous R&D resources invested and use of innovative energy-saving technologies to lessen the impact on the environment.

Performance

In 2021, 11.5 thousand packaging cartons were saved, which saved about NT\$ 575,000, and 2,400 wafer cassettes were reused, which saved NT\$12,000,000.



Carbon emission management

Target

Set a 1% reduction target of annual carbon emissions based on 2021, the benchmark year, and reach the goal of carbon neutrality by 2050.

Actions

1. The light fixtures of office buildings and corridors are replaced by LED lights.
2. Upgrading the uninterruptible power supply equipment and installing the new equipment with high efficiency and low energy consumption.
3. Upgrading the air compressors and installing the new equipment with high efficiency and low energy consumption.



Performance

Implemented 24 energy- saving projects in 2021, which saved 186,246 kWh (equivalent to 670.5 GJ) annually and reduced carbon dioxide emissions by 93.3 metric tons of CO2e per year.

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Practicing UN SDGs

The 17 SDGs	Events or Products	Description
SDGs 01 No Poverty 	On-site workplace massage services in cooperation with Hsinchu Blind Welfare Association.	We cooperate with the non-profit Hsinchu Blind Welfare Association every year to purchase massage services with a blind therapist. In 2021, a total of 271 employees made use of this service for 893 hours in total, which contributed an amount of NT\$37,200 to the Hsinchu Blind Welfare Association.
SDGs 03 Good Health And Well-being 	A.I. - Artificial Intelligence	With the increasingly mature AI algorithm and big data analysis, AI is expected to create a smart healthcare world for human society. Depending on the continuously accumulated big data, AI will accelerate medical diagnosis, drug development, epidemic disease control, human genomics, and other medical research, providing solutions to diseases with deeper understanding for human health, so as to provide better quality medical services, reduce costs, improve outcomes, and thus contribute impressively to society. GUC launched system-level IP solutions to meet the increasing demand for AI applications.
	Donating blood to save a life	Bloodmobiles are regularly invited to be stationed at the Company, where all the employees can join the cause by donating blood and sharing love. In 2021, a total of 54 people participated to give 76 bags of blood.
	Fight against the pandemic and improve the employees' updated knowledge of pandemic prevention	In response to the changing status of domestic and overseas pandemic, GUC shares topics and information based on the latest affairs, including immunity enhancing, vaccines for COVID-19, precautions for vaccination, cleaning and disinfecting when reaching home, and life proposals for pandemic prevention to provide employees with the latest knowledge and practical information on pandemic prevention from various physical and spiritual aspects.
	Passed ISO 13485 Quality Management System Standard for Medical Devices and acquired the certificate	We voluntarily acquired the certification of ISO 13485 Quality Management System for Medical Devices in 2017, assisting our customers of medical device market in launching products, which comply with relevant regulations, specifications and market requirements. GUC has drawn on its professional IC design capabilities to expand the scope of services to the field of medical devices, thereby improving medical technologies and benefiting human being.

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The 17 SDGs	Events or Products	Description
SDGs 04 Quality Education 	Immersive multimedia experience	With the advancement of science and technology, people no longer feel the world only through the body and senses. 5G-based virtual reality, even augmented reality (AR) and mixed reality (MR) applications can bring people new experiences which were not available in the past; moreover, they can also be applied to education, enabling students to learn in inaccessible places. When schools close during the pandemic, technologies such as virtual classrooms and meeting rooms can be helpful for studying from home. These applications are all made possible because of 5G technologies developed with GUC's assistance.
	Join the Old Computer Donation Program	GUC enthusiastically participates in charitable events and donated the yearly decommissioned computers to the "Your Old Computer, His New Hope" fundraising project organized by the Triple-E Institute in Taiwan. In 2021, we donated a total of 41 desktop computers, 79 notebook computers, 14 LCD monitors and six boxes of consumables (mice, keyboards and power cords).
SDGs 05 Gender Equality 	Support gender equality	GUC guarantees the career development opportunities and rights of all employees and provides equal salary and benefits without gender influence. In terms of training hours, although the percentage of male employees is larger than that of female employees due to our industry category, the allocation of training resources is mainly based on company and personal growth and learning. We consider the training of female employees to be as crucial as that of male employees; the training hours of female employees are even slightly higher than those of male employees.
SDGs 07 Affordable And Clean Energy 	Join the effort of green energy generation	GUC is expected to start installing photovoltaic systems in 2022 in order to reduce carbon emissions and use sustainable energy. With the planning and installation of green energy facilities, GUC hopes to contribute to the mitigation of global warming and environmental pollution.

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The 17 SDGs	Events or Products	Description
<p>SDGs 08 Decent Work And Economic Growth</p> 	Summer internships for college students	GUC provides a summer internship program for students to gain more industrial and working experience, build the network and transition into the society early. This program is available for students who are currently studying at college, and the salary offered complies with the Labor Standards Act. In 2021, a total of 8 students participated in the internship program.
<p>SDGs 09 Industrial, Innovation And Infrastructure</p> 	5G-based intelligent IoT	There haven't been highly integrated applications of IoT until now due to the limitation of network technology. Now with more advanced 5G technology, home appliances, vehicles and supportive equipment of IoT can connect to cloud, which will allow remote control of all equipment, and, in combination with Always-On sensors, transform a regular house into a smart one capable of sensing incoming disasters real-time.
	Obtained ISO 27001 Information Security Management System Certificate	To refine the operation of the information security management system, GUC regularly implements internal and external audits, complies with the international standard ISO 27001 Information Security Management System and acquired the certificate in 2021.
<p>SDGs 10 Reduced Inequalities</p> 	A diverse, inclusive and friendly workplace	GUC provides the EFS Service Center/EAP employee assistance program, implementing the employee care policy to ensure every employee has been taken care of.
	Conflict-free minerals	With the global trends of human rights advocacy, customers insist on using only minerals from conflict-free mining areas in their products. We will strive to manage suppliers, urging them to investigate the conflict minerals with due diligence.
<p>SDGs 11 Sustainable Cities and Communities</p> 	Integration of 5G and Autonomous Driving Technologies	GUC facilitates the development of 5G solutions and autonomous driving technology, one of which is autonomous driving. The introduction of low-latency 5G shortens the communication time between the on-board system and the operation control center for significant response efficiency improvement, reaching near real-time communication. With the effects of the larger bandwidth and fast network connection, it can also integrate advanced signals and smart cameras, even with other vehicles to form a Vehicle-to-Everything (V2X). Even in bad weather conditions, connected vehicles and signals can be used to calculate the safe stopping distance to avoid collisions, thus improving the safety substantially. In 2021, GUC successfully assisted customers in completing the design finalization and verification of self-driving vehicle system chips.

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The 17 SDGs	Events or Products	Description
SDGs 12 Responsible Consumption and Production 	Glink IP interface	In an era of AI, HPC, and high-speed Internet, the interface protocols of the chips in e-products require upgrading to optimize processing speed. In terms of the coordination of heterogeneous chips, it's like humans who need a language for communication. GUC, the leading ASIC manufacturer, released a silicon-verified/demonstrated Glink interface that shoulders the responsibility of system performance enhancement. Glink has the features of high throughput and low power consumption, which makes high performance multi-chip solutions possible. Thanks to a 15-20W reduction, less power is required in comparison with other SerDes-based interfaces, which is an advanced trend of energy efficiency and carbon reduction.
SDGs 13 Climate Action 	5/3nm process	GUC owns the silicon-verified 5 nm process IP. If it's applied to ASIC design for customers, after the end products become commercially available, the equipment using the chips are expected to consume less power and generate less heat and carbon emissions. It also reduces the power consumption of the cooling system used for lowering heat. GUC continues to invest in the technology development of advanced process design technologies and successfully completed the design finalization of the N3 test chips in the first quarter of 2021. This will lay a solid foundation for the future N3E nm process silicon IP and continue to guide customers to adopt more energy-efficient process nodes.
	Earned the GHG Inventory Certificate	GUC passed ISO 14064-1 GHG inventory standard and earned the certificate. The inventory information will be used to set the goals regarding energy saving and carbon reduction in the future.
SDGs 15 Life On Land 	Reduce paper consumption and conserve forests	Promote paperless offices and install various cloud operating systems for all the workplace operations, including leave requests, purchase requisitions, official document signing and approvals, asset transfer applications, dormitory applications, expense requests, general affairs applications, business and operations, design and R&D, financial requests, etc. All of them will adopt electronic signatures and the use of electronic documents will continue in all the workplace operations.
SDGs 16 Peace, Justice, and Strong Institutions 	A fair, just, and worry-free complaint procedure	In order to strengthen the Company's organizational culture and eliminate corruption and bribery, GUC supports the Responsible Business Alliance (RBA) Code of Conduct. We provide a certain number of training hours for supervisors and employees every year and establish a complaint procedure to create a favorable atmosphere in the workplace.

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The 17 SDGs	Events or Products	Description
SDGs 17 Partnerships for The Goals 	Joining the effort of Green Time Deposits	In order to support the green financing, foster sustainable industries, and advance the sustainable development goals, GUC took the lead in participating the Green Time Deposit launched by Mega Bank and Bank SinoPac in 2022, investing a total of 270 million TWD as a guiding fund for promoting green industries.
	Being a good neighbor and promoting community harmony	Giving institutional food to other neighboring factories to build a friendly community.
	The staff cafeteria is open to those not working for the Company	The staff cafeteria is open to those not from the Company to provide convenience for the community, allowing our employees to enjoy the high-quality and low-cost catering service, at the same time, and making the institutional food service provider profitable and able to operate continuously, leading to a win-win situation for society and the community.



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1. About the report

This is the 11th Sustainability Report issued by GUC. We will continue to publish the reports yearly. There were no material changes in the organizational scale, structure, ownership, or supply chain during the report period. In addition to addressing sustainability issues that concern stakeholders, such as shareholders, employees, customers, suppliers, government agencies and society, this report has an appropriate disclosure of our implementation of these major issues in our sustainable development process. Considering the sustainable development as our main mission, GLOBAL UNICHIP CORP. (GUC) is dedicated to promoting the practical actions on major aspects, including environmental protection, social participation, and corporate governance. Our response to the Task Force on Climate-related Financial Disclosures (TCFD) and the industrial opportunities and risks in accordance with the Sustainability Accounting Standards Board (SASB) are revealed in this report.

External Initiatives and Verification

This report is prepared according to GRI guidelines specified by the TWSE. We earned the Independent Third Party GRI Standards & AA1000 Double International Assurance Statement issued by the British Standards Institution (BSI). This report discloses and advocates the Sustainable Development Goals (SDGs) of United Nations.

Report Period

From January 1, 2021, to December 31, 2021.

Date of the Last Report

2020 CSR Report/May 4, 2021

Report Cycle

On an annual basis

Report Scope and Boundaries

This report covers the data and activities of GUC's Hsinchu Headquarters, Hsinchu branch, Taipei Office and Tainan Office in Taiwan only, and does not include our overseas subsidiaries and liaison offices. With regard to the scope of report data, only the consolidated financial statements of GUC covers all entities; social and environmental information covers only Hsinchu HQ.

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There are no restatements in this report compared to any information provided in the previous annual report. Furthermore, there are no significant changes of the information in the Report Scope and Boundaries compared to the previous report period. There is no material change in the organizational scale, structure, ownership or supply chain during the report period.

Reference

This report has been prepared according to the Global Reporting

Initiative, Sustainability Reporting Standards (GRI Standards),

and its core selection refers to the General Standard Disclosures and Specific Standard Disclosures for the sustainable development issues and information disclosure of this year. A cross-reference table of the GRI Standards is attached in this report to provide references for each chapter.

About images used in this report

This report owns 100% of purchased copyrights to all images and use of certificates of print publication found in this Report.

Verification Criteria and Results

This report, through an internal highest management meeting, was decided to seek assurance from external third parties to enhance the credibility of this report. The British Standards Institution (BSI), a third-party impartial verification agency, was entrusted to perform independent investigations on the disclosed information of this report. The BSI has adopted the AA1000AS v3 (AA1000 Assurance Standards) Type 1 and the Moderate Assurance standard formulated by the global NGO Accountability. The BSI report, states that this report completely covers four major accountability principles: inclusivity, materiality, responsiveness, and impact according to the AA 1000 standard. In the final audit report, the following statement was made: This annual report has fully covered and disclosed

sustainability topics, and it is recognizable that the current CSR operation of the Organization has been introduced in regular communication by managerial levels. It is recommended that future implementation follow CSR policy.

Contact Information

This report is available on the GUC website. You are welcome to contact us via any of the following methods if you have any suggestions or questions concerning this report.

1. Address: No.10, Li-Hsin 6th Rd., Hsinchu Science Park, Taiwan, R.O.C.
2. Contact: Asia Lin, Deputy Director of Financial Planning and Investor Relations Department
3. Tel: 886-3-5646600 #6868
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2. Introduction

2.1 A Message from the Executive Secretary of ESG Sustainability Committee

Despite the continued spread of the COVID-19 pandemic in 2021, GUC adopted comprehensive strategies to proactively address the risks faced by customers due to the production shortage in the supply chain, while continuing to achieve groundbreaking records in generating revenues and profits under such challenging circumstances. In the meantime, we continue to pay close attention to environmental and social issues and to vigorously promote more productive solutions.

In 2021, the GUC Board of Directors required the Company, as a responsible purchaser in the industry, to announce its objective of achieving carbon neutrality in 2050 while incorporating ESG agendas in the manager performance indicator and key categories in the annual assessment. Particularly, with regard to supplier management, the Company shall give priority to members of the Responsible Business Alliance (RBA) and request other manufacturers to propose a timetable for compliance with the RBA Code of Conduct. We aim to build a supply chain that values sustainable business operations.

The competent authority of the government is currently promoting Corporate Governance 3.0. GUC expects to move beyond legal compliance, and uphold the ESG spirit as a principle of self-discipline. Therefore, GUC formed the ESG Sustainability Committee in 2022 to assume responsibility for promoting

sustainability policy and performance through collaborative inter-departmental efforts to continually move toward its sustainability goal. Furthermore, we actively implemented ISO 14064-1 GHG inventory system in 2021 with a top-down approach through allocating budgets for green energy equipment such as solar panels and setting medium and long-term goals for energy and water conservation.

Our future planning will focus on risk management. According to studies by the international credit rating agency Moody's, risks associated with the environment, society, and governance are likely to gain greater attention; concerns about risk issues such as climate-related financial disclosures (TCFD) and sustainability accounting (SASB) are the new corporate norms. GUC expects all company members to integrate the concept of sustainable operation into their personal beliefs and behaviors. In 2021, the Company offered training through professional institutions to help our employees acquire knowledge and insights into corporate sustainability development. We seek to incorporate sustainable development into the GUC's corporate culture by encouraging our employees to proactively participate in discussing and proposing solutions for relevant issues.

Looking ahead, GUC remains committed to maintaining commercial integrity, achieving progress toward co-prosperity and sustainable development year after year, and contributing to global society.

Senior Vice President & Corporate Governance Officer &
Executive Secretary of Sustainability Governance Committee
Daniel Chien

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2.2 Company Introduction

The operating principles of GLOBAL UNICHIP CORP. (GUC) include economic, environmental, and social issues. To ensure that the rights and responsibilities are balanced between relevant organizations and individuals, GUC recognizes the importance of corporate governance and transparency within organizations. Therefore, this Report reveals the establishment and members of GUC's Governance Committee and ensures that the decisions by the Committee comply with GUC's operating principles. The ultimate targets of implementing corporate governance are to maximize the shareholders' interest and reasonably decide the rights and responsibilities among every shareholder and member of the operating team through supervision of the team and checks and balances. At the same time, GUC expects to be a contributor to the improvement of society, and seeks the maximum interest for its shareholders, employees, customers, suppliers and the government and society.

GUC is the advanced leader in customized application specific integrated circuit (ASIC). GUC's headquarters was established in Hsinchu Science Park in January 1998. It provides complete services of customized IC to meet the demand for unique business and technology from innovative tech companies. GUC's goal is to provide world-class services of advanced IC customization and assist promising IC manufacturers in promoting their leading roles in the market. GUC seeks perfection by providing absolutely great power consumption, speed, quality, yield, and on-time delivery so as to meet customers' demand for IC design services with a fast path, on-time solution to customers' problem, and complete verification successively.

Semiconductor manufacturing and designing in Taiwan can be very specific,, which is beneficial to the development of local design services. GUC's Advanced ASIC Model TM combines professional design, systemic knowledge, and manufacturing resources. It utilizes advanced technologies and embedded CPU design with low power consumption. Moreover, GUC cooperates with Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC) and other package test companies, using key manufacturing technologies to keep developing advanced design platforms of manufacturing process and package test technologies. Therefore, it provides a systemic design solution with high performance to the leading companies in the

industry. The design services are based on the concept of one-stop shopping, providing customers with overall SoC solutions from the generation of design concept to product manufacturing in the shortest time. These include all the important services during IC manufacture. Customers can also select different services and delivery methods according to their needs and technologies. These services can not only help lower capital and the technical threshold for medium- or small-size IC design companies, but also assist system manufacturers in the self-development of customized IC. This will show the difference between software and hardware and shorten the developing process of product design. Thereby, products can enter the market faster and have higher added value.

GUC provides complete technical services for system companies and fabless semiconductor companies for different kind of customers (AI/ML, network, digital consumers, industries, and others) from all over the world (like the United States, China, Japan, South Korea, and Europe). GUC has been publicly listed in Taiwan Stock Exchange Corporation with the ticker symbol 3443.

As the demand for IC increases steeply from global cross industries in the post-pandemic era, all industries are affected by the shortage of IC and the semiconductor supply has become the most eye-catching issue in the world. Although the Corporation's supply chain is slightly limited, GUC still achieved an excellent business record in 2021 due to the benefits from the accelerated digitalization trend and the eager demand for IC in the market. The consolidated revenue of 2021 was NT\$15.108 billion while the consolidated earnings per share (EPS) was NT\$10.90, both of which broke their records.

Now GUC has stipulated Practical Principles of Sustainable Development and established Committee of Sustainable Development combining members from different departments. The Board of Directors assigned Corporate Governance Supervisor cum CFO as the Executive Secretary of the Committee, who will regularly report on the promotion and implementation performance of the sustainable development of the Corporate. The sustainability report will then be verified by a third party and announced on the official website upon the approval from the Board.



| 2.3 Our Belief, Mission, and Vision

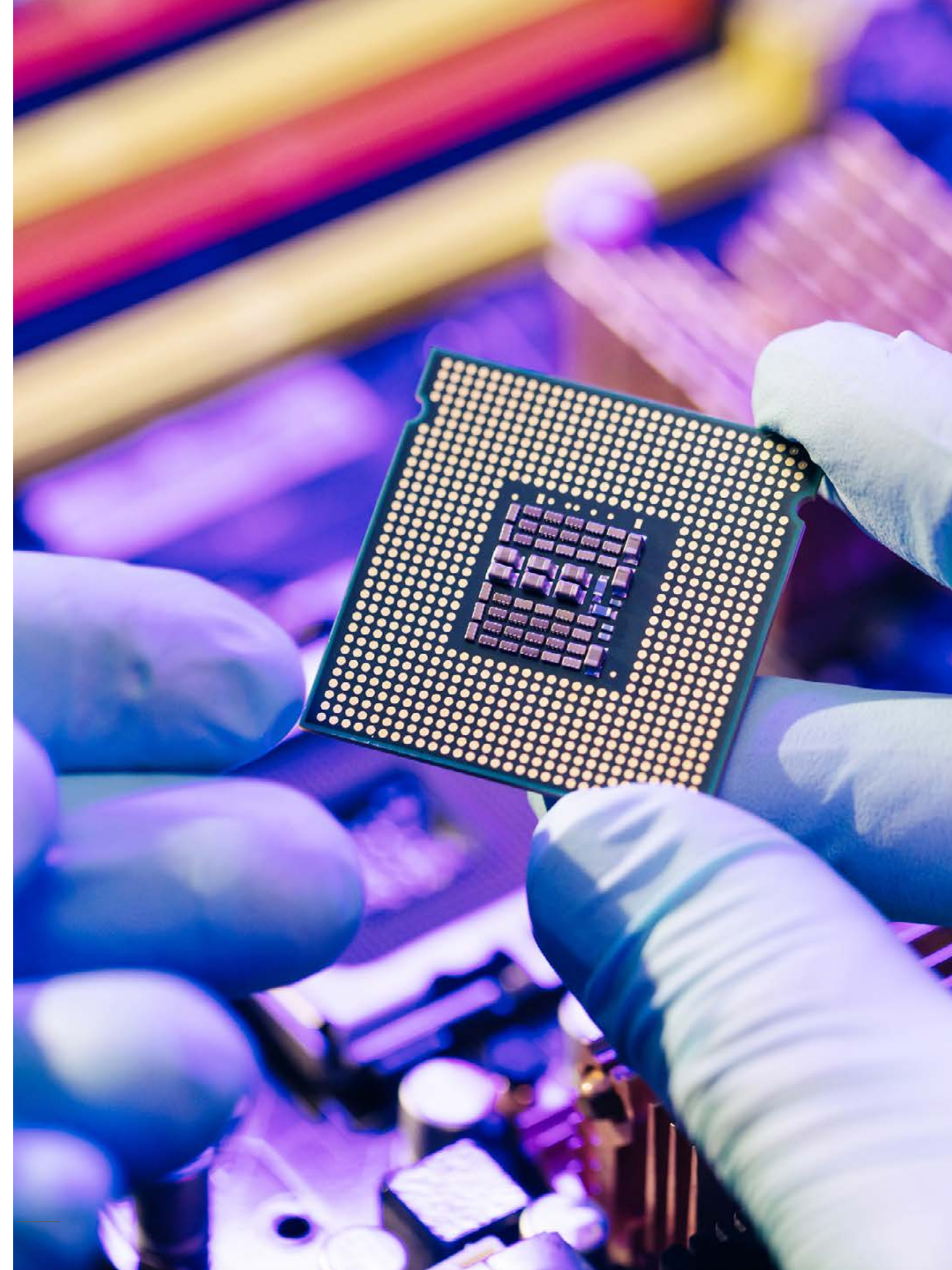
2.3.1 Technical Innovation, Refined Quality, Warm Service

GUC was established in January 1998. In these 24 years, we have always believed that creativity can bring a meaningful future and make the world better. GUC never changes its beliefs: innovative technology, excellent quality, and warm services.

2.3.2 Creative Future, Sustainable Innovation

Since its establishment, GUC has never stopped moving forward. We exclusively combine advanced technologies, embedded CPU design with low power consumption, and the key manufacturing technology co-developed with TSMC and other package test companies. GUC has years of experience in manufacturing CoWoS-s (silicon interposer) with high bandwidth memory (HBM). The InFo design and its simulation process has been silicon verified with GUC's exclusive N7 and N5 GLink IP technology. Recently, GUC has utilized 4Gbps HBM2E physical layer, an N5 manufacturing, and controller IP, having CoWoS-R (organic interposer) chip verified. Now GUC owns a complete set of SI verified interface IP and package design which is applicable to all types of TSMC's 2.5D advanced packaging technology. Therefore, GUC can provide customers with the most suitable solution to CPU, GPU, artificial intelligence (AI), high performance computing (HPC), and networking products.

GUC keeps improving the design and services of semiconductor manufacturing, assisting customers in IC innovation to make products more advanced, stronger, and with higher energy efficiency. With such products, we can improve living quality and realize the sustainable future.





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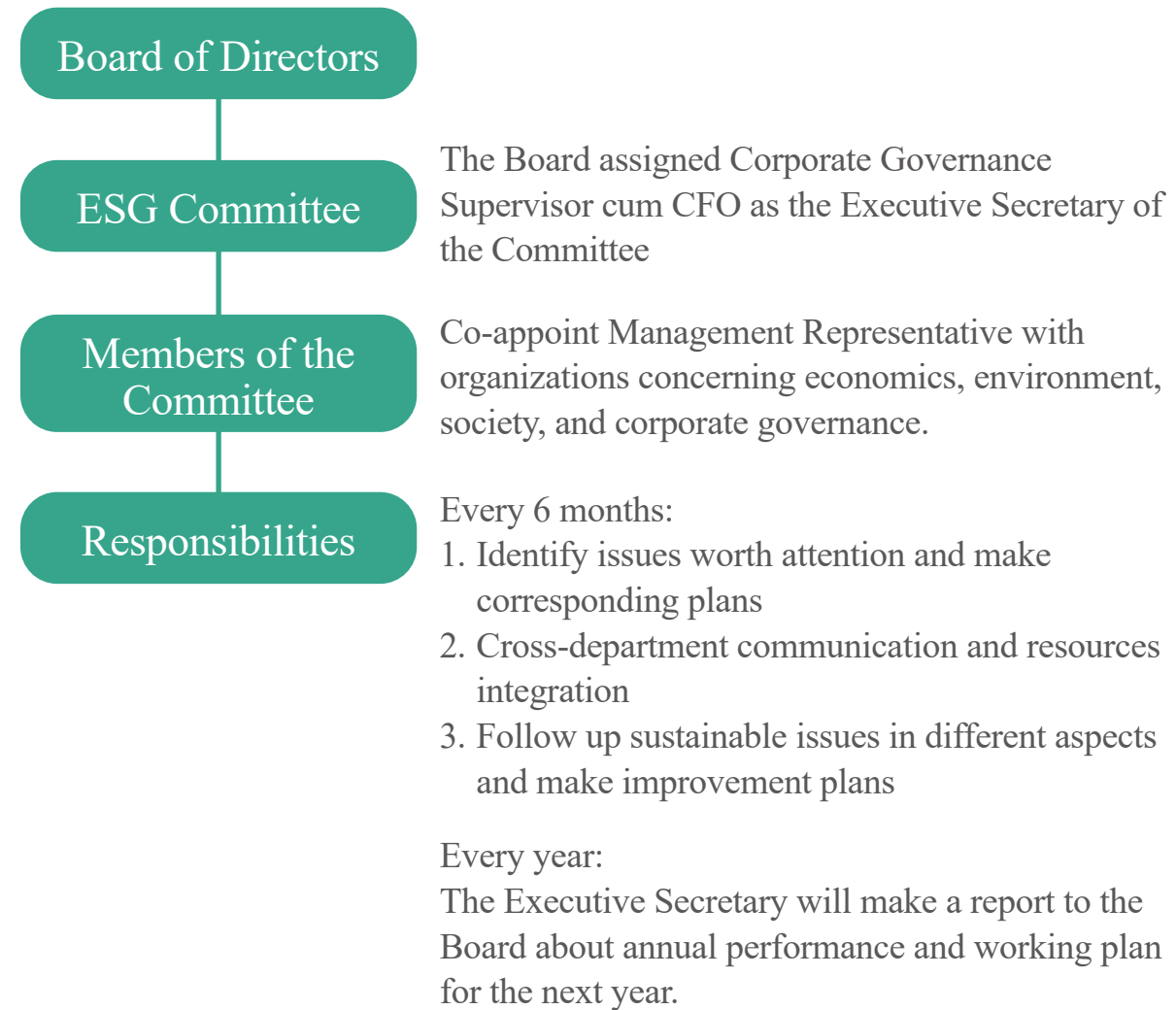
3. Performing Sustainable Management

3.1 ESG Implementation Structure





ESG Management Platform



ESG Implementation Policy

On the aspect of faithfulness and righteousness, GUC promotes trustworthy operation and professional ethics to balance the interests among every stakeholder and activate the positive cycle in the industry. Everyone can help to improve society. GUC has stipulated Procedure of Trustworthy Operation and Code of Professional Ethics. Every year, the Corporate will periodically hold employee training and testing on proper behaviors and competencies of professional ethics. Any violation against the Code or impeachment will be reported to the Board.

In regard to environmental protection, GUC dedicates itself to environmental sustainability. We insist on utilizing green design and green supply chains to seek the highest resource efficiency and meet the target of waste reduction and pollutant avoidance.

In regard to social concern, GUC holds charitable activities with its resources and voluntary kindness from the employees. We support suburban regions and assist the underprivileged in the way of providing money, resources, and manpower. In addition, we provide life support and emergency donation for underprivileged groups and hold Family Day for the employees joining beach and mountain cleanup to build a friendly mutual-aid society.

3.2 ESG Management Platform

3.2.1 Management Policy of Sustainable Development

CSR (corporate social responsibility) Promoting Committee was founded in 2015 and later renamed to ESG Committee in 2021. GUC's Board of Directors assigned the Executive Secretary of the Committee to Daniel Chien, Senior Vice President cum CFO. With the representatives from different relevant departments, such as Human Resources, Investor Relation, Legal Affairs, Operation, Business, Occupational Safety & Environmental Protection, Financial Accounting, Customer Service, Research & Development, and Design Service; the Committee holds periodical meetings every year to promote relevant activities, reviews the performance of its implementation, and keeps improving. To ensure the ESG Committee works smoothly, the Executive Secretary will regularly report to the Board about the material issues of sustainability and their improvement. The Corporate's performance report of sustainable operation will be verified by the British Standards Institution and publicly announced.

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Since its establishment, besides focusing on seeking the greatest achievement in its profession, GUC engages in friendly communication with stakeholders and treats everyone fairly, including shareholders, employees, customers, suppliers, governmental authorities, and society. We actively fulfill the duty of corporate citizenship to realize sustainability. The managerial supervisors promise to build a management system to guarantee that the Corporate and the suppliers comply with the Code and keep improving.

To ensure the implementation of ESG Committee's annual target, GUC builds an operation mechanism connected vertically and horizontally in which the ESG Committee acts as a communication platform for different departments. The Executive Secretary will take the lead in planning sustainable operation with the members in accordance with international standards and gradually fulfill the targets. The Committee will also periodically review the performance to realize sustainable management.

3.3 Materiality Analysis

Besides building a management structure of ESG information disclosure in accordance with the three main principles of GRI Standards: stakeholder inclusiveness, materiality, and sustainability context, the Committee will identify material issues with four steps: identification, prioritization, validation, and review.



Step 1: Identification

After GUC's internal meeting and stakeholder survey results (a total of 107 questionnaires were collected), we sorted out the ranking of "Relevant Topics" and "Aspects". This is a list of issues such as GRI Standards and standards of disclosure to be included in this ESG Report.

At the same time, the Committee picked the relevant issues from the topics and standard disclosure of GRI Standards and made an issue list included in this Report, which is named Relevant Topics (hereinafter Aspects).



Step 2: Prioritization

Prioritize Relevant Topics in accordance with the three main principles of GRI Standards.

Principle I: Clarify stakeholders and explain how to respond to their reasonable expectations and interest in the Report in accordance with stakeholder inclusiveness.

Principle II: Recheck the issues selected in the Report as to whether they are controversial enough to strike economics, environment, and society in accordance with materiality.

Principle III: Disclose the development of the impact from GUC on local or global economics, environment, and society and its corresponding improvement and damage avoidance in accordance with sustainability context.



Step 3: Validation

In the process of validation, the Committee will evaluate the identified material issues in accordance with completeness principle in GRI Standards. The completeness principle includes defining the scope. The aspects in this Report cover economic performance, materials, occupational health and safety, and employee training. The aspect boundaries define the striking boundary of every material issue to ensure the completeness of the information during the period stated in the Report.










Step 4: Review

Eventually, the prioritized list of material issues in the Report was approved by the top decision makers. At the final phase of identifying material issues and their boundaries, the Committee will collect stakeholders' feedback after this Report is announced and prepare for the next report. GUC values every stakeholder's feedback because they could be meaningful and worthy of reference. This will be helpful for the next identification of the report.



Material Issues, Impact Range, and Involvement Level

● Direct Impact ○ Impact Trigger ▲ Commercial Impact

Order	Material Issue	Importance of Operation	Internal		External Stakeholders			
			Employees	Shareholders	Customers	Manufacturers	Authorities	Society
1	 Research & Development and Innovation	To meet the exclusive business and technical demand from innovative tech companies, GUC proactively implements innovation and transformation to create value for the industry and market. We also make our own innovative business culture. It not only increases the added value of products, but also seeks the greatest interest for our stakeholders. Thus, we can move forward to become a helping force for society.	●	○	▲	●	○	
2	 Quality and Competitiveness	Technologies progress quickly while the life circle of products decreases, which increases the operation risks of the industry. In order to provide world-class advanced IC customization services, GUC actively pursues innovative R&D technologies and excellent quality of products. This can assist customers in making higher added value for products, decrease market risks, and increase industrial competitiveness.	○	●	▲	▲	○	
3	 Climate Change	The aggravation of global warming and frequent extreme natural disasters damage many countries and corporates economically. To ease the impacts from the climate change, GUC internally promotes environment protecting measures which save energy and reduce carbon emission. Moreover, we externally launch green products having adjustability and toughness against climate change.	○	○	▲	▲	●	●
4	 Sustainable Operation	To retain the resources for the next generation and meet the developing elements for the current market at the same time, GUC reviews the impacts on society, the environment, and economics from its products and services and keeps improving to realize sustainability.	●	●	▲	▲	○	○
5	 Management of Suppliers	To meet the demand from customers, decrease manufacturing cost, and increase operating performance, GUC established a stable and thorough supplier system through methods like supplier selection and supplier verification. In addition, it provides an encouragement mechanism and communicating channels to share the same quality concept and expects to make long-term cooperation with suppliers to contribute to sustainable supply chain.		●	▲	●	○	○
6	 Customer Relation Maintenance	To win customers' trust and establish stable long-term cooperation, GUC makes sure both parties share the same concept of developing targets and cooperation by periodical meeting, performance review or audit. We are looking forward to a win-win profiting model which increases the efficiency of customer services and satisfies our customers.	●	○	●	▲		
7	 Corporate Governance	To increase the performance and protect the rights and interest of shareholders and other stakeholders, GUC keeps balancing the power and responsibilities of the Board, implementing financial disclosure and internal audit, and strengthening the faith of corporate governance of management team to ensure that the Company will be able to efficiently adjust to any kind of impact in the future and retain sustainability.	●	●	▲	▲	○	○

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Matrix Diagram of Material Issue

● Environment ● Society ● Economics



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Research & Development and Innovation

Strategy	Develop core commodities
Vision	Be the leader of IC design service company
Resources	The investment amount in 2021 was NT\$ 2.8 billion
Specific actions, processes, projects or schemes	<ul style="list-style-type: none"> Launched the second generation 5 nm chip interconnection IP “GLink 2.0” in combination with TSMC’s InFO/CoWoS packaging technology. The silicon verification was completed in the third quarter of 2021, which can provide customers with a complete multi-chip interconnection solution. GLink IP won the “The Promising Product” of the first EE Awards Asia. Launched the third generation 5 nm chip interconnection IP “GLink 2.3” in combination with TSMC’s InFO/CoWoS packaging technology. The design finalization was completed in the fourth quarter of 2021. The silicon verification is expected to be completed in the third quarter of 2022. Completed the design finalization of 5 nm and 6 nm GLink-3D IP verification chips for 3D SoIC in the second quarter of 2021. It has successively mass produced super large SoC chips with HBM2/CoWoS for 4 clients, and successfully integrated 2 to 4 HBM2 memories, which are mainly used in the AI and HPC fields. It successfully completed the silicon verification of HBM2E 3.6G (PHY & Controller) IP in the third quarter of 2021, which is adopted by SoC of 5 nm and 7 nm clients. The finalization is expected to be completed in the first quarter of 2022. Leading the industry, launched the HBM3 CoWoS platform for the first time, verified the HBM3 7.2G, GLink and 112G SerDes IP, and completed the design finalization in the second quarter of 2021 in combination with TSMC’s latest CoWoS-S and CoWoS-R packaging technology. The silicon verification is expected to be completed in the first quarter of 2022.

