

# 2021 Sustainability Report



**RichWave**  
Technology Corporation

The logo for RichWave Technology Corporation is centered within a large, glowing blue circular graphic that resembles a lens or a data visualization. The text is in a clean, white, sans-serif font. The background of the entire page is a vibrant blue with abstract, flowing lines and circular patterns, suggesting a digital or technological theme.



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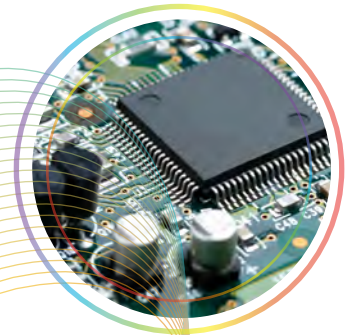
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## Chairman's Words

"Perseverance" has always been RichWave's corporate philosophy since our inception. Perseverance in corporate social responsibility and ethical management; perseverance in green manufacturing and environmental sustainability; perseverance in innovation and service, as well as a friendly workplace to ensure the company's operations and visions are consistent with the stakeholders' needs and satisfy our clients' expectations.

In terms of our perseverance in corporate social responsibilities and ethical management, RichWave is dedicated to building an effective corporate governance structure to guarantee our shareholders' equity, bolster the Board of Director's supervisory performance, and respect the stakeholders' rights while upholding the company's information transparency as the highest principle. RichWave is aware that with great influence comes great responsibility, hence we emphasize ethical management concepts such as corporate social responsibility and corporate governance while striving for excellence. This is the momentum that keeps the firm forging ahead and the key to our sustainability and development.

In terms of the environmental sustainability dimension, RichWave regards environmental protection as our mission and continues to emphasize the R&D of energy-saving and high-efficiency products. In terms of supply chain management, RichWave has promoted a green supply chain with our suppliers to ensure the supply chain's goals of enhancing energy efficiency and reducing carbon emissions are consistent with that of RichWave, so as to set the industry benchmark.

As far as a friendly workplace is concerned, RichWave has always perceived our employees as our partners, thus we have strived to provide them with a LOHAS, healthy, positive, and open work environment in a bid to inspire their creativities and proactive attitude. This is complemented by a comprehensive training mechanism and remuneration/welfare system to offer our employees a progressive career development platform and opportunities, thereby advancing the company's overall technological innovation and development, as well as attaining a win-win situation for the company and the employees.

Looking ahead, RichWave will continue to consolidate the company's resources and the strength of our clients, suppliers, and employees. Furthermore, we will tirelessly engage in environmental protection, energy conservation, innovation, and talent cultivation in order to bolster our corporate governance, care about the underprivileged groups, and fulfill our corporate social responsibilities, thereby achieving the objective of sustainable management.

Chairman

*Dye-Jyun Ma*





## Vision and Philosophy

Innovation, Dedication, to Brilliance the trusted RF provider

RichWave is a company that specializes in the design of RF front-end components and transceivers for wireless systems.

Our mission is to differentiate our products with innovation, technology, unique marketing positions, and outstanding performance.

At RichWave, we respect the ideas and creativity of every team member, hoping to materialize a brighter future through dedication and teamwork.



# About the Report

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## Introduction of the Report

RichWave Technology Corp. (hereinafter referred to as RichWave) started publishing the corporate sustainability report in 2022 to demonstrate the company's commitments, actions, and accomplishments in ESG-related issues, as well as facilitate good communication and interaction with our stakeholders. The scope of disclosure focuses on RichWave's business operation in Taiwan. During the reporting period, there is no significant changes of the company's organizational scale, structure, ownership, and supply chain.

## Reporting Time, Scope, and Publication Period

RichWave's first corporate sustainability report discloses data and content for 2021 (January 1 to December 31, 2021). Some of the performance data dates back to 2020, 2019, and earlier to present relevant trends and fluctuations.

Publication time of this report: August 2022

Scheduled publication time of next report: June 2023

## Report Preparation Guideline

The report's information disclosure complies with the core option of GRI Standards published by the Global Reporting Initiative (GRI). Furthermore, the GRI Standards Content Index is attached in the appendix of the report for the readers' reference. The report's relevant statistics and data are derived from RichWave's own investigation and statistics of the daily operations/management. Moreover, local regulations, internationally accepted indicators, industry standards, or industry customs are taken into consideration when performing the calculations.

## Feedback

If there are any questions or suggestions about the report, please do not hesitate to contact us.

RichWave Technology Corp.

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# RichWave Accolades

**2020. 08**

Awarded the “Excellent Quality Collaboration Award” by client



**2021. 05**

Sponsored the 2021 TEDxNYCU Event



**2021. 05**

Awarded 9th place among the Top 200 Resilience Companies by Commonwealth Magazine



**2021. 06**

Sponsored the IEEE Radio Frequency Integrated Circuits Symposium (RFIC 2021)



**2021. 03**

Sponsored the 11<sup>th</sup> Annual Philanthropic Concert – Huashan 2021 Peter and the Wolf Music Concert



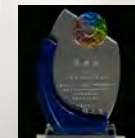
**2021. 11**

Received the “Promising Product of the Year” Award of 2021 EE Awards Asia hosted by ASPENCORE



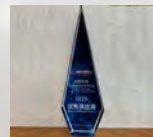
**2021. 08**

Sponsored the 32nd VLSI Design/ CAD Symposium



**2021. 06**

Awarded 7th place in the “2020 Top 100 High-Value Companies in Taiwan” by “Business Next”



**2020. 10**

Awarded the “Excellent Supplier” by client at the Global Elite Partner Conference



# 1 Sustainable Management

A person in a blue suit is holding a tablet and a pen, looking at the tablet. The background is a blurred office setting. In the foreground, there is a glass of water on a desk.

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## 1.1 About RichWave

### Company introduction

Founded in 2004, RichWave is devoted to radio-frequency integrated circuit (RF IC) development and design. Our product lines include RF front-end components for WiFi 802.11n/ac/ax wireless networks, 5G/4G/LTE mobile communication, as well as microwave sensors, digital broadcasting receivers, and RF transceivers for wireless video transmission. RichWave provides complete RF front-end product solutions and applications for various wireless communication markets. The expertise of the company's team members encompasses system design, RF microwave IC, semiconductor engineering, and back-end technology development. RichWave focuses on the establishment and sharing of fundamental technology, where creative and advanced IC design, intricate and rigorous quality control, differentiated product marketing strategy, and comprehensive customer service have earned the recognition and support of our customers.

RichWave applies multiple process design technologies involving SiGe, GaAs, SOI/CMOS, and IPD. Focusing on the products' price/performance ratio, we have successfully tapped into the global market under RichWave, our self-owned brand. Now, RichWave is one of the major global suppliers of WiFi RF front-end components. We continue to develop new technologies to provide our clients with more competitive solutions and strive to become a world-class leading manufacturer of RF IC.

### RichWave Technology Corp

Founded on	January 7, 2004
HQ location	3F., No. 1, Alley 20, Lane 407, Sec.2, Tiding Blvd., Neihu District, Taipei City 11493
Industry	Semiconductor
Main services	R&D and sales of RF IC front-end components R&D and sales of RF IC wireless video transmission technology
Product category	The main products and services of the company and its affiliated businesses include wireless communication product IC design and sales, as well as the R&D, sales of WiFi RF IC front-end chips (such as PA, LNA, SW, and FEM), 2.4GHz wireless video transmission RF IC, SoC, and general investment services.
Number of employees	332 persons
Business location	Taiwan: Taipei, Hsinchu
Total Capital (NT\$)	2,000,000,000

### RichWave's main products

- R&D and sales of WiFi RF IC front-end chips including PA, LNA, SW, and FEM.
  - PA (Power Amplifier): The PA's main function is to amplify the baseband processed signals so that they can be transmitted.
  - LNA (Low Noise Amplifier): The LNA's main function is to amplify the signals received and lower the noise so that they can be used by back-end systems.
  - SW (Switch): The SW's main function is to allow or prevent a signal from being transmitted along the transmission path through the phenomenon of charge accumulation or repulsion driven by a voltage.
  - FEM (Front-end Module): The FEM's main function is to integrate the PA, LNA, and SW.
- R&D and sales of RF IC and SoC (System on Chip) used for 2.4GHz wireless video transmissions, including 2.4GHz RF transceiver and video compression/decompression SoC.
- R&D and sales of RF IC FEM used for 3G/4G LTE femtocell, including PA and SW.



## Business Performance

Steady profits and continual growth are important prerequisites of sustainable corporate development. Affected by a shortage of WiFi SoCs and rising costs in the supply chain in 2021, RichWave's consolidated operating income was NTD 5,316,267 thousand, and the consolidated net profit after tax was NTD 465,517 thousand. Looking ahead to the next year, the overall mobile communication and wireless communication industry will continue to flourish. The increasing demand for RF IC FEM used in WiFi 6 and multimode/multiband smartphones foster RichWave's growth and sales performance in terms of RF IC FEM products. After the shortage of WiFi SoCs is gradually mitigated, the company's growth is expected to continue. In 2021, the economic values generated and distributed by the organization are as illustrated below:

### Economic value statistics

Unit: NT\$1,000

Item \ Year	2019	2020	2021	Compared to the previous year
Operating income	2,749,555	5,350,200	5,316,267	-0.6%
Operating costs and expenses	2,506,321	4,342,248	3,770,235	-13.2%
Net operating profit	243,234	1,007,952	533,608	-47.1%
Income tax	53,008	150,891	61,389	-59.3%
Net income	190,737	866,216	465,517	-46.3%
Employee remuneration and benefits	350,713	471,917	513,421	8.79%
Cash dividend	1.94	8	3.5	-56.3%
Gross profit margin	36.00%	36.00%	29.00%	-19.44%
EPS (NT\$)	3.13	9.87	5.26	-46.7%

For more management performance-related information, please refer to the company's Investors' Corner or the MOPS. ▶





## Participation in External Organizations

### Participation in international industry societies and associations

RichWave is dedicated to developing the field of RFIC (radio-frequency integrated circuit). By participating in international technology exchange activities, offering technical support in professional fields, and striving to develop more sound, reliable designs and products in conjunction with industries, governments, and academia both in Taiwan and abroad, we aim to prolong our products' life cycle and minimize resource consumption, so as to assist the international industrial organizations to develop industry white books, guidelines, and standards. The ultimate objective is to facilitate the comprehensive development of the industry and society.