- It has successfully developed the client’s 7 nm switch chip, integrating more than 200 channels of 112G-LR high-speed SerDes, which can be used by super large data centers. The client verification was completed in the fourth quarter of 2021.
- It has successfully developed mmWave RF integrated circuit chips for clients’ 28 nm 5G base stations and small base stations to meet the communication needs of 28GHz and 39GHz mmWaves, and assisted customers to enter mass production.
- It successfully carried out ASIC design and mass production planning for 6 nm clients in 2021.
- By adopting TSMC’s advanced manufacturing process and integrating AI/HPC chips and 2.5D packaging technology designed by clients for large-scale cloud data centers, it successfully assisted customers to enter mass production in 2021.
- Cooperated with 5G leading manufacturers in 12 nm high-speed analog front-end IP to support mm Wave and sub-6G bands, completed the silicon verification, been adopted by clients, and assisted clients to enter mass production.
- Completed the design finalization of 5 nm TCAM verification chip in the fourth quarter of 2021. And the silicon verification was completed in the fourth quarter of 2021.
- Provided design service solutions of ultra-low power consumption, which can significantly reduce the power consumption required by AI SoC chips and meet the ultra-low power consumption requirements of edge computing and assist clients to successfully enter mass production.
- Provided industry-leading spec-in services. After assisting the artificial intelligence chip client of super large data center and prestigious consumer electronics client to enter mass production in 2021. It also assisted the network chip client to complete the chip design and attain successful verification in 2021, and the chip is expected to enter mass production in 2022.

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- It has taken the lead in the industry in 3 nm development and completed the design process and verification of Version 0.9 in the fourth quarter of 2021. Plans to carry out the design process development of the 3 nm enhanced version in 2022 to meet the clients' product design finalization in 2023.
- Assisted clients to complete the design finalization and verification of lidar chips for self-driving cars in 2021. And it is expected to enter mass production in 2026.

Addressing GRI major themes	Custom theme
Effectiveness evaluation	Through 7nm/5nm low power consumption 3.2-3.6Gbps HBM2E physical layer/controller silicon IP verification, GUC announced that it has passed TSMC's 7nm/5nm 3.2-3.6Gbps HBM2E physical layer/controller silicon IP verification. Through use of patented architecture and the characteristics of advanced process, the power consumption was reduced from 1.8 watts of 7 nm process design finalized in 2019 and packaged in 2020 to 1.2 watts of 5nm process design finalized in 2020 and packaged in 2021, which meant an impressive reduction by approximately 33.3%.
Target	Continued to apply TSMC's most advanced process and APT packaging technology to develop HBM3 and Glink IP



Quality and Competitiveness

Strategy	<ul style="list-style-type: none"> • Developing technological development plans for the Company and conducting reliability verification operations during the design phase. • Promoting comprehensive and continuous efforts and cultivating a quality-oriented culture.
Vision	GUC is driven by the competitiveness of its customers. We are committed to becoming a premier long-term partner, winning the trust from, and contributing to, the success of our customers.
Resource	Continuing to motivate our employees to strive for excellence with incentives, including offering CIS bonus and public acknowledgment for improvement proposals.
Specific action, process, projects or schemes	<ul style="list-style-type: none"> • The Company has established policies for quality management. • Ensuring the effective implementation of quality management system, achieving quality management targets, and satisfying system requirements. • Maintaining the integrity of the quality management system when system changes . • Continuing to propose projects that improve internal procedures.
Addressing GRI major themes	Custom theme
Effectiveness evaluation	Corporate image, service quality, and customer satisfaction are the important indices for company competitiveness.
Target	We are dedicated to promoting customized quality services to assist customers in gaining market opportunities and strengthening their competitiveness with our excellent and reliable product quality.



Climate Change

Strategy	Preparing emergency response plans for climate abnormality to reduce greenhouse gas emissions from the Company and its suppliers.
Vision	Mitigating the impacts of sustainable business operations on climate change.
Resource	Proactively promoting environmental protection, energy-saving, and carbon reduction initiatives, reducing greenhouse gas emissions, increasing green energy consumption, etc., to mitigate the impacts of climate change on corporate operations.
Specific action, process, projects or schemes	<ul style="list-style-type: none"> Fully implementing clean manufacturing in the green R&D and manufacturing processes, including zero environmental pollution, non-hazardous materials, and improved resource consumption efficiency. The Company is expected to install solar power systems in 2022. With the installations of green energy facilities, we hope to contribute to the mitigation of global warming and environmental pollution. Creating a green corporate image by engaging in marketing initiatives that help customers rediscover the value of the brand. Increasing green product promotions and sales to explore the potential of the green market.
Addressing GRI major themes	GRI 102-11/GRI102-15/GRI 305-1/305-2/305-5
Effectiveness evaluation	<ul style="list-style-type: none"> Setting a 1% annual carbon reduction target based on the benchmark year, 2021. Adopting a step-by-step approach to develop energy conservation strategies and actions. Setting future KPI targets, including the reduction of GHG emissions, water and power use by 2025. Ensuring that the carbon footprints of goods exported from Taiwan follow the applicable specifications in Europe and the United States. Total investment amount in energy conservation items in 2021 was NT\$4.03 million. Continuing to develop Nano 5/3 process and encourage our customers to adopt the energy-efficient process, thereby reducing the overall energy consumption.
Target	Creating a better and safer living environment for us and future generations.



Sustainable Operations

Strategy	With the drastic worsening of climate change and major shifts in the global political and economic landscape, the Company must assess its ESG factors and risk scenarios and conduct constant reviews of internal control procedures, in order to build the resilience required to address unknown challenges in the future.
Vision	Improving our business performance by adhering to the PDCA principles and becoming the world's leading IP and ASIC provider.
Resource	GUC's Committee of Sustainable Development integrates efforts of various functional organizations within the Company and addresses issues affecting our stakeholders, which includes employees, shareholders/investors, customers, suppliers, government agencies, and society. Furthermore, the Committee develops plans to fulfill GUC's sustainability vision and mission.
Specific action, process, projects or schemes	<ul style="list-style-type: none"> The Board of Directors adopted the "Sustainable Development Best Practice Principles" as the long-term guidance for ESG implementation. Convening periodical meetings every year and reporting to the Board of Directors. Conducting annual ESG education and training for employees to highlight key strategies and initiatives, while urging all employees to work together to realize our sustainable operation vision.
Addressing GRI major themes	GRI 102-16
Effectiveness evaluation	The Board of Directors supervises and provides guidance. The executive secretary of the Committee of Sustainable Development prepares an annual report to the Board on implementation outcomes and future planning.
Target	To fulfill our social responsibilities, we implement corporate governance and equal treatment of stakeholders and contribute to environmental protection and charitable activities in conjunction with 17 targets of the UN Sustainable Development Goals (SDGs).

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Suppliers Management

Strategy	Building a supply chain that meets RBA requirements.
Vision	Maintaining long-term cooperative relations with domestic and foreign suppliers to build a stable and sustainable supply chain together.
Resource	Building effective incentive systems, communication channels, and shared quality values.
Specific action, process, projects or schemes	<ul style="list-style-type: none"> Supplier information platform Unannounced supplier audit Unannounced interviews and meetings Periodic questionnaire surveys Public campaign on business integrity (GUC Procedures for Ethical Management and Ethics & Business Code of Conduct). Conflict resources/ Suppliers are required to declare or sign declarations. Code of Business Conduct & Supplier Code of Conduct/ Suppliers are required to comply with RBA regulations by declaring or signing declarations.
Addressing GRI major themes	GRI 204-1/GRI 308-1/GRI 414-1
Effectiveness evaluation	Establishing a supplier evaluation system through supplier screening procedures and supplier certification regulations.
Target	<ul style="list-style-type: none"> Acquiring products and services that meet the required quality and quantity. Acquiring products and services at the lowest cost. Ensuring that suppliers provide high-quality service and on-time delivery. Developing and maintaining favorable relations with suppliers Explore potential suppliers

Customers relations

Strategy	Conducting QBR analysis to address customer’s problems in conjunction with continuous prevention and improvement. Implementing information security control on customers’ information. Collaborating GUC’s work processes with its customers to ensure on-time products delivery.
Vision	Building a long-term and trustworthy partnership with our customers to create mutual benefits and achieve co-prosperity.
Resource	Providing customers with timely communication channel (replying within 24 hours).
Specific action, process, projects or schemes	<ul style="list-style-type: none"> Establishing internal standard operating procedures and specifications, such as the Confidential Information Protection Policy and the Confidential Information Control Protocol. The Proprietary Information Protection Committee (PIP), composed of members nominated by all department directors, is in charge of planning, creating, auditing, and enforcing control over the Company’s proprietary information. The committee meets every other month for discussion and decision-making on issues related to confidential information control, and it convenes interim meetings as needed. E-mail Monitoring System. USB Drive Data Access Control. Installation of CCTV surveillance equipment. Conducting regular customer satisfaction surveys and formulating customer complaints response procedures to maintain excellent customer relations.
Addressing GRI major themes	GRI 418-1
Effectiveness evaluation	The average rate of customer satisfaction is 94%.
Target	In 2021, there were no complaints concerning intrusions on customer privacy or loss of customer data.



Corporate Governance

Strategy	GUC establishes an effective corporate governance framework, reinforces the functions of the Board of Directors, increases transparency in information disclosure, and improves communications with stakeholders based on the Company's governance plans. We also aim to foster a culture of responsible governance by adhering to international standards and enhancing the efficiency of our functional committees.
Vision	Continuing to implement equal treatment of all stakeholders and becoming an excellent model of corporate governance in Taiwan.
Resource	The Company's management is dedicated to building a management system and ensuring that the Company's governance performance continues to improve in accordance with the Corporate Governance Code of Practice.
Specific action, process, projects or schemes	<ul style="list-style-type: none"> • Under the Board of Directors, GUC has established the Audit Committee, Compensation Committee, and Committee for Sustainable Development. We intend to create additional functional committees as needed. • Creating a dedicated corporate governance organization. • There is no gender disparity in the Company's basic compensation, which is decided by factors such as professional background and experience. • GUC has established a dedicated business integrity management organization that reports regularly to the Board of Directors on the implementation outcome.
Addressing GRI major themes	102-18/GRI 405-1
Effectiveness evaluation	GUC was awarded the top 6% to 20% in the eighth Corporate Governance Evaluation of Listed Companies by the Taiwan Stock Exchange.
Target	Maximizing shareholder interests and continuing to be listed in the TWSE Corporate Governance 100 Index.

3.4 Stakeholders Communication

3.4.1 Stakeholders Communication Procedures

GUC is dedicated to achieving sustainable development while also honoring our stakeholders' requests and the expectations of the Company. The Company applies materiality assessment to identify key sustainability issues and types of stakeholders. The assessment helps us understand the sustainability issues that our stakeholders are concerned about, as well as review our implementation outcomes of corporate sustainability. The Committee of Sustainable Development has identified six groups of GUC stakeholders based on the GUC Sustainable Development Best Practice Principles: shareholders, employees, customers, suppliers, government agency, and society. With our long-standing commitment and efforts, we have built transparent, effective, and timely communication channels with our stakeholders to earn their trust and support. Furthermore, representatives from each group constantly communicate with stakeholders in their routine course of business operations, collect questionnaires and feedback, and identify stakeholders' concerns and other issues related to corporate social responsibility. We aim to achieve the following objectives with this report:

- ✔ Understanding our stakeholders' concerned topics and continuing to enhance our corporate sustainability performance.
- ✔ GUC's objective in pursuing corporate sustainability has always been to earn our stakeholders' trust and support and meet the expectations of various stakeholders.

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The four primary phases of GUC’s stakeholder management approach are identification, analysis, planning, and management:

1. Identification of stakeholders: GUC defines stakeholders as internal or external organizations or persons who may impact GUC or be affected by GUC. As a result, we have identified GUC’s stakeholders as shareholders, employees, customers, suppliers, government agencies, society, etc.
2. Materiality analysis of stakeholders’ concerns: Based on the impacts on GUC and the level of concern, we conducted questionnaire surveys on material issues, gathered the data, and developed GUC stakeholder communication channels. Furthermore, the various channels created by concerned departments are entrusted with collecting concerns of interest to our stakeholders. We selected 19 issues that are important to our stakeholders by considering the Company’s stance on sustainability and topics specified in the GRI Standards. Subsequent materiality analyses and evaluations on these topics have been performed based on their level of concern.
3. Plans for stakeholders: Based on the aforementioned analyses, GUC’s responsible groups created management approaches and implemented them into daily and annual business planning. These approaches are subject to frequent assessments and evaluations, which serve as a crucial reference point for the Company’s sustainability strategy.

4. Stakeholder interaction management: GUC effectively utilizes company resources and establishes mutually beneficial relations with its stakeholders by engaging in varying degrees of interaction with stakeholders based on their relevance.

After identifying the types of stakeholders, we screen and compile material issues from the concerned issues of our stakeholders’. GUC gathered stakeholder complaints through department directors in mid-2021 and conducted two managerial meetings to discuss and summarize stakeholder opinions and concerns. Furthermore, we engaged Mr. Wang Sheng-Yuan, General Manager of Leadership Consultancy, and his expert team to review the corresponding GRI Standards index and outline the concerned subjects of our stakeholders through interviews with various departments of our Company. The Company then convened an internal meeting to finalize material issues of 2021. GUC will address these issues respectively in the Sustainability Report. There were no significant changes in the material aspects and boundaries compared to the previous reporting period.

In addition to the above standard operating procedures, we created a Stakeholders Engagement section on the GUC website, providing contact information for stakeholder communication. Any stakeholder with questions, suggestions or complaints may find appropriate contact information in the “Business Services”, “Investors & Shareholders”, and “Business Ethics” sections. We maintain a seamless and healthy interaction with stakeholders.





3.4.2 Stakeholder Interaction

▼ GUC Stakeholders’ Concerned Topics, Communication Channels, Frequency, and Specific Procedures



Stakeholders	Concerned topics	Communication Channel	Frequency	Communication Outcomes
 Shareholders	<ul style="list-style-type: none"> • R&D and innovation • Quality and competitiveness • Sustainable Operations • Corporate Governance • Risk management 	General conference of shareholders	Q2/ Annually	1. Financial performance: Completing financial statements based on International Financial Accounting Standards, Taiwan-IFRSs, and relevant laws and regulations. Conducted analysis and describing the financial differences of various periods. 2. Business strategy: Highlighting the direction of GUC’s medium and long term developments and strategies. 3. Dividend policy: Describing GUC’s dividend policy and factors affecting dividend. 4. Corporate governance: Disclosing corporate governance information and interacting with our investors.
		Sustainability Report	Annually	
		Publication of the Annual Report prior to the shareholders meeting	Annually	
		By phone and e-mail	Periodically	
		Investor conference	Semi-annually	
		Financial reports	Quarterly	
		Participating in investor forums or conferences held by domestic and foreign investment institutions and securities firms	Periodically	
Receiving institutional shareholders, domestic and foreign investment institutions and securities firms	Periodically			
		Releasing information though the Market Operation Post System (MOPS) and the Company’s website	Periodically	



Stakeholders	Concerned topics	Communication Channel	Frequency	Communication Outcomes
 Employee	<ul style="list-style-type: none"> • Sustainable Operations • Labor relations & remuneration • Labor rights • Occupation safety and health 	Employee conferences	Quarterly	<ol style="list-style-type: none"> 1. EFS Service Center and external consultation requests 2. Labor relations, employees' perception on organization identity: Q&A at Labor Conference 3. Anti-discrimination and equal employment: Enforcing supervision through joint efforts of internal audit mechanism and RBA verification unit 4. Attract and retain talent: Providing competitive compensation and benefits 5. Human rights policy: Complying with RBA regulations and the requirements of specific customers, and treating all employees with respect
		Labor meetings	Quarterly	
		Regular meetings	weekly/ monthly	
		HR services and questionnaire surveys	Periodically	
		EFS Service Center	Periodically	
		Employee Assistance Program (EPA)	Periodically	
		Employee's appeal mailbox/Performance Management Development System (PMD), Proprietary Information Protection (PIP), and suggestion /administrative service mailbox, etc./Audit Committee mailbox	Periodically	
Corporate general announcements	Periodically			
 Customers	<ul style="list-style-type: none"> • Climate Change • Environmental policy • Green products and operations • Energy saving expenditure • Responsibility for products • Water resource management 	Customer audit	Periodically	<ol style="list-style-type: none"> 1. Management of products with hazardous substances: GUC complies with RoHS & REACH regulations 2. Environmental management and pollution control: GUC complies with domestic and foreign environmental protection laws and regulations 3. Customer service and stratification: Collecting feedback from questionnaire surveys and the sales team 4. Handling and tracking status through our customer complaint system
		Customer meeting	Periodically	
		Annual technology symposium	Annually	
		Customer Satisfaction Survey	Annually	
		Conducting surveys on the industrial environment and social responsibility and implementing improvements as requested by our customers	Periodically	
		Dedicated e-mail address	Periodically	
		Timely response to customer complaints (ACSS system)	Periodically	


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Stakeholders	Concerned topics	Communication Channel	Frequency	Communication Outcomes
 Supplier	<ul style="list-style-type: none"> • Quality and competitiveness • Suppliers Management • Sustainable Operations • Customers relations 	Supplier information platform	Periodically	<ol style="list-style-type: none"> 1. Conflict Resources: requesting supplier to declare or sign declarations 2. Code of Business Conduct & Supplier Code of Conduct: Suppliers are required to comply with RBA regulations by declaring or signing declarations.
		Periodic questionnaire surveys	Annually	
		Supplier Audit	Periodically	
		Interviews and meetings	Periodically	
		Public campaign on business integrity (GUC Procedures for Ethical Management and Ethics & Business Code of Conduct).	Periodically	
 Government Agency	<ul style="list-style-type: none"> • Sustainable Operations • Corporate Governance • Suppliers Management • Code of Business Conduct: anti-corruption and anti-trust • Risk management • Responsibility for products • Labor rights • Occupation safety and health 	Corporate financial statements	Annually	<ol style="list-style-type: none"> 1. Water resource management: Reusing and reclaiming recycled water, recovering rainwater, and using recycled water for outdoor purposes to reduce water resources consumption 2. Waste management: Assigning dedicated unit to implement waste reduction, including source reduction, office recycling, etc. 3. Energy management: Replacing energy-intensive equipment by Employee Facilities Services. 4. Legal compliance: Monitoring regulations and compliance issues and providing timely suggestions and responses through appropriate communication channels.
		Communication with government authorities through associations or labor unions	Periodically	
		Receiving and submitting official documents	Periodically	
		Attending industry-government-academia seminar	Periodically	
		Providing relevant reports or responses as required by government authorities and regulations	Periodically	

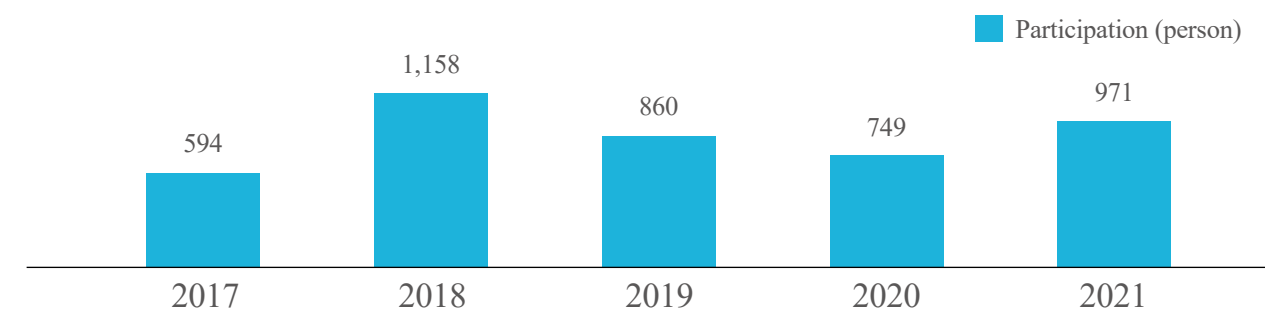
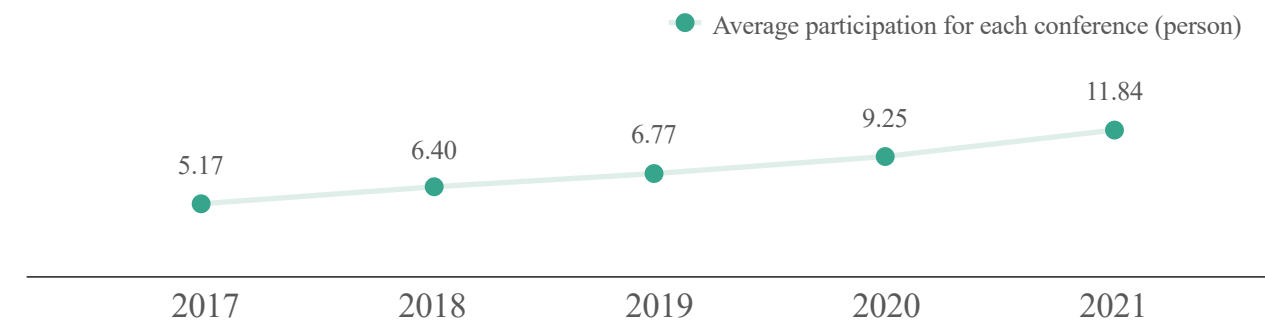
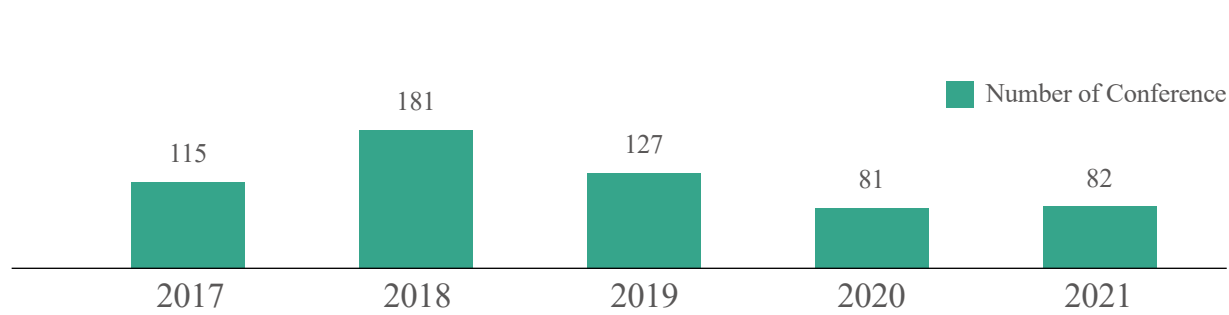
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Stakeholders	Concerned topics	Communication Channel	Frequency	Communication Outcomes
 Society	<ul style="list-style-type: none"> • Green products and operations • Customers relations • Responsibility for products • Water resource management • Social participation • Labor relations & remuneration 	Revenue press release	Monthly	<ol style="list-style-type: none"> 1. Proactively participating in public welfare projects and contributing to the society 2. Talent recruitment: cultivating, training, and developing talents, as well as providing career guidance 3. R&D and innovation: encouraging patent applications with bonus awards 4. Inviting teachers from universities and colleges to provide advice on business sustainability issues.
		Financial/Business operation report	Quarterly	
		Releasing Sustainability Report	Annually	
		Other media and public welfare events	Periodically	
		Official website and e-mail	Periodically	
		Participation in disaster relief activities	Periodically	
		Press release about new technologies and new products	Periodically	
		Participation in the Dream Project for disadvantaged families	Periodically	
		Participation in questionnaires and surveys	Periodically	
		Industrial and academic collaboration program	Periodically	
		Summer Intern Program	Periodically	
		Company Visiting Program	Periodically	

▼ Statistics for Investor Interactions in 2021

Year	2017	2018	2019	2020	2021
Number of Conference	115	181	127	81	82
Participation (person)	594	1,158	860	749	971
Average participation for each conference (person)	5.17	6.40	6.77	9.25	11.84





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4. Sustainability Performance

4.1 Sustainable innovation

4.1.1 Innovative R&D

Wafer Product & ASIC Design

GUC provides application-specific integrated circuit (ASIC) design services that meet market demands for comprehensive services of design, manufacturing, packaging and testing.

1. ASIC and Wafer Products: Comprehensive services of design, wafer manufacturing, packaging and testing.
2. Non-Recurring Engineering (NRE): GUC provide a circuit design cell library and various IPs required in the process of product design; circuit layouts needed for mask-making; we subcontract mask-making; wafer manufacturing, dicing, and packaging to vendors; and we conduct final testing to get customers prototype samples.
3. Multiple-Project Wafer (MPW): MPW integrates multiple design projects of different customers in one single mask and by one wafer engineer run. It is an effective and efficient time-to-market chip verification service with cost sharing in masking and wafer engineering run. Before the phase of massproduction, design engineers are able to timeously verify their prototype designs with advanced process technologies of much lower costs.

4. Intellectual Property (IP): These are silicon-verified reusable IC designs with specific functions. With the rapid advancement of semiconductor processing technologies, the design industry is trending toward multi-functional chips and SoC (System on a Chip). Reusable IP help customers avoid redundant designs and resources. Designed, verified, and reusable integrated circuit designs with specific functions. With the advancement of integrated circuit manufacturing technology, multi-functional chips and even SoCs have become the mainstream of IC design. Reusable IP can reduce repeated designs and resource investment in designs.

With the support of high-capacity emulator, GUC not only accelerates the development and verification of systems-on-a-chip (SoCs) hardware (over 700 times the simulation speed of workstations), but also enables software/firmware to be developed and verified in advance, shortening the chip's time to market.

Advanced ASIC Services

The semiconductor industry supply chain can be divided into four major parts: design, manufacturing, packaging, and testing, from up to downstream. GUC provides upstream IC design services. The design flow of a chip is not simply a specification design of hardware, but also the software integration with the assistance of EDA tools as the process technology approach nanometer scale. To cater for the ever changing and various demands from clients and semiconductor industry, our Advanced ASIC Services offer clients an entry into the semiconductor design industry with choices of product concept, specification, development, verification, production, and final product.

2021



Global Unichip Corporation

ESG Rrport

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There are three core values of the Advanced ASIC Services model:

- IP Solution, Chip Implementation, and ASIC Manufacturing. IP Solution will help customers to reduce chip design time and risk.
- Chip Implementation: GUC works closely with TSMC to establish the knowhow of advanced technology in advance, to assist customers in getting familiar with the most advanced and efficient technology, to improve yield, and strengthen market competitiveness. In order to reduce design complexity and time to market, GUC chose ANSYS RedHawk-SC in order to effectively sign off a billion nodes designs. It takes RedHawk-SC less than two days to complete verification and produce reports.
- ASIC Manufacturing: By cooperating with world-class fabs, packaging, and testing companies, as well as other providers, GUC provides customers with professional and high-quality manufacturing services, minimizes barriers to entry and technical risks, and shortens time to market (Time-to-market), and time to volume (Time-to-volume). This ensures high quality, high yield, and on-time delivery, so that customer’s valuable resources can be invested in their core capabilities.

GUC values a sustainable future and voluntarily advocate UN SDG 3: “Ensure healthy lives and promote well-being for all at all ages.” We obtained an ISO 13485 certificate for medical device quality management system in 2017 to ensure our capability in designing medical chips and establishing effective mechanisms.

We work with customers to build customized ASIC ICs for medical equipment that are compliant and meet market requirements. GUC’s specialization in IC design expands the scope of services to medical equipment that benefit people with enhanced medical technology.



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Development Programs for New Products

GUC continues the development of advanced IP including GLink, HBM2/2E/3Controller and PHY, 28G/32GSerDes, PCIe Gen3/4/5, and highspeed ADC/DAC in 7nm, 6nm, 5nm and 3nm processing technologies. The company also migrates key components, such as Power Management Solutions and Clock Generators to advanced processing technologies. GUC's R&D team is also developing in-house memory IP (TCAM, SRAM) and customized standard cell libraries that enrich our IP/Library portfolio of competitive IP and subsystem solutions (3nm, CIPRD edited). For advanced process technologies, the 3 nm test chip has taped out in 1Q21 and is silicon-verified in 4Q21, paving the way for N3E IP cores (DS, 3 nm).

4.1.2 Quality management

Product Design and Lifecycle Control

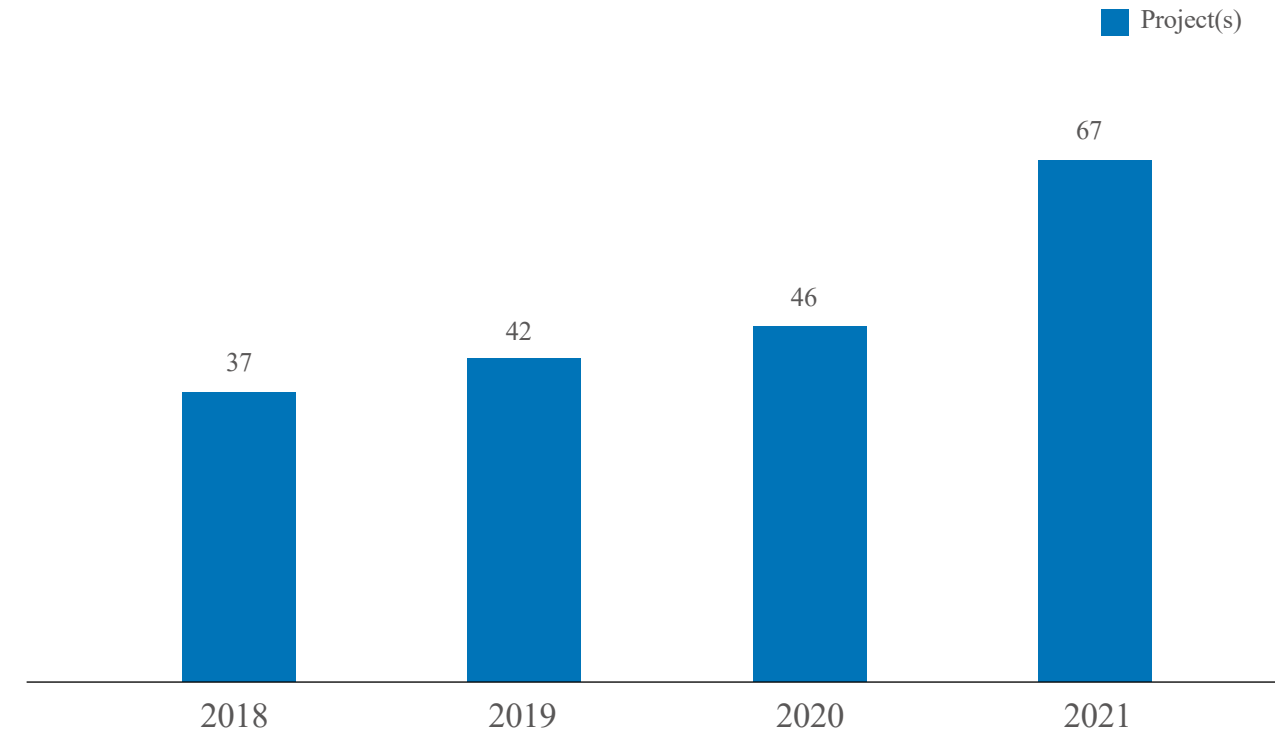
Green IC Design

1. GUC implements green design from the design and R&D stage of a product's lifecycle. Bisphenol A (BPA) is a hazardous substance to humans and the environment. The current EU regulations don't impose any restrictions on the shipment of products containing BPA. In spite of that, GUC aims to be a sustainable business and holds itself to an industry leading standard higher than that of the EU. Starting in 2018, all new products have adopted BPA-free key components.

Year	2018	2019	2020	2021
BPA-free project for new products	37	42	46	67

Unit: project(s)

▼ BPA-free project for new products



2. GUC strives to reduce environmental pollution and energy consumption and values the health of our supply chain partners. The ink diluent used for printing at our production lines used to contain formaldehyde. To reduce environmental hazards and health risks, the Company's product labeling has been shifting away from ink printing gradually toward laser marking since 2020. Laser marking shipments increased from 74.15% in 2020 to 87.04% in 2021. We will continue the transition to laser marking to protect the safety and health of our supply chain partners.
3. Lead (Pb), commonly used in electronics manufacturing, has reproductive toxicity and is also a carcinogen, which endangers human health. Pb-free bumps have been fully adopted by the Company's product since 2018. Pb-free bumps have reached 99.92% in 2021 and are scheduled to reach 100% in 2022, achieving international compliance in advance.

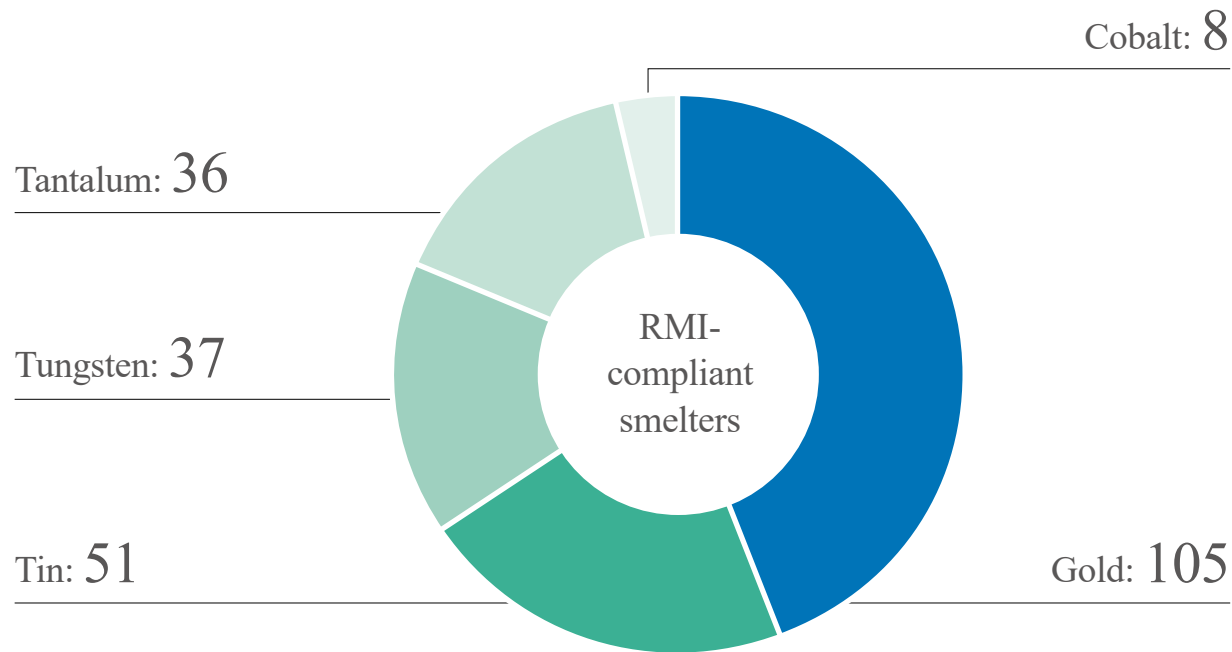
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Raw Materials Management — Conflict Free Minerals

In pursuit of global human rights, customers insist on not using natural resources from conflict zones. GUC 100% purchases from 237 refiners recognized by the RMI (Responsible Minerals Initiative) for gold, tungsten, tin, tantalum, and cobalt. With the updates of the CMRT (Conflict Minerals Reporting Template) and CRT (Cobalt Reporting Template), we will continue to actively manage suppliers' due diligence on conflict minerals.

▼ 237 RMI-compliant refiners



Uncompromised quality during the pandemic

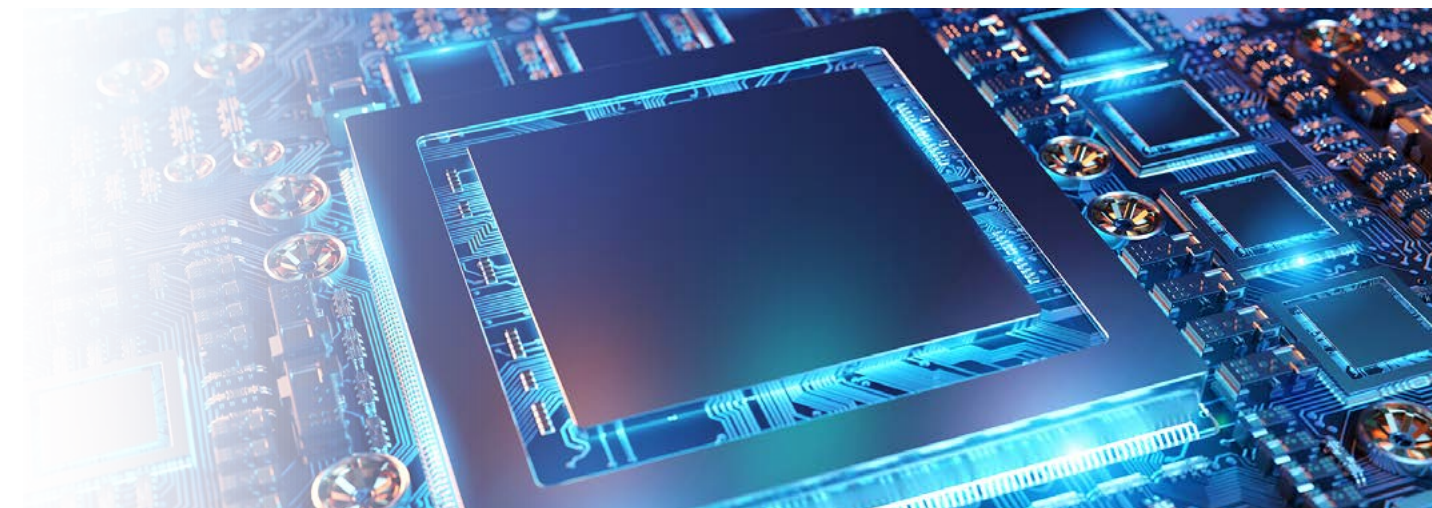
Product reliability during the pandemic: As suppliers do not allow customers to enter their premises for device testing, we had prepared by planning the schedules of reliability tests and discussing with customers about adjusting these schedules. We deliver the tested units directly to the suppliers' labs for testing, and the suppliers will upload the results. This meets the established product testing plans while avoiding the risks of human contact.

4.1.3 Customer Service

Customer first

As for customer relations and communication, GUC supports seamless partnerships through meetings and visits as well as quarterly and monthly performance reviews or audits, synergizing short/medium/long-term goals and plans on social responsibilities. To serve customers closely, we opened customer service offices in six regions including Taiwan headquarter, China, Japan, South Korea, the United States, and Europe with dedicated contacts for environmental management, social responsibility, hazardous substances control, and conflict minerals. We are ISO 9001 compliant and audited by third parties. Not only do we provide necessary and sufficient information promptly to meet the requirements of the downstream sectors, end customers, or the authorities, but we also perform the required activities, investigations, verifications, audits, and data collection for customers' social responsibility plans.

To ascertain customer satisfaction, GUC conducts a customer satisfaction survey in 1Q annually or upon the completion of a project. Customers may rate, give feedback, or compare us with our competitors. Our customer satisfaction team then responds to customers and tracks the progress of improvement of the teams at issue. Moreover, the team finds the underlying problems through accurate data analyses and reports to the higher ups as reference for mid- and long-term business plans.

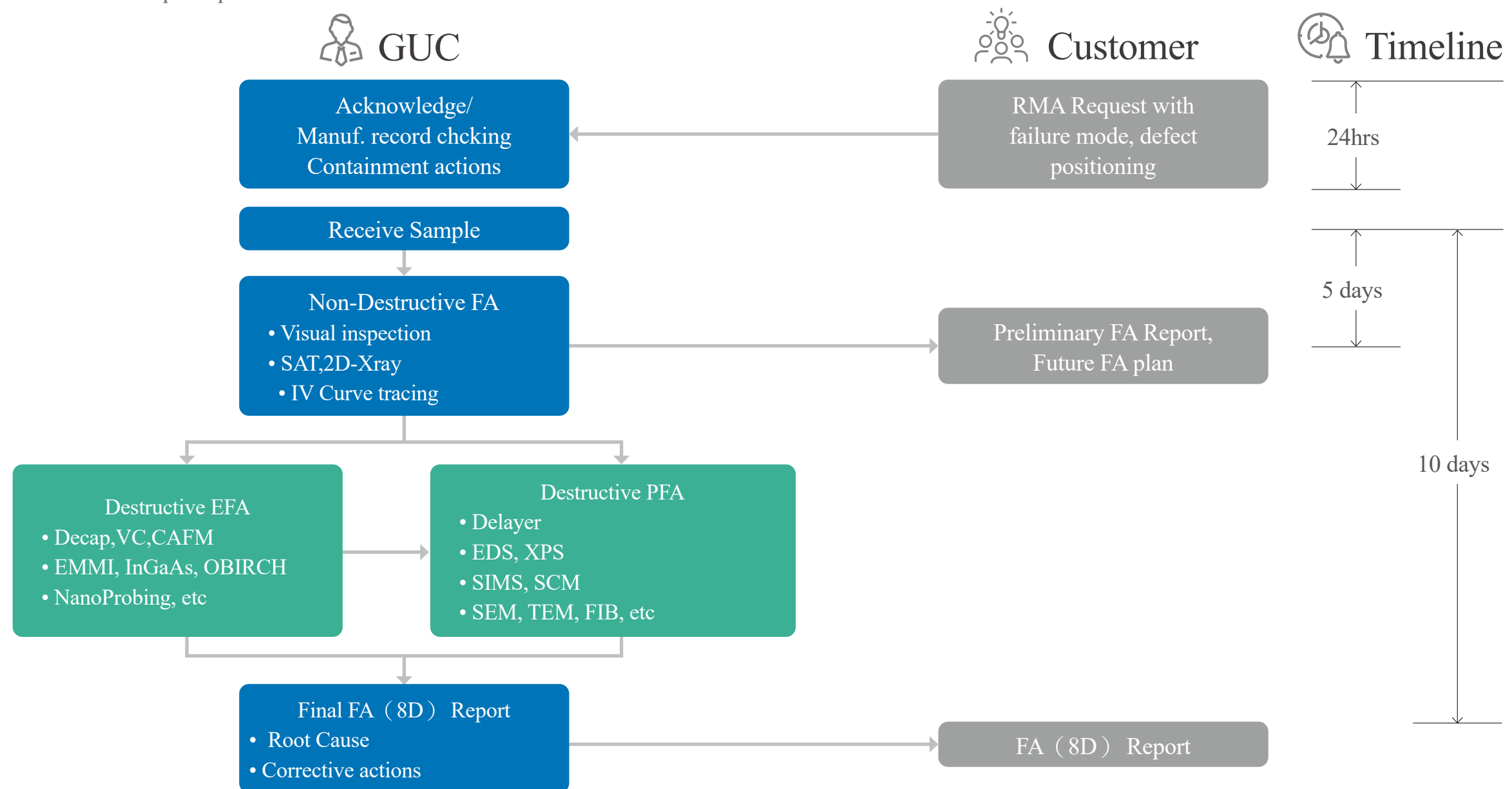




The customer satisfaction survey in the past five years up to 2021 has achieved an 80% response rate with over 90% giving the rating of “satisfied” or above for the past 5 years and 94% in 2021. This means that GUC has continued to improve customer service efficiency in spite of technological evolution and business competition. In the 2021 customer satisfaction survey, we were greatly encouraged by the 25 customers who commended us for “stable quality,” “excellent team,” “superb communication,” “good service and expertise” and “reliable partnership.”

Regarding complaints, we have formulated “Customer Complaint Management Procedures,” requiring relevant teams to reply to customers within 24 hours after receiving complaints. In 2021, the on-time rate of complaint replies reached 90%.

▼ Customer complaint process





4.2 Responsible Procurement

4.2.1 Green Supply Chain

Climate change and global warming are contemporary global issues that impact human beings, the ecology, and global environment. Our actions include promotion and implementation of “planning and saving energy and resources and reducing GHG emissions” as well as “waste reduction management,” to fulfill our corporate social responsibility, enhance the Company’s overall image, reduce operations costs, and ensure sustainable development.

We systematically practice environmentally-friendly, sustainable management. We have formulated the Company’s internal code of conduct based on the Responsible Business Alliance (RBA) Code of Conduct and set up an RBA Committee directly under the Operations Management Committee. The RBA Committee meets regularly to review and implement the Code of Conduct.

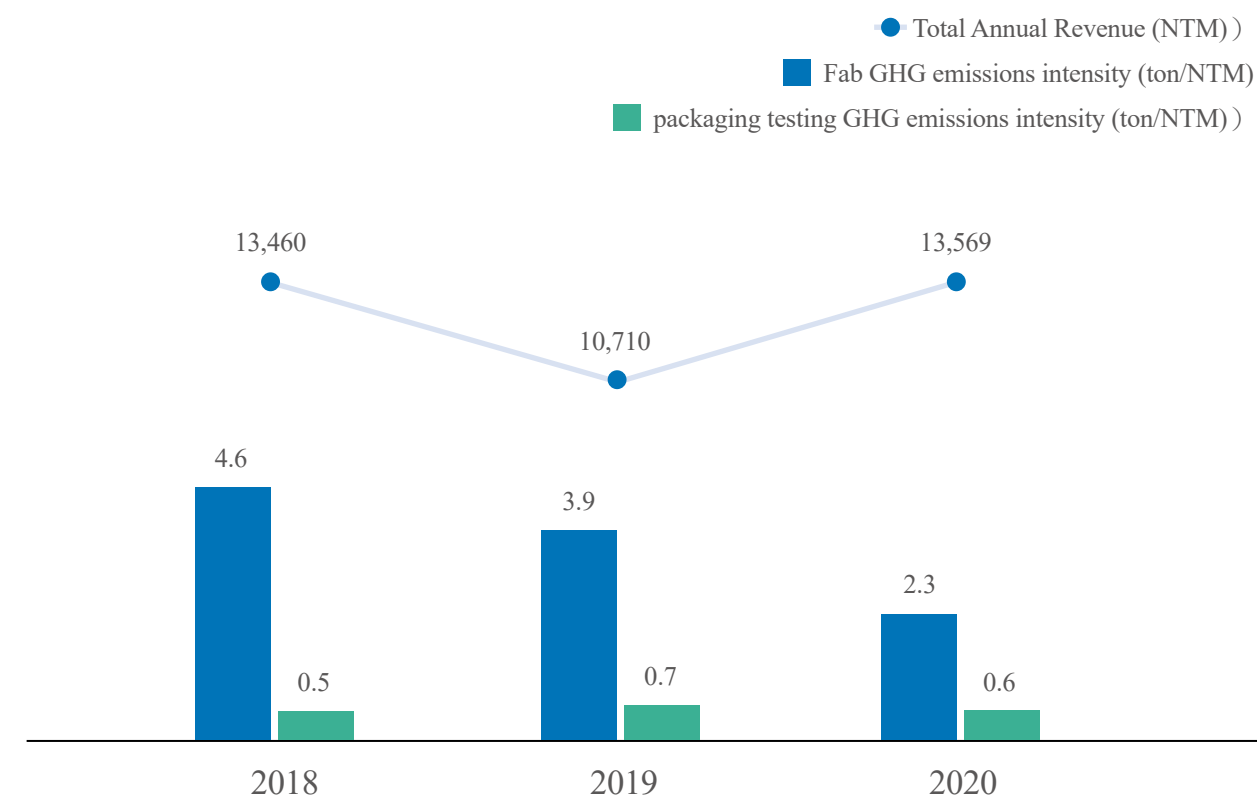
Through the operation of the Environmental Safety Department and the RBA Committee, we are committed to reducing the impact on natural resources and lessening environmental pollution. Quantitative statistics and disclosure on environmental information document the use of purchased power, renewable energy, water resources, and various raw materials. Long-term data documentation and disclosures help us review year by year whether these environmentally-friendly measures are progressing toward their goals. Our actions to save natural resources and mitigate climate change include improving product energy efficiency, green supply chain management, raw material and waste management, product packaging reduction and recycling, cloud office, lowering CO₂ concentrations at headquarters, and increasing energy efficiency.

Greenhouse Gas Emissions in the Value Chain

In response to the management trend of global warming, we audit the greenhouse gas emissions and management measures of the responsible supply chain, verify the emissions from GUC products, exert influence on suppliers, and reduce carbon emissions year by year, so as to create a green and sustainable supply chain.

▼ GHG emissions intensity in the value chain

Item	2018	2019	2020
Fab GHG emissions intensity (ton/NTM)	4.6	3.9	2.3
packaging testing GHG emissions intensity (ton/NTM)	0.5	0.7	0.6
Total Annual Revenue (NTM)	13,460	10,710	13,569



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4.2.2 Supplier Sustainability Management

Sustainable Management Principle

We are dedicated to sustainable environmental development and to setting good examples to protect the environment through third-party verification and compliance with standards. Also, we request our suppliers to abide by the same principles with the aim of helping the steady growth of the business while being mindful of the environmental sustainability. We require suppliers to observe GUC’s Supplier Compliance Guidelines for labor rights, safety and health, environmental protection, business ethics, and management systems performance, so as to reduce the risk of business interruptions.

Target	short term	<ul style="list-style-type: none"> Working with key supply chain partners to reduce greenhouse gas emissions In 2022, 100% of the key suppliers have signed the RBA 7.0 Code of Conduct.
	Medium and long term	Championing environmental and carbon initiatives in Taiwan and abroad, exerting influence on suppliers, and inventorying suppliers’ GHG emissions and management.
How to manage	Responsibility	<ul style="list-style-type: none"> Responsible Unit: Operations Division External Responsibilities: Suppliers
	Resources	The vice president of Operations Division serves as the commander. In addition to the employees directly under the responsible unit, the Human Resources Department and the Employee Facilities Services Department will also send staff to assist according to the needs of the audits.
	Communication channel	Monthly meetings with suppliers to exchange ideas
	Evaluation Methods	<ul style="list-style-type: none"> Return rate of Code of Conduct sign forms Supplier ESG risk assessment results On-site audit rate Supplier support rate
Specific Performance		<ul style="list-style-type: none"> Code of Conduct: 100% of the suppliers have signed the Code of Conduct. Supplier social responsibility assessment: In 2021, all audited key suppliers were rated B or above. We provided them with additional consulting and communication. Conflict minerals: Ensured that the products provided by suppliers use reliable sources of non-conflict minerals Local procurement: In 2021, the procurement amount of local raw materials was NT\$11.8 billion, accounting for 98.1% of the total procurement amount. GUC’s influence: Set goals and include them in the annual supplier corporate social responsibility evaluation to help suppliers improve with continuous communication and encouragement.

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Supply chain management

As a global leading company in IC design, we take on the responsibility of environmental sustainability. Our direct suppliers have introduced a series of ecofriendly, energy efficient, and carbon reduction measures to avoid environmental pollution caused by raw materials or components. By 2021, more than 90% of GUC’s 54 suppliers were certified for ISO 14001 environmental management system or QC 080000 hazardous substance process management system. In 2021, 100% of its 6 key suppliers are ISO 14001 environmental standards-certified.

The raw materials for GUC’s main products are wafers, and the main supplier is Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC). TSMC is also our largest shareholder and has established a long-term partnership with us, thus stabilizing the supply of raw materials. In addition, GUC works with other suppliers. The wafers and packaging materials of the suppliers’ products must comply with EU’s RoHS Directive 2011/65/EU and 2015/863 (4 additional prohibited substances: DEHP, BBP, DBP, DIBP), and comply with the EU’s new chemical policy (Registration, Evaluation, Authorization & Restriction of Chemicals, REACH). GUC promotes green policies and concepts along the entire supply chain. All new product manufacturing suppliers must comply with GUC’s RBA requirements. Suppliers become qualified only after they have signed statements and passed reviews.

100% of GUC’s key GUC suppliers have signed a statement of no hazardous substances use, and 100% of its new suppliers have signed the statement. In the report period, our supply chain had no significant actual or potential negative impact on the environment.

Moreover, GUC requires suppliers to use recycled materials and reduce the use of consumables, whether in the plant or during transportation. For example, reusing plastic carrier trays for IC products, or reusable packaging materials such as anti-static “black boxes” throughout the transportation in the production process to lower the use of cartons. The close cooperation between the up- and down-streams of the supplier chain to elevate the industry’s social responsibility and raise awareness as global citizenship. GUC takes various environmentally friendly actions, and fully uses green materials from product design, manufacturing to packaging, comprehensively introducing the awareness of environment protection to production and quality management systems.

▼ List of IC industry chain suppliers



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Supply chain sustainability management process



Supplier Audit

GUC regularly audits its suppliers based on the following three regulations. If we find any violations of environmental regulations, we issue a warning and require improvement within a time limit. Serious violations will result in termination of partnership.

- GUC Responsible Business Alliance (RBA) Code of Conduct
- Hazardous Substance Restriction
- GUC Supplier Certification

Suppliers need to pass both engineering evaluation and system audit before they become certified and qualified. Especially for key suppliers, in addition to regular QBR reviews on quality, delivery, service, technical support, information interaction, etc., on-site audits are performed at least once a year.

2021 Supplier Quality Audit

All key suppliers were rated B (Good) or above in quality audits. There were still deficiencies found in the audit and key improvements have been made.

Category	Main Deficiencies Found in the Audit	Key improvement results
Supplier quality audit	<ol style="list-style-type: none"> 1. Risks in handling bulky IC packaging are not considered. 2. Control of hardware and jigs for production is not strict enough. 3. No clear definition of new product introduction (NPI) in the process of the same series or new products. 4. No clear correspondence between operator training and certification and production line support. 	<ol style="list-style-type: none"> 1. Reconfirm the processing flow of and add FMEA to products with heavier packaging. 2. Standardize and define inspection items, methods and control rules in documents. 3. Re-strengthen the definition of the same series of products and brand-new products to avoid misuse of production jigs. 4. Define the qualification review of operators for cross-machine support.

Supplier rating management system

Rating	Score	Level	Actions
A	≥90	Excellent	May adjust to biennial audits
B	≤89 ~ ≥80	Good	Annual audits and consulting
C	≤79 ~ ≥70	Normal	Annual audits and given improvement deadlines.
D	<70	Bad	Quality management unit and relevant departments will discuss whether to continue the relationship with the supplier. If the relationship continues, the supplier will be required to make immediate improvements. Otherwise, the supplier's qualification will be terminated.



Local Procurement

GUC cares about local economic development. We intend to retain job opportunities for the locals and reduce carbon emissions generated by material transportation. Be it raw materials or general purchases, we adhere to the principle of local procurement. The amount of orders placed from Taiwan exceeded NT\$ 11.8 billion in 2021. We continue to increase the ratio of local procurement. In the future, we will work with suppliers to set sustainable goals for reduction of water and power consumption, waste, and carbon footprint, as well as improve the sustainable development of the local supply chain.

	Amount of local procurement of raw materials (Unit: NTD)	Amount of procurement of raw materials (Unit: NTD)	Amount of local procurement of raw materials Proportion
2018	8,959,188,142	8,965,853,551	99.9%
2019	7,496,360,398	7,531,316,983	99.5%
2020	9,615,235,333	9,744,512,379	98.7%
2021	11,850,144,493	12,078,770,446	98.1%



4.3 Green Management

4.3.1 Climate Change and Energy Management

Development of energy efficient products

GUC provides energy consumption models so that IC design engineers are able to optimize energy consumption in the SOC design flow, providing optimal power consumption solutions on packaging design.

GUC continues the development of advanced IP, including GLink, HBM2/2E/3Controller and PHY, 28G/32GSerDes, PCIe Gen3/4/5, and highspeed ADC/DAC in 7nm, 6nm and 5nm processing technologies. The company is also migrating key components such as Power Management Solutions and Clock Generators, to advanced processing technologies. GUC's R&D team is also developing an in-house memory IP (TCAM, SRAM) and customized standard cell libraries that enrich our IP/Library portfolio of competitive IP and subsystem solutions. The company's 6nm in-house IP test chip was silicon-verified in 4Q 2020 and is ready for mass production. 5nm TCAM test chip has taped out and is has been silicon-verified in 1Q22.

Energy management

Energy consumption

In 2021, GUC's power was provided by the power grid of the Taiwan Power Company, accounting for 100% of the total energy consumption. The Company's energy consumption in 2021 was lower than that in the previous year, proving the effectiveness of energy management. With long-term recording of electricity consumption and calculation of the equivalent CO₂ generated, GUC takes practical actions to reduce energy use and greenhouse gas emissions for a better environment and sustainable operation.

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▼ GUC's electricity consumption and greenhouse gas emissions in the past five years

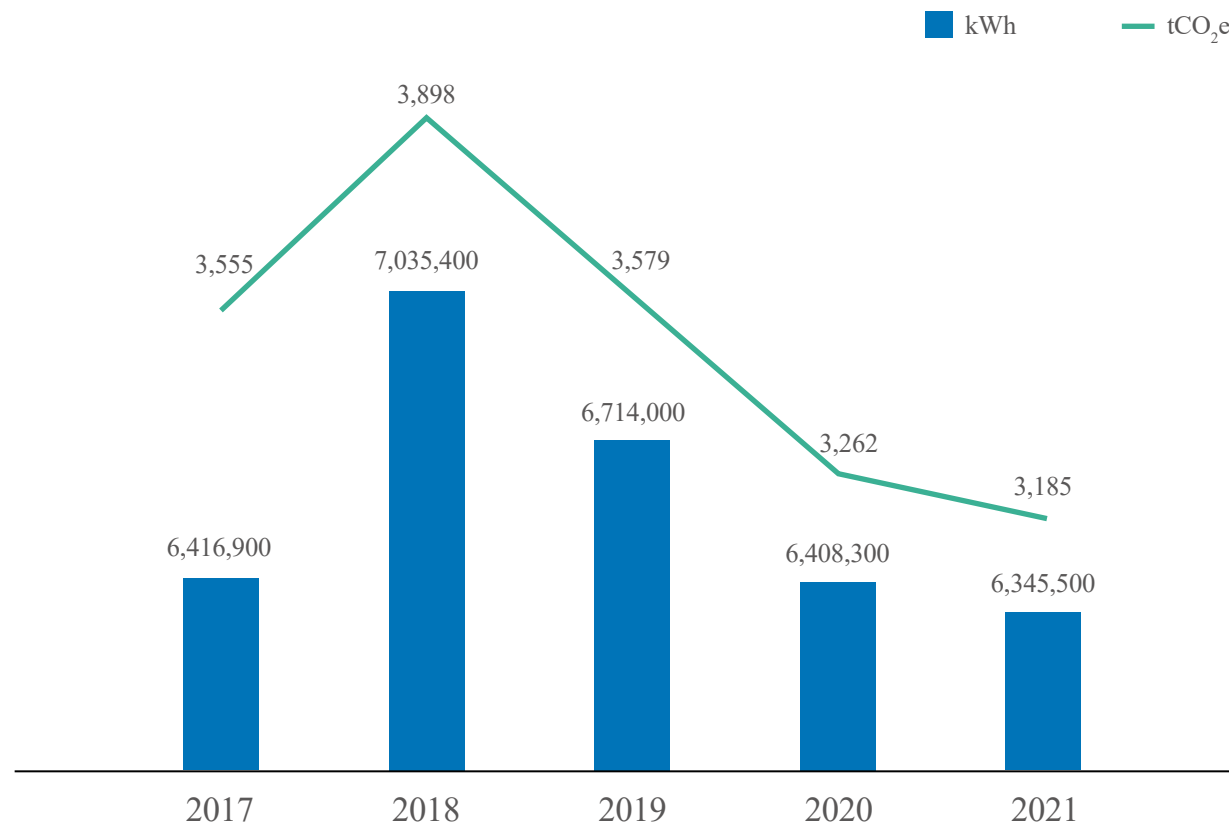
Year	2017	2018	2019	2020	2021
kWh	6,416,900	7,035,400	6,714,000	6,408,300	6,345,500
tCO ₂ e	3,555	3,898	3,579	3,262	3,185
GJ	23,100	25,327	24,170	23,070	22,843

Note 1. Since the Bureau of Energy, MOEA has not yet published the 2021 electricity emission intensity, this table uses the 2020 standard, with each kWh of electricity generating the equivalent of 0.502 kg of CO₂.

Note 2. The unit is tCO₂e based on GRI Standards.

Note 3. Greenhouse gas consolidation is an operational control measure.

Note 4. Data from 2017 to 2020 were based on self-inventory; the data in 2021 was externally verified.



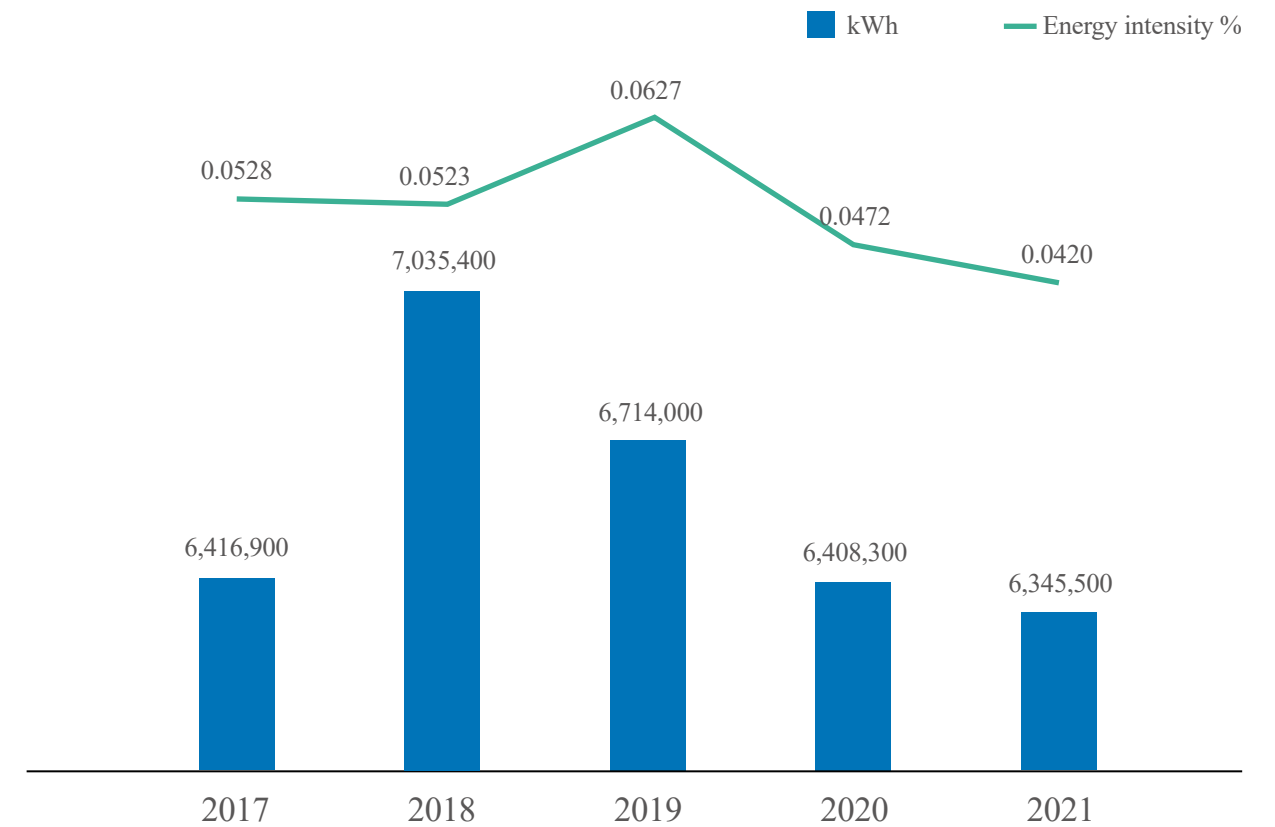
Energy intensity

In 2021, energy intensity was 0.0420%, down 0.0052% from last year's 0.0472%, and energy usage decreased by 1% (62,800 kWh).

▼ GUC's energy intensity for the past five years.

Unit of measurement	2017	2018	2019	2020	2021
Annual revenue (in NT\$ thousand)	12,160,610	13,459,804	10,710,086	13,569,411	15,107,915
Annual electricity usage (kWh)	6,416,900	7,035,400	6,714,000	6,408,300	6,345,500
Energy intensity %	0.0528	0.0523	0.0627	0.0472	0.0420

Note: Energy intensity: annual electricity usage/annual revenue



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4.3.2 Water resource management

Water Resource Consumption

Our water is 100% sourced from the Taiwan Water Corporation (TWC), and does not use any of surface water, groundwater, seawater, produced water, or third-party water. Long-term documentation of water consumption shows our use of local water resources and is used to calculate the carbon dioxide equivalent. As a result of water-saving measures and working-from-home, the water consumption in 2021 was reduced by 523 cubic meters from 2020, and water use intensity by 0.016%. The amount of carbon dioxide equivalent per employee using water resources has also decreased yearly. In this regard, we have been implementing green living programs for many years and look forward to reducing water consumption year by year.