The main industry societies and associations RichWave is involved in include:

- IEEE RFIC Symposium

RichWave has sponsored the activity for numerous years in a row with VP Deng, Wei-Kung acting as its technical committee member. The goal of the symposium is to bolster the design and R&D of high-energy efficiency products.

- The Industry Council on ESD Target Levels

RichWave participates and assists in the group's discussions, questionnaire preparation and analysis, and technical document review in a bid to help formulate standards as well as develop more durable, reliable products and increase their lifespan.

- Taiwan ESD Association

RichWave's VP Chao Chuan-Chen has served as the director of the Taiwan ESD Association since 2003 and its international convention's technical committee member. Since 2021, she has been appointed as the association's chairman.

### RFIC Conference 2021

IEEE RFIC Symposium is one of the most representative international IC design conferences focusing on the exchange of radio frequency (RF), microwave, mmWave IC system, and circuit-related technologies.

In light of the impact of COVID-19, RFIC 2021 was held in conjunction with RFIC, IMS, and ARFTG for the first time, attracting the attendance of over 4,000 people this year.

The offline meeting was jointly conducted by RFIC and IMS in Atlanta during June 7-9, 2021. The online RFIC symposium was held from June 20 to 25, 2021. RichWave has sponsored the technical symposium for numerous years, demonstrating our determination in elevating industrial technology and fostering social welfare.

### List of organizations and associations participated by RichWave

Number	Name of organization	Applicable country or region	Members' qualification (such as director/supervisor)
1	TSIA	Taiwan	Member
2	WOB	Taiwan	Member
3	MIPI Alliance	Global	Member
4	IEEE	Global	Individual member
5	The Industry Council on ESD Target Levels	Global	Member
6	Taiwan ESD Association	Taiwan	Individual member



## 1.2 Sustainable Practices

### Sustainable visions and strategies

#### Sustainable visions

"Striving for excellence with innovation and dedication to become an RF component supplier offering market differentiation and outstanding performance" is RichWave's corporate vision. Since the company was founded, we have always upheld the corporate philosophy of "persistence," focusing on sustainable corporate development and our six major core values of "innovation, product strength, problem solving, team work, customer retention and development, and talent retention and development" to promote sustainable development and ethical management, green manufacturing and environmental protection, innovation and quality, talent development and a busfriendly workplace, hoping to shape a brighter future with every team member.





## Development Strategy

### Short-term development plan:

1. Develop various wireless products based on the market development trends of the information, communication, and consumer electronics to accommodate our customers' needs, thereby expanding the market share of our products.
2. Utilize the company's accumulated technological know-how to create technical differentiation. Besides maintaining existing products, we also research cost reduction approaches and develop other products to be sold on the market to improve our product quality and strengthen product competitiveness.
3. Capitalize on Taiwan's Vertical Integration Specialization in semiconductors and excellent manufacturing capability to offer the versatility of customization, as well as maintain close collaboration with domestic foundries and packaging and testing plants to uphold production capacity and accurate product delivery dates for the sake of catering to the needs of our clients and the market.
4. Reinforce partnership and trust with our clients and provide quick, excellent technical service, as well as use channel agents to reach every corner to increase profitability and product market share.
5. Value our employee welfare policy, implement a bonus and performance reward system to encourage employee morale and increase workplace cohesion.

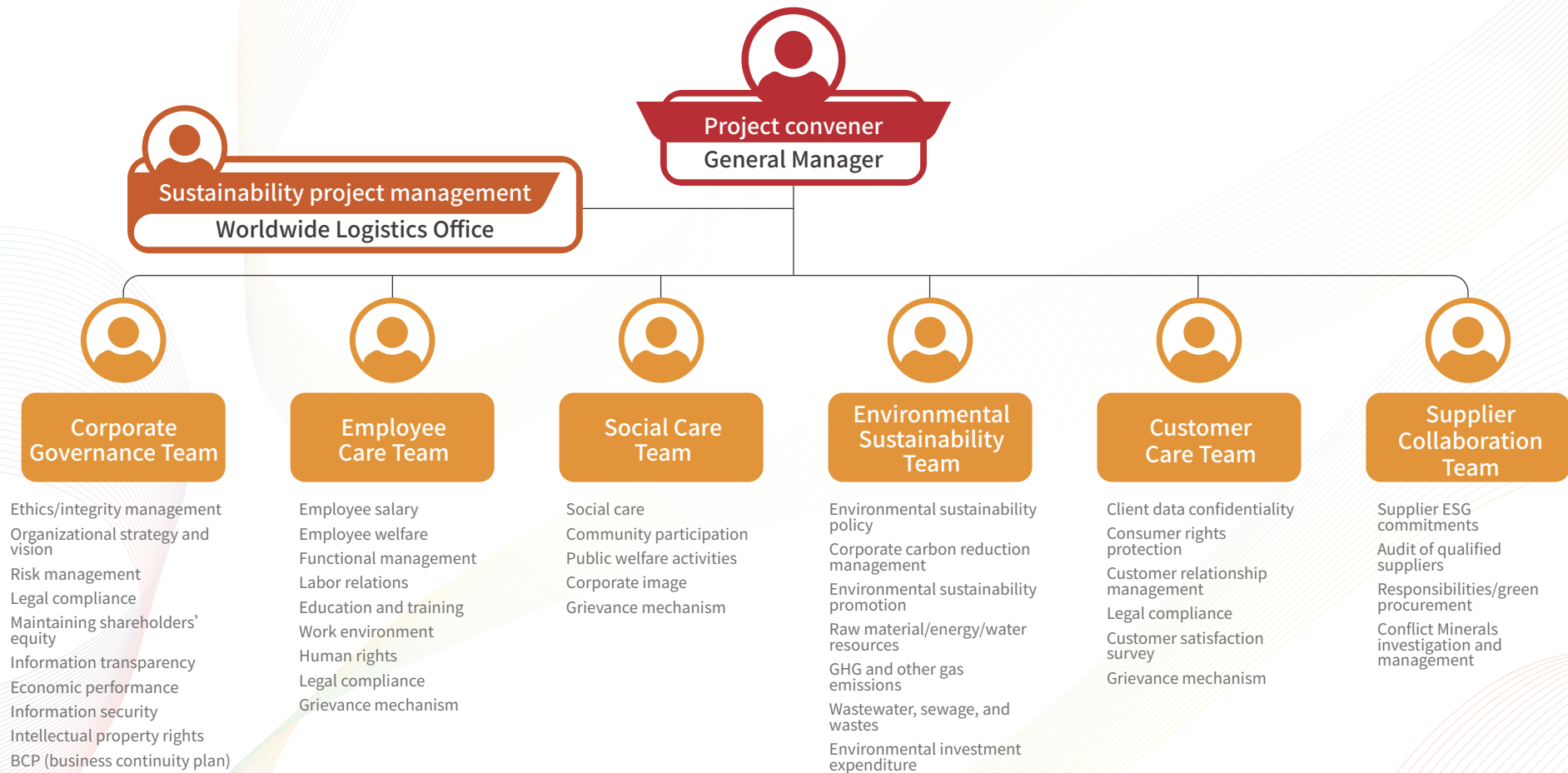
### Long-term development plan:

1. Take into consideration the market's application needs, provide a comprehensive production collection, develop the breadth and depth of our product lines, and apply more advanced technologies to develop high-end products, to satisfy the needs of our clients and the market through a diverse product lineup.
2. Seek technical exchanges with domestic and overseas academic institutions and research organizations, as well as forge a long-term strategic partnership with systems companies to establish our exclusive technology brand.
3. Forge a long-term partnership with SoC manufacturers, and develop and deploy reference designs for the platform in advance to expand RichWave's market share.
4. Continue to maintain a long-term partnership with our upstream foundries, packaging, and testing plants, turning them into strategic partners to jointly develop manufacturing processes with unique niches, lower production costs, and develop high-quality, competitive products.
5. Master key technologies, optimize product applications and engage in the integrated development of more advanced and sophisticated products in a bid to become a world-class industry leader.
6. Promote the concept of internationalization and harness the management capabilities of international enterprises, vigorously cultivate international talents, and aim to become an international enterprise.
7. In supporting the growth of the company's long-term operational scale, we have applied diverse financial management tools in the capital market to strengthen RichWave's financial structure. Meanwhile, we have also utilized sound, diverse funding channels to assemble the most suitable capital combinations that can support the company's operational development.



## Corporate Sustainability Organization

In supporting the UN's SDGs and ESG policy, RichWave formed the sustainability task force in early April 2021 with the GM as the project convener and the Worldwide Logistics Office as the part-time unit responsible for RichWave's ESG-related affairs. In addition, six working groups including corporate governance, customer care, supplier collaboration, environmental sustainability, employee care, and social care were established, consisting of representatives from different departments including talents with diverse backgrounds, expertise, and experiences. Moreover, they report their achievements of advancing sustainability to the Board of Directors regularly. On December 23, 2021, their report indicated on the company's sustainability projects to the Board of Directors and obtained the directors' approval.