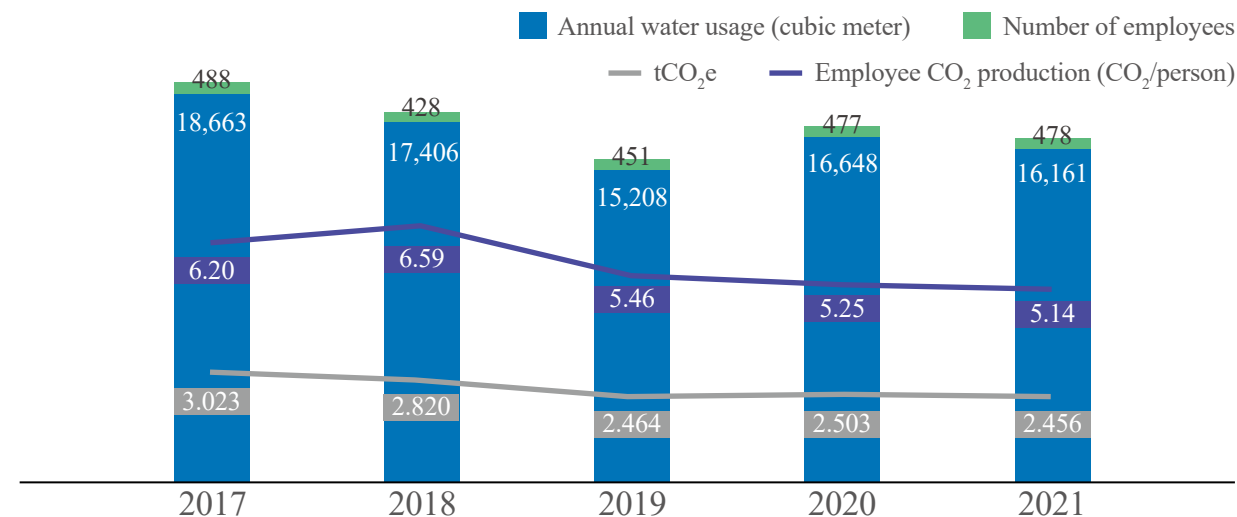
▼ GUC's water consumption and greenhouse gas emissions in the past five years

Year	2017	2018	2019	2020	2021
Water consumption (cubic meters)	18,663	17,406	15,208	16,684	16,161
tCO ₂ e	3.023	2.820	2.464	2.503	2.456
CO ₂ e/employee	6.20	6.59	5.46	5.25	5.14

Note 1. Since the Taiwan Water Corporation has not yet published the 2021 water emission intensity, this table uses the 2020 standard, with each cubic meter of water generating the equivalent of 0.152 kg CO₂.

Note 2. The unit is tCO₂e based on GRI Standards.

Note 3. Before 2021, greenhouse gas emissions from water use was based on self-inventory.



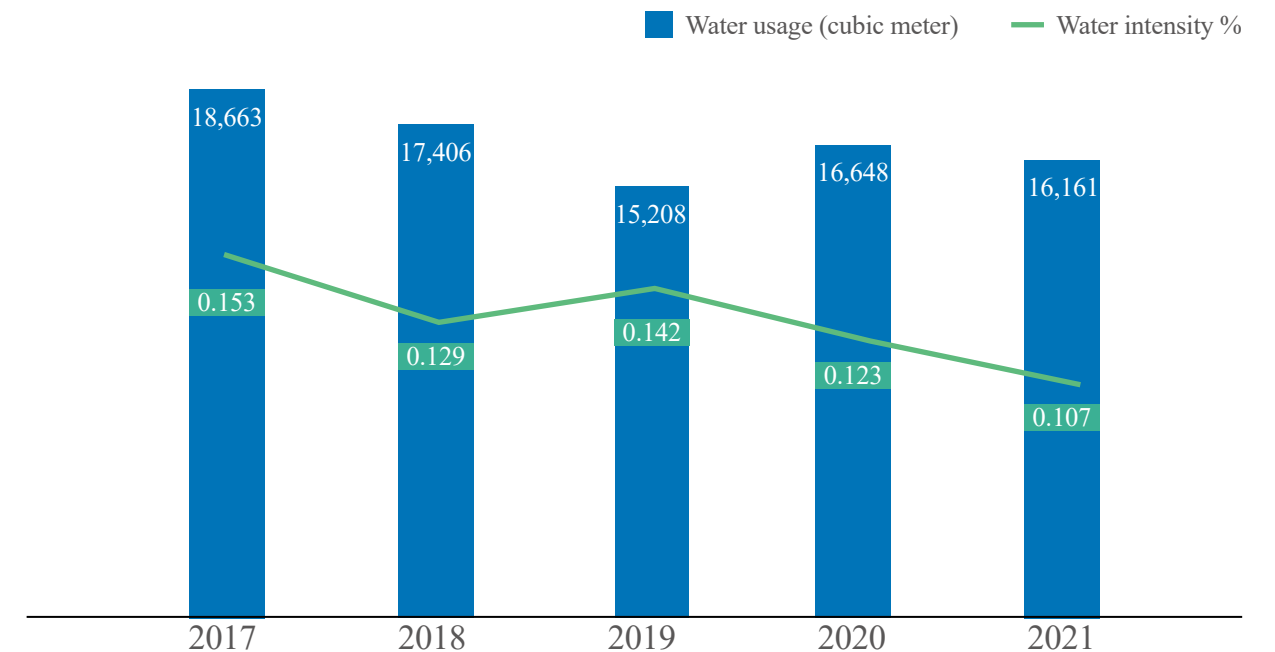
Water use intensity

The water resource intensity in 2021 was 0.107%, down 0.016% from the previous year (0.123%).

▼ GUC's water use intensity for the past five years.

Unit of measurement	2017	2018	2019	2020	2021
Annual revenue (in NT\$ thousand)	12,160,610	13,459,804	10,710,086	13,569,411	15,107,915
Annual water usage (kWh)	18,663	17,406	15,208	16,684	16,161
Water use intensity %	0.153	0.129	0.142	0.123	0.107

Note: Water use intensity: annual water usage/annual revenue



In 2021, GUC's wastewater discharge was 16.161 million liters. Its wastewater discharge has followed the regulations of the Hsinchu Science Park.

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Water conservation results

The following measures was implemented in 2021 and reduced water use by 523 cubic meters and water use intensity by 0.016% as compared to 2020.

<p>Measures to reduce water use</p>	<ol style="list-style-type: none"> 1. Reducing the AC cooling tower drainage to lower AC water consumption. 2. Reducing faucet flows to lower daily water consumption.
<p>Continuation of water conservation measure.</p>	<ol style="list-style-type: none"> 1. Rainwater recovery system for watering plants. 2. Ensuring the availability of automatic faucets in restrooms to control waterflow, save water, and enhance hygiene. 3. Ensuring the availability of dual-flush toilets to save water and avoid leakage. 4. More frequent inspections of water equipment to improve facility availability and timely repairs. 5. To accommodate the policy of the science park’s union, we reinforce the measures of water saving during the time of low water availability, and record daily water consumption to achieve the 10% water saving goal monthly. 6. Promoting water conservation measures and posting slogans to remind colleagues to develop water-saving habits.

4.3.3 Waste Management

We strictly follow the principles of sustainable operations, continuously lessening the environmental impact of our operations, including the transportation of products, other commodities, raw materials, and employee transport. In 2021, GUC did not violate any environmental regulations or receive any formal environmental impact complaints filed by stakeholders. GUC’s long-term goal is to perform diligent inspection of raw material supply processes and internal management of raw materials to prevent conflict metals from entering the production processes, so as to protect stakeholders’ rights and interests, and be responsible for the environment during production processes. GUC’s electronic raw material supplies and waste management systems completely comply with international environmental regulations and customers’ requirements. We have signed and endorsed the following environmental policies and regulations formulated by external organizations.

- Declaration of Conflict-Free Minerals
- EU RoHS Compliance
- EU PFOS Directive
- Registration, Evaluation, A uthorization & Restriction of Chemicals (REACH)
- China RoHS Compliance

GUC’s waste management in the past five years

GUC is a customized IC manufacturer that involves the design and sales of chips rather than manufacturing, packaging or testing. The hazardous waste disclosed in the report is not generated by the manufacturing process, but mainly wafer samples provided by manufacturers for testing. After scrapping, these defective ICs are sent to be shredded and disposed of at waste disposal companies that have obtained ISO 14001 and other international environmental safety and health management system certifications.

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(Unit: metric tons)

Category Year	Hazardous Industrial Waste			General Industrial Waste	
	IC wastes	Paper	Metal	Plastic	PC wastes
2017	0.501	4.239	0.414	0.412	0.002
2018	0.975	14.813	0.456	0.411	0
2019	0.227	1.473	0.074	0.109	0
2020	1.07	0.69	0.06	0.08	0
2021	1.062	0.52	0	0.01	0
Total	3.835	21.735	1.004	1.022	0.002
Disposal	Outsourced disposal (Recycled and reused by recycling companies)	Outsourced disposal (Recycled and reused by recycling companies)	Outsourced disposal (Recycled and reused by recycling companies)	Outsourced disposal (Recycled and reused by recycling companies)	Outsourced disposal (Recycled and reused by recycling companies)

Note:

1. The outsourced waste disposal companies are all private institutions that have been approved by the authorities to clear and dispose of such waste, and there have been no violations of laws and regulations from 2017 to 2021.
2. GUC outsources approved disposal companies approved by the competent authorities for hazardous industrial waste. 100% of hazardous industrial waste is recycled.

Reduction, recycling and reuse for products and events.

We employ product life cycle management at the initial design stage of the product, investing extensive R&D resources and using innovative energy-efficient technologies to address various factors at various stages from manufacturing to final disposal that may impact the environment. The 3R green design philosophy, namely Reduce, Reuse, and Recycle, is included in the initial design of the product.

The services we provide include physical non-end products and intangible design/IP core services, and the physical products sold are non-end products. Packaging materials consist mainly of cartons, buffer foam, wafer carrier boxes, and wafer carrier trays. Furthermore, all products are outsourced, and suppliers are required to use fully qualified recycled packaging materials. In 2021, 11.5 thousand cartons were saved, which saved about NT\$ 575,000, and 2,400 wafer cassettes were reused, which saved NT\$12,000,000.

In addition, we provide environmentally-friendly chopsticks for new employees to reduce the use of disposable bamboo chopsticks, thereby reducing the amount of waste generated.



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4.3.4 Greenhouse Gas Emissions Management

Greenhouse Gas Management

For the sustainable development of the environment and ecology, since 2019, we have conducted voluntary greenhouse gas inventory and management; since 2021, we have been conducting inventory and received external verification according to ISO 14064-1. 2021 is the base year for GUC’s greenhouse gas inventory and management. All carbon reduction goals will be based on the figures of 2021.

In 2021, the total greenhouse gas emissions of the Hsinchu Operation Headquarters were 4,652.03 metric tons CO₂e / year. The main source of greenhouse gas emissions in 2021 was purchased electricity (Scope 2), accounting for 95.57% of the total emissions, and the rest came from stationary emission sources (diesel for emergency generators), mobile sources (gasoline of official vehicles), and fugitive sources (refrigerant, fire extinguisher). GUC has only simple office spaces and no production lines, so there is no process emission source.

The direct emissions of Scope 1 were 101.85 metric tons CO₂e / year, accounting for 2.19% of the total emissions, which came from the living energy consumption of employees (e.g., official vehicles, refrigerators, water dispensers, air conditioners). GUC intends to decrease this type of energy consumption and emissions but lacks suitable alternatives due to technical limitations. We will continue to pay attention to technological development to pursue greenhouse gas reduction.

▼ 2021 emissions statistics of GUC’S seven major greenhouse gases

	Emission equivalent (metric tons CO ₂ e/year)	Gas percentage (%)
CO ₂	4,551.454	97.838%
CH ₄	0.012	0.0002%
N ₂ O	0.035	0.0008%
HFCs	100.529	2.161%
PFCs	0.000	0.000%
SF ₆	0.000	0.000%
NF ₃	0.000	0.000%
Total	4,652.029	100%

Greenhouse gas reduction actions

▼ Specific measures for sustainable energy saving



- Encouraging using stairs to reduce elevator electricity consumption.
- Switching off lights, air conditioners and projectors in the conference room after each meeting.
- Turning off computers and displays after work or when on break.
- Lights off in the office area during lunch break.
- Natural lighting for aisles by windows and skylight panels at the ceilings in some areas.
- Table lamps or other local auxiliary lighting.
- Energy and water conservation slogans are posted in restrooms and near power and air conditioning switches

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Timer control

- Water dispensers use electronic timer switches to control sterilization and water making during off-peak hours and reduce electricity consumption during peak hours.
- Timer switches are installed separately for fresh air intake, restroom ventilation, and open/partitioned office areas air conditioners to avoid air-conditioning loss and unnecessary electricity consumption.
- The central monitoring system controls the equipment to start and stop at necessary times to lower energy consumption.
- The exhaust fans at parking lots are now only turned on during commuting hours to reduce running time.
- Electronic timers are used to start and stop the positive pressure ventilation fans at emergency staircases to reduce electricity consumption.
- Lights are turned on for every other lamp in the parking lots during non-working hours.
- Natural lighting at emergency staircases is used in combination with timer-controlled lighting.



Efficiency maintenance

- Purchasing home appliances (e.g. air conditioners and refrigerators) with energy efficiency labels.
- Regular AC maintenance to maintain highly efficient operations.
- Ice water at dispensers is set above 8 °C.
- Indoor ACs are recommended to set at the optimum temperature of 26 °C, and curtains and heat insulation paper can be installed appropriately depending on sun exposure and heat load.
- The temperature of returned cold water determines the switch-on of each cooling water tower. Control valves are installed to dissipate heat.
- High-efficiency, energy-saving lamps and natural light reduce energy consumption.
- Electronic high-efficiency lighting fixtures and bulbs in offices.

Energy conservation performance

Total investment amount in energy conservation items in 2021 was NT\$ 4.03 million. Implementation of major energy conservation measures are as follows:

Measures	Performance
Replacement of LED lighting fixtures in offices and walkways	Saved 36,307.2 kWh (equivalent to 130.7 GJ) annually and reduced carbon dioxide emissions by 18 metric tons CO ₂ e/year.
Upgrading the uninterruptible power supply equipment and installing the new equipment with high efficiency and low energy consumption.	Saved 36,808 kWh (equivalent to 132.5 GJ) annually and reduced carbon dioxide emissions by 18.5 metric tons CO ₂ e/year.
Upgrading the air compressors and installing the new equipment with high efficiency and low energy consumption.	Saved 113.131 kWh (equivalent to 407.3 GJ) annually and reduced carbon dioxide emissions by 56.8 metric tons CO ₂ e/year.

Note 1: 1 kWh = 3,600,000 Joule

GUC also participated in the Industrial Technology Research Institute’s high-efficiency motor application promotional program which subsidized NT\$ 200,000 to replace air compressors.

Note 2. Since the Bureau of Energy, MOEA has not yet published the 2021 electricity carbon emission factor, this table uses the 2020 standard, with each kWh of electricity generating the equivalent of 0.502 kg of CO₂.



▲ Replacement of LED lighting fixtures in offices and walkways

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Green power purchase — solar power generation

As a member of the global village, GUC is expected to start installing photovoltaic systems in 2022 in order to reduce carbon emissions and use sustainable energy. With the planning and installation of green energy facilities, GUC aims to contribute to the mitigation of global warming and environmental pollution.

2022 Energy conservation and carbon reduction plan

In 2022, we will continue working on energy conservation, with an estimated total investment of over NT\$ 3 million. The short, medium and long-term goals are as follows:

Short, medium-term goals:

- Continuing to replace T8 lamps with LED bulbs in the office area, with an estimated annual energy saving of 30,000 kWh and 15.1 tons of carbon reduction per year.
- Solar power generation, which is estimated to bring 18,454KWH (3% of the total electricity consumption) and reduce 9 tCO₂e of emissions annually.

Long-term goals

- The 5-year plan is to annually save 1% of the total electricity consumption in the previous year and make long term plans for using renewable energy to reduce carbon emissions.

Environmentally-friendly office

Promote paperless offices and install various cloud operating systems for all the workplace operations, including leave requests, purchase requisitions, official document signing and approvals, asset change applications, dormitory applications, expense requests, general affairs applications, business and operations, design and R&D, financial requests, etc. All of them will adopt electronic signatures and use of electronic documents will continue in all the workplace operations.

As the Company's business continues to grow, we have achieved 241,532 electronic signatures, saving an estimated 531,000 pieces of paper.

▼ GUC's 2021 Paper Use Reduction Results

System	Documents
Notes + AgentFlow	132,752
ERP	87,340
PLM	21,440
Subtotal (A)	241,532
Average paper consumption/document (B)	2.2
Pieces of papers saved (A*B)	531,370

As the Company's business continues to grow, we have achieved 241,532 electronic signatures, saving an estimated 531,000 pieces of paper. GUC purchased 21 sets of video equipment in important and overseas offices for communication between employees and stakeholders in Taiwan and abroad, reducing the carbon footprint caused by business trips.

It is estimated that remote meetings reduce business trips required for business growth by about half.

▼ Multi-party conference telecommunication expenses (unit: New Taiwan dollar)

Year	2018	2019	2020	2021
Telecommunication charges	2,349,521	2,584,473	2,687,850	1,026,161



4.4 Friendly workplace

4.4.1 Protection of human rights

In 2021, we injected plenty of resources into personnel cultivation, and experienced a joint growth with our employees through planned training and nurture. At the same time, we also devote our efforts to inspiring internal innovators in an attempt to create a dynamic and premium workplace. With the principle of equal opportunity, Global Unichip Corp. (GUC) highly values diversity of employee backgrounds, so it recruits its employees based on their competence through fair and open recruiting channels, which are well-designed and planned regardless of gender, religion, race, nationality, political affiliation, etc. We are also convinced that each employee should be respected and treated fairly. On top of this, we are also dedicated to protecting and respecting internationally recognized human rights, including the “United Nations Universal Declaration of Human Rights” and the “Fundamental Conventions of International Labor Organization”. We are committed to building a corporate culture where innovation and diversity are encouraged and we also provide our personnel with a challenging work environment with reasonable compensation. We value each individual’s gifts, talents and unique perspectives; because of the diverse perspectives, viewpoints and ideas from our employees, we can then become one of the most innovative companies in the IC industry.

4.4.2 Talent drawing and retention

Human resources structure

By the end of 2021, the total number of our global employees was 797, including 652 domestic employees or 82% of the total employees and 145 overseas employees or 18% of the total employees, among which 133 employees or 16.7% of the total employees were foreign nationals (covering Japan, the U.S., India,

etc.); the number of the managerial personnel was 8 and the general staff was 789; male employees accounted for 73% and female employees took up 27%. In terms of the age distribution, 21.8% of the total employees were under the age of 30; 65% of them were aged between 30 and 50; 13.2% of them were over 50 years of age. Furthermore, 63.6% of the employees held a master’s degree or above.

In the aspect of new entrants and retention, in 2021, there were 110 new male employees or 68.8% of the total new employees and 50 female new employees or 31.2% of the total new employees. In addition, GUC also offers physically challenged people employment opportunity. Currently, it has two disabled employees making up 0.25% of the total employees. To meet the number of the disabled employees required by law, we have continued the recruitment of disabled employees. We have never employed anyone under the age of 16. In respect to employee retention, a total of 171 employees left the Company in 2021; 132 or 77.2% of them were male employees while 39 or 22.8% of them were female employees.



▲ Length-of-service awards were presented to employees at 20 years of service

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Compared to 2020, the turnover rate in 2021 showed a significant increase, mainly due to higher salaries offered by other companies. Taiwan's semiconductor industry had substantial growth in 2021, so intense competition for talent ensued. Many icon companies severely suffered from a doubling of the turnover rate. As a result, they could only offer a significant salary increase in trying to avoid the loss of their talent. As such, we already worked on the structural salary adjustment

in the 4th quarter of 2021; we developed a variety of talent retention programs for technical talent and increased the annual salary raising rate so as to retain the talent through multi-pronged approaches. Moreover, we continue to draw talent and retain employees by strengthening the balance between employee's work and life, offering good salary and welfare policies, improving supervisors' competence, providing employees with career development opportunities, caring for employees, listening to their voices, etc.

2021 basic employee statistics

797 global employees: including 652 domestic employees (82%) and 145 overseas employees (18%).

652 domestic employees: including 644 employees with local nationality (99%) and 8 employees with foreign nationality (1%).

▼ Information on employees and other workers

Main categories	Sub-categories	Male		Female		Sub-total	
		Number	Ratio	Number	Ratio	Number	Ratio
Nationality	Local nationality	478	60.0%	186	23.3%	664	83.3%
	Non-local nationality	104	13.0%	29	3.6%	133	16.7%
Sub-total		582	73.0%	215	27.0%	797	100.0%
Employment type	Routine employees	575	72.1%	208	26.1%	783	98.2%
	Employees under standard form contracts	7	0.9%	7	0.9%	14	1.8%
Sub-total		582	73.0%	215	27.0%	797	100.0%
Employee category	Managerial personnel	8	1.0%	0	0.0%	8	1.0%
	Non-managerial personnel	574	72.0%	215	27.0%	789	99.0%
Sub-total		582	73.0%	215	27.0%	797	100.0%
Age	29 years of age or younger	125	15.7%	49	6.1%	174	21.8%
	30~50 years age	365	45.8%	153	19.2%	518	65.0%
	51 years of age or older	92	11.5%	13	1.6%	105	13.2%
Sub-total		582	73.0%	215	27.0%	797	100.0%
Academic background	Doctorate degree holder	20	2.5%	1	0.1%	21	2.6%
	Master's degree holder	398	49.9%	88	11.0%	486	61.0%
	College graduate	162	20.3%	125	15.7%	287	36.0%
	High school graduate	2	0.3%	1	0.1%	3	0.4%
Sub-total		582	73.0%	215	27.0%	797	100.0%

Note: Standard form contracts are also applicable to intern personnel.

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▼ Statistics of total numbers and ratios of new entrants and ex-service personnel compiled by age group and gender

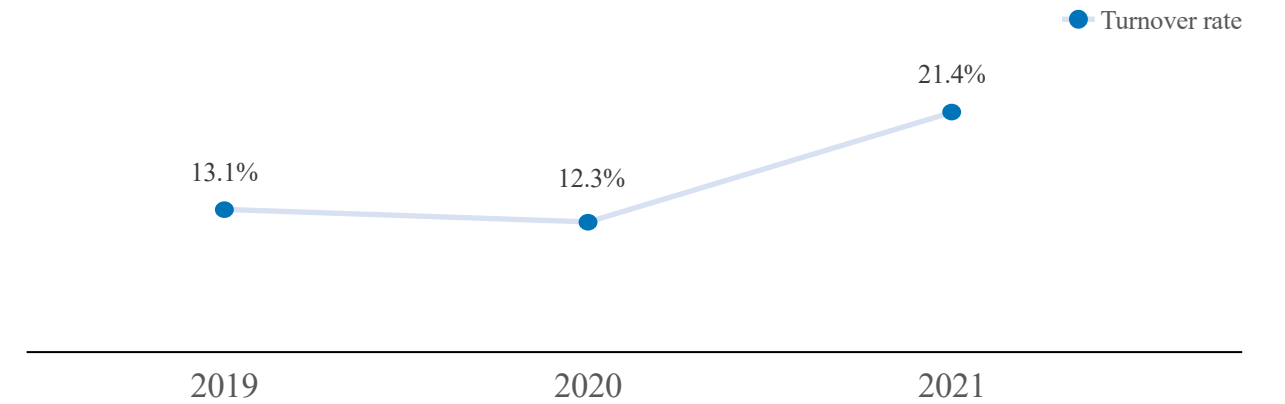
Category	Age	Male		Female		Sub-total	
		Number (persons)	Number (persons)	Number (persons)	Number (persons)	Number (persons)	Number (persons)
New entrants	29 years of age or younger	53	42.4%	24	49.0%	77	44.3%
	30~50 years age	50	13.7%	26	17.0%	76	14.7%
	51 years of age or older	7	7.6%	0	0.0%	7	6.7%
	Sub-total	110	13.8%	50	6.3%	160	20.1%
Ex-service personnel	30~50 years age	27	21.6%	13	26.5%	40	23.0%
	30~50 years age	97	26.6%	26	17.0%	123	23.7%
	51 years of age or older	8	8.7%	0	0%	8	7.6%
	Sub-total	132	16.6%	39	4.9%	171	21.4%

Notes:

1. New entrants and ex-service personnel did not include the standard form contracted employees.
2. The ratio of new entrants or ex-service personnel was calculated as follows: The total number of new entrants or ex-service personnel in the age group in question is divided by the total number of employees in the age group in question.

▼ The turnover rates of GUC over the past 3 years.

Year	Turnover rate
2019	13.1%
2020	12.3%
2021	21.4%



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▼ Other workplace related information

Main categories	Sub-classification	Male		Female	
		Number	Ratio	Number	Ratio
Employment of disabled employees		2	100%	0	0%
Difference in the base salary	No difference. GUC determines employees' salaries according to their competence and job content and gives rewards and promotion opportunities according to their work performance. The remuneration system does not differ by gender.				
Absence statistics	[A] The number of workdays in 2021 was 246 for each employee.				
	• 246 days * 582 (total number of male employees)	121,277		41,990	
	• 246 days * 215 (total number of female employees)				
	[B] Actual number of absence days	1,443		961	
	[C] Absence rate = B/A	1.01%		1.82%	
Average hours of annual educational training	8 managerial personnel (in total)	61 hours	100%	0 hours	0%
	789 non-managerial personnel (in total)	3,599 hours	72%	1,815 hours	28%
Total hours of annual educational training	Average training hours (each employee)	6.3 hours		8.4 hours	

Note 1: Absence days: (sick leave days + injury leave days + menstruation leave days) / (total work days of male + female employees).

Note 2: Annual educational training hours include the hours of classroom training, digital learning and external training, but they do not cover the hours of other learning ways, such as the monitoring teaching system, work guidance, job rotation, etc.

Note 3: The Company and individual growth and learning are the major consideration for the allocation of educational training resources, which is not restricted by gender and age.

4.4.3 Talent cultivation and development

Talent cultivation and development

GUC aggressively cultivates premium talent and technologies. Its educational training program is closely linked to its development strategy and elevation of employees' competence. At the same time, it is also dedicated to shaping a learning and teaching culture, so as to enhance the value of human capital. In 2021, the average training hours per employee was 6.9 hours, having increased 10% from 6.3 hours in 2020. To provide its employees with the optimal learning environment, GUC has introduced a diversified learning platform. Apart from physical classroom learning, virtual e-classrooms have also been constructed to develop the online learning and knowledge management system. In addition, the online teaching satisfaction survey mechanism has also been built, with which dedicated personnel are assigned for planning and promoting a variety of learning, training and talent development projects.

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Holding ESGA seminars to galvanize sustainability consensus

GUC emphasizes environment and society sustainable development. To promote corporate internal sustainability concept, it offers ESG seminar courses having invited Professor Huang Qi-Rui, a consultant of the Center for Corporate Sustainability of NTPU and currently a professor at the Department of Finance and Cooperative Management, National Taipei University, to lecture in courses in the Company focusing on international trends and practical action strategies. It is hoped that, through professional knowledge, such as corporate ESG, sustainable investment, socially responsible investment (SRI), etc., shared by the lecturer, ESG fulfillment and coping strategy can be explored from the standpoints of investors, organizations, suppliers and clients, respectively. A total of 8 seminars of ESG series courses were held from 2021 until early 2022 and a total of 316 participants completed the training.



Course projects	Course content and 2021 execution status
New entrant orientation training	<ul style="list-style-type: none"> Have new entrants understand the Company's core values and future development and introduce employee's rights and obligations, so as to accelerate new entrants' fitting into the big family of GUC. A total of 136 participants completed the training in 2021. ESG-related courses cover those required in the fields of safety and health management, prevention of illegal infringement at the workplace, code of ethical conduct, etc. The training completion rate was 100%.
Professional training	A professional training blueprint has been set up in accordance with job position, seniority and job rank, to provide complete professional knowledge required for work. In 2021, 33 technical professional training sessions were provided and a total of 743 participants were trained.
Leadership management	Leadership learning forums have been provided specifically for high-rank managerial personnel and, separately, management courses have been offered for rank-and-file employees and mid-level supervisors, so as to reinforce the leadership management practices of all ranks of supervisors and lead the workforce team to achieve the Company's goals. In 2021, three sessions of leadership management-related courses were provided and a total of 76 supervisors completed the training.
General training	The courses, including Office skills and problem analysis and resolution, have been offered to all the employees for improving the efficiency of work performance evaluation. In 2021, 11 sessions of such courses were provided and a total of 282 employees completed the training.

2021



Global Unichip Corporation

ESG Rrport

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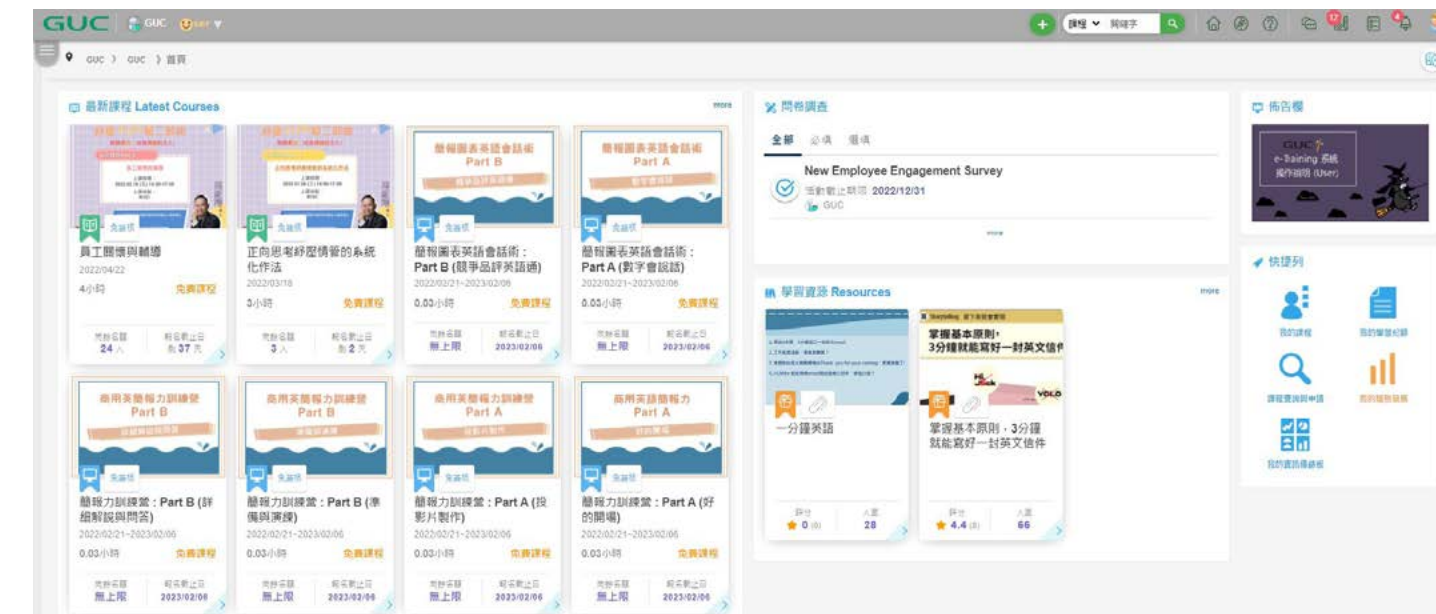
Course projects	Course content and 2021 execution status
Digital learning	In conjunction with the launch of the e-learning platform, online English learning courses and Excel courses were separately provided at the end of 2021, so as to offer flexible and diversified learning methods. In 2021, a total of 4,200 participants completed the online learning courses.
External training	In addition to the aforementioned internal learning resources, the Company has also offered its employees participation in external training with full subsidization in accordance with employees' professional requirements, so as to reinforce their professional skills. In 2021, a total of 45 participants completed external training.
Scholarship grants	On-the-job scholarships, included: "Advanced Study Scholarships", "Credit Scholarships", "Degree Scholarships", etc., have been offered to support employees' advanced studies. In 2021, the amount of accumulated subsidies was \$168,000.

Overall upgrading on the online learning platform

To facilitate employee cultivation and development, the Company comprehensively upgraded its e-learning platform at the end of 2021 in an attempt to improve employees' learning environment and foster their learning efficiency. The brand-new online learning platform combining plenty of utility functions and a clear user interface can record employees' learning hours, test scores and passing status in detail, so employees may check their learning status at any time and do self-learning by flexibly using online course resources.

The Company offers a variety of professional courses and personal efficiency-related utility courses on the e-Learning platform. Thus, unaffected by the COVID-19 pandemic in 2021, employees could still choose to read different online learning resources according to their requirements. In order to reinforce learning vibes, the Company has regularly conducted a course requirement survey for its employees, and the survey results have been used as reference for adjusting the course orientation and holding various activities. At the same time, we have also launched a series of activities to encourage employees to actively use online learning resources. In 2021, a total of 1,102 employees signed up for e-Learning-related activities, and the course pass rate was 86%, showing a significant effect on learning facilitation.

The Company has set up the "Technical Committee" specializing in planning and promoting proactive technical development. In 2021, the Best Known Method was shared between departments, and the method stresses passing on wisdom and experience of knowledge management. In 2022, we plan to hold cross-unit Chalk Talk to draw more employees to continue to pass on their experience. It is hoped that, through sharing, the knowledge cycle can be established and R&D competitiveness can be enhanced.



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Learning can make GUC better. The Company anticipates that its personnel can enjoy the quality learning experience and continue their career growth, so as to gain better development opportunities.



Performance management and development

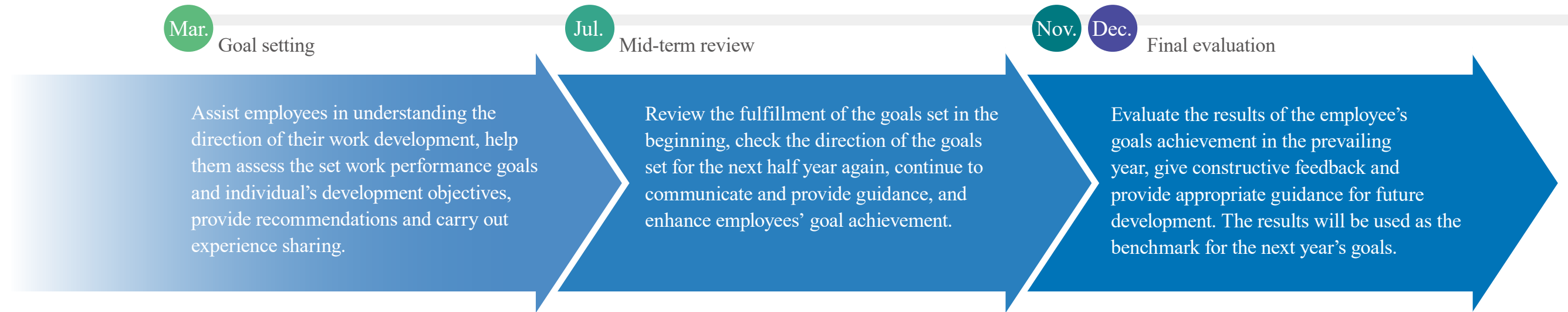
GUC regularly implements employee performance evaluation every year, and the results are used as an important reference for employee promotion, salary adjustment and other personnel related operations. Through performance management, supervisors and their subordinates can jointly review their goal achievement, so excellent performance can be recognized and acclaimed and incentives can be awarded, whereas deficiency can be guided and corrected. Other than evaluation of work efficiency, we more value employees' potential development and future prospects, in the hope that employees can be effectively guided to pursue higher work quality. As such, GUC has fulfilled its execution of the Performance Management and Development (PMD) system, with which, based on employee's development of respective stages in the Company, the appraisal is divided into the new entrant probation period evaluation, annual performance evaluation and performance guidance plan.

Except for those who have served for less than three months and on a fixed-term contract, in 2021, the ratio of global employees receiving performance evaluation was 100%, in which 71% passed the performance guidance. On the other hand, cross-departmental feedback has also added to the Company's performance evaluation, so more objective appraisal results can be obtained through the feedback from diversified channels, and more effective recommendations for personal improvement and future development guidelines can be provided. The PMD system laying equal stress on "performance" and "development" emphasizes continuous interaction and communication, so as to reinforce joint cooperation between supervisors and their subordinates, effectively integrating and elevating the overall performance of individuals and organizations and helping personnel attain their task objectives and gain a sense of accomplishment. In the end, it is anticipated that employees will be motivated and become more enthusiastic about their future development.

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Three major processes of performance management and development system



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4.4.4 Employee benefits and rewards

Employee Assistance Program (EAP)

Employee rights and interests

In addition to devoting its efforts to creating a corporate culture encouraging its employees to diversely develop, GUC also provides its employees with a work environment where challenging jobs and reasonable compensation are offered. Furthermore, we also offer EFS Service Center/EAP Employee Life Service program to fulfill our responsibilities and obligations to care for our employees.

Major policies



Remuneration policy

- Employees' benefits and welfare are valued without any discrimination in gender. Employees are paid according to their academic background, professional experience and personal performance while the payment required by law is also complied with. We adjust salary every year and distribute bonuses according to the Company's annual operating performance and employee performance.
- If an employee monthly sets aside an amount of a certain ratio of their salary to their trust account for purchase of the Company's stock, the Company will also monthly contribute the amount of the certain ratio to the employee's trust account.
- Other than taking out insurance and group insurance to protect the Company's employees, in response to continuous spread of the COVID-19 pandemic, the Company additionally purchased the one-year pandemic insurance for its employees, so as to protect their health and control the risk during the pandemic period.



Protection of rights and interests

- To provide full protection for employees' collective negotiation, the Company has set up diversified communication channels and strengthened its interaction with employees. Management has regularly held management meetings and the employee communication conference has been held quarterly. Moreover, the email address has been established, so any employee can complain or express their opinions directly to the Company's high-rank supervisors and independent directors through the channel. To this day, no union organization or group agreement has been established.
- When a major operating change occurs which can affect the rights of employees, we will concretely elaborate on the shortest pre-notice period for the major operating change in the collective negotiation. At the same time, we will strictly follow all the labor regulations, and the notification procedure for any change of labor conditions will be completed by law. In 2021, there was no major operating change occurring to the Company, but two employee complaint cases occurred. After investigation by the management and the unit in charge through the dedicated complaint Ombudsman, the Company already properly handled them, the follow-up coping measure was adopted and internal dissemination was also implemented.



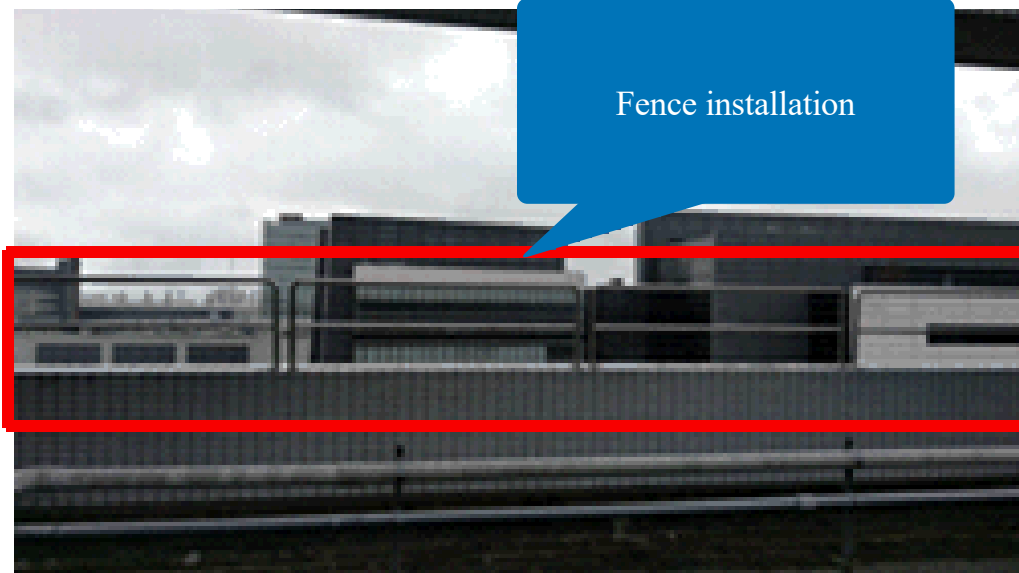
Occupational safety

- Other than five company representatives, three labor representatives and a medical staff member have also been invited to join the formal Labor Health and Safety Management Committee for helping supervise the plans related to occupational health and safety and providing pertinent recommendations.
- Value employee's occupational and health safety and include the issues relating to employee health and safety in the regulations of the labor union or other similar types of employee organizations.
- Medical care-related matters, such as infectious disease prevention and control contingency plan, medical care, health care, employee health examination and medical care-related activities.
- Health and safety issues have taken up more than 95% of the regulations.
- Safety (zero accidents) and environmentally sustainable development.

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- Objectives: As a company specializing in professional system chip design services, GUC provides design and turnkey services, and recognizes that the issues regarding environmental protection, safety and health are the cornerstone of its business. Thus, it passed ISO 45001 requirements and garnered the accreditation in 2020. We have continued to upgrade our services and product quality, and are dedicated to achieving “safety (zero accidents), environmentally sustainable development” and becoming a world benchmarking company in the sectors of environmental protection, safety and health.
- Occupational safety, health and industrial safety improvement project: The height of the parapet on the top floor was insufficient, so the wall which was originally less than 1 meter was increased to 1.2 meters to avoid employee’s falling risk.



Practice of human rights

- GUC totally recognizes universal values of human rights; we believe that every employee should be treated and respected fairly and we devote our efforts to protecting and respecting the internationally recognized human rights, including the United Nation’s “Universal Declaration of Human Rights” and the “Fundamental Conventions of International Labor Organization”;we also communicate corporate ethics and social values with customers, suppliers, investors, employees and communities.
- For the issue of human rights, we refer to the United Nation’s “Universal Declaration of Human Rights” and anticipate that GUC will become an international corporate citizen defending human rights. We do not have any labor union or organization, but we have still complied with the government’s labor regulations to regularly hold labor-management meetings for mutual communication and negotiation. Furthermore, according to Article 83 of the “Labor Standards Act”, we annually hold four labor-management meetings (once a quarter). When necessary, a provisional meeting may be held to mutually discuss the issues regarding reinforcement of labor-management cooperation, coordination of labor relations, improvement of labor conditions and labor welfare planning. At the same time, we also request our suppliers to follow the same human rights policy. We are committed to optimally protecting and fulfilling human rights in the semiconductor industry chain.

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Rotating changes of employee's workplace

The environment and facilities of the office zone leased from Sunplus Technology Co., Ltd. are somewhat different. Taking into account employees' feelings and fair treatment, more than 10% of employees are arranged for rotating changes of their workplace every year, so as to motivate their work efficiency.



▲ Appearance of Sunplus Technology Co., Ltd.



▲ Rest Zone of Sunplus Technology Co., Ltd.



▲ Recreation Center of Sunplus Technology Co., Ltd.



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New employee care and satisfaction survey

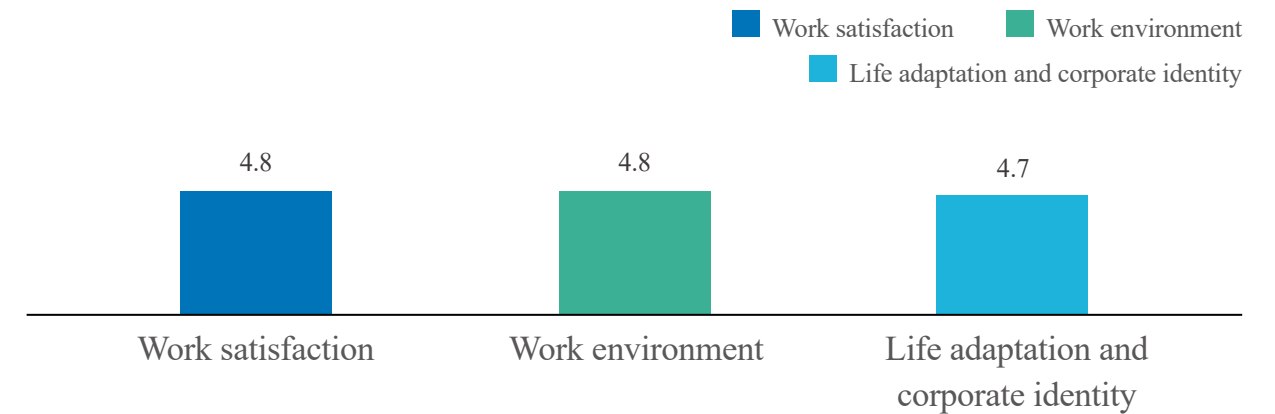
In GUC, employees are an important asset. Only by taking care of the needs of employees and caring about their work adaption can the Company be kept invigorated. To help new employees quickly integrate into the work environment, the Company offers an exclusive instructor for each new employee and provides new employees with one-on-one real-time assistance and guidance in respective aspects. In addition to being guided by dedicated personnel for the job, new employees also have their channel for consultation and communication, which also simultaneously enhance their trust in, and sense of belonging to, the Company. On top of this, we regularly conduct new employee care questionnaire surveys to better understand new employee’s adaptation to the workplace. It is hoped that the feedback from new employees will help us understand their adaptation to the workplace, so employees’ understanding and work satisfaction can be enhanced. By then, the Company and its employees can progress hand-in-hand and grow together!

To motivate new employees to bravely express their ideas, we encourage them to complete the questionnaire by offering gift vouchers to those who have finished the questionnaire; they can win a lucky draw among the ones completing the questionnaire, so as to improve the feedback mechanism stably and continuously.

2021 new employee care questionnaire surveys

The questionnaire survey conducted once a quarter was scored on three dimensions: “work satisfaction”, “work environment” and “life adaptation and corporate identity” with a full score of 5 for each item.

Items	2021
Work satisfaction	4.8
Work environment	4.8
Life adaptation and corporate identity	4.7
Total average	4.8
Questionnaire filling rate	89.7%



In 2021, the score of overall evaluation from new entrants to the Company was 4.8. According to the questionnaire results, the new entrants highly rated the Company and indicated that they had good communication and interaction with the workforce team and a friendly work environment over the three months of adaptation period. Moreover, for the questions regarding system operation and improvement suggestions put forth by new entrants in the questionnaire, we resolve them promptly and in a timely way. Through such a system, we have continued to review the details which can be optimized, so as to build a better work environment.

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Remuneration and welfare

Competitive salary and generous employee welfare

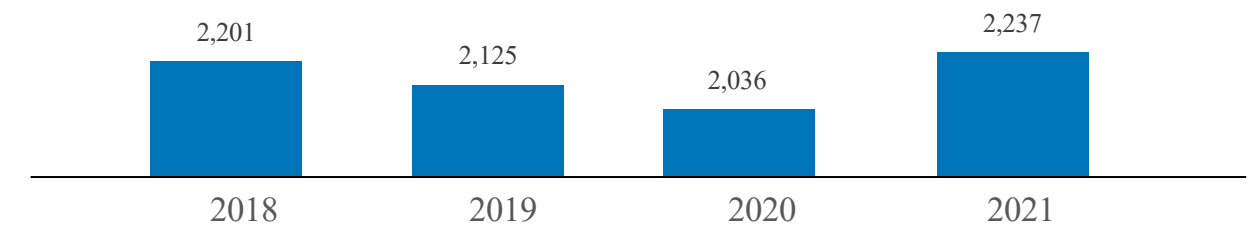
We attract, retain, nurture and motivate a variety of outstanding talent with the philosophy of profit sharing. The initial salary and benefits of each employee shall not differ in any way by gender and other conditions. In addition to complying with the requirements of local labor laws, GUC also actively participates in regional salary surveys. Our overall remuneration policy includes the following:



In addition, as required by Taiwan Stock Exchange, a TWSE-listed company shall disclose the number of its full-time employees not in a supervisory position, its average salary amount and the median of the salary amounts. The statistical method shall be adopted according to the regulations of Taiwan Stock Exchange, in which the numbers of supervisors (managerial personnel) and statistical personnel meeting the exemption requirement shall be deducted, the employees serving less than one year shall be weighted according to the number of their employed days and employee remuneration shall be calculated on the accrual basis. The amounts of employee remuneration having yet to be distributed are all estimated.

Year	Average salary of full-time employees not in a supervisory position (Unit: NTD1,000)	Median salary of full-time employees not in a supervisory position (Unit: NTD1,000)
2018	2,201	1,792
2019	2,125	1,756
2020	2,036	1,705
2021	2,237	1,856

▼ Average salary of full-time employees not in a supervisory position (unit: NTD1000)



In response to the organization's global business development and aiming at the welfare and reward planning for the expatriate talent deployed globally, we pay competitive remuneration. In addition, we further offer subsidies, such as expatriate allowances and transportation, accommodation and children's education allowances, and regularly review expatriate personnel's allowances and welfare every year to ensure that the offer meets the market level, and we provide expatriate personnel with sufficient remuneration and welfare; in the end, we anticipate that employees will be more willing to be expatriated and their retention as expatriate personnel will be more stable.

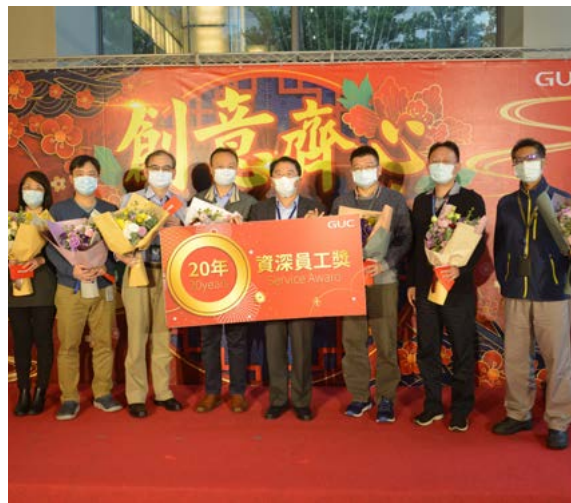
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Incentive reward system

With diversified employee incentive programs, GUC uses substantive rewards to encourage its employees to aggressively pursue continuous growth. More than hundreds of employees have received incentive rewards as of 2008. The incentive programs include the following:

- Patent reward: Encouraging employees to continue to create more patents for the Company
- Super STAR Award – individual: Rewarding the employees’ outstanding work performance and significant as well as immediate contribution or potential contribution to the Company’s business or operating profits.
- STAR Award – individual: Rewarding the employees’ excellent work performance, which can be patterned by other employees.
- CTA Award – workforce team: Encouraging employees to achieve their goals through teamwork cooperation.
- Award for improvement proposal: Encouraging employees to put forth recommendations for a variety of improvements and award those who give good proposals.
- Seniority service reward: Awarding senior employees to appreciate their long-standing service and contribution as well as commitment to the Company.



▼ GUC 2021 Implementation Performance Reward Program (Unit: person-time)

2021	Patent Award	Super Star Award (Individual Prize)	Star Award (Individual Prize)	Star Award (Team Prize)	CIS Award	Seniority Award
Q1	21	0	2	44	9	
Q2	16	0	0	51	10	77
Q3	32	0	6	75	11	
Q4	28	2	1	77	22	
Total	97	2	9	247	52	77

Welfare & Subsidy

- Employee Traveling: The employees are provided with generous subsidies to travel domestically or overseas. They can choose either itineraries thoughtfully planned by the Welfare Committee or arrange trips to their liking. GUC hopes the employees can get closer to their families and friends and relax after busy work to reach a balance between work and living. The travel subsidies for each person are up to NT\$12,000. Because of the pandemic in 2021, there were 328 people using travel subsidies. The rest, 312 employees who did not use the subsidies, received e-gift vouchers worth NT\$9,000 instead.
- Convenience Store: Buy goods with 5% discount.
- Contracted Stores: The Welfare Committee signed contracts with stores to allow the employees to shop with greater discount and better welfare programs. In 2021, there were 501 contracted stores in total.
- Year-End Party: Because of the pandemic in 2021, the Year-End Party was replaced with parties separately held by each department to reward the employees for their hard work. At the same time, there were online lucky draws with 100% winning rate to show our appreciation for all employees’ contribution to the Company.

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- **Movie Ticket Subsidies:** The employees could purchase 12 tickets for Vieshow Cinemas' movies at NT\$100 each (original price NT\$260), allowing them to have healthy recreation, cultivate artistic interest, and share their tickets with their family and friends to enhance interpersonal relationships. In 2021, a total of 2,457 person-times received the subsidies.
- **Family Movie Day:** We cooperated with external cinemas to annually hold one or two movie-watching events with the entire theater reserved. Two types of movies: family- and adult-oriented, are provided to meet the needs of different groups of audience. In 2021, a total of 235 employees participated and 967 more were their family members or friends.
- **Meal Subsidies:** The employees are provided with generous meal subsidies every day. In 2021, the meal subsidies amounted to over NT\$20 million.
- **Other benefits:** The Welfare Committee provides e-gift vouchers for employees on three major holidays and their birthdays, allowing them to freely use the vouchers according to their needs. Moreover, the paperless vouchers conform to the Company's principle of environmental protection. Before the Mid-Autumn Festival, the Welfare Committee will prepare a list of gift boxes to be voted on by employees. The gift boxes winning the most votes are distributed for the holiday. We also worked with the Blind Massage Association, providing on-site massage services 2 or 3 days every week. It allows the employees to enjoy massages and relax with preferential prices and gives the visually impaired people working opportunities. On Christmas, we give out hand-made cookies, hoping the employees could enjoy the holiday warmth even during the pandemic

Complete Welfare and Protection of Rights and Interests

- **Complete Insurance Plan:** Every employee is covered with Labor Insurance, National Health Insurance, and Group Insurance in accordance with the laws. The Group Insurance is fully covered by GUC, including life insurance, casualty insurance, hospitalization insurance, medical insurance, and cancer insurance. Employees' dependents can also join the Company's group insurance at the most favorable rates to enjoy the same complete protection as our colleagues.
- **We care about employees' benefits and welfare and do not discriminate between genders.** Employees are paid based on their academic background, professional experience and personal performance, and in compliance with laws. We adjust

- salary every year and distribute bonuses according to the Company's annual operating performance and employees' performance.
- If an employee allots a certain percentage of their salary monthly to their trust account for purchase of the Company's stock, the Company will also contribute the certain amount monthly to the employee's trust account.

Leave policy superior to the stipulation of local laws

In order to take care of the employees in every aspect, GUC provides diverse leave policy which is superior to the provisions of the Labor Standards Act, allowing them to balance their work and living, and focus on their work for long-term employment and development without worry.

Primary Item	Secondary Item	Welfare policy superior to the laws
Leave	Paid Leave	Paid leave superior to what stipulated in the Labor Standards Act.
	Flexible Leave	In the event of holidays specified in the deleted Article 23 of the Enforcement Rules of the Labor Standards Act or the days specified as holidays by other central authorities, GUC gives a day of flexible leave. In addition, if the holiday is adjusted to a regular attendance day according to the governmental calendar, the flexible leave will also be granted.
	Paid Sick Leave	Fifteen days of sick leave with full pay and fifteen days of sick leave with half pay upon coming on board.
	Maternity Leave	Employees who give birth after over 6 months of pregnancy have twelve weeks of maternity leave so that they can get better rest and family arrangements.
	Paternity Leave	Employees who accompany their spouses for pregnancy checkup or childbirth have 10 days of paternity leave. Employees whose spouse has miscarried have 5 days of paternity leave.
	Leave Without Pay	Employees can apply for leave without pay due to baby care, military service, or severe illness and apply for reinstatement upon expiration of the leave.



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Retirement Policy

The pension policy GUC plans for the employees includes the definite benefit plan stipulated in accordance with the Labor Standards Act in Taiwan and the definite contribution plan stipulated in accordance with the Labor Pension Act in Taiwan and the local practices overseas. Besides the retirement reserve allotted as required by law, GUC conducts annual actuarial calculations of the retirement reserve through a professional accounting consultant to protect the rights of employees to claim retirement funds in the future and ensure that the full amount is contributed.

Pension Contribution Practices and Readiness

	Pension Readiness in 2021	
 Definite Benefit Plan	<ul style="list-style-type: none"> In Taiwan, in accordance with the provisions of the Labor Standards Act, pension benefits are calculated based on the employee's service years and the average salary of the six months prior to retirement. The pension contribution is deposited in the name of the Labor Pension Fund Supervisory Committee into a special account at the Bank of Taiwan. 	<ul style="list-style-type: none"> In Taiwan, GUC monthly contributes 2% of employees' total salary to their retirement reserve. In Taiwan, GUC's fair value of plan assets was NT\$45,069,000 at the end of 2021. <p>In accordance with the aforementioned regulations, GUC recognized NT\$1,594,000 in 2021; the accrued pension liability recorded for amounts that are legally required to be provided in the future was NT\$33,388,000 at the end of 2021.</p>
 Definite Contribution Plan	<ul style="list-style-type: none"> In Taiwan, the pension funds are allotted to the individual accounts of the Bureau of Labor Insurance in accordance with the employee retirement plan stipulated by the Labor Pension Act. Overseas subsidiaries also contribute a specified percentage of local employees' monthly salary to the pension management business. 	<ul style="list-style-type: none"> In Taiwan, GUC's allotted 6% of its employees' monthly salary as pension funds; globally, including overseas subsidiaries, the allotted pension funds recognized were NT\$65,649,000 in 2021.

Promoting Workplace Health Culture

- Health Examination:** GUC arranges for new recruits to complete physical examinations before they are on board. The specifications are superior to the laws every year. Employees who have been working for the company for 6 months will have health examinations as well. In 2021, 124 new recruits (100%) participated in physical examinations and 572 employees (97.9%) in health examinations. For those whom a physician determines to require health management based on the health examination results, the professional medical staff will conduct health follow-up and arrange one-on-one consultation with a physician to ensure the health of our employees.
- Health Promoting Events:** GUC held a total of 10 health promoting events in 2021, which were participated by 372 person-times in total. In order to establish the concept of "prevention is better than treatment" and to enhance the immunity of employees, GUC arranged a health seminar (Dietary Regimen to Enhance Immunity) and flu vaccination. To address employees' general health problems, GUC acquired the test quota of lung CT/coronary artery calcium analysis/bone density test/whole body fat analysis from the employee clinic in Hsinchu Science Park. The quotas are reserved first for people with medical abnormalities who can register first to achieve early diagnosis and treatment in order to make more effective use of medical resources. In consideration of the Company's working style, which involves mostly sitting in the office, GUC arranged health seminars (Topic: Exercise Therapy for Modern Disease - Back Pains) to help employees learn the correct posture and ways to relieve muscle pain. To enable more employees to lend a helping hand in case of emergency, GUC held CPR & AED first aid training courses and invited first aid team members on each office floor and all employees to join. Through lectures and practices of first aid techniques, employees' emergency response ability will be enhanced. GUC is dedicated to increasing the participation rate of employees through diverse health promotion events, so that more employees can develop health awareness and focus on their own health.
- Online Exercise Classes:** In response to employees working from home due to the pandemic, in order to maintain their habit of exercise, GUC held online yoga and muscle training classes on Engineers' Day, so that employees can enjoy the fun of exercising with their families at home. Each class was participated by an average of 25-30 employees.

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- **Varied Club Activities:** GUC has established 11 clubs and held various club activities and games, such as table tennis, badminton, basketball, board games, aerobic and yoga classes, and road running, enabling the employees to develop their personal interests and release their stress after work.
- **The central kitchen requires a low oil and low salt diet.**
- **Employee Assistance Program (EAP):** GUC cares for employees and authorizes EAP Service Center of Hsinchu City Lifeline to conduct EAP, which provides employees with free personal psychological counseling services twice a year, covering work and career development, family and parenting, interpersonal relationships, romantic relationships, physical and mental stress, etc. **Periodical Publication:** EAP recommends books on spiritual growth, movies, spiritual stories, and relaxation bulletins, and holds seminars and courses to help employees deal with personal and family problems and maintain a balance between work and living.
- **Artistic Events:** Experts are invited to the Company from time to time to give a variety of lectures, including travel, finance, romantic relationships, etc.
- **Recreational Events:** EAP regularly holds a family day, movie watching, and one-day trips to bring employees closer to GUC and their families through activities and to maintain a balance between work and family life.

Complete and Convenient Hardware Facilities

- **Staff Restaurant:** The restaurant offers three meals and a variety of dining options for free, including: buffet, noodles, vegetarian dishes, Chinese and Western meals, special meals or famous special snacks from numerous areas and cafe.
- **Outdoor Basketball Court:** GUC is equipped with an outdoor basketball court.
- **Indoor Gymnasium:** GUC set up a professional gymnasium equipped with facilities such as basketball machines, TV games, and pool tables.

- **Free Parking:** Free parking for cars and motorbikes is available for all employees in a spacious parking lot. There are also parking spaces designated for pregnant women, who can enjoy the parking space closest to the entrance. In addition, a non-slip floor is set at the turning corner to prevent bikers from slipping when turning downhill on rainy days. GUC provides convenient and safe parking spaces for employees through a series of careful planning.





4.4.5 Occupational Safety and Health

Occupational safety policy

▼ The Eighth Safety, Health, and Environment Protection Committee

Representative	Department
1. Business Representative	General Manager
2. Representative for RD Wastes and Lab	RD Lab
3. Quality Assurance	QRA
4. OSH supervisor	OSM
5. OSH staff	OSM
6. Welfare Representative	Member of Welfare Committee
7. Welfare Representative	Member of Welfare Committee
8. Welfare Representative	Member of Welfare Committee
9. Medical staff	Occupational Protection

GUC is committed to achieving the goal of “zero accident and environmental sustainability” and becoming a world-class benchmark enterprise in terms of environment, safety and health. Workplace safety in GUC complies not only with domestic laws concerning labor safety, health, and environmental protection, but also international standards. GUC passed ISO 45001 certification in 2020. In accordance with Article 23 of the Occupational Safety and Health Act, we established the Occupational Safety and Health Management Committee to review relevant occupational safety issues. The minimum proportion of labor representatives elected to assist in overseeing and advising on relevant planning of occupational health and safety is one-third. Please refer to the Organizational Chart of the 7th Occupational Safety, Health and Environmental Protection Committee

for representatives and responsible persons. GUC is a professional company of IC design services and the employees are not engaged in duties with high risk or high incidence of specific diseases. To ensure the health and safety of every employee and to avoid health hazards caused by work load, operating environment, or mental stress, the Committee holds regular meetings, formulates the “Preventive Plan of Diseases Caused by Abnormal Work Load”, “Maternal Health Protection Plan”, “Prevention Plan of Hazards due to Human Factors”, and “Prevention Plan of Unlawful Assault When Performing Duties”, and continues to implement the following policies in accordance with the Occupational Safety and Health Act and the working guidelines promulgated by the Occupational Safety and Health Administration. There was no financial loss due to violation of employees’ health in 2021.

- Provide relevant education and training to enhance employees’ awareness of safety, health, and environmental protection.
- Plan health promoting events to ensure employees’ physical and mental health.
- Ten health promoting events were held and participated by 372 person-times in 2021.
- Regularly conduct safety and health promotional events to enhance employees’ relevant concepts.
- Ensure that operations and services comply with, or exceed, the regulations and standards related to environmental protection, safety, and health.
- Build a safe workplace to prevent occupational injuries and diseases.
- Focus on global safety and health issues, assess their risks, and take effective control measures.
- Enhance every employee’s awareness and responsibility of environmental safety and health and establish a friendly culture of environmental safety and health.
- Improve overall environmental protection, safety, and health performance through experience sharing and cooperation.
- Set safety target: The target is zero occupational accidents, which was achieved in 2021.



- Formulate and inspect various environmental safety procedures and regulations, including: “Inspection, Measurement and Test Equipment Management Procedures”, “Plant Affairs Inspection and Maintenance and Automatic Inspection Management Regulations”, “Dangerous and Hazardous Material Marking and Identification Rules”, “Electrical Equipment Operation Standards”, “Warehouse Management Operation Standards”, “Material Handling Operation Standards”, “Human Safety and Health Protection Standards”, “General Area Safety and Health Standards” and “Special Area Safety and Health Operation Standards”, etc.

Preventive Plan of Diseases Caused by Abnormal Workload

In accordance with Article 324-2 of the Regulations Governing Occupational Safety and Health Facilities, the “Preventive Plan of Diseases Caused by Abnormal Workload” should be formulated if employers have workers engaged in shift work, night work, or long working hours, to ensure the workers’ physical and mental health and to achieve the purpose of overwork protection and stress management for workers. GUC utilizes relevant assessment data to identify and screen high-risk groups that may suffer from diseases, assists them in arranging physician interviews and health guidance, and further adjusts, shortens working hours, or changes work contents to reduce or remove the existing risk factors that are learned of.

In 2021, after a comprehensive assessment of employee health examination results, overtime hours, and fatigue scale, 9 employees from high risk of abnormal workload group and 43 from moderate risk group were screened out for health education and related health management activities, including arranging physician consultation, employee stress relief seminars, and other improvement measures.

Maternal Health Protection Plan

The Plan is conducted in accordance with Articles 30 and 31 of the Occupational Safety and Health Act, and Article 39 of the enforcement rules under the same Act. Plan and take necessary safety and health measures to ensure the physical and mental health of pregnant, postpartum, and breastfeeding female workers to achieve the purpose of protecting maternal labor health. Provide breastfeeding space and breast milk storage refrigerator, conduct hazards assessment and control, doctor’s interview and guidance, and risk classification management for female employees during pregnancy and one year postpartum, and make appropriate work arrangements when necessary. A total of 17 employees received the services in 2021 (3 during pregnancy, 14 during one year postpartum, and 5 for breastfeeding).

Prevention Plan of Hazards due to Human Factors

The Plan is to prevent the occurrence of work-related musculoskeletal hazards and injuries of employees caused by long-term exposure to poorly designed work environments, repetitive operations, and poor work postures. The Company formulated the “Prevention Plan of Hazards due to Human Factors,” and annually evaluates relevant proposals and provides improvement projects to create a comfortable, healthy and favorable workplace.

In GUC’s operational environment, keyboards and mice are used mainly for administrative paperwork, which may cause ergonomic hazards due to prolonged sitting, excessive eye use, and incorrect posture. In 2021, 50 employees were randomly selected for a survey of office sitting posture and visual distance to be compared with the ergonomically compatible facility conditions and perform the survey of using auxiliary aids. Two target cases with suspected musculoskeletal hazards were screened out. From the Musculoskeletal Health Survey, 32 employees with a score of 3 or higher were tracked, and 5 employees were recommended to consult with a physician after assessment. It is expected that 7 employees will be arranged to consult with a physician on a one-on-one basis in 2022, and on-site visits will be made with occupational safety personnel to provide health and medical advice, professional health consultation, and improvement recommendations.