## Sustainability Performance

The year 2021 was RichWave's first year in implementing sustainable management, where the company sustainability task force was officially launched under the leadership of the GM. Consisting of department heads, the task force conducted an inventory of the company's ESG status based on six major dimensions, implementing important corporate governance systems such as the risk management policy and information security management policy approved by the Board of Directors. Project refinements are carried out focusing on key ESG issues recommended by the corporate governance evaluation, while the inaugural issue of the company's e-newsletter was published, serving as a crucial platform for internal communication and establishing sustainable corporate values. RichWave's ESG highlights in 2021 are:

### ESG highlights

Dimension	2021 annual highlights
 <p>(Governance)</p>	<ul style="list-style-type: none"> <li>💡 The Board of Directors' meeting was convened 8 times in 2021, achieving an average attendance rate of 98%.</li> <li>💡 Formulated the "Risk Management Policy and Protocol" approved by the Board of Directors.</li> <li>💡 Formulated the "Information Security Risk Management Policy and Protocol" approved by the Board of Directors.</li> <li>💡 Invested NT\$539,010,000 in R&amp;D, accounting for 10% of the company's income.</li> <li>💡 Ranked 9<sup>th</sup> place in CommonWealth Magazine's 2021 Top 2000 Enterprise Survey.</li> <li>💡 Received the "Promising Product of the Year" Award of 2021 EE Awards Asia hosted by ASPENCORE.</li> <li>💡 100% of our main suppliers received ISO 14001 environmental management system certification.</li> <li>💡 Achieved 100% implementation rate and a pass rate of 100% for ESG on-site audits in 2021.</li> <li>💡 Local procurement accounted for 68.3% of total procurement in 2021.</li> <li>💡 The satisfaction survey was expanded to 5 major terminal customers in 2021 and obtained an excellent overall satisfaction score of 87 points.</li> <li>💡 Continued to optimize the corporate governance system and improve sustainability performance, the "8<sup>th</sup> (2021) Corporate Governance Evaluation Score showed an improvement of 55% compared to last year.</li> </ul>
 <p>(Environment)</p>	<ul style="list-style-type: none"> <li>💡 In 2021, Energy Use Intensity (EUI) decreased by 6.2% compared to last year.</li> <li>💡 In 2021, average water consumption per person decreased by 2.8% compared to last year.</li> </ul>
 <p>(Social)</p>	<ul style="list-style-type: none"> <li>💡 We value our employees' health by hiring medical staff to conduct regular on-site health services 3–4 times a month.</li> <li>💡 We value the workers' rights, diversity, and inclusion; there was no violation of human rights in 2021.</li> <li>💡 In 2021, RichWave organized numerous professional and general knowledge courses across different disciplines, training a total of 488 persons and accumulating 2,240 hours of training.</li> <li>💡 In 2021, we engaged in industry–academia collaboration to sponsor and donate a total of NT\$3 million in scholarships.</li> <li>💡 Social care actions taken amid the impact of the pandemic in 2021: Raised NT\$300,000 and gave away 300 gift boxes to underprivileged families in the community.</li> <li>💡 Offered the silver grade prize of NT\$100,000 for the "32<sup>nd</sup> VLSI Design/CAD Symposium".</li> </ul>

## 1.3 Stakeholder Communication and Materiality Topic


### Stakeholder engagement

RichWave has taken "stakeholder inclusiveness" of the GRI standards into consideration to define the internal/external groups or individuals that have an impact on the company or are being impacted by the company's actions as RichWave's stakeholders. Furthermore, the definition is used to identify seven major stakeholder groups that exert an influence on the company or are being influenced by the company in three dimensions included governance, environment, and society. These stakeholder groups include the government, RichWave's shareholders and investors, media, communities, our clients/consumers, suppliers/contractors/distributors, and employees.

We have collected stakeholder concerns through the stakeholder questionnaire to form an individual communication platform according to their influence on RichWave and areas of concern. Various responsible units have established good communication channels with the stakeholders to proactively respond to and satisfy their expectations of the company. Moreover, we have disclosed information from different years on the open platform to demonstrate our emphasis on the stakeholders' concerns.



Stakeholder	Topic of concern	Communication channel/response method and communication frequency	Achievements in 2021	Contact person and method
 Government agency	Legal compliance	Ensures the company's conducts are compliant with the law Communicate with the competent authorities from time to time	<ul style="list-style-type: none"> <li>■ In 2021, the company did not receive any letter from securities and taxation authorities requesting us to make corrections.</li> <li>■ In 2021, the Department of Labor inspected the company and did not find any violations.</li> <li>■ In 2021, a building fire safety inspection was carried out in conjunction with the fire brigade, and no violations were found, nor were improvements necessary.</li> <li>■ In 2021, product scrapping was conducted once by a qualified waste disposal company, and the scrapped products were reported to the Department of Environmental Protection according to the law.</li> </ul>	For labor and environmental protection regulation-related topics, please send your questions to Mr. Chang of the HR Administration Department ( <a href="mailto:dennischang@richwave.com.tw">dennischang@richwave.com.tw</a> ) For securities or taxation regulation-related topics, please send your questions to Ms. Chin of the Finance Department ( <a href="mailto:gloriachin@richwave.com.tw">gloriachin@richwave.com.tw</a> ) or call the service hotline at 02-87511358/03-6008999





Stakeholder	Topic of concern	Communication channel/response method and communication frequency	Achievements in 2021	Contact person and method
 Shareholders and investors	Business performance Ethical management Corporate governance	<ul style="list-style-type: none"> <li>■ Shareholders' meeting, annual report, meeting agenda handbook: annually</li> <li>■ Earnings Call : quarterly</li> <li>■ Monthly revenue announcement: monthly</li> <li>■ Conferences held by institutional investors : 3 sessions per quarter</li> <li>■ Investor meetings : 10 meetings per month</li> <li>■ Material information disclosure and news release: from time to time</li> <li>■ Investor calls and emails : daily</li> <li>■ Information disclosure on the MOPS and the IR Platform</li> </ul>	<ul style="list-style-type: none"> <li>■ Shareholders' meeting: Held on 7/27, the annual report and meeting agenda handbook are uploaded to the MOPS and IR Platform.</li> <li>■ Earnings Call : 4 online investor conferences were held in 2021 on 2/26, 5/4, 8/5, and 10/28, attended by 1,069 people. The presentation and rebroadcast website of the investor conference are disclosed on the MOPS and the IR Platform.</li> <li>■ Monthly revenue announcement: The revenue information is disclosed on the MOPS and the IR Platform.</li> <li>■ Conferences held by institutional investors : RichWave was invited to attend 12 conferences held by institutional investors and spoke with 363 investors.</li> <li>■ Investor meetings : We joined 111 domestic and foreign investor meetings and spoke with 395 investors.</li> <li>■ Material information disclosure/news release: There were 35 material information released on MOPS and about 80 news.</li> <li>■ Investor calls and emails : On average, the company receives about 20 calls or emails daily.</li> <li>■ Information disclosure on the MOPS and IR Platform: Annual reports, shareholders meeting agenda handbook, investor conferences, quarterly earnings calls, monthly revenue announcements.</li> </ul>	For investor-related topics, please send your questions to Ms. Juan of the General Manager Office ( <a href="mailto:wendyjuan@richwave.com.tw">wendyjuan@richwave.com.tw</a> ) or call the service hotline at 02-87511358

Stakeholder	Topic of concern	Communication channel/response method and communication frequency	Achievements in 2021	Contact person and method
 Media	Market brand image Social welfare activities	<ul style="list-style-type: none"> <li>■ Media interview : from time to time</li> <li>■ Shareholders' meeting: annually</li> <li>■ Technology Symposium : annually</li> <li>■ Disclose social welfare activities on the company's official website</li> <li>■ Receive interviews at the company's public events</li> <li>■ Material information disclosure/news release: from time to time</li> <li>■ Information disclosure on the MOPS and the IR Platform</li> </ul>	<ul style="list-style-type: none"> <li>■ Media interview:               <ul style="list-style-type: none"> <li>▪ Ranked 9<sup>th</sup> in the Commonwealth Magazine's "Annual Growth Top 100 Enterprises"</li> <li>▪ Ranked 7<sup>th</sup> in the Business Next's "High-Value Top 100 Enterprises"</li> </ul> </li> <li>■ Shareholders' meeting : Held on 7/27</li> <li>■ Technology Symposium : Held on 12/17</li> <li>■ Disclose social welfare activities on the company's official website:               <ul style="list-style-type: none"> <li>▪ Sponsored NCHU to organize the TCUS "Courage to Pursue Dreams – Circle of Love" cycling around the island volunteer service activity</li> <li>▪ Sponsored the Huashan Social Welfare Foundation and TFT's Peter and the Wolf Music Concert</li> <li>▪ Sponsored 2021 TEDxNYCU annual conference</li> <li>▪ Sponsored "32<sup>nd</sup> VLSI Design/CAD Symposium"</li> </ul> </li> <li>■ Receive interviews at the company's public events:               <ul style="list-style-type: none"> <li>▪ Shareholders' meeting: 7/27</li> <li>▪ Investor Conference: 2/26, 5/4, 8/5, 10/28</li> <li>▪ Technology Symposium : 12/17</li> </ul> </li> <li>■ Material information disclosure/news release: There were 35 material information released on MOPS and 80 news.</li> <li>■ Information disclosure on the MOPS and the IR Platform: Annual reports, shareholders meeting agenda handbook, investor conferences, quarterly earnings calls, monthly revenue announcements.</li> </ul>	For relevant topics, please send your questions to Ms. Juan of the General Manager Office ( <a href="mailto:wendyjuan@richwave.com.tw">wendyjuan@richwave.com.tw</a> ) or call the service hotline at 02-87511358