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Prevention Plan of Unlawful Assault When Performing Duties

The Plan will be activated once possible or existing workplace violence is detected to protect employees from unlawful acts of aggression causing physical or mental injury and to ensure the safety and physical and mental health of employees at work. Besides arranging training and orientation for new recruits, GUC provides internal employees with education and training related to unlawful assault at least once a year; the completion rate of the training is 100%.

Worker training on occupational safety and health

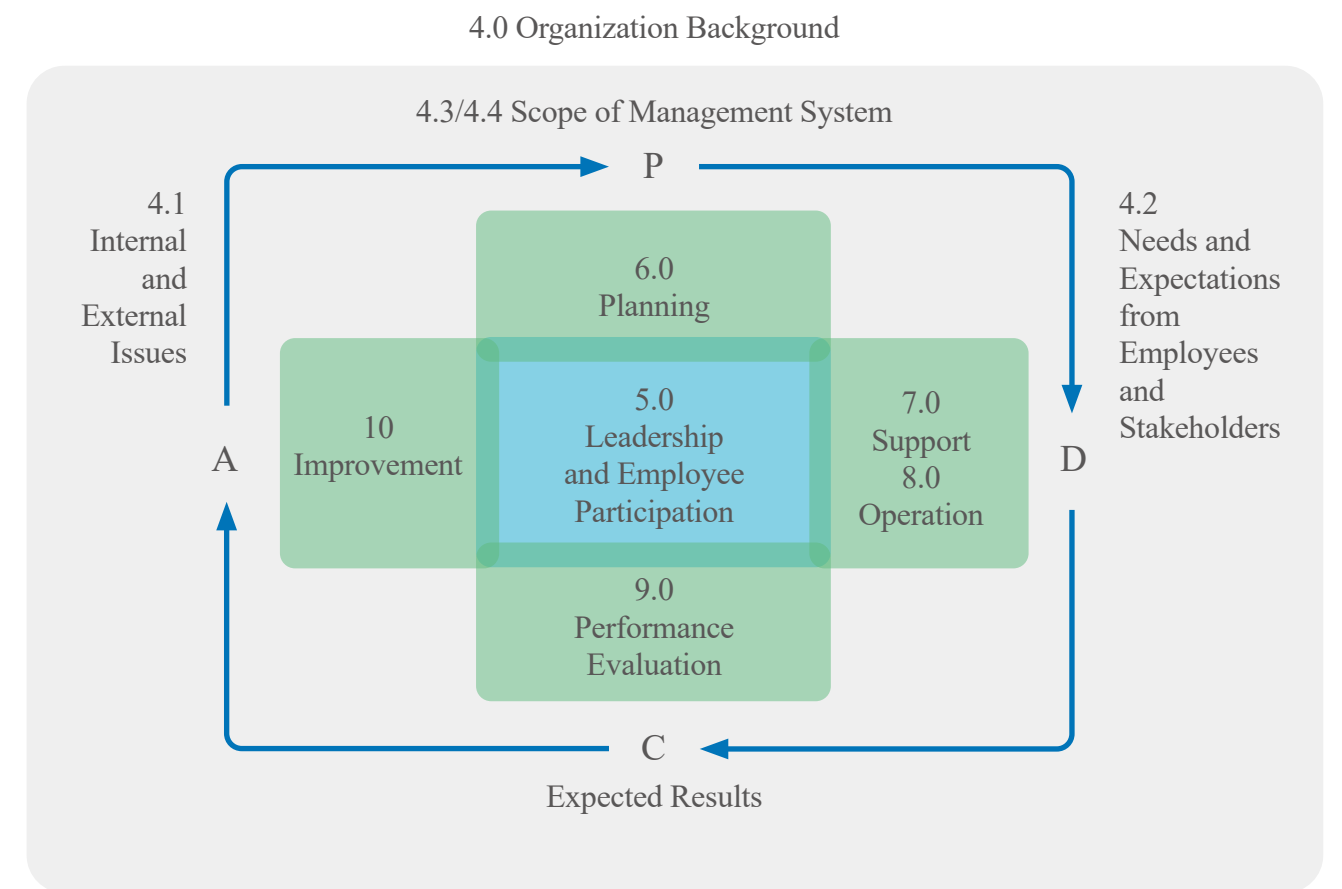
To enable employees to work in a healthy and safe environment and avoid the recurrence of similar accidents, GUC holds regular accident training and in-service employee retraining, and lets employees understand the causes of accidents through accident investigation and analysis to reduce the occurrence of public safety accidents.

New recruits will have 3 hours of occupational safety training (including occupational safety and related training) included in the overall training, so that they can learn about the necessary safety knowledge at work. In 2021, 107 employees participated in the training, which was a 100% participation rate.

Identification of Risks and Hazards related to Occupational Safety and Health

The identification of risks and hazards related to employees' occupational safety and health is conducted annually by the representatives of various departments and the occupational safety department for identification of safety and health hazards, and assessment of risks and opportunities. The assessment results are submitted to the Senior Management Review Board and the Occupational Safety and Health Committee for review and announced on the Company's internal bulletin board.

In 2021, there was 1 case of high-risk hazard (risk level greater than or equal to 4), which was the insufficient height of the parapets on the top floor (risk level 5); the risk was corrected by increasing the height from 65cm to 120cm, which lower the risk level to 2 after the improvement. Then safety and health change control was carried out, and the management department was inspected before commissioning and the maintenance staff were informed and trained. GUC conducts risk prevention and recurrence prevention through risk hazard identification and other related methods in accordance with the P-D-C-A approach of ISO 45001 management system.



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▼ 2021 GUC's Implementation Status of Occupational Safety and Health Training Course

Employee Category	2021 Training Course	Number of Participants (persons)	Training Hours (hours)	
New Employee	General training			
	Occupational safety and health training for new employees	107	4	
	Emergency escape training	366	1	
	General training			
	On-the-job safety training for general employees	9	2	
	On-the-job education and training for fire management personnel	1	6	
	Safety and health education and training for fire management personnel	2	24	
	On-the-job education and training for occupational safety and health management personnel	2	18	
	On-the-job education and training for occupational safety and health supervisor	1	6	
	In-service employees	Specific training		
Education and training for ISO 45001 hazard identification and risk assessment		7	1	
On-the-job training for emergency response personnel		1	4	
Safety and health education and training for emergency response personnel		2	36	
On-the-job education and training for members of the safety committee		15	1	
On-the-job safety training for business supervisors at all levels		32	2	
Safety duty training for contractors		7	2	
Group training for self-defense fire protection		42	8	
Total			487	111

Health Promotion

Employees are the most important cornerstone of the Company, and health is the foundation for every employee. Only with a healthy body and mind can an employee achieve good work efficiency and innovative thinking. The Company is committed to enabling every employee to have the mental quality of “Accountability (sense of ownership)”, which extends to the concept of “being responsible for your own health” and encourages all employees to start from daily life by developing good diet and exercise habits and paying attention to their health.

Collaborating with professional medical personnel and local medical resources, we regularly conduct one-to-one medical consultation services, health lectures, vaccine administration, blood donation, employee assistance programs and other health promotion events. We also provide health education materials according to current events so that employees can learn correct health knowledge. Its aim is to “create a healthy and supportive environment”, build a healthy workplace, enhance health awareness, and maintain a healthy body. In 2021, a total of 10 health promotion events were held, with a total of 372 people participating in the events and obtaining the Healthy Workplace Certification and Health Promotion Mark from the Health Promotion Administration.

Healthy Workplace Certification and Health Promotion Mark from the Health Promotion Administration ▶





4.5 Social common good

4.5.1 Public welfare club

GUC's support for public welfare events of all kinds of non-profit organizations and local communities, we continue to provide them with software and hardware equipment and service support to establish good trust and caring relationships. These friendships make GUC full of positive corporate social responsibility energy.

Computer donation

GUC responds enthusiastically to public welfare events and donates the decommissioned computers every year to the "Your Old Computer, His New Hope" fundraising program organized by the Triple-E Institute (TEI) of Taiwan. The TEI is a national association composed of like-minded scholars, experts, and social figures engaged in think tanks, research and development, conferences and exhibitions, public welfare events, educational promotion, and networking events related to sustainable development of energy, the environment, and the economy. In 2021, 41 desktop computers, 79 notebook computers, 14 LCD monitors and 6 boxes of consumables (mice, keyboards and power cords) were donated.

Volunteering

Hoping to contribute more to society, GUC is expected to set up a volunteer club in 2022 to enable employees who have been enthusiastic about public welfare to have a place to devote their capabilities and, through the effort of the club, enable all employees of the Company to participate in public welfare events in a more active and organized manner, achieving a positive cycle of goodness. Subsequent social service development aspects will be decided internally by the club after its establishment, to pursue a win-win situation for the Company, employees, recipients of assistance or the ecological environment.

Procurement of goods from non-profit organizations

From time to time, GUC purchases goods made by non-profit organizations as gifts for employees. This year, we purchased handmade biscuits from Syinlu Foundation as gifts to employees on the Engineers' Day, which not only enabled employees to enjoy delicious biscuits, but also helped social welfare organizations increase their income.

4.5.2 Social services

Social donation

- Donating a bag of blood can save a life. We regularly invite bloodmobiles to the Company, encourage all employees to donate blood together to express their love and care. In 2021, a total of 54 people participated to give 76 bags of blood.



- The staff cafeteria is also open to those not working for the Company, providing convenience for the community. Employees can enjoy quality yet affordable food and make the catering service provider profitable and sustainable, achieving a win-win situation for society and the public.

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- In order to promote the harmonious community and be a good neighbor, the central kitchen's meals are sent to other neighboring factories to realize the goal of friendly communities.
- Every year, we cooperate with the non-profit organization Hsinchu Blind Welfare Association to purchase blind massage services. In 2021, a total of 271 employees used the service for about 893 hours, and the total purchase amount was NT\$37,200.

Supporting green time deposit and fostering sustainable industries

In response to climate change and international sustainability trends, Bank SinoPac launched a green deposit program in line with the government's "Green Finance Action Plan 2.0", and actively developed various green financial products, which included various green financial products released in April 2022. Being the first to join the effort, GUC has a deposit amount as high as NT\$200 million; the funds will be used to support green loaning programs such as green buildings, renewable energy loans, and pollution prevention and control industries.



In addition, Mega Bank actively promotes green finance as the first example of a public-stock bank, launching green and sustainable time deposit programs for corporate customers. GUC supports the United Nations Sustainable Development Goals (SDGs) and continues to pay attention to green finance and industry-related issues. We have not only planned short, medium and long-term implementation plans for the 2050 net zero emissions target, but also encouraged employees to actively participate in social welfare events. Therefore, GUC was the first to make the first green time deposit of NT\$70 million in April 2022, becoming the first green time deposit account owner with Mega Bank, supporting green finance with practical actions, and implementing the concept of taking from society and applying it to society.

In addition to voluntarily issuing a third-party verified sustainability report every year, GUC also actively promotes the verification of GHG emissions (ISO 14064-1) and incorporates the "Responsible Business Alliance (RBA)" in supplier management. It has also planned short, medium and long-term implementation plans for the 2050 net zero emissions target. The main reason for the cooperation with the two major banks: Mega Bank and Bank SinoPac, is that green and sustainable time deposits combine the two ESG characteristics of green and social benefits, and the funds deposited by customers are used as the source of funds for green loans and sustainability-linked loans. In other words, corporate customers use deposits to support stores or companies that are willing to invest in ESG development, and at the same time positively impact and benefit the environment and society in the long run, which is also in line with the concept of sustainable innovation of GUC and echoes the SDGs Goal 17 "Strengthen the means of implementation and revitalize the global partnership for sustainable development."

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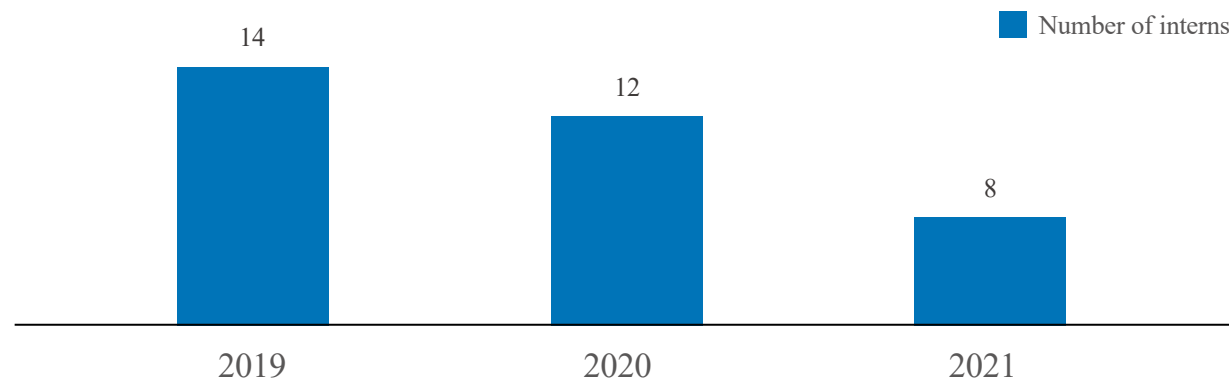


Summer internships for college students

GUC understands that education is the foundation for elevating industry, so we also maintain a good relationship with colleges. In order to enable students to gain industry and work experience and connect with society earlier, the Company also offers a summer internship program. This program enables students who are currently studying at a university to sign up to participate; the salary provided also complies with the specifications of the Labor Standards Act. In addition to accumulating practical experience earlier, students will be able to facilitate their future career development, and at the same time, understand the industry and practical work content.

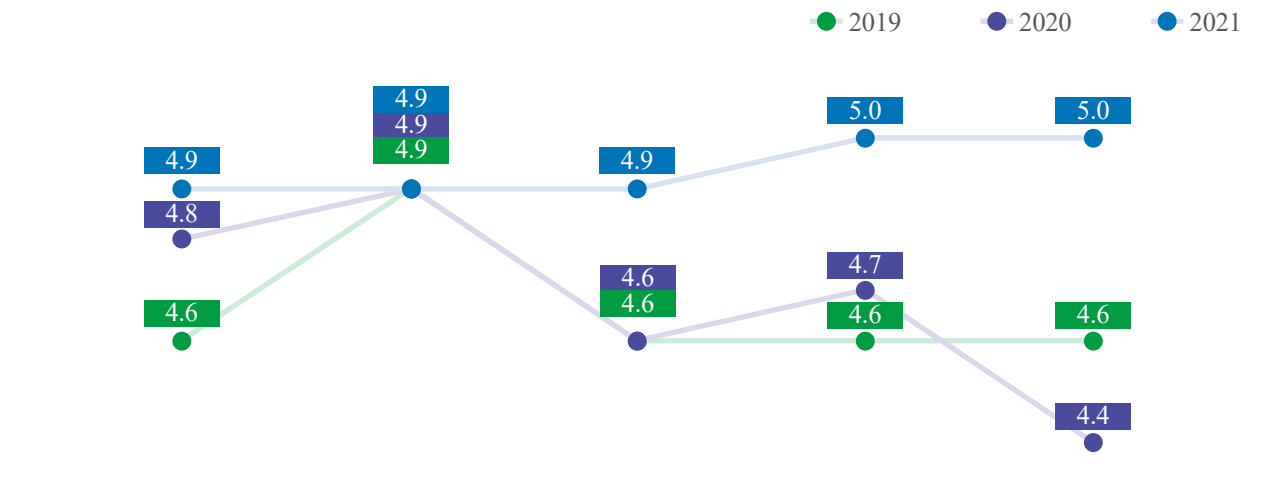
Year	Number of interns
2019	14
2020	12
2021	8

Note: There isn't a fixed number of interns each year; it depends on the number approved by the supervisors and the actual recruitment status of the year. (The number of interns has also been affected by the pandemic in the past 2 years)



Regarding the summer internship, we also conducted a satisfaction survey as a basis for improvement. Each item is worth 5 points. In terms of overall scores, the interns' satisfaction is above 4.5 points. In addition, from the feedback of the interns, we also know that through the internship program, apart from gaining a better understanding of the semiconductor industry, students can also feel that the departments' participation in internship activities and related plans is very active. This also means that the Company has a positive influence on the planning, training and care for interns, which can be felt by students. In the future, we will do our best to continue promoting related internship programs!

Item/Year	2019	2020	2021
In-depth understanding of GUC's industry and operation	4.6	4.8	4.9
Personal growth and career development	4.9	4.9	4.9
Overall summer internship satisfaction	4.6	4.6	4.9
Willing to recommend others to join GUC	4.6	4.7	5.0
Willing to join GUC in the future	4.6	4.4	5.0



Item/Year	2019	2020	2021
In-depth understanding of GUC's industry and operation	4.6	4.8	4.9
Personal growth and career development	4.9	4.9	4.9
Overall summer internship satisfaction	4.6	4.6	4.9
Willing to recommend others to join GUC	4.6	4.7	5.0
Willing to join GUC in the future	4.6	4.4	5.0

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4.5.3 Emergency rescue and aid

Donation

GUC employees continue to actively join the efforts of protecting people with mental disability by participating in donations. In addition to purchasing the lychees that farmers with mental disability grow and tend, they also respond to the recruitment of “Love 100 Guardians” to adopt lychee trees to help the severely paralyzed in Canaan Disability Home raise funds for support. However, in 2021, due to the poor production of lychees impacted by the climate, we could not procure any, but we continue to pay attention to the needs of these farmers and give them support.

In addition to the Company’s participation in, and care for, social issues, our employees also voluntarily make regular small-amount donations every month. In 2021, NT\$120,000 was donated to the Harmony Home Association Taiwan, showing our care about those in need.



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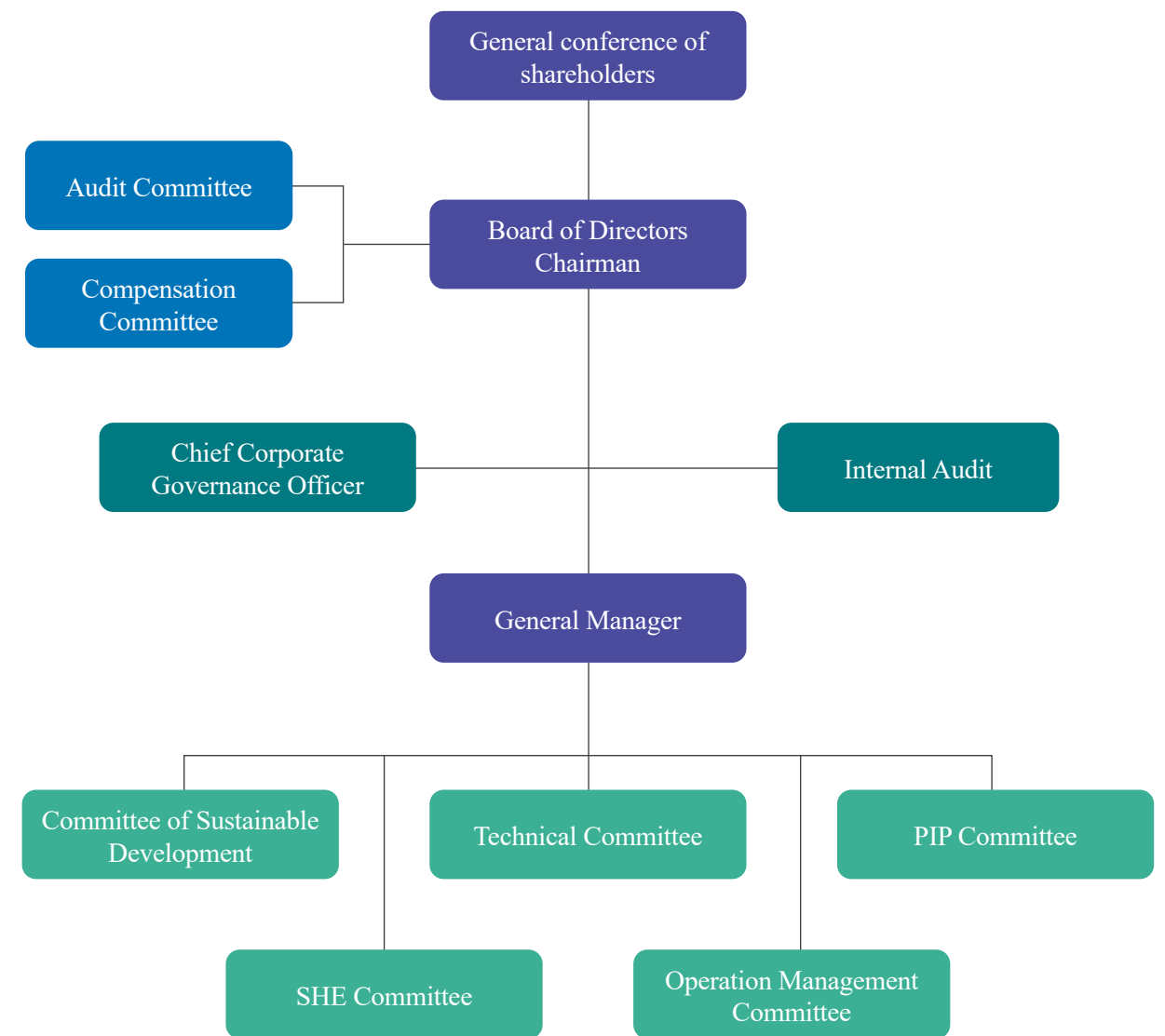
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5.1 Corporate Governance

5.1.1 Level-based Authorization

Based on the GUC Sustainability Best Practice Principles, we established the Committee of Sustainable Development, comprised of cross-departmental representatives. The Board of Directors appointed the Chief Financial Officer as the Committee Chairman to execute and report the outcomes to the Board. For more information about our corporate governance framework, please visit our website (https://www.guc-asic.com/zh-tw/investor_financial/annual) and download 2021 GUC Annual Report.

GUC Organizational Structure ▶



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5.1.2 Professionalism and Diversity

Our Board of Directors currently consists of 9 directors, 8 of whom are not GUC executives. All directors are above the age of 50, and the percentage of independent directors had been increased to 56% to improve corporate governance. A total of five regular Board meetings were convened in 2021. Members of the Board of Directors possess a wide range of expertise and experience in corporate operation. Meanwhile, independent directors are appointed to the Audit Committee and the Compensation Committee. All members of the Board of Directors are elected through a nomination procedure, with an emphasis on competency as well as integrity and ethical reputation. In addition, the Corporate Governance Code of Practice of the Company requires at least one female board member.

Candidates for independent Director of Board must meet the professional qualification standards, independence criteria, and concurrent position restrictions stipulated in the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies. The Board is responsible for formulating comprehensive and innovative strategies, performing effective oversight, protecting shareholders' interests, and improving corporate governance.

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▼ GUC Board of Directors in 2021

Title	Name	Term	Gender	Age	Expertise in economic, environmental, and social issues
Chairman of the Board of Directors	Taiwan Semiconductor Manufacturing Co., Ltd. Representative: Dr. F.C. Tseng	7	Male	77	Management experience and economic expertise
Director of Board	Taiwan Semiconductor Manufacturing Co., Ltd. Representative: Dr. Ken Chen	3	Male	61	Management experience and economic expertise
Director of Board	Taiwan Semiconductor Manufacturing Co., Ltd. Representative: Wendell Huang	2	Male	60	Management experience and economic expertise
Director of Board	Taiwan Semiconductor Manufacturing Co., Ltd. Representative: Dr. Cliff Hou	5	Male	60	Assisting GUC in developing energy-saving products, adapting to climate change risks, and seizing market opportunities
Independent Director of Board	Benson Liu	6	Male	72	Chairman, Corporate Governance Committee
Independent Director of Board	Dr. Chein-Wei Jen	6	Male	73	Assisting GUC in developing energy-saving products, adapting to climate change risks, and seizing market opportunities
Independent Director of Board	Dr. Wen-Yeu Wang	5	Male	66	JSD, Stanford University, member of FTC, Executive Yuan, Director of Board of TCB, Taifex Supervisor, Director/Supervisor of TLS, Prof. of College of Law, NTU, lawyer at Sullivan & Cromwell
Independent Director of Board	Dr. Chung-Yu Wu	4	Male	71	Assisting GUC in developing energy-saving products, adapting to climate change risks, and seizing market opportunities
Independent Director of Board	Dr. Kenneth Kin	2	Male	75	Management experience and economic expertise

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▼ 2021 GUC Board Member Education Courses & Hours

Title	Name	Date	Organizer	Courses	Hours
Chairman of the Board of Directors	Dr. F.C. Tseng	11/23/2021	Accounting Research and Development Foundation	New Sustainability Policy, Climate Governance, and Low Carbon Management	6
Director of Board	Dr. Cliff Hou	10/22/2021	Securities & Futures Institute	Anti-money Laundering and Combating Information Terrorism in Practice	3
		11/26/2021	Taiwan Corporate Governance Association	2030/2050 Zero Emission-Sustainability Challenges and Opportunities Global Corporations Face	3
Director of Board	Dr. Ken Chen	07/29/2021	Securities & Futures Institute	Information Security Governance in Practice for Board of Directors	
		12/10/2021	Taiwan Corporate Governance Association	Planning Differentiated Corporate Strategies in Accordance with the ESG Trends	3
Director of Board	Wendell Huang	09/01/2021	Accounting Research and Development Foundation	New Corporate Sustainability Policy and Climate Governance	3
		12/29/2021	Accounting Research and Development Foundation	Key for Sustainable Development	3
Independent Director of Board	Dr. Chein-Wei Jen	07/29/2021	Securities & Futures Institute	Information Security Governance in Practice for Board of Directors	3
		12/15/2021	Accounting Research and Development Foundation	Promoting Corporate Governance via the Implementation of Intellectual Property Management	3
Independent Director of Board	Dr. Wen-Yeu Wang	07/29/2021	Securities & Futures Institute	Information Security Governance in Practice for Board of Directors	3
		11/29/2021	Taiwan Securities Association	Domestic and Foreign Trends and Patterns in Anti-laundering and Combating Information Terrorism	3

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Title	Name	Date	Organizer	Courses	Hours
Independent Director of Board	Benson Liu	02/25/2021	Taiwan Corporate Governance Association	Strategic Turning Points: Sustainable Development Lessons from Century-Old Enterprises	1
		07/29/2021	Securities & Futures Institute	Information Security Governance in Practice for Board of Directors	3
		09/01/2021	Securities & Futures Institute	The 13th Taipei Corporate Governance Forum Morning Session	3
		09/28/2021		Advanced Practical Cases Sharing: Proceeding to Audit Committee 3.0	3
		12/10/2021	Taiwan Corporate Governance Association	Case Sharing on International ESG Trends and Corporate Practices	3
		12/22/2021		Summit Forum on ESG Governance and Sustainability Implementation	6
Independent Director of Board	Dr. Chung-Yu Wu	07/02/2021	Securities & Futures Institute	Corporate Governance and Securities Laws and Regulations	3
		07/29/2021		Information Security Governance in Practice for Board of Directors	3
		08/03/2021		Corporate Sustainability Governance from a Risk Perspective: Corporate Governance and ESG	3
		10/26/2021	Taiwan Corporate Governance Association	The Role of AI and Dig Data in Internal Anti-corruption and Investigation (Part I)	3
		10/26/2021		The Role of AI and Dig Data in Internal Anti-corruption and Investigation (Part 2)	3
		11/02/2021	Securities & Futures Institute	Practical Case Sharing on Enterprise Mergers and Acquisitions-Hostile Takeovers	3
Independent Director of Board	Dr. Kenneth Kin	10/26/2021	Taiwan Corporate Governance Association	The Role of AI and Dig Data in Internal Anti-corruption and Investigation (Part I)	3
		10/26/2021		The Role of AI and Dig Data in Internal Anti-corruption and Investigation (Part 2)	3

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5.1.3 Governance Rule

GUC has formulated the Procedure of Trustworthy Operation and Code of Professional Ethics in line with the Taiwan Corporate Conduct and Ethics Implementation to enhance business integrity, ethics, and legal compliance. GUC's Human Resource Department is in charge of enforcing the Code and educating other departments. All of our employees, managers, and Board members must comply with ethical codes and accept personal responsibility for preserving and implementing professional behaviors and ethics.

Creating a dedicated corporate governance organization

On July 30, 2020, the Board appointed Daniel Chien, Deputy General Manager and Chief Financial Officer, as the Chief Corporate Governance Officer to lead a corporate governance working group comprised of seven members from the financial, legal, internal audit, and human resource departments. The working group is responsible for providing required data to the Board, assisting the Board in implementing legal compliance, organizing meetings for the Board and shareholders, managing company registrations and amendments, compiling minutes for Board and shareholder meetings, strengthening the Board's function and ensuring equal treatment of stakeholders and shareholders.

Creating Dedicated Business Integrity Management Organization

The Company is dedicated to observing government laws and specifications, as well as corporate ethics and protocols. We uphold the highest standards of transparency, integrity, and accountability, while actively fulfilling our corporate social obligations and conducting business with integrity. As such, the Company has formulated the "Procedures for Ethical Management, Ethics & Business Code of Conduct" and "Protocols for Complaints and Reporting". Customers, shareholders, government agencies, society, academic institutions, suppliers, GUC employees, and other stakeholders (business partners, suppliers, and the general public) may file complaints or reports through confidential channels on any legal violations (fraud), unethical behaviors (corruptions or bribes), and any other violations or potential violations of laws and company policies.

The Board of Directors supervises related operations through a designated reporting mailbox. In addition, GUC has established a Violation of Ethical Conduct Reporting System' section in both Chinese and English versions (<https://www1.guc-asic.com:8443/guc/>). The HR Department is responsible for collecting and disclosing relevant information.

We ask all our employees and external suppliers to comply with the same corporate ethics and code of conduct. As an assurance, our suppliers are obliged to sign the 'GUC Ethics and Business Code of Conduct for Suppliers' declaration. The Company has completed anti-corruption assessments of all our operational posts.

Participation of Union Organizations

GUC intends to contribute to the semiconductor industry through our proactive participation and membership in relevant unions and associations.

Consortium	Membership Status
Taiwan Semiconductor Industry Association, TSIA	Member
The Allied Association for Science Park Industries	Member
Taiwan Corporate Governance Association	Member
Chinese Professional Management Association of Hsinchu	Member
Accounting Research and Development Foundation	Member
Hsinchu City Nurses Association	Member

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Legal Compliance

The Company provides education and training courses, as well as resources, to all of our employees to enhance their understanding of legal compliance issues. For instance, all managers and concerned staffs are required to attend courses on the Personal Information Protection Act and the Trade Secrets Act. We also offer e-learning resources to all employees to help them learn and comply with Procedures for Ethical Management, Ethics, and Business Code of Conduct and Electronic Industry Code of Conduct. GUC's management team closely monitors both local and international government policies and regulatory changes that may affect GUC's business and financial operations, and has authorized the legal department to compile and review legal compliance procedures and implementation outcomes. GUC did not receive any monetary penalties or non-monetary punishments in 2021 for failing to comply with any economic, environmental, and social laws and regulations. Furthermore, we observe the Fair Trade Act and have never been involved in anti-competition, anti-trust, or monopolization litigation. All of the Company's business operations are in compliance with domestic and international laws and regulations, which serve as the foundation for our operational sustainability. Moreover, we inspect and review all of our operations according to the three legal compliance indices disclosed in the GRI Standard.

Environment protection compliance: In 2021, the Company received no major fines or other non-monetary penalties related to violations of environmental laws and regulations. In addition, no environmental impact complaints have been filed, handled or resolved through the official appeal mechanism.

Social compliance: In 2021, the Company received no major fines or other non-monetary penalties for non-compliance with laws and regulations concerning financial reporting, workplace discrimination, corruption, etc. Furthermore, no complaints concerning human rights have been filed, processed, or resolved through the formal appeal system.

Product sales compliance: In 2021, no significant fines were imposed for non-compliance with laws and regulations concerning the provision and use of products and services throughout the sales process.

In 2021, no incidents of corruption were recorded.

In 2021, no complaints were filed regarding any violations of customer privacy or the loss of customer data.

In 2021, no incidents of non-compliance with marketing and promotion laws and regulations were recorded, including advertising, promotion, sponsorship, and any other events related to voluntary guidelines.

In 2021, no sales of disputed products were reported.

In 2021, no incidences of non-compliance with laws and regulations concerning the labeling of products and services and voluntary guidelines were recorded.

In 2021, no cases of non-compliance with laws and regulations concerning the health and safety of products and services within their life cycles and voluntary guidelines were recorded.

5.2 Financial Performance

5.2.1 Major Financial Performance

GUC's total revenue for 2021 was NT\$15.108 billion, an increase of 11% compared to NT\$13.569 billion in 2020. Net income was NT\$1.46 billion, an increase of 72% compared to the previous year. The 2021 EPS was NT\$10.9, a 72% increase over NT\$6.34 in the previous year. This was significantly higher than the annual revenue growth rate.

Due to the margin improvement of both of NRE and Turnkey products, GUC's gross margin for 2021 was 34.6%, a considerable rise from 30% in the previous year. The operating margin in 2021 was 11.1%, up from 7.1% in 2020. Profit margin after tax in 2021 was 9.7%, an increase of 3.4 percentage point compared to 6.3% in the previous year.