Stakeholder	Topic of concern	Communication channel/response method and communication frequency	Achievements in 2021	Contact person and method
 Community	Market brand image Social welfare activities	<ul style="list-style-type: none"> <li>■ Created the company's LinkedIn page</li> <li>■ Created the company's YouTube page</li> <li>■ Industry-academia collaboration</li> <li>■ Sponsorships and donations</li> </ul>	<ul style="list-style-type: none"> <li>■ Created the company's LinkedIn page and uploaded 21 posts</li> <li>■ Created the company's YouTube page and uploaded 29 videos</li> <li>■ Industry-academia collaboration               <ul style="list-style-type: none"> <li>▪ Assisted NTU SoC Center to conduct analog electronics research</li> <li>▪ Assisted NSYSU Department of Applied Mathematics to conduct radar algorithm research</li> <li>▪ Assisted NYCU Institute of Communications Engineering to conduct RF circuit research</li> </ul> </li> <li>■ Sponsorships and donations:               <ul style="list-style-type: none"> <li>▪ Sponsored TFT NT\$25,000</li> <li>▪ Offered the silver grade prize of NT\$100,000 for the "32<sup>nd</sup> VLSI Design/CAD Symposium."</li> <li>▪ Sponsored the 2021 IEEE RFIC Symposium (US\$3,000-5,000/session)</li> </ul> </li> </ul>	For relevant topics, please send your questions to Ms. Juan of the General Manager Office ( <a href="mailto:wendyjuan@richwave.com.tw">wendyjuan@richwave.com.tw</a> ) or call the service hotline at 02-87511358
 Customer/ consumer	Customer product development trend Maintaining customer relationships Brand market image Customer satisfaction survey	<ul style="list-style-type: none"> <li>■ Daily, routine communication</li> <li>■ Immediate handling</li> <li>■ Product satisfaction survey is conducted quarterly</li> </ul>	<ul style="list-style-type: none"> <li>■ The 2021 customer satisfaction survey was completed in December, achieving an average score of 87 points.</li> <li>■ At least 4 sales review meetings are held with important clients including new product presentations.</li> </ul>	For product sales-related questions, please send your questions to Ms. Ma of the Customer Service Department ( <a href="mailto:amberma@richwave.com.tw">amberma@richwave.com.tw</a> ) or call the service hotline at 02-87511358/03-6008999

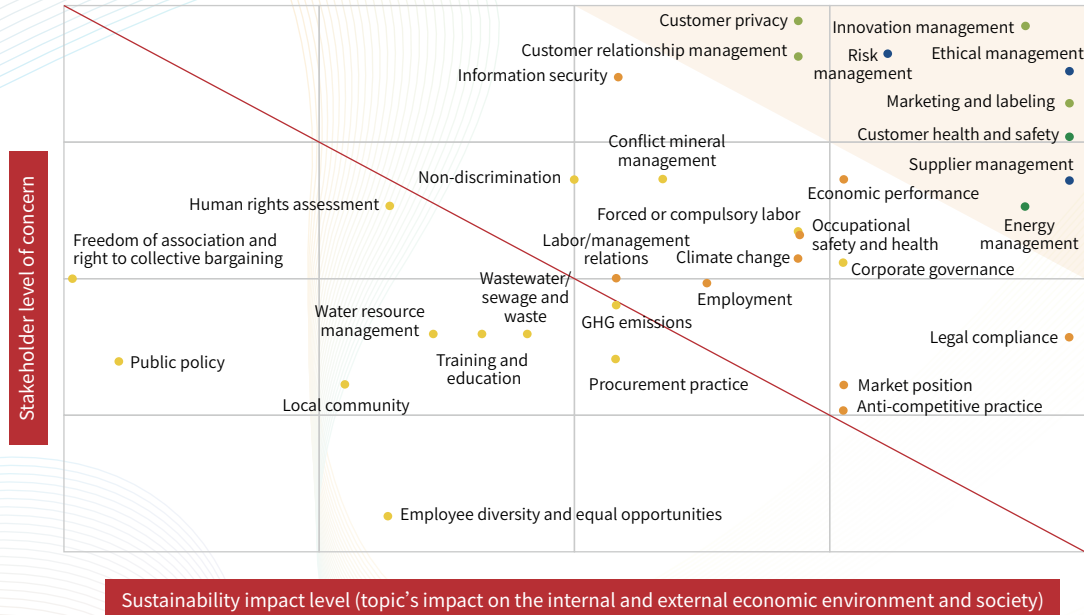
Stakeholder	Topic of concern	Communication channel/response method and communication frequency	Achievements in 2021	Contact person and method
 Supplier/ contractor/ distributor	Supplier audit Grievance channel	<ul style="list-style-type: none"> <li>Quality meeting: weekly/quarterly</li> <li>Annual supplier audit</li> <li>Supplier audit from time to time</li> </ul>	<ul style="list-style-type: none"> <li>Completed 100% audit in Q3</li> <li>The hazardous substance report has been updated to 395 items in Q3, complying with international and customer requirements.</li> <li>Conducted conflict minerals survey on 147 smelters, achieving a 100% pass rate.</li> </ul>	For product quality control and supplier-related topics, please send your questions to Mr. Chang of the Quality Control Department ( <a href="mailto:patrickchang@richwave.com.tw">patrickchang@richwave.com.tw</a> ) or call the service hotline at 02-87511358/03-6008999
 Employee	Company policy and employee-related information	<ul style="list-style-type: none"> <li>The labor-management meeting is convened quarterly</li> <li>Welfare Committee meeting is convened quarterly</li> </ul>	<ul style="list-style-type: none"> <li>The labor-management meeting is convened quarterly; 3 meetings were held on 6/16, 9/28, and 12/30 in 2021. Due to COVID-19, the meeting in Q1 was canceled.</li> <li>The Welfare Committee convened 8 meetings on 2/26, 6/8, 8/3, 8/23, 9/1, 11/1, 11/15, and 12/15 in 2021</li> </ul>	For employee relations and welfare-related topics, please send your questions to Mr. Chang of the HR Administration Department ( <a href="mailto:dennischang@richwave.com.tw">dennischang@richwave.com.tw</a> )  Sexual Harassment Complaints ( <a href="mailto:hr@richwave.com.tw">hr@richwave.com.tw</a> ) or call the service hotline at 02-87511358/03-6008999





# Material Topic Identification

## RichWave's Material Topic Identification Outcome




The company has followed the guidance of GRI Standards and AA1000 SES to identify and confirm the stakeholders' topics of concern through the four major steps of identification, sequencing, execution, and communication, where 33 key sustainability-related topics are gathered and selected before analysis and sequencing is carried out by collecting our competitors' level of concern towards the economy, the environment, and society. Eventually, nine sustainability-related material topics and eight moderate topics were identified as the basis for compiling and disclosing the corporate sustainability report.

2021 Material Topic	
Governance	1 Ethical management
	2 Risk management
	3 Supplier management
Environment	4 Energy management
	5 Customer health and safety
	6 Marketing and labeling
Product	7 Customer privacy
	8 Innovation management
	9 Customer relationship management



Moderate Topics	
1	Information security
2	Legal compliance
3	Economic performance
4	Occupational safety and health
5	Climate change
6	Labor-management relations
7	Market position
8	Anti-competitive practice



## Material topic management guideline

Category	Material topic risk assessment item	Within the organization	Outside the organization					Risk management or strategy	
		Richwave/ Employee	Government agency	Shareholders and Investors	Media	Community	Customer/ consumer		Supplier/ contractor/ distributor
 Corporate governance	Ethical management	●	●	●	●	●	●	●	<ul style="list-style-type: none"> <li>■ The Board of Directors has formulated the "Procedures for Ethical Management and Guidelines for Conduct" as well as launched and implemented ethical management-related promotions.</li> <li>■ To make sure the company's employees are aware of the regulations and to maintain competitive order, relevant education and training courses have been provided to enhance their legal compliance awareness.</li> </ul>
	Risk management	●		●	●		●	●	<ul style="list-style-type: none"> <li>■ Formed an interdepartmental BCP (Business Continuity Planning) team to prevent potential major risks from endangering the company. The BCP team conducts rigorous evaluations on major risks that the company may face to formulate response strategies, and emergency response measures, conduct drills as needed, and make ongoing improvements.</li> </ul>
	Supplier management	●	●					●	●



Category	Material topic risk assessment item	Within the organization	Outside the organization						Risk management or strategy
		Richwave/ Employee	Government agency	Shareholders and Investors	Media	Community	Customer/ consumer	Supplier/ contractor/ distributor	
 Environment	Energy management	●	●	●				●	<ul style="list-style-type: none"> <li>Control and inventory power consumption and carbon emissions conditions at various business locations in search of carbon reduction opportunities in the future.</li> </ul>
	Customer health and safety	●	●	●	●			●	<ul style="list-style-type: none"> <li>Implement sound HSF management in compliance with RoHS and WEEE regulations through supply chain management.</li> </ul>
 Product and customer relationship	Marketing and labeling	●	●		●			●	
	Innovation management	●		●				●	<ul style="list-style-type: none"> <li>Bolster the company's innovation capability and product competitiveness to protect the company's achievements in cutting-edge technology. The company stipulates the number of additional patent certificates that must be obtained for the year from the annual operational target, encouraging colleagues from various R&amp;D units to vigorously attain the target.</li> </ul>
	Customer relationship management	●						●	<ul style="list-style-type: none"> <li>Regularly conduct customer satisfaction surveys and rolling revisions of relevant topics to maintain good customer relationships.</li> </ul>
	Customer confidentiality	●			●			●	<ul style="list-style-type: none"> <li>Implement information security management to protect the security of our clients' confidential information.</li> </ul>

# 2 Corporate Governance

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## Chapter Highlight

- 📌 The Board of Directors' meeting was convened 8 times in 2021, achieving an average attendance rate of 98%.
- 📌 Formulated the "Risk Management Policy and Protocol" approved by the Board of Directors.
- 📌 Formulated the "Information Security Risk Management Policy and Procedures approved by the Board of Directors.
- 📌 Disclosed 19 corporate governance-related regulations, please refer to the company's official website for further details.

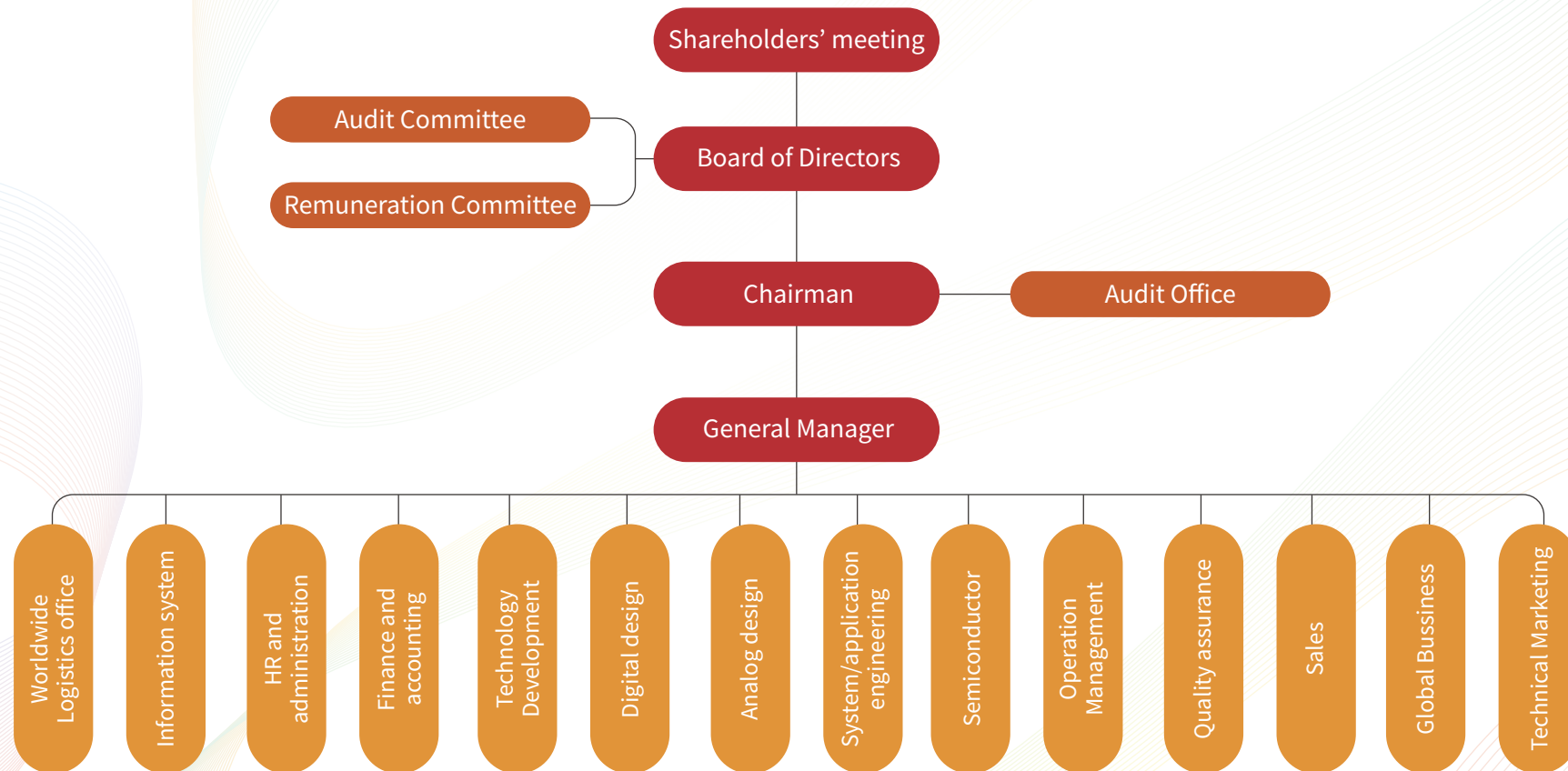




## 2.1 Management Governance

### Corporate Governance Structure

A sound corporate governance system is the key to sustainable corporate management, and a well-functioning Board of Directors is not only the cornerstone of outstanding corporate governance but also facilitates the company's sustainable development. RichWave has formulated the "Corporate Governance Best-Practice Principles" to reinforce the Board of Directors' functions, protect the shareholders' equity, and respect the stakeholders' rights. Furthermore, the "Articles of Incorporation" regulate the selection and formation of the Board of Directors. The Audit Committee and Remuneration Committee subsidiary to the Board of Directors are responsible for fortifying the independence of corporate governance and enhancing the company's remuneration system.

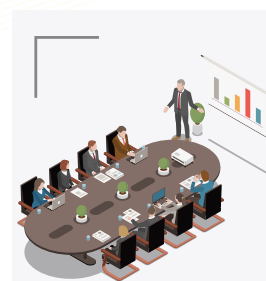



## Operation of the Board of Directors

RichWave has appointed 5–7 directors according to the Articles of Incorporation. Adopting the candidate nomination system, the directors are selected from the roster of director candidates by the shareholders' meeting, and they may be reelected. In particular, there shall be more than two independent directors and should make up for no less than 1/5 of the directors' seats, serving a term of 3 years. The Board of Directors will exercise its powers according to the law, the Articles of Incorporation, and decisions made by the shareholders' meeting. The company's directors come from diverse backgrounds including management, science and engineering, accounting, and finance. They are also business owners in the technology industry as well as professors in science, engineering, and accounting field. The board members possess diverse backgrounds in industry, academia, and knowledge, offering differing perspectives and professional opinions to guide the company's strategies and supervise the management level, ensure the sustainable performance of RichWave and protect the stakeholders' rights. RichWave's Board of Directors has seven directors, consisting of four directors and three independent directors.

To effectively materialize corporate governance and elevate the Board of Directors' performance, RichWave conducts an annual Board of Directors' performance evaluation using internal questionnaires to assess the overall operation of the Board of Directors, functional committees, Board of Directors engagement, their understanding of the company, awareness of their duties, and further education. The outcome of the evaluation is used as a reference for the board members to engage in ongoing improvement in the future.

Board of Directors Performance Evaluation	Board Member Performance Evaluation	Functional Committee Performance Evaluation
<ul style="list-style-type: none"> <li>✔ Level of engagement in the company's operations.</li> <li>✔ Improve the Board of Directors' decision-making quality.</li> <li>✔ Board of Directors formation and structure.</li> <li>✔ Director selection, appointment, and further education.</li> <li>✔ Internal control.</li> </ul>	<ul style="list-style-type: none"> <li>✔ In control of the company's goals and missions.</li> <li>✔ Awareness of the directors' responsibilities.</li> <li>✔ Level of engagement in the company's operations.</li> <li>✔ Internal relationship management and communication.</li> <li>✔ Directors' professional and further education.</li> <li>✔ Internal control.</li> </ul>	<ul style="list-style-type: none"> <li>✔ Level of engagement in the company's operations.</li> <li>✔ Awareness of the functional committees' responsibilities.</li> <li>✔ Improve the functional committees' decision-making quality.</li> <li>✔ Formation of the functional committees, election, and appointment of committee members.</li> <li>✔ Internal control.</li> </ul>



The Board of Directors convenes regularly every year to discuss the company's material issues. In 2021, the Board of Directors convened eight meetings achieving an attendance rate of **98%** 

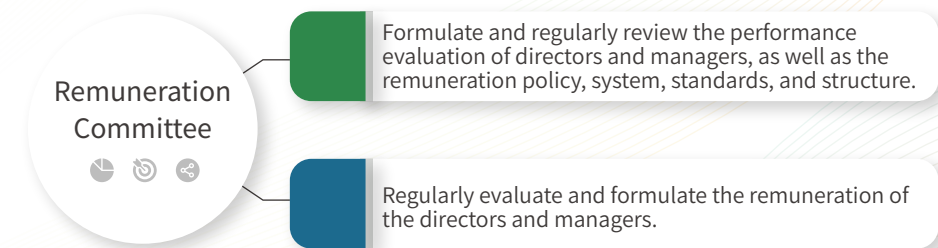


## Functional Committees

The company has established an Audit Committee and a Remuneration Committee under the Board of Directors to assist the board in fulfilling its responsibilities of strategic leadership and carrying out its supervisory function. The Audit Committee consists of independent directors who are in charge of supervising the hiring (dismissal) of the company's CPA, internal control effectiveness, legal compliance status, and performing potential risk control. In addition, RichWave has formulated the Audit Committee organizational regulations, stipulating that Audit Committee meetings must be conducted at least once every quarter, and the meeting may be convened at any time if necessary. In 2021, the Audit Committee convened five meetings, achieving an average attendance rate of 93%.



The company's Remuneration Committee is also made up of three independent directors who propose recommendations concerning the remuneration of directors and managers to the Board of Directors from an independent, objective point of view. The recommendations serve as a reference for the Board of Directors during its decision-making process. According to the company's Remuneration Committee organization regulations, at least two Remuneration Committee meetings should be convened annually, and the meeting can be convened at any time if necessary. In 2021, the Remuneration Committee convened four meetings, achieving an attendance rate of 92%.



## 2.2 Ethical Management

### ■ Ethical Management and Anti-corruption Regulations

#### Ethical Management Regulations and Responsible Unit

Ethical management is the root of corporate management, hence RichWave conducts business activities based on the principle of fairness, honesty, integrity, and transparency. The Board of Directors has approved the "Procedures for Ethical Management and Guidelines for Conduct" that applies to the group's parent company and subsidiaries. The guideline outlines the precautions RichWave employees should observe while implementing services, so as to materialize the company's ethical management policy, vigorously prevent unethical conduct, and prevent the company employees from, in the course of their duties, directly or indirectly providing, accepting, promising or requesting improper benefits, or committing a breach of ethics, unlawful act, or breach of fiduciary duty to acquire or maintain benefits. The guideline stipulates that the company's colleagues should avoid unethical conduct including corruption, bribery, political donation, conflict of interest, and anti-competitive practices. The guideline also states the possible disciplinary actions against unethical conduct and proposes a clear reporting procedure.

- The GM's Office of RichWave is responsible for promoting and implementing ethical management, and it must report to the Board of Directors regularly (at least once a year). It is also obligated to report to the Board of Directors at any time about the following:
  - Help to incorporate ethical and moral values into the corporate management strategy, as well as cooperate with the law to formulate ethical management-related fraud prevention measures.