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▼ 2019 - 2020 GUC Production Output (Unit: thousand piece/NT\$ thousand)

Main Output	2020		2021	
	Output	Amount	Output	Amount
ASIC & Wafers	166,213	5,591,090	176,489	4,712,990
Non-recurring Engineering (NRE)	-	2,971,329	-	2,654,621
Others	-	10,650	-	38,458
Total	166,213	8,573,069	176,489	7,406,069

▼ Percentage of revenue from GUC's main products (in NT\$ thousands)

Main products	2020		2021	
	Sales	Percentage	Sales	Percentage
ASIC & Wafers	8,524,887	62.82%	10,086,532	66.76%
Non-recurring Engineering (NRE)	4,614,332	34.01%	4,708,703	31.17%
Others	430,222	3.17%	312,680	2.07%
Total	13,569,441	100.00%	15,107,915	100.00%

▼ Performance statistics in the past five years (in NT\$ millions)

		2017	2018	2019	2020	2021	
Direct economic value generated	Revenue	12,161	13,460	10,710	13,569	15,108	
	Cost	8,996	9,443	7,180	9,499	9,878	
		<hr/>					
		Income tax	129	159	150	152	281
		<hr/>					
		Remuneration for Board members	12	14	5	12	28
		<hr/>					
Economic value distributed	Employee bonus - Cash	134	153	75	134	272	
	Employee bonus - Incentives	134	153	75	134	272	
	Shareholder bonus - Cash	670	670	670	670	938	
		<hr/>					
Economic value retained		185	318	-37	180	522	

Notes:

1. Economic value retained = Direct economic value generated - Economic value distributed
2. No community investment in 2021

5.2.2 Technology Development

The progress of technology is the most fundamental factor to ensure the growth of revenue and profit. In 2021, the Company's 16/12 and 7 nm revenue accounted for 46%. To maintain its leading position in technology, GUC continues to invest heavily in research and development. Moreover, the Company obtained 422 patents globally by end of 2021, showing the achievements with our heavy R&D investments, which have effectively raised our core competitiveness.



Technology developments and innovations in 2021

- Cooperated with 5G leading manufacturers in 12 nm high-speed analog front-end IP supporting mmWave and sub-6G bands, completed the silicon validation, had it adopted by clients, and finalized product design in 1Q21. (CIPRD)
- Completed the design finalization of 5 nm and 6 nm GLink-3D IP verification chips for 3D SoIC in the 2Q21. (CIPRD)
- Leading the industry, launched the first HBM3 CoWoS platform, to verify the HBM3 7.2G, GLink and 112G SerDes IP, and completed the design finalization in 2Q21 in combination with TSMC's latest CoWoS-S and CoWoS-R packaging technology. The silicon validation is expected to be completed in 1Q22. (CIPRD)
- Launched the 2nd generation 5 nm die-to-die interconnect IP "GLink 2.0" in combination with TSMC's InFO/CoWoS packaging technology. The silicon validation was completed in October 2021, which can provide customers with a complete die-to-die solution. (CIPRD)
- GLink IP won the "The Promising Product" of the first EE Awards Asia. (CIPRD)
- GUC has taken the lead in the industry in 3 nm development and completed the design process and verification of Version 0.9 in 4Q21. Planning to carry out the design process development of the 3 nm enhanced IP in 2022 to meet the clients' product design finalization in 2023. (CIPRD)
- First N3 test chip tape-out was completed in March 2021, and silicon validation was completed in 4Q21.
- Provide design service solutions of ultra-low power consumption, which can significantly reduce the power consumption required by AI SoC chips and meet the ultra-low power consumption requirements of edge computing and have assisted clients to successfully enter mass production.
- Industry-leading spec-in services have successfully helped developed an SoC chip for 5G base stations that has completed system verification and entered mass production. (SoCRD)
- Worked with leading manufacturers of self-driving cars to develop chips required for self-driving ADAS in 2Q21. System functions and chip reliability are currently being verified. (SoCRD)

Product Applications



High Performance Computing

With the development of technologies such as cloud computing, artificial intelligence (AI), virtual reality (AR/VR), and fifth-generation mobile communication (5G), the amount of data generated by the connections of things is also showing explosive growth; this is driving data centers and communication infrastructures to be capable of unprecedented data computing capabilities.

HPC combines high-density, high-speed computing units with wide-bandwidth, high-capacity memory units, greatly shortening processing time. Recently, it has been successfully applied in the COVID-19 pandemic, during which time governments joined forces with the tech industry and academia to work with the medical field. Structure-based drug design system utilized HPC to simulate protein molecular behaviors of viruses, providing insight into the genes and variability of viruses and active pharmaceutical ingredients that ensure inhibition against COVID-19 molecules.

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GUC has been committed to advanced 3 nm and 5 nm processes to develop instant, effective and reliable high-performance data processing chips. Furthermore, we began to work closely with fabs in 2018 to build an advanced process design platform and bleeding-edge 2.5D and 3D packaging technologies, offering industry-leading high-performance, system-level design solutions that support multi-die packaging requirements for high-performance processors.

Artificial Intelligence

With the increasingly mature AI algorithm and big data analysis, AI is expected to create a smart healthcare world for human society. Depending on the big data accumulated continuously, AI will accelerate medical diagnosis, drug development, epidemic disease control, human genomics, and other medical research, providing solutions to diseases with deeper understanding for human health, so as to provide better quality medical services, reduce costs, improve outcomes, and thus contribute impressively to society.

AI can be applied to climate change, water safety, healthy oceans, clean air, biological protection, weather, and disaster relief to prepare human society for global environmental changes, reduce risks of natural disasters, safeguard food and water safety, and protect natural resources and biodiversity, thereby enhancing the well-being of all mankind. To meet the needs and growing demand of the AI market, GUC helps in the development of advanced, efficient AI chips, and launches system-level IP solutions. Our services enable clients to enter any area of the semiconductor industry chain from the initial product conceptualization to specification, development, verification, manufacturing, and production to the final product. Additionally, to reduce the carbon footprint, GUC provides ultra-low power design solutions, which greatly lower the power consumption of AI chips while retaining high performance.

5G Communication

5G has the advantages of high bandwidth, high density and low latency, providing faster and larger traffic millimeter wave communication network (mmWave) and meeting the requirements for low-power, energy-saving smart IoT applications (sub-6). 5G communication opens the door to the age of ultra-connectivity, driving development for a wealth of applications, such as:



Smart city: 5G facilitates the integrated management of buildings, energy, transportation, and air pollution, in a city to improve energy utilization and achieve a country's carbon target.



Smart life: 5G applications break the limitations of space and benefit society with convenient services in the areas of health care, education, culture, entertainment, and smart home.

GUC has for years been committed to 5G technologies, including SerDes and high-speed ADC/DAC IP silicon cores solutions. Sub-6 products have entered mass production in 2020 to facilitate 5G commercialization. GUC started to offer solutions that simultaneously support both sub-6 and mmwave bands in 2020, and assisted clients to finalize designs. Verification processes began in multiple countries in 2021; this will improve the quality of existing 5G services and bring speed and convenience to mobile communication.

Future R&D plans and estimated R&D costs

To be prepared for future growth, GUC will continue to invest its R&D resources to optimize 5 nm and 3 nm design processes and develop high-speed die-to-die interface IP "GLink", HBM PHY & Controller, SerDes, PCIe, High-speed ADC, and TCAM. (CIPRD: update IP) An estimated NT\$1.3 billion will be invested in R&D in the next two years. Relevant projects are as follows: (DS: add N3, revise N5, remove N6) (CIPRD: update IP plan)

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Recent Annual Projects	Current Progress	Validation Completion Time
5 nm HBM2E-3.6G controller & PHY	Silicon validation of test chip completed	Silicon validation completed in 1Q22
7/6 nm HBM3 controller & PHY	Test chip tape-out completed	Silicon validation to be completed in 2Q22
5 nm HBM3 controller & PHY	Test chip tape-out to be completed in 1Q22	Silicon validation to be completed in 4Q22
3 nm HBM3 controller & PHY	Test chip tape-out to be completed in 3Q22	Silicon validation to be completed in 2Q23
3 nm PLL, THM, Process Monitor	Test chip tape-out to be completed in 3Q22	Silicon validation to be completed in 2Q23
7nm high-speed analog front-end IP supporting 5G mmWave and sub-6G	Test chip tape-out to be completed in 3Q22	Silicon validation to be completed in 1Q23
5 nm die-to-die interconnect IP "GLink2.3" PHY	Test chip tape-out completed	Silicon validation to be completed in 3Q22
3 nm die-to-die interconnect IP "GLink2.3" PHY	Test chip tape-out to be completed in 3Q22	Silicon validation to be completed in 2Q23
5 nm die-to-die interconnect IP "GLink-3D" PHY	Test chip tape-out completed	Silicon validation to be completed in 2Q22
6 nm die-to-die interconnect IP "GLink-3D" PHY	Test chip tape-out completed	Silicon validation to be completed in 2Q22
3 nm design process	Ver. 0.5 of N3 implementation process and test chip tape-out completed	Test chip tape-out completed in 4Q21

5.3 Risk Management

5.3.1 Risk Management Framework

GUC has established an Audit Committee, a Compensation Committee and an Operations Management Committee, and has formulated its "Risk Management Policy". Each management unit will evaluate and review risk matters on a regular basis, and the General Manager will collect and organize major risk matters and report to the Board of Directors regularly. In the operations of management, possible risks will be prevented and controlled and relevant warning measures will be established. The details of our risk management implementation are as follows:

Risk Management Related Units

Audit Committee

The main power and responsibility of the Audit Committee is to implement the management and control of the risks the Company faces. The Committee is composed of 5 independent directors elected at regular shareholders' meeting, and they meet at least once each quarter with the tasks of fairly presenting the financial statements of the Company, appointing certified accountants, overseeing their independency and performance, effectively implementing the Company's internal control, complying with relevant acts and rules, and controlling and managing the existing and potential risks the Company may encounter.

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Compensation Committee

The Compensation Committee is in charge of the evaluation and review of the executive management team's compensation and the ratio of profit set aside as employee compensation. The Committee has established the schedule of the "Percentage of the Total Compensation of Directors, General Manager and Deputy General Manager in After Tax Net Profit of the Individual Financial Report". Please refer to page 37 of the Company's "2021 Annual Report". The Committee evaluates and reviews the salaries and compensation of the management team based on their ability, contribution to the Company, and performance of each individual and verifies if it's reasonable, so as to ensure that the overall compensation system is able to balance the rights and interests of all stakeholders and effectively attract and retain the talents.

Operation Management Committee

The meeting takes place regularly once a week and its main task is to review the implementation of the Company's business strategies and the achievement of the Company's business objectives. The meetings are presided over by the General Manager, and the business unit and production management unit will compile the information and report it to the General Manager.

The Committee is also in charge of evaluation and providing countermeasures for potential risks that are significant enough to affect the operation plan of the Company, and the report will be given to the Board of Directors by the Chairman of the Committee after the completion of information compilation.

5.3.2 Various Risk Management Reports

Establishing Various Risk Management Measures

In order to create a risk management mechanism between affiliated companies, we have established the "Risk Management Policy", the "Operation Measures for Supervision of Subsidiaries", the "Internal Control System Statement", and the "Regulations Governing Transactions between Related Enterprises, Specific Companies and Related Parties". We have also formulated the "Procedures for Honest Operation and Code of Ethics" to prohibit internal personnel from using undisclosed information in the market to buy or sell securities.

5.3.3 Epidemic Prevention Measures for COVID-19

The financial markets worldwide have responded severely to the raging large-scale, global epidemic of COVID-19 since the spring of 2020, and its impact on the global economy has begun to appear. In order to strengthen employees' responding ability to COVID-19 emergency, we have made plans on prevention measures, epidemic prevention and responding manpower's responsibilities. We have also determined the correct handling procedures to ensure the safety of personnel and equipment and the minimization of disaster losses.

We immediately initiated the prevention actions when the epidemic started, and we instantly purchased a non-contact infrared body temperature measurement device and placed it in the lobby for visitors to take their temperatures, thereby preventing front desk staff from directly contacting visitors, and reducing the risk of infection.

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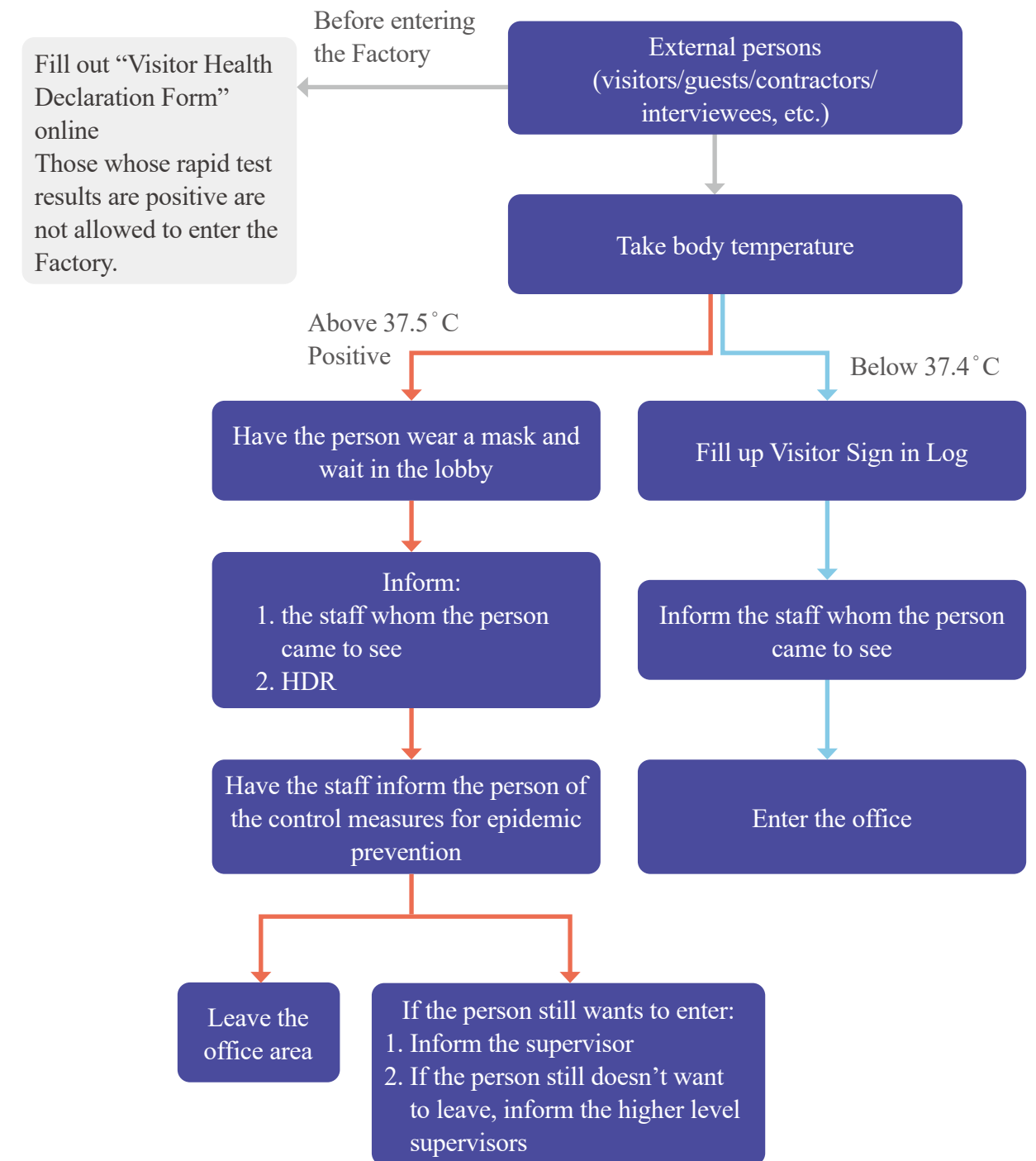


▼ Measures and Risk Management in Response to the 2021 Coronavirus Disease (COVID-19)

Scenario	Measures	Responding Units
Epidemic Prevention Stage	<ul style="list-style-type: none"> • Implementing personal and workplace health management • Each floor is equipped with forehead thermometers for employees to take their temperatures. • Employees' going online on their own for body temperature recording 	Epidemic Prevention Stage Unit – Decision Making Group on the Epidemic
Severe Epidemic Response Stage	<ul style="list-style-type: none"> • Employees' health monitoring and management • Cooperating with the CDC to promote travel alerts • Guests/visitors are required to fill out Health/Travel Declaration Forms and wear masks. • Disinfecting environment regularly with disinfectant water made at a concentration of 1% • Communicating regularly with all the employees on epidemic prevention plans and the latest epidemic information • Promoting ideas and knowledge in relation to epidemic prevention, such as following the etiquette of coughing and practicing hand hygiene • Providing epidemic prevention items, such as alcohol hand sanitizer and mask 	Severe Epidemic Response Stage Unit – Emergency Response Unit

⚙️ **Control measures for external persons, such as visitors, guests, contractors, and interviewees**

1. External persons (visitors, guests, contractors, interviewees, etc.) who come into the building from the lobby/1st floor are required to have a rapid COVID-19 test, take their temperature, and fill out a Visitor Health Declaration Form. Those who do not meet the requirements will not be allowed to enter the office area. The procedure of process is shown in the figure on the right (the procedure of process will be adjusted on a rolling basis according to the epidemic level announced by the CDC):



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2. The Customer Service Department will make a roster and inform the HR of the customers who are stationed in the Factory on a weekly or daily (if there is any change) basis:
 - Customers who made a single trip will be led to the 1st floor to have their body temperature taken and recorded by a non-contact infrared body temperature measurement device.
 - For customers who hold long-term passes, HR will coordinate with the responsible person of the related floor to take and record their temperatures based on the roster made and the availability of conference rooms.
3. In case the external person (hereinafter referred to as “such person”) has symptoms similar to the aforementioned COVID-19 symptoms, it shall be handled in accordance with the following procedures:
 - Ask the person to wear a mask and wait in the lobby; inform the staff whom such person came to see, and have the staff inform the person of the control measures for epidemic prevention, and advise the person to leave, that he/she is not allowed to enter the building; if the person insists on entering the building, will inform the supervisor of the staff whom the person came to see; if the person still doesn't want to leave, will inform the higher level supervisors.
4. Measures for contractors who are stationed in the Factory to take their body temperatures on their own:
 - Contractors who are stationed in the Factory are required to go to the Front Counter to take and record their body temperatures. If their body temperatures are higher than 37.5°C or they have the aforementioned COVID-19 symptoms, they shall not enter the Company's building. Contractors that hold long-term passes but are not stationed in the Factory shall be informed by the contact window of taking their body temperatures at the Front Counter when entering the Factory, and if their body temperatures are higher than 37.5°C or they have the aforementioned COVID-19 symptoms, they shall not enter the Company's building.

Supply of epidemic prevention materials

In order to reduce the risk of infection for employees and prevent the transmission chain from forming at workplace, sufficient materials for epidemic prevention are provided. Each floor is equipped with a hand sanitizer machine and body temperature measurement instrument (forehead/ear thermometers) so that the staff may disinfect their hands and know their current body temperatures at any time. The epidemic prevention materials such as protective clothing set, protective masks and at-home COVID-19 test kits are also available for employees to use when necessary. We are constantly making sure that the quantity of medical grade masks in stock in the Company is sufficient for the use of emergency and other epidemic prevention materials in stock are sufficient for employees to use for 6 months when needed.

Three-stage epidemic prevention measures for employees' cafeteria

Stage 1 of epidemic prevention control measures for the cafeteria

▼ Post signs at all entrances to the cafeteria



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Stage 2 of epidemic prevention control measures for the cafeteria

- ▼ Raise epidemic prevention level. External persons are prohibited to enter the cafeteria for meals.



Stage 3 of epidemic prevention control measures for the cafeteria

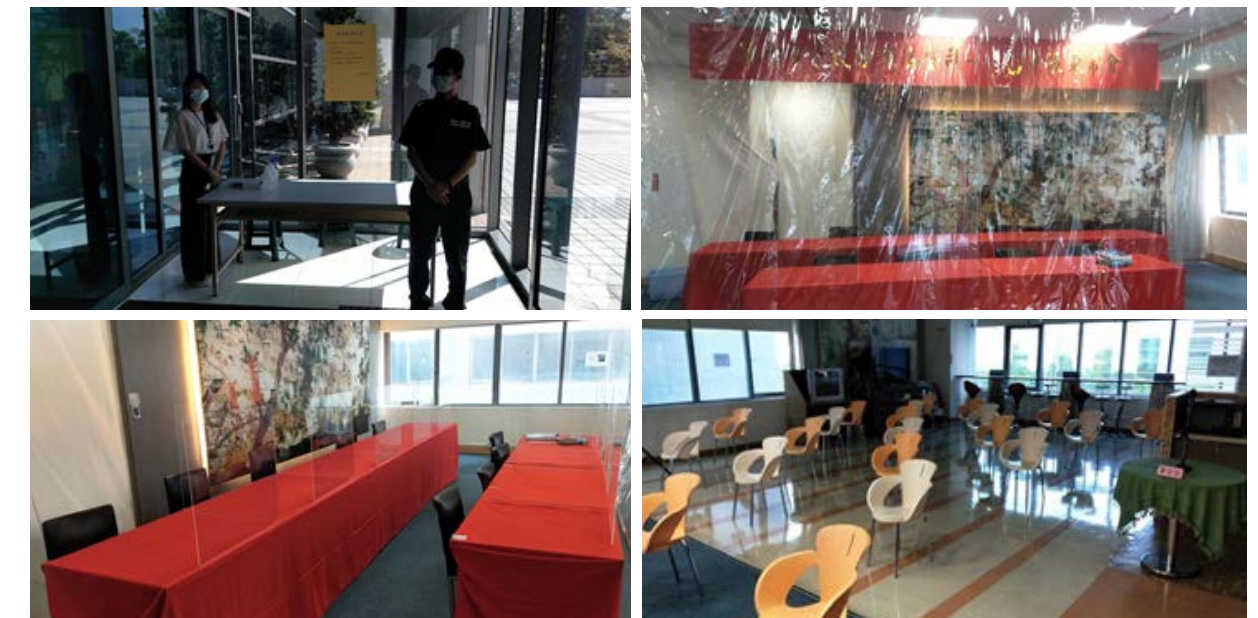
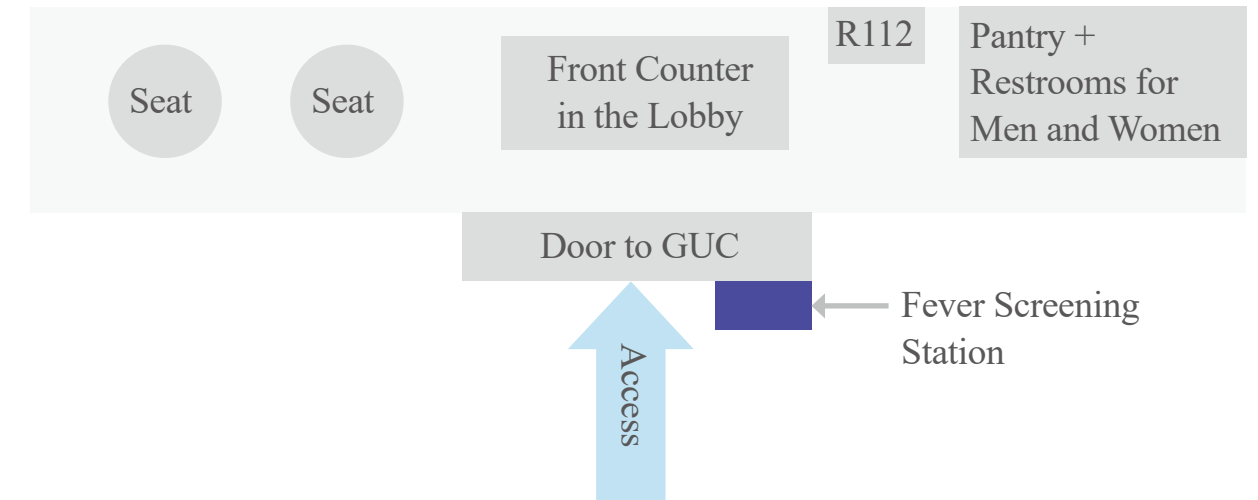
- ▼ Raise epidemic prevention level again. Dining in the cafeteria is prohibited, and take-out is provided instead.



Epidemic prevention control measures for the cafeteria will be adjusted on a rolling basis according to the epidemic level announced by the CDC.

⚙️ Epidemic prevention mechanism for shareholders meetings

Since shareholders meetings are held indoors, to comply with relevant regulations on epidemic prevention, fever screening stations will be set up outside the 1st floor, and the distance between seats in the venue will be increased.



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5.3.4 Social Risk Assessment (Anti-Corruption)

The Company is dedicated to observing government laws and specifications, as well as corporate ethics and protocols. We uphold the highest standards of transparency, integrity, and accountability, while actively fulfilling our corporate social obligations and conducting business with integrity.

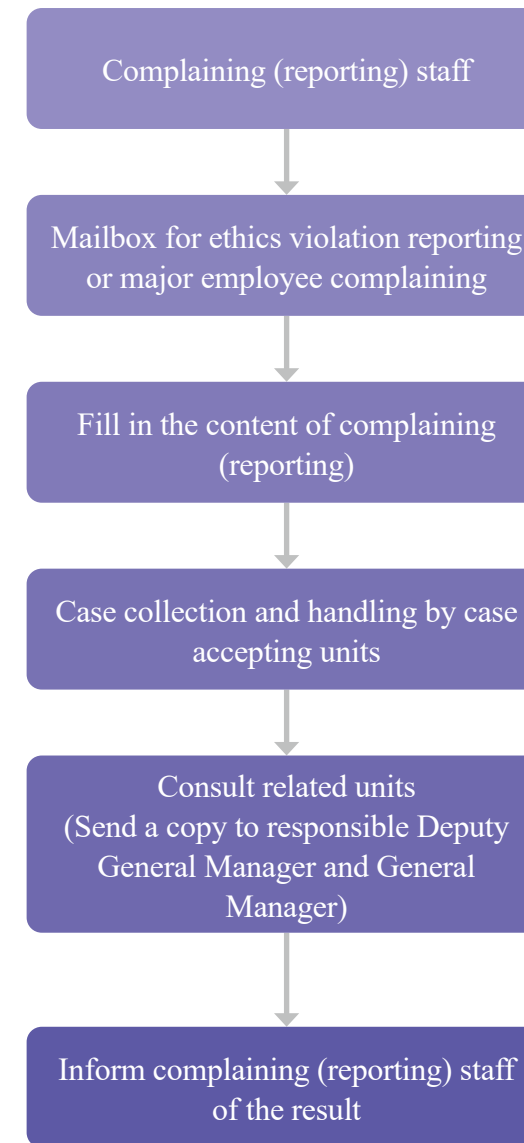
Thus, we hereby formulate the “Procedures for Honest Operation and Code of Ethics” and the “Policy for Reporting and Complaining and Procedures of Reporting”.

The establishment of the policy/procedures of complaint was to effectively manage the internal and external reporting/complaining channels on business ethics, ensure the implementation of the aforementioned honest operation commitment of the Company, and protect the legal rights and interests of reporting/complaining persons. We also actively set up the confidential channels for customers, shareholders, government agencies, society, suppliers, employees of the Company, and other stakeholders (such as business partners, suppliers, and the public) to report or complain about fraudulent or unethical behaviors (such as corruption and bribery), as well as the actual or potential violations of laws or policies of the Company. For this channel of complaint, there will be a contact person designated by the Investigation Committee to reply regularly to the complainant regarding the progress of the case, and there will be meetings convened by senior executives to follow up and control the progress of the investigation regularly.

The Company will conduct education and training courses in relation to the honest operation for managerial personnel and other employees at least once a year. The courses conducted will be in the form of E-learning and the participants will be given a test after the class. Newly hired employees will be trained and advised of such information during job orientation. Therefore, the participation rates for new staff and old staff are both 100%.

⚙️ Procedures of Complaining (Reporting)

Complaints (reports) from the staff of the Company:



Complaints (reports) from external stakeholders:



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The company is dedicated to observing government laws and specifications, as well as corporate ethics and protocols. We uphold the highest standards of transparency, integrity, and accountability, while actively fulfilling our corporate social obligations and conducting business with integrity. Thus, we hereby formulate the “Procedures for Honest Operation and Code of Ethics” and the “Procedures for Reporting and Complaining”, and actively set up the confidential channels for customers, shareholders, government agencies, society, institutions for academic research, suppliers, employees of the Company, and other stakeholders (such as business partners, suppliers, and the public) to report or complain about law violation matters (such as fraud), unethical behaviors (such as corruption and bribery), or actual or potential violations of laws or policies of the Company.

The establishment of the policy/procedures of complaint was to manage effectively the internal and external reporting/complaining channels of the Company, ensure the implementation of the aforementioned honest operation commitment of the Company, and protect the legal rights and interests of reporting/complaining persons. Due to the reporting channels functioning properly, we occasionally receive various reports. Please refer to the following table for data related to the investigation of reports received from 2019 to 2021:

▼ Reporting Channels for Procedures for Honest Operations & Code of Ethics

		2019	2020	2021
Mailbox of Independent Directors (Audit Committee)		1 case	1 case	0
Major Employee Complaint/ Reporting (non-categorized)		0	2 cases	2 cases (Note 1)
Code of Ethics Reporting System	Sexual Harassment	1 case	0	0
	Wrongful Infringement Complaint	0	0	0
	Procedures for Protection and Control of Confidential Information	0	0	0
Case established after investigation		1 case	2 cases	2 cases (Note 2)

Note 1: One of the employees has been reported twice for the same behavior, and since the reports didn't come from the official complaining channels, and the complaints have nothing to do with major violation of honest operation and code of ethics, these two cases are not included.

Note 2: There were two major employee complaints in total. One of them was to report an employee who lent his/her employee identification card to other people for meals. This employee has been given an oral warning, and we have also strengthened the publication internally about the methods and principles in using employee identification cards. The other complaint involves three matters, which are violation to the procedures for the control of confidential information, wrongful workplace infringement, and performance review dispute. After the investigation of the Management of the Company's Ombudsman and handling unit, it was determined that it doesn't constitute a violation to the procedures for the control of confidential information or a wrongful workplace infringement. As for performance review, it has been adjusted appropriately after the discussion in the meeting of Audit Committee and resolution of the Board of Directors.

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5.3.5 Information Security Management

I. Governance Systems, Objectives, and Strategies for Information Security

Setting the creation of a rigorous and effective network for defense in information security as its vision for information security, and gradually improving its capabilities in all-around protection with consistency of governance for information security as the foundation, GUC expects to become an enterprise with outstanding performance in maturity of governance in information security. The Information Security Department compiles information security rules and compliance, and promotes the implementation of relevant operations, so as to continuously improve the awareness and professional ability for information security. Through the use of technology, the risks and weakness in information security are identified and effectively strengthened to constitute a sound governance rule and comprehensive capability for protecting information security and cultivate good awareness for information security among colleagues at the same time.

II. Implementation of Policies for Information Security

1. Establishing norms for information security management that comply with regulations and customer needs
2. Achieving consensus on full implementation of protection for information security through recognition by all employees
3. Protecting the confidentiality, integrity, availability and legal compliance of the information of the company and the customers

III. Organizations for Information Security

1. Committee for Information Security

The “Information Security Committee” is responsible for carrying out planning for managing security of the information-based operations, setting up, and maintaining the information security management system. The chief of information security supervises on execution of the Company’s operations for information security and the effectiveness of risk management mechanism for information security. He/she regularly reports to the board of directors on the effectiveness of the implementation of the operations and rules regarding the overall organization for management of information security, and is the highest level of supervisor responsible for information security. An “Information Security Representative Meeting” is held annually to review the plan for developing information security, results of implementation, and to announce relevant policies on information security and key points on the implementation. The items for resolution from the annual meeting in 2021 are to ensure the implementation of the ISMS management system, improve the corrective measures related to internal audits, and have colleagues cooperate with pre-assessment of external audits as well as the annual information security work items.

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2. Committee for Proprietary Information Protection (PIP)
 PIP Committee: Composed of representatives designated by the heads of departments, and responsible for discussion, setup, audit and promotion of operations for control on confidential information throughout the Company. Protecting confidential information is the commitment of GUC to its customers, shareholders, and colleagues of the Company. GUC understands the Company’s current and future competitive advantages in protecting confidential information, formulates the Policy for Proprietary Information Protection (PIP) that specifies the management procedures and specifications for the protection of the Company’s confidential information, and properly controls the Company’s business secrets and related GUC confidential information that has not been disclosed publicly, to ensure the best interests of the Company, its shareholders, employees, customers, and suppliers. GUC’s protection of confidential information is the management cycle based on Plan-Do-Check-Act (PDCA), which continuously strengthens the ability to protect confidential information and enhances correct concepts and alertness of personnel on the protection of confidential information, reducing the risk of leakage of confidential information.

- 2.1 Audits are conducted on a quarterly basis, and the audit team reports the results of the audits in PIP meetings to ensure that the Company’s measures to protect confidential information are implemented.
- 2.2 Promote the concept and observance of confidential information through daily work and various occasions.
- 2.3 The education and training of employees are carried out to improve the awareness and ability of information security for employees. In addition to having the content regarding the control of confidential information included in the mandatory training course for new entrants, all employees must undergo retraining every year in order to continuously strengthen and raise their awareness of information security.

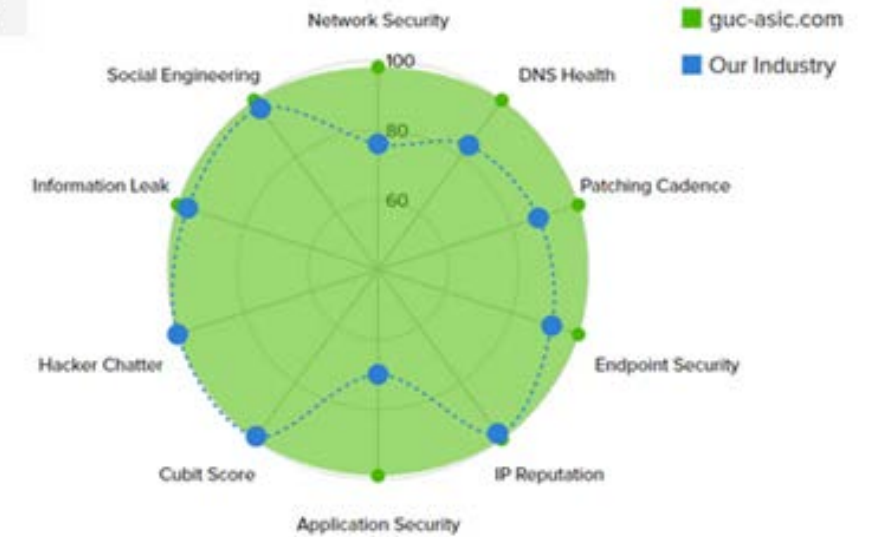
IV. Measures to Respond to the Framework for Managing Information Security Risk

- 1. Strengthening the assessment of ability and maturity for defense in information security:
 Regularly test and strengthen information security systems and continue to carry out exercises for response in the continuity of the operations. Establish a response plan for cyber security incidents and take corresponding notification and recovery actions. At the same time, risk analysis is carried out via objective results and threat information verified by third-parties, and the advanced enhancement for the information security management system is carried out.

SECURITY POSTURE SUMMARY FOR GLOBAL UNICHIP CORP

PREPARED ON JUN 17, 2021

OUR CURRENT SECURITY SCORE



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The frequency of external vulnerability scans has been increased from once a month to once a week currently, and once a high-risk vulnerability is identified, the fix can be completed within one week, with results shown in the following table.

▼ Number of instances found according to statistics from vulnerability scan in 2021

	W141	W144	W149	W150
Headquarters	2	-	1	1
Branch Office	-	1	1	1

2. Refining the procedures for management of information security:
GUC acquired certification for compliance with the ISO 27001 International Standard for Information Security in 2021 and is continuing to improve through annual reviews.



3. Risk Management

Through the annual risk assessment, the main items identified from each combination of possible threat and vulnerability include:

- 3.1 Fraudulent groups using fake emails to trick companies into sending or trading money to employees.
- 3.2 Business espionage or competitors using hacker technology to continuously infiltrate internal hosts and steal internal information from corporations.
- 3.3 Criminal groups collaborating with hackers to disseminate maliciously linked content via email, text, social software, and communication software, resulting in the victim computer data being kidnapped with encryptions and thereby demanding high amounts of ransom payments.
- 3.4 Hackers using the Internet to launch a large amount of connection requests to disrupt normal operation of the Company's network.
- 3.5 Internal employees using illegal software or copy sensitive company information to portable storage devices, resulting in data leakage due to loss, theft, or sale.
- 3.6 Catastrophic events causing damage to the information software or hardware which result in disruption of service or loss of data.
- 3.7 Although not currently insured, in the absence of insured investment security insurance, in the case of the above risk items, the following key measures shall be taken under the management mechanism of information security by applying the guidelines for information security management, introducing scientific and technological solutions, and enhancing education and training on information security.
 - 3.7.1 Regularly carry out internal and external audits, with ISO 27001:2013 certification for Q4 of 2021 passed and maintained, and improve the operation of the information security management system.
 - 3.7.2 Continuously carry out simulated exercises of social engineering attacks and provide education and training on information security to enhance employees' awareness of mail protection. The number of attachments opened for fishing mail in 2021 was 261, with an opening rate of 31.8%. After the education training, the number of attachments opened in 2022 dropped to 71, with the opening rate dropped to 8.7%.

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- 3.7.3 The client installed an anti-virus and EDR (Endpoint Detection and Response) endpoint protection system that provides real-time anomaly detection and alerting, forensic analysis, and endpoint repairing. Simultaneously block both connections for USB storage device and permissions for self-installed software. Also provide a server for backup files to back up important information.
- 3.7.4 For network layers, combine firewalls, and control network traffic and applications. Develop a mechanism for the management of security monitoring for protection of intranet and access of database.
- 3.7.5 Protect the confidentiality of documents through the DRM (Digital Right Management) management system for sensitive documents and disk encryption technology.
- 3.7.6 Use mail filtering and mail audit systems and anti-APT to reduce the risk of e-mail use.
- 3.7.7 Introduce fingerprint recognition system and swipe card system for management at the gate to achieve the physical security requirements for two-factor authentication.
- 3.7.8 Centralized management of the mainframe, establishment of environmental control for service rooms and mechanism for alerting, regular data backup, and annual disaster backup drills.

4. Education and Training

The Information Security Department also conducts quarterly information security education and training for all colleagues. The subjects advocated are planned according to the current internal and external threats. The themes for each quarter in 2021 are as follows:

Quarterly	Subject
First Quarter	Identifying malicious websites
Second Quarter	Malware prevention, information security for working from home
Third quarter	Techniques and prevention of social engineering attack & testing in phishing for social engineering
Fourth Quarter	Regulations regarding protection of confidential information in emails

V. Resources Invested in Information Security

Continue to invest resources in the fields related to information security. In 2021, the amount of investment increased by 190% compared to 2020. Matters of resource investment include: perfecting the infrastructure in governance and technical aspects, strengthening the equipment for information security defense, monitoring and analysis on the information, drills and education training on incident response, etc., to comprehensively improve capabilities in information security.

VI. Information Security Incidents

For reporting and handling information security incidents, clearly define the process for reporting and handling of the information security matters, and the information security incidents notified by the IT unit to the contact window for recording and classification into levels. In the case of major information security incidents, the risk management team will be notified, and the IT unit needs to remove and resolve the information security incidents within the target processing time. After completing the handling of the incident, conduct root cause analysis and take corrective measures to prevent recurrence of the incident.

So far in 2021, the Company has not suffered any losses due to major incidents in information security.

Performance of management on education and training for information security

1. New colleague information:

Every new employee of the company is required to undergo education and training related to the protection of confidential information. Trainings related to protection of confidential information were held for 152 new employees in 2021, with content including a total of 167 hours of learning from online courses on procedures for control and verification of confidential information, protection of information, access control and document security, and protection of trade secret. Course files are also placed on the internal education and training platform for reference by colleagues.

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2. Information on all current colleagues working in Taiwan including new employees:

At least once a year, the Company conducts education training related to the protection of confidential information for all employees; for new employees, the session is held during their training period. Education training related to the protection of confidential information were held for 779 current employees in 2021, with content including a total of 293 hours of learning from online courses on the procedures for control and verification of confidential information, the protection of information, access control and document security, and the protection of trade secret. Course files are also placed on the internal education and training platform for reference by colleagues.

5.3.6 Management on Rights to Intellectual Property

The Company adopts a strategy that combines key objectives for operations development with the protection of intellectual property rights. For silicon intellectual property (SIP) specifically developed, such as CoWoS, HBM and G-Link, the patent engineers shall regularly review the research and development, design process, and results with relevant researchers to assess the feasibility of patent applications, actively apply for patents for individual cases with value for patent arrangement, and continuously track the progress of relevant proposals. In the recent two years, the Company has been continuously arranging for patents on specifically developed SIPs, which serves as a means for achieving the objective of “SIP Project / IC Product for Patent Protection” in addition to strengthening the Company’s competitive advantage in certain areas and implementing “Patenting of SIP Project / IC Product”. The management of relation between patented intellectual property and SIP, such as the operation of inventory checking on patented technologies, may also serve as a technical differentiation between the Company’s SIP and that of the competitors and as a basis for assessing the value of the patented intellectual property. As of December 31, 2021, the number of patents

received by the company in Taiwan, China, and the US in the last five years was 240, and the total number of patents under review in the aforementioned countries was 130. The head of the legal department reports to the Board of Directors at least once a year on the implementation of the plan for managing the intelligent property.

In addition, since 2000, the Company has promoted the plan for management related to intelligent property rights, with the main status on implementation shown as follows:

The “Procedure for Application of Patent Proposal” was formulated in 2000. The twenty-first revision was released on December 1, 2021.

The “Procedures for Control of Confidential Information” was formulated in 2003. The tenth revision was released on May 26, 2021.

The “Measures for Management on Trademark Application” was formulated in 2008. The third revision was released on May 23, 2012.

The “Policy for Protection of Confidential Information” was formulated in 2012.

The patent proposal system was activated in 2015 to effectively improve the overall efficiency of patent-related operations for control of various phases of patent-related matters, such as proposal management, application management, bonus management, and firm management, while effective recording complete internal technology and results of patent development for patent procedures from proposal to patent application.

The “Measures for the Management of Intellectual Property Rights” was formulated in 2016.

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5.3.7 Climate Change Responses



Environmental Risk Management, Emergency Response and Continuous Operation Plan

In consideration of Taiwan’s location in the seismic belt, we conduct post-earthquake reviews and exercises to strengthen building inspections after earthquakes while shifting risks to a third party with insurance plans. The Company conducts annual firefighting training to educate our employees on how to correctly operate portable fire extinguishers and fire hydrants/extinguishers (including hose), as well as drills on personnel evacuation. In addition, we formulate improvement strategies based on risk assessments and conduct regular exercises/drills to evaluate potential effects on plant operations. We seek to mitigate the uncertainties in our business operations and ensure corporate sustainability through comprehensive risk management and crisis response, which includes developing preventative measures, crisis communication mechanisms, and manpower backup plans.

Risks and opportunities associated with climate change

GUC strives to collect information pertaining to decision-making and forward-looking financial planning in order to address the risks and opportunities associated with low-carbon economy adaptation. Based on the Task Force on Climate Related Financial Disclosures (TCFD), the Company developed consistent initiatives for voluntary climate-related financial disclosures to help identify material organizational risks and effectively assess climate-related risks and opportunities.

TCFD Core Components

Core Components	GUC Climate Change Response
 Governance	The GUS ESG Committee is responsible for addressing climate change concerns and assessing their potential internal and external impacts on the Company. The Committee identifies and evaluates climate change risks and develops response measures to prevent climate impacts. The ESG Committee’s responsible officers submit an annual report to the Sustainable Development Committee on the year’s ESG performances and the next year’s climate change adaptation targets. The Executive Secretary of the Sustainable Development Committee will thereafter provide the Board of Directors with a report on the responses to climate change risks. The Board evaluates the report and gives instructions.
 Strategy	Starting with the project framework, GUC’s low power consumption design and R&D services aim to develop energy-saving and eco-friendly solutions, while improving the quality of AI-integrated products to satisfy the requirements of new living, working, and learning modes and provide our customers with more user-friendly and energy-efficient applications. GUC strives to steadily accomplish our short, medium, and long-term climate change adaptation targets through attaining excellence, supporting effective management and system-building, and collaborating with society and industry on environmental issues. The short-term is defined as within 3 years, the medium-term as within 10 years, and the long-term as 10 years or longer. GUC’s climate change policy provides the top guidelines for the Company’s climate change response.

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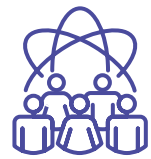
Core Components

GUC Climate Change Response



Risk Management

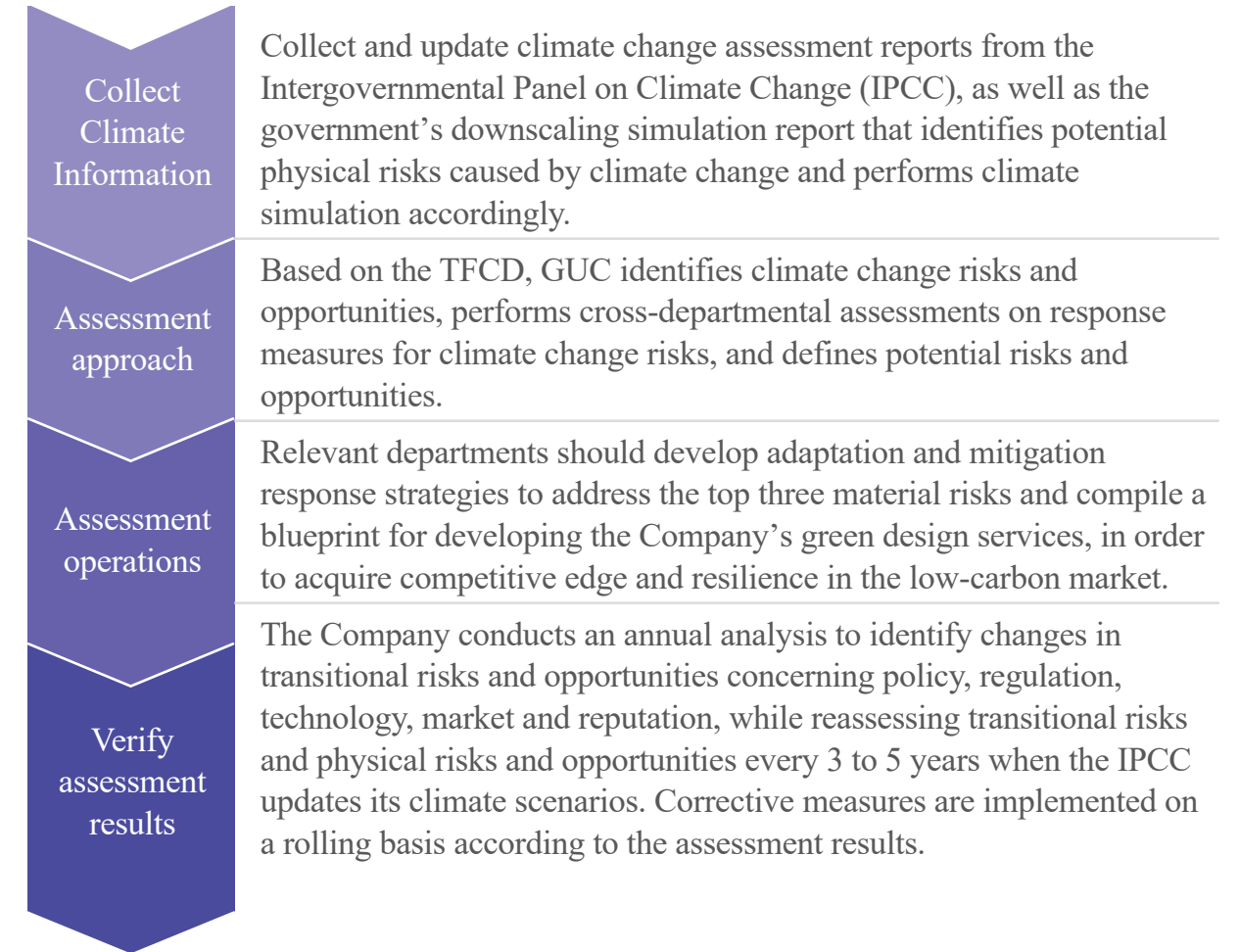
To evaluate whether products and services related to our continuous operations will cause material risks impacting the environment, GUC created the “task force on “climate change risk and opportunity assessment”” attended by related departments to perform periodic organizational risk assessments and make policies and targets based on the assessment results. The adaptation and mitigation coping measures developed based on the top three material risks, and the overall assessment results are submitted to the Sustainable Development Committee.



Metrics and Targets

To mitigate environmental impacts, GUC proactively increases energy and resource consumption efficiency for the Company and our customers. We formulated medium and long-term climate change plans that include the goals of waste reduction and water conservation, and the plan for carbon reduction, and completed the GHG inventory in accordance with the GHG Protocol and the ISO 14064-1 standards with third party verification. We set a 1% annual carbon reduction target based on the benchmark year, 2021. Furthermore, we applied a step-by-step approach in 2021 for developing energy conservation strategies and actions, while integrating the targets of reducing GHG emissions, water use, and electricity consumption by 2025 into our future KPI planning.

▼ Climate change risk assessment procedures



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1. Collect climate information:
Collect and update climate change assessment reports from the Intergovernmental Panel on Climate Change (IPCC), as well as the government’s downscaling simulation report that identifies potential physical risks caused by climate change and performs climate simulation accordingly.
2. Assessment approach:
Based on the TFCDD, GUC identifies climate change risks and opportunities, performs cross-departmental assessments on response measures for climate change risks, and defines potential risks and opportunities.
3. Assessment operations:
Relevant departments should develop adaptation and mitigation response strategies to address the top three material risks and compile a blueprint for developing the Company’s green design services, in order to acquire competitive edge and resilience in the low-carbon market.
4. Verify assessment results:
The Sustainable Development Committee discusses to confirm the assessment results before submitting them to the Board of Directors.
5. Improvement and Tracking:
The Company conducts an annual analysis to identify changes in transitional risks and opportunities concerning policy, regulation, technology, market and reputation, while reassessing transitional risks and physical risks and opportunities every 3 to 5 years when the IPCC updates its climate scenarios. Corrective measures are implemented on a rolling basis according to the assessment results.

▼ Climate-related Risk and Opportunity Matrix



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Financial Impact of Climate-Related Risks and Response Measures

Risk	Potential Financial Impacts	Response measures in 2021
Transition Risk	<p>Policy and regulation risk</p> <ol style="list-style-type: none"> ① The imposition of carbon fee/carbon tax increases operational cost ② Customers' demand for green energy drives up R&D costs for new technology. ③ The operational costs increase as a result of increased costs for compliance, raw materials and parts. ④ Policy changes cause existing assets' write-offs and premature scrapping, as well as revenue losses. ⑤ Revenue reduction caused by increased cost and decreased product/service demand due to fines and penalty rulings. 	<ul style="list-style-type: none"> • Build solar power facilities • ISO 14064-1 GHG emissions verification • Proactive participation in green industries such as solar energy and autonomous vehicle. • Compared to 3G/4G, 5G wireless communication services provide transmission efficiency at least ten times better and can support a wide range of application scenarios. • Satisfy emerging application needs: Low latency and high bandwidth transmission requirement for AI, AR/VR and 8K images and V2X. • GUC continues to work on advanced process design platforms and 2.5D and 3D packaging technologies, while meeting the needs of high performance, low latency, and power efficiency. • Use of green energy and low-pollution energy sources and machinery, including solar panels and heat pump. • In 2021, 24 energy-saving projects were implemented to save up to 186,246 kWh of electricity.
	<p>Technology risk</p> <ol style="list-style-type: none"> ① Capital investment in technological development and expenditure in researching and developing new and alternative technologies. ② Cost increases due to failed technological development. ③ Costs of adopting/establishing new practices and processes. 	<ul style="list-style-type: none"> • Continue to improve the existing matured process design to realize the technology; GUC has successfully provided two international solar energy customers with design and mass manufacturing services. • To be prepared for future growth, GUC will continue to invest its R&D resources to optimize 7nm and 5 nm design processes, and develop high-speed interface SerDes, PCIe, LPDDR/DDR Controller & PHY, HBM Controller & PHY, TCAM, and High speed ADC technologies.

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	Risk	Potential Financial Impacts	Response measures in 2021
Physical risk	Market risk	<ol style="list-style-type: none"> ① Declining demand for products and services ② Possible cost loss caused by market uncertainty 	<ul style="list-style-type: none"> • Strengthen products' green competitiveness through sustainability design with a focus on energy efficiency, recyclability, and reduction of hazardous substances. • Continue to develop N5/3 (5/3 nm) process and encourage our customers to adopt the N5/3 process that is more power efficient, thereby reducing overall energy consumption.
	Reputation risk	<ol style="list-style-type: none"> ① Customers may procure products from our opponents if we fail to develop energy-efficient technologies or measures, which may lead to the Company's revenue loss. 	<ul style="list-style-type: none"> • The total amount invested in energy conservation projects in 2021 was NT\$ 4.03 million.
實體風險	Acute risk	<ol style="list-style-type: none"> ① Daily rationing of tap water supply ② Decreased revenue due to lower production capacity (e.g., production line suspension, transportation challenges, and supply chain disruption) ③ Compromised workforce (e.g., health, safety, and absenteeism) causes revenue decrease and cost increase 	<ul style="list-style-type: none"> • Voluntary Water Conservation • In 2021, water consumption reduced by 523 cubic meters and water use intensity by 0.016% as compared to 2020.
	Chronic risk	<ol style="list-style-type: none"> ① Unstable room temperatures affect instrument and equipment service life, causing existing assets' write-offs and premature scrapping and increasing infrastructure costs. 	<ul style="list-style-type: none"> • Monitor energy usage status, obtain ISO 14064-1 verification statement, and implement energy management with a plan. • Enforce air conditioning energy saving measures and reduce temperatures in the buildings.

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Climate-related Impacts on Opportunities and Finance and Response Measures

Type	Potential Financial Impacts	Response measures in 2021
<p>Resource Efficiency</p>	<ul style="list-style-type: none"> Reduce operation costs (e.g., cost reduction by acquisition of solar energy or by recycling and reuse). Increase the value of fixed assets (e.g., high-efficiency green buildings). Implement workforce management and planning that benefit employees (e.g., enhancing health, safety, and employee satisfaction) to reduce labor costs 	<ul style="list-style-type: none"> Adopt waste reduction strategy, continue to reduce waste generation from the source through sorting and reduction campaigns, and prioritize our reuse practice to increase resource recycling efficiency Proactively promote energy performance management such as energy-saving solutions for lighting and air-conditioning equipment in buildings
<p>Source of Energy</p>	<ul style="list-style-type: none"> Reduce operational costs (e.g., using solar energy to reduce energy costs) 	<ul style="list-style-type: none"> Continue the use of green energy, including solar panels, heat pump, and other low pollution energy and machinery Implement energy saving solutions and measures, such as improving the efficiency of lighting and air conditioning to create a low carbon lifestyle Obtain green certificates
<p>Products and Services</p>	<ul style="list-style-type: none"> Increase revenue through designs of low carbon products and services Satisfy customers' needs for climate adaptation and increase revenue through new solutions 	<ul style="list-style-type: none"> Proactive participation in green industries, such as solar energy and autonomous vehicles Develop the technologies related to AI, HPC, and logic self-test to provide design services to electronic autonomous vehicle industry

Type	Potential Financial Impacts	Response measures in 2021
<p>Market</p>	<ul style="list-style-type: none"> Increase revenue by expanding into new and emerging markets (e.g., working with governmental and public agencies, or hospitals) 	<ul style="list-style-type: none"> Invest in key manufacturers designated by the government Proactive participate in 5G application market. 5G wireless service provides transmission efficiency at least ten times faster than existing 3G/4G Proactively participate in AI application market. Customize AI ASIC designs based on specific customer requirements to provide higher efficiency performance than ASSP. Satisfy the needs of various emerging applications that require low latency and wide bandwidth transmissions, such as AI, AR/VR and 8K images, and V2X.
<p>Resilience</p>	<ul style="list-style-type: none"> Increase market valuation through resilience planning (e.g., infrastructure, lands, and buildings) 	<ul style="list-style-type: none"> Plan the installation of a solar power generating system to reduce the risk of power shortages and enhance resilience for the Company in the face of climate change.

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6.1 GRI Standards Cross-reference Table

GRI Standards No.	Disclosure items	Disclosure item No.	Titles of Disclosure item	Chapter
GRI 102				
GRI 102: 2016	Organizational Profile	102-1	Name of the Organization	About the Report About GUC
GRI 102: 2016	Organizational Profile	102-2	Activities, brands, products, and services	About GUC
GRI 102: 2016	Organizational Profile	102-3	Location of Headquarters	About GUC
GRI 102: 2016	Organizational Profile	102-4	Location of operations	About the Report About GUC
GRI 102: 2016	Organizational Profile	102-5	Ownership and legal form	About GUC
GRI 102: 2016	Organizational Profile	102-6	Markets served	About GUC
GRI 102: 2016	Organizational Profile	102-7	Organizational Size	Human Resources Structure 2021 General Employee Statistics Report Scope and Boundaries Major Financial Performance
GRI 102: 2016	Organizational Profile	102-8	Information on employees and other workers	2021 General Employee Statistics
GRI 102: 2016	Organizational Profile	102-9	Supply chain	Supply Chain Management
GRI 102: 2016	Organizational Profile	102-10	Material changes to the organization and its supply chain	Report Scope and Boundaries
GRI 102: 2016	Organizational Profile	102-11	Early warning principles or guidelines	Risk management
GRI 102: 2016	Organizational Profile	102-12	External initiatives	External Initiatives and verifications



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GRI Standards No.	Disclosure items	Disclosure item No.	Titles of Disclosure item	Chapter
GRI 102: 2016	Organizational Profile	102-13	Membership of associations and unions	Participation of Union Organizations and Membership
GRI 102: 2016	Strategy	102-14	Statement from senior decision maker	A Message from the Executive Secretary of ESG Sustainability Committee
GRI 102: 2016	Strategy	102-15	Key impacts, risks and opportunities	Risk management
GRI 102: 2016	Ethics and Integrity	102-16	Values, principles, standards, and code of conduct	Our Beliefs, Mission, and Vision
GRI 102: 2016	Governance	102-18	Governance structure	Sustainable Management Policy Hierarchic Authorization Professionalism and Diversity
GRI 102: 2016	Stakeholders Communication	102-40	Stakeholders Group	Stakeholders Communication
GRI 102: 2016	Stakeholders Communication	102-41	Collective agreements	Major policies
GRI 102: 2016	Stakeholders Communication	102-42	Identify and select stakeholders	Stakeholders Communication
GRI 102: 2016	Stakeholders Communication	102-43	Guidelines for stakeholder communication	Stakeholders Communication
GRI 102: 2016	Stakeholders Communication	102-44	Key topics and concerns raised by stakeholders	Stakeholders Communication
GRI 102: 2016	Reporting Practice	102-45	Entities included in the consolidated financial statements	Report Scope and Boundaries Major Financial Performance
GRI 102: 2016	Reporting Practice	102-46	Define report contents and topic boundaries	About the Report
GRI 102: 2016	Reporting Practice	102-47	List of material issues	Material Issues, Impact Scope, and Level of Involvement
GRI 102: 2016	Reporting Practice	102-48	Restatements of information	Report Scope and Boundaries
GRI 102: 2016	Reporting Practice	102-49	Changes in reporting	Report Scope and Boundaries
GRI 102: 2016	Reporting Practice	102-50	Reporting period	Report Period
GRI 102: 2016	Reporting Practice	102-51	Date of Last Report	Date of Last Reporting

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GRI Standards No.	Disclosure items	Disclosure item No.	Titles of Disclosure item	Chapter
GRI 102: 2016	Reporting Practice	102-52	Reporting cycle	Report Cycle
GRI 102: 2016	Reporting Practice	102-53	Contact person for inquiries about the report	Contact Information
GRI 102: 2016	Reporting Practice	102-54	Compliance Statement of GRI Standards	Reference
GRI 102: 2016	Reporting Practice	102-55	GRI Content Index	GRI Standards Cross-reference Table
GRI 102: 2016	Reporting Practice	102-56	External assurance/verification	Third Party Verification and Results
GRI 103				
GRI 103: 2016	Management Guidelines	103-1	Explain material issues and their boundaries	Materiality Analysis
GRI 103: 2016	Management Guidelines	103-2	Management guidelines and elements	Materiality Analysis
GRI 103: 2016	Management Guidelines	103-3	Evaluation of management guidelines	Materiality Analysis
GRI 200				
GRI 201: 2016	Economic Performance	201-1	Direct economic value generated and distributed by the organization	Major Financial Performance Remuneration and Benefits
GRI 201: 2016	Economic Performance	201-2	Financial impacts and other risks and opportunities associated with climate change	Climate Change Responses
GRI 201: 2016	Economic Performance	201-3	Define obligations for benefits and other retirement plans	Remuneration and Benefits
GRI 204: 2016	Procurement Practice	204-1	The proportion of purchases made from local suppliers	Local Procurement
GRI 300				
GRI 305: 2016	Emissions	305-1	Direct GHG emissions (Scope 1)	Greenhouse Gas Management
GRI 305: 2016	Emissions	305-2	Energy-related indirect GHG emissions (Scope 2)	Climate Change and Energy Management Water Resource Management
GRI 305: 2016	Emissions	305-3	Other indirect GHG emissions (Scope 3)	Water Resource Management

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GRI Standards No.	Disclosure items	Disclosure item No.	Titles of Disclosure item	Chapter
GRI 305: 2016	Emissions	305-5	Reduction of GHG emissions	Greenhouse Gas Emissions Management
GRI 308: 2016	Supplier Environmental Assessment	308-1	Screen new suppliers with environmental criteria	Supply Chain Management
GRI 400				
GRI 405: 2016	Employee Diversity and Equal Opportunity	405-1	Diversity of governance body and employees	Professionalism and Diversity Human Resources Structure
GRI 414: 2016	Supplier Social Assessment	414-1	Screen new suppliers with social criteria	Supply Chain Management
GRI 418: 2016	Customer Privacy	418-1	Confirmed complaints concerning breaches of customer privacy and losses of customer data	No such occurrence

6.2 SASB Organizational Standards

Topics	No.	Category	Accounting index	Page No.
Greenhouse Gas Emissions	TC-SC-110a.1	Quantification	(1) Global Scope 1 emissions (2) Total PFCs emissions	Greenhouse Gas Management
	TC-SC-110a.2	Discussion and analysis	Examine and analyze Scope 1 emissions and reduction targets, as well as evaluate short- and long-term management strategies or plans, such as the gap between actual outcomes and targets	Greenhouse Gas Management
Energy management in Manufacturing Operations	TC-SC-130a.1	Quantification	(1) Total energy consumed, (2) power grid percentage, (3) renewable energy percentage	Climate Change and Energy Management
Water Resource Management	TC-SC-140a.1	Quantification	High and extreme baseline water stress statistics in: (1) total water intake volume and percentage (2) total water consumption and percentage	Water Resource Management
Waste Management	TC-SC-150a.1	Quantification	The hazardous waste generated during manufacturing processes and the percentage recycled	Waste Management GUC's waste disposal in the past five years

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Topics	No.	Category	Accounting index	Page No. 及相關解說
Employee Health and Safety	TC-SC-320a.1	Discussion and analysis	Describe assessment, supervision, and mitigation measures concerning employee's exposure to human safety hazards.	Health Promotion
	TC-SC-320a.2	Quantification	The amount of monetary loss incurred as a result of legal procedures due to employees' safety and health violations	Occupational safety policy
Global and talented employee recruitment management	TC-SC-330a.1	Quantification	Percentage of (1) foreign employees, and (2) employees posted overseas	Human Resources Structure
Product Life Cycle Management	TC-SC-410a.1	Quantification	Revenue percentage of products containing IEC 62474 declarable substances	8.5%
	TC-SC-410a.2	Quantification	Energy efficiency of system processors in (1) servers, (2) desktop computers, (3) laptop computers	The software or standards referred to in this index are intended for energy consumption testing or score comparisons of system products and are thus inapplicable to tests on parts and components or IP. IP electricity consumption test results should be based on the measurement results of test chips on actual verification boards.
Material procurement	TC-SC-440a.1	Discussion and analysis	Description of risk management for key materials used	GUC's manufacturing is outsourced to TSMC. The procurement risks of raw materials used in the production and manufacturing are mainly based on TSMC's coping strategies.
Intellectual property management and competitive behavior	TC-SC-520a.1	Quantification	The total amount of monetary loss incurred as a result of legal proceedings related to anti-competitive laws.	Legal Compliance



6.3 Independent third party verification statement



INDEPENDENT ASSURANCE OPINION STATEMENT

Global Unichip Corporation 2021 ESG Report

The British Standards Institution is independent to Global Unichip Corporation (hereafter referred to as GUC in this statement) and has no financial interest in the operation of GUC other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of GUC only for the purposes of assuring its statements relating to its ESG report, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by GUC. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to GUC only.

Scope

The scope of engagement agreed upon with GUC includes the followings:

1. The assurance scope is consistent with the description of Global Unichip Corporation 2021 ESG Report.
2. The evaluation of the nature and extent of the GUC's adherence to AA1000 AccountAbility Principles (2018) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

This statement was prepared in English and translated into Chinese for reference only.

Opinion Statement

We conclude that the Global Unichip Corporation 2021 ESG Report provides a fair view of the GUC sustainability programmes and performances during 2021. The ESG report subject to assurance is free from material misstatement based upon testing within the limitations of the scope of the assurance, the information and data provided by the GUC and the sample taken. We believe that the performance information of Environment, Social and Governance (ESG) are fairly represented. The sustainability performance information disclosed in the report demonstrate GUC's efforts recognized by its stakeholders.

Our work was carried out by a team of ESG report assurors in accordance with the AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that GUC's description of their approach to AA1000AS v3 and their self-declaration in accordance with GRI Standards: Core option were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- a review of issues raised by external parties that could be relevant to GUC's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 6 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of key organizational developments.
- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018).

Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness and Impact of AA1000AP (2018) and GRI Standards is set out below:

Inclusivity

This report has reflected a fact that GUC has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for the information of Environment, Social and Governance (ESG) in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the GUC's inclusivity issues.

Materiality

GUC publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of GUC and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the GUC's management and performance. In our professional opinion the report covers the GUC's material issues.

Responsiveness

GUC has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for GUC is developed and continually provides the opportunity to further enhance GUC's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the GUC's responsiveness issues.

Impact

GUC has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. GUC has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization. In our professional opinion the report covers the GUC's impact issues.

GRI Sustainability Reporting Standards (GRI Standards)

GUC provided us with their self-declaration of in accordance with GRI Standards: Core option (For each material topic covered by a topic-specific GRI Standard, comply with all reporting requirements for at least one topic-specific disclosure). Based on our review, we confirm that sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported or omitted. In our professional opinion the self-declaration covers the GUC's sustainability topics.

Assurance level

The moderate level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

Responsibility

The ESG report is the responsibility of the GUC's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of Lead auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:

Peter Pu, Managing Director BSI Taiwan



Statement No: SRA-TW-2021060
 2022-05-12

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