- Regularly analyze and evaluate the risks of unethical conduct within the business scope to formulate solutions to prevent unethical conduct, as well as to define work-related SOPs and guidelines within various solutions.
- Plan the internal organization, structure, and allocation of responsibilities and set up check-and-balance mechanisms for mutual supervision of the business activities within the business scope which are at the higher risk of unethical conduct.
- Promote and coordinate awareness and educational activities concerning ethics policy.
- Develop a whistleblowing system and ensure its operating effectiveness.
- Assist the Board of Directors and managerial level in auditing and assessing whether the prevention measures taken to implement ethical management are operated effectively, and prepare reports on the regular assessment of compliance with ethical management in operating procedures.
- Prepare and maintain the ethical management policy as well as the compliance statement and documented information such as the materialization of commitments and implementation status.





- The ethical management promotion status was reported to the Board of Directors on 10/28, 2021, and received the board's approval.

The company must review the risk of potential unethical conduct at all times based on the principle of "Procedures for Ethical Management and Guidelines for Conduct" and bolster education and promotion. The company has established and announced an internal independent whistleblowing email and hotline on the company's website and intranet or commissioned other external independent organizations to provide a whistleblowing email and hotline for the company's internal and external person. To encourage internal and external personnel to report unethical conduct or misconduct, a reward of less than NT\$500,000 will be provided depending on the severity of the offense to increase the company's ethical management performance and foster an ethical culture with our colleagues in the company.



## Codes of Ethical Conduct

RichWave believes that ethical conduct should begin at the top, leading by example to guide the company's colleagues, thus the "Codes of Ethical Conduct" has been stipulated, describing the eight good conducts expected of the company's directors and managers in regard to ethical standards including the prevention of conflict of interest and the pursuit of personal gains, confidentiality responsibility, fair transactions, protection and the appropriate use of the company's properties, legal compliance, encouraging the reporting of any illegal or unethical conducts, as well as disciplinary measures.

The guideline defines the conflict of interest that occurs involving personal interests or the company's overall interests, stipulates conflict of interest prevention policies, and provides adequate channels for the directors or managers to voluntarily explain whether a potential conflict of interest with the company exists; when the company is given an opportunity to gain profits, the directors and managers are reminded of their duties to increase the company's legitimate profits; it also stipulates that the directors or managers are bound by the duty of confidentiality for information pertaining to the company, suppliers or customers, unless otherwise authorized or disclosure is required by the law;

The directors or managers should treat the company's suppliers, customers, competitors, and employees fairly. The company is not allowed to manipulate, conceal, and misuse the information they received at work, and it is not permitted to obtain improper profits through false statements or other unfair transactions; it regulates that the directors or managers have the responsibility to safeguard the company assets and to ensure that they can be effectively and lawfully used for official business purposes;

The company should reinforce the internal promotion of ethical awareness and encourage employees to report suspected or confirmed violations of law or unethical conduct to the managers, internal audit supervisors, or other appropriate staff. The company has stipulated a clear whistleblowing system that allows for anonymous whistleblowing; when the directors or managers violate the codes of ethical conduct, the company should deal with the problem per the disciplinary measures in place and immediately publish information such as the date of violation, reasons for violation, the code violated, and the actions adopted to remedy the situation on the MOPS. Through the regulatory document, we can forge an ethical consensus among our directors and managers, as well as allow the company's stakeholders to further understand the company's ethics regulations.

### Employee Work Regulations



Procedures for Ethical Management and Guidelines for Conduct



Codes of Ethical Conduct



## Ethical Management Education and Training

The company stipulates that the responsible unit should conduct at least one internal promotion of ethical management every year, where the Chairman, GM, or senior management communicate the importance of ethics to the directors, managerial level, and company colleagues. To ensure that company employees are aware of the regulations and maintain competitive order, the company's new employee orientation seminar includes an explanation of the Codes of Ethical Conduct, and the company also holds an annual education and training course on the protection of major trade secrets, prevention of insider trading, ethical conducts, and legal compliance, inviting external attorneys to conduct the lectures for RichWave's executives and employees. Through the analysis of legal regulations, our employees can gain a clear understanding of the scope of trade secrets and insider trading, and through the sharing of practical case studies, our employees can understand the potential civil and criminal liabilities of the negative impact on the individuals and the company caused by such violations, to prevent relevant unethical conducts. In 2021, 294 people participated in the course and received a total of 294 hours of training.

Ethical Management Education and Training	2021 Goals	2021 Achievements	Goal Achievement Status	2022 Goals
Total number of people trained	302	294	98%	349
Total training hours (1hr/person)	302	294	98%	349



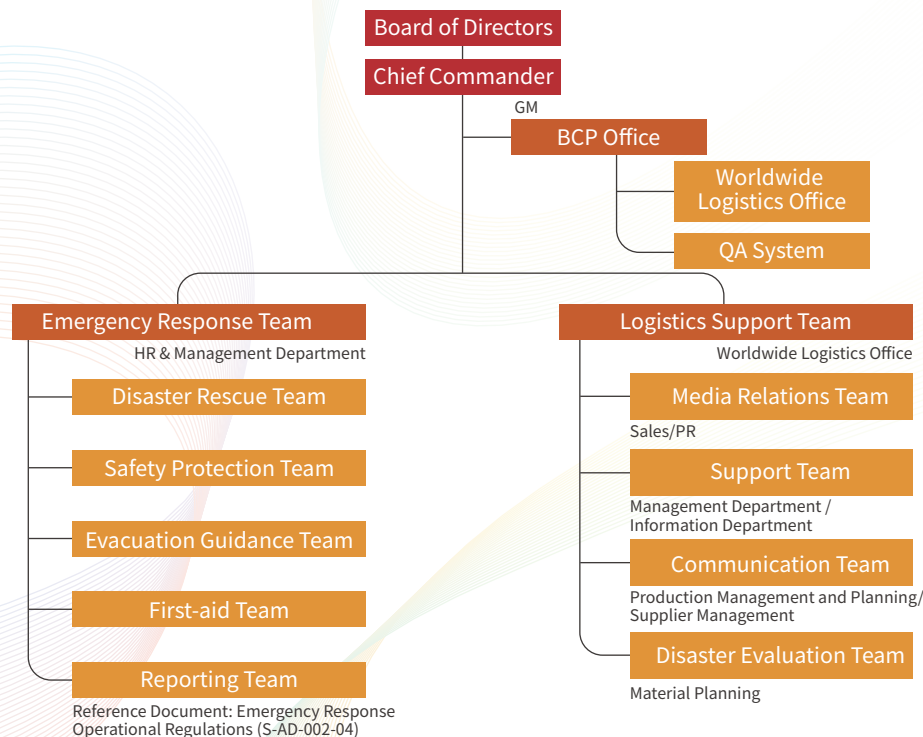
## 2.3 Risk Management

### Risk Policy

#### Risk Management Organization

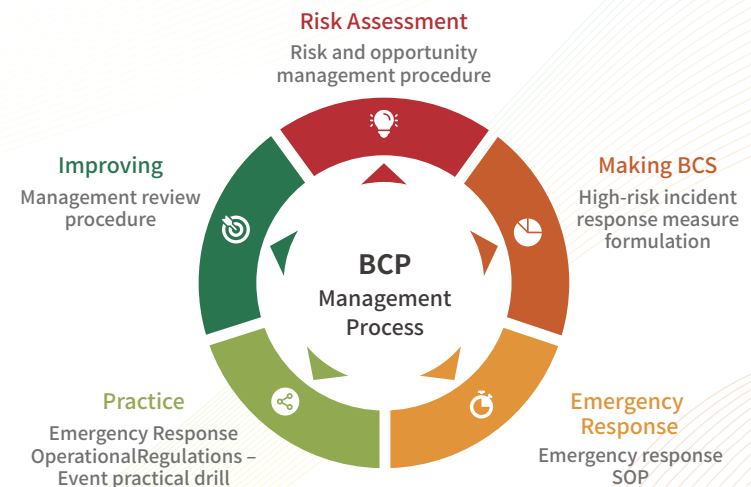
RichWave has formed an interdepartmental BCP (Business Continuity Planning) team with the GM as the chairperson and team members consisting of representatives from various business units. In order to prevent potential major risks from harming the company, the BCP team conducts rigorous risk evaluation to formulate response strategies, arrange for emergency response measures, as well as carrying out drills from time to time and engage in ongoing improvement.

#### BCP Organizational Chart



#### Risk Policy and Management Process

To ensure RichWave's management team can apply proactive and cost-effective approaches to integrate and manage all strategies, operations, finance, and potential risks that may have an impact on the company's operations and profitability, as well as strengthening the Board of Directors' risk management and supervision functions, the company has formulated the "Risk Management Policy and Protocol," which was approved by the Board of Directors. Through risk identification, analysis, evaluation, response, control, and supervision, the company can evaluate and manage various existing risk factors and regularly observe the emerging risks' possible impact on the company. In doing so, we can monitor the scope of various risks and adopt adequate measures and resource allocations to ensure that the company can manage risks appropriately.



## Risk Item Identification and Management

By analyzing the global conditions, industry trends, and regulatory trends, RichWave can identify risks related to five dimensions including strategy, operation, finance, hazardous events, and legal compliance:

Strategy	Operation	Finance	Hazardous Event	Legal Compliance
<ul style="list-style-type: none"> <li>❖ Industry changes and technological innovation</li> <li>❖ Technical R&amp;D process and competitive situation</li> <li>❖ Policy or regulation changes</li> <li>❖ Developments in global politics and economy</li> </ul>	<ul style="list-style-type: none"> <li>❖ Market demand</li> <li>❖ Business continuity risk (risk of interruption of operation including supply chain interruptions and production interruptions)</li> <li>❖ Information security</li> <li>❖ Supplier management</li> <li>❖ Intellectual property rights</li> <li>❖ Credit risk (including clients and suppliers)</li> <li>❖ Corporate image</li> <li>❖ Loaning of funds to others and endorsements or guarantees for others</li> <li>❖ Strategic investment</li> </ul>	<ul style="list-style-type: none"> <li>❖ Interest rate, exchange rate, inflation</li> <li>❖ Liquidity</li> <li>❖ High-risk/high-leverage financial investment, derivative transactions</li> </ul>	<ul style="list-style-type: none"> <li>❖ Climate change, natural disasters</li> <li>❖ Occupational safety and health</li> <li>❖ Fire and other manmade disasters (including the use of hazardous substances in products and manufacturing processes)</li> <li>❖ Influence of an epidemic</li> <li>❖ Water and power supply</li> </ul>	<ul style="list-style-type: none"> <li>❖ Company Act, Securities, and Exchange Act, Business Entity Accounting Act, insider trading</li> <li>❖ Financial reporting procedure</li> <li>❖ Personal Data Protection Act</li> </ul>

In regard to the risk items that may be encountered during the company's day-to-day operations, RichWave has developed a risk and opportunity management protocol to conduct a SWOT analysis based on the company's background. Furthermore, the stakeholders' concerns and appeals are included in the stakeholder risk analysis and controlled by the risk analysis team. In 2021, the three major high-risk items identified include product competitiveness, price competitiveness, and supplier management. Response measures planned and implemented include strengthening product audit, establishing BCP, fortifying supplier management protocol, and the resident management of key suppliers.



To effectively manage and respond to major operational risks, the company has implemented the BCP system, and the following main items were implemented in 2021:

- Pandemic risk management:

In response to COVID-19-related risks, RichWave has established corresponding response measures, carried out disinfections regularly, as well as enforced the compulsory wearing of masks and daily body temperature measurements. To prevent the pandemic from affecting the company's operation, RichWave has implemented the WFH (work from home) and staggered shift system, encouraged video conferencing and phone communication, as well as prohibited visitors and commuting between offices in Taipei and Hsinchu. For those working in the office, RichWave has made plans to examine the employees' health conditions on a daily basis. The company also offers them flexible working hours to avoid peak hours of public transport, and we have advised our employees to dine indoors.

- Water/power shortage and pandemic risk analysis at various plants:

Analyses are conducted for our Taipei/Hsinchu office and plants with suppliers located in Taoyuan, Hsinchu, Taichung, and Tainan to assess the possibility and possible impact of droughts, blackouts, and the pandemic, categorizing them into three risk levels (low, medium, and high), so as to mitigate their potential impact on the company.

The company's risk management, identification status, and response measures were reported to the Board of Directors on December 23, 2021, while instructions and recommendations were also received from the Board of Directors.

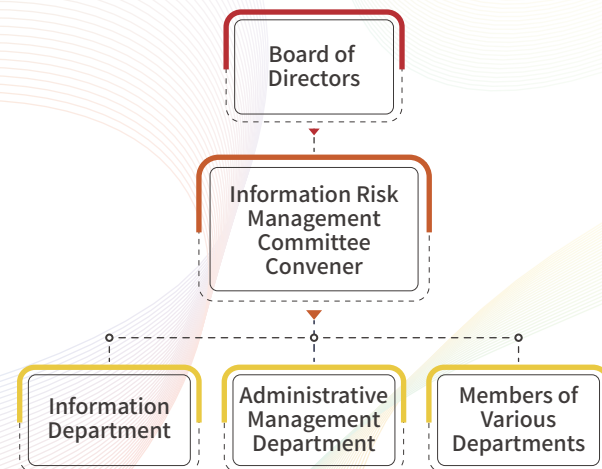


## 2.4 Information Security and Customer Confidentiality

### Information Security Measures

#### Information Security Organization

Amid the digital trend, the importance of the network, IT system, and data security is becoming increasingly important, while the demand and expectations of the competent authorities and stakeholders for the company's information security are also on the rise. If the quality of the company's system is not up to standard, information leaks or service interruptions will result in expensive costs and damage the company's reputation. In light of this, RichWave has formed an interdepartmental information security management team with the GM as the convener, while the Information Department and Administrative Management Department are in charge of offering directions and planning, with support and cooperation coming from various business units. The information security team convenes regular meetings to review the company's information security system operations, and it must report information security-related implementation status to the Board of Directors at least once a year to obtain advice and guidance from the highest level of the company. This is to ensure the operational effectiveness of RichWave's information security management.



#### Information Security Policy

To ensure the reliability of the company's information services and protect the confidentiality, integrity, as well as the availability of employee, supplier, and client-related information assets, RichWave stipulated the "Information Security Risk Management Policy and Procedures" on December 23, 2021, which was also approved by the Board of Directors. The policy regulates the company's conduct in information asset inventory, information security promotion, company data confidentiality, information equipment maintenance and backup, personal computer security system maintenance, and information security incident report, to ensure the sustainable operation of RichWave's information services.



The company has formulated the information security management procedures document to make sure of the security and accuracy of various systems' electronic data, as well as to achieve the objective of maintaining the company's normal operation. The policy applies to all of RichWave's system data and information equipment, regulating the company's information security control operation (including authorization control, file management, and anti-virus measures), data processing operation, information equipment management and maintenance, form filling operation and form storage period, thereby guaranteeing that the company's system can engage in effective hierarchical control, important data can be kept, reviewed adequately, and the information system can be comprehensively protected and backed up. Additionally, the company regularly establishes a data backup system to conduct disaster recovery drills and engender an effective data security protection environment in conjunction with the information security system for the sake of ensuring the company's sustainable operation.

### RichWave's information security management measures

Work Item	Work Details
Information equipment management	<ul style="list-style-type: none"> <li>Establish an annual inventory and list of information assets, conduct risk management according to the information security risk evaluation, and implement various control measures.</li> </ul>
Information security promotion and implementation	<ul style="list-style-type: none"> <li>The company regularly carries out information promotion operations by organizing one information security education and training session annually. All new employees must sign the information confidentiality agreement.</li> <li>All personnel must comply with legal regulations and the information security policy requirements. Executives should supervise the implementation status of the information security system, and bolster our colleagues' information security and legal awareness.</li> </ul>
Software management	<ul style="list-style-type: none"> <li>Anti-virus software should be installed on personal computers and the virus database should be regularly updated. The use of unauthorized software is strictly forbidden.</li> </ul>
Account protection	<ul style="list-style-type: none"> <li>The colleagues' accounts, passwords, and authorization should be kept and stored responsibly, and they should be changed regularly.</li> </ul>
Information security incident management	<ul style="list-style-type: none"> <li>Stipulate the SOP for information security incident response and reporting, to resolve information security issues immediately and prevent the damage from escalating.</li> </ul>
Supplier information security control	<ul style="list-style-type: none"> <li>All of the company's employees, contractors, and third parties must sign the confidentiality agreement to make sure that those using the company's information to provide information services or carry out related information services have the responsibility and obligation to protect the information asset of RichWave, thereby preventing unauthorized access, tampering, destruction, or improper disclosure.</li> </ul>
Data backup	<ul style="list-style-type: none"> <li>Important information systems or equipment should be equipped with adequate backup or surveillance mechanisms, and a drill must be performed once a year to maintain its availability.</li> </ul>

## Information Security Training and Education

### Setting the 2022 Information Security Education and Training Goals

- ❖ Biannual information security education and training sessions are held, with each session lasting at least one hour (including information security awareness/social engineering)
- ❖ Arrange for an external information security firm to conduct an information security inspection/drill once a year (including email social engineering drill/weak spot detection)
- ❖ Arrange for an annual data recovery drill focusing on the recovery and verification of backed up data to ensure the correctness of the recovered data
- ❖ Announce relevant information security reports from time to time (provide analysis report for special information security incidents)
- ❖ Arrange for a system security update at least once a year, focusing on the patch updates of major system loopholes
- ❖ Establish an information security reporting mechanism and an information security team to conduct comprehensive information security management

To instill information security awareness in our colleagues and make every employee an integral part of the company's information security protection network, RichWave has conducted information security education and training for all new employees, and we have promoted information security to them from time to time through email. The new employees' information security training includes an introduction to the company's information system, document management system, electronic form operations, computer and network regulations, and USB regulations. RichWave's information security supervisor will brief the new employees to make sure they can comply with the company's information security system and regulations. The company also continues to observe the current information security conditions in society and prepare information security promotional materials focusing on high-risk topics for the company's colleagues to prevent the occurrence of risks and incidents. In 2021, four information security promotions were conducted on topics such as account safety management, phishing, and scam emails to heighten our colleagues' information security awareness and vigilance in using emails, as well as reminding them to regularly change their system login passwords.

## Customer Confidentiality

RichWave values our customers' personal data and confidentiality, hence we uphold the most stringent approach to collecting and managing our customer's information. When signing a contract with our customers, we have included the confidentiality agreement as part of the official contract to ensure that RichWave's colleagues and partners comply with confidentiality through formal document regulations. After obtaining our clients' information, it will be stored in a digital format and maintained by the company's information security management system in conjunction with the account authorization management mechanism to ensure that RichWave can effectively control the use of our customer's confidential information. Furthermore, RichWave has established a hotline and email to process the company's consumer rights-related complaints and problems to make sure consumer complaints are responded to in a fair and timely manner. In 2021, RichWave did not receive any customer confidentiality violation-related complaints.

## 2.5 Legal Compliance

Legal compliance is the fundamental duty of corporate citizens, while the proactive understanding of regulatory changes in a bid to make the necessary adjustments is the embodiment of corporate social responsibility. RichWave upholds a rigorous attitude of honesty and integrity to interact with our stakeholders; to ensure legal compliance, the company has established a legal affairs unit responsible for reviewing the legality of our contacts, and various units have also appointed colleagues to monitor and follow domestic/foreign policies and regulations that have a potential impact on the company's business and finance, such as the Company Act, Patent Act, Occupational Safety and Health Act, and Labor Standards Act. Moreover, changes to the laws and regulations are reported to the supervisor followed by internal regulation adjustments to ensure the company's operations are in compliance with the law. In addition, RichWave holds a long-term partnership with professional teams from law firms to study high-risk topics, and an external legal education and training course is held annually to strengthen the legal competency of the company's management team. In 2021, RichWave did not violate any environmental law, social law, products and services related health and safety regulations, products and services related information and labelling regulation, marketing communications (including advertising, promotion and sponsorship) related laws and therefore was not penalized in this regard.



# 3 Product Management

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3-3 Customer care	47

## Chapter Highlight

- 💡 In 2021, we invested NT\$539,010,000 in R&D, accounting for 10% of the company's income.
- 💡 Ranked 9<sup>th</sup> place in CommonWealth Magazine's Annual Growth Top 100 Enterprises.
- 💡 Received the "Promising Product of the Year" Award of 2021 EE Awards Asia hosted by ASPENCORE.
- 💡 The target number of patent applications and the cumulative number of patent applications for 2021 were 51 and 48, respectively, equivalent to an achievement rate of 94%.
- 💡 The satisfaction survey was expanded to 5 major end client in 2021 and obtained an excellent overall satisfaction score of 87 points.
- 💡 100% of our main suppliers received ISO 14001 environmental management system certification.
- 💡 Achieved 100% implementation rate and a pass rate of 100% for ESG on-site audits in 2021.
- 💡 Local procurement accounted for 68.3% of total procurement in 2021.



## 3.1 Innovation Management

### Innovative Measures

Innovation is one of RichWave's six major core values and a core element of corporate growth. We adhere to the quality policy of "Ongoing quality refinement – Customer satisfaction comes first" to achieve market differentiation and develop products with outstanding performance through innovation, technology, and unique market positioning. In the field of WiFi wireless communication and IC, we have constantly unveiled new products to accommodate the market's needs. RichWave monitors technological changes and developments in the industry closely, with special focus on the environmental protection of products, R&D of low energy consumption and high efficiency products, maintaining a high level of understanding of industrial dynamics demand while persistently elevating the company's R&D capabilities. At the same time, we have hired external professional consultants to introduce new technologies and engage in industry-academia collaborations, where the patent mechanism is applied to protect RichWave's innovative ideas and R&D outcome, thereby maintaining the company's technological leadership position, allowing us to strive to become the leader in the global RFIC market through innovative technology. We will continue to invest resources for innovative R&D; in 2021, RichWave's R&D expense totaled NT\$539,010,000, accounting for 10% of the company's revenue.

Unit: NT\$1,000

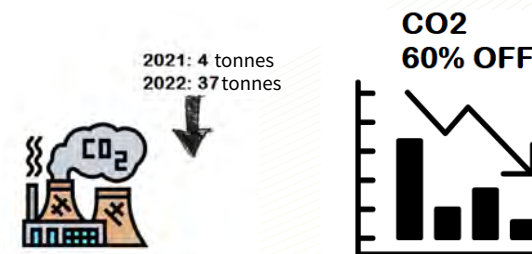
	2019	2020	2021
R&D investment	399,253	513,922	539,010
Revenue ratio	15%	10%	10%

### Energy-saving Performance of Green Products

RichWave specializes in chip design, and our chips are sold worldwide for a wide range of wireless communication product applications. The company is committed to develop more energy-efficient products with lower carbon emissions through chip design in an attempt to minimize environmental impact and enhance product competitiveness. RichWave can achieve the objective of energy-saving, carbon reduction, and environmental friendliness by improving the performance of the products, such as lower power consumption, minimal design, and better production process

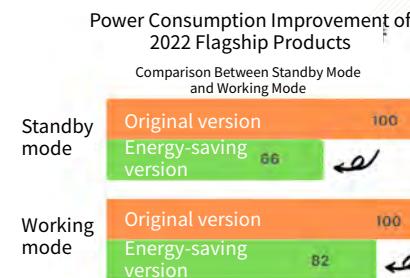
#### Saving GHG Through Manufacturing Materials

Design and process innovation are the company's primary concerns; besides demonstrating RichWave's pursuit of product quality, we also want to contribute to environmental sustainability. Through the effort on the chip design by controlling the surface area and innovations in the production process, we can significantly increase the die yield per wafer to lower GHG emissions by approximately 60%. Based on product shipments in 2021, RichWave has decreased CO<sub>2</sub> emissions by about 4 tonnes. Based on 2022 product shipments, the company is expected to lower CO<sub>2</sub> emissions by 37 tonnes



#### Energy-saving Technology of Flagship Products

For products with an advantage in transmission range, RichWave has completed a "green innovation" design in 2021 to improve power consumption under various scenarios (lowering power consumption by 34% and 18%, respectively while in the standby mode or working mode). Some of our customers have already proposed such a need for energy-saving products. 2022 flagship products can save 1.43 million kWh of electricity in a year (calculation based on 12 hours of working mode and 12 hours of standby mode)





### 🔧 Mobile Product

Mobile products boast extremely low power consumption under special standby mode, which only consumes roughly 30%–45% power compared to the normal mode. When transmitting, the efficiency mode offers a transmission capability of 80%-92% power consumption rate in comparison with the normal mode. Therefore, it can extend battery life and minimize battery pollution.



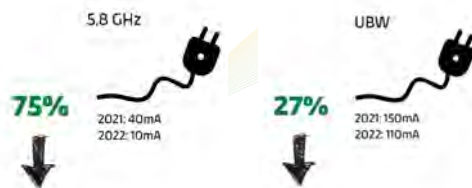
### 🔧 Tablet and Smartphone Product

Under special standby mode and combined with the efficient transmission mode, tablet and smartphone products can achieve the benefits of lower power consumption. The technology has been applied to the tablet and smartphone project in 2021. If it is calculated based on 12 hours of standby mode and 12 hours of working mode daily, the products can save electricity consumption for up to 3.52 million kWh. Based on the estimated product shipments in 2022, the product series can save approximately 21.97 million kWh. If it is calculated based on the Electricity Carbon Emission Factor announced by the Bureau of Energy in 2020, the products can decrease CO<sub>2</sub> emissions by about 43,765 tonnes.



### 🔧 Microwave Radars with Integrated Signal Processing Sensor

Products continue to undergo lower current design. The CW mode current of the 5.8GHz microwave radar front sensor was 40mA. It was decreased to 10mA in 2022, showing a reduction of 75%. The CW mode current of the 10GHz ultra-wideband microwave radar with an integrated signal processing sensor was 150mA. It was decreased to 110mA in 2022, showing a reduction of 27%.



### 🔧 Energy Conservation and Carbon Reduction Applications of Microwave Radar with Integrated Signal Processing Sensor

- Light bulbs equipped with the automatic sensing function of the radar sensor can turn off the lights automatically when the room is unoccupied
- Air conditioners equipped with radar sensors can detect the presence of occupants in the room automatically adjust the fan volume to the lowest level or enter sleep mode
- Desktop or notebook computers equipped with radar sensors can turn off the screen and enter sleep mode when the user is away from the screen
- Surveillance systems equipped with radar sensors will automatically enter sleep mode when no object movement is detected for some time



### RichWave Masters Key Technologies, Increases Market Share and Gains International Recognition

In recent years, as Taiwan's RFIC industry and technology become more mature, RichWave is the only domestic manufacturer utilizing the advanced material SiGe to produce and design PA, as well as designing SW using the SOI process, and our technological capability has already reached economies of scale. Moreover, the company has taken advantage of the technical communication between the technical team, our clients, and partners to develop highly integrated and price-competitive IC products that cater to the needs of domestic system manufacturers. What's more, RichWave has steadily increased production to become a contender amid fiercely competitive major international manufacturers. We have not only reshaped the market that was once monopolized by major domestic and foreign manufacturers but also indirectly increased the global market share of domestic RFIC products year after year. In terms of RFIC FEM products used for WiFi applications, RichWave has shipped over 104 million chips on average every month in 2021, totaling 1.243 billion chips for the entire year, hence the global market share for RichWave WiFi products in 2021 is estimated at approximately 20%.

## Proactively Participate in Academic Seminars to Establish RichWave's Industry-leading Position

RichWave organizes product launches at the end of every year to showcase the company's new products and R&D achievements to our supply chain partners. In 2021, in response to the business opportunities associated with 5G mobile network technology, and IoT business opportunity enhanced by WiFi performance, we have presented RichWave's WiFi/5G technology and products, IoT and automobile applications, home passive components and sensors, consumer products, as well as industrial and automotive applications to help our stakeholders quickly understand the company's products, technologies, and future outlook. Meanwhile, we have continuously sponsored the activities of IEEE and its branches annually since 2014, including BCTM-IEEE EDS brown award in 2015, BCTM-IEEE silver award for 2016 and 2017, BCICTS-IEEE brown award for 2018, RFIC silver award in 2019, and RFIC student program in 2020. Additionally, we also have been participating in TSIA's quarterly report presentations and the content production of NTU SoC Center's R&D quarterly report to disseminate RichWave's technological know-how through academic institution journals. Due to the influence of COVID-19, many countries in Europe and the US have implemented large-scale WFH and distance learning measures, resulting in a considerable increase in the electronics peripherals manufacturers' revenue, which had remained stagnant in the past. In particular, while being in the upstream IC Design Group who shall have better gross margin products, but we also experienced the stronger demand than the supply. As a result of the aforementioned factors, RichWave was awarded 9<sup>th</sup> place in CommonWealth Magazine's 2021 Top 2000 Enterprise Survey.

《天下》韌性企業200強

全年成長Top100

排名	公司名稱	2020年 營收成長率 (%)	產業別	排名	公司名稱	2020年 營收成長率 (%)	產業別
1	世紀鋼鐵結構	166.82	製造	51	語瑞科技	29.37	製造
2	嘉威生活	162.07	服務	52	中菲行國際物流	28.91	服務
3	圓剛科技	139.26	製造	53	新日興	28.89	製造
4	岱宇國際	124.30	製造	54	矽力杰	28.74	製造
5	茂林光電科技(開曼)	111.99	製造	55	凱基證券	28.58	金融
6	采鈺科技	104.53	製造	56	瑞登半導體	28.01	製造
7	明泰科技	103.28	製造	57	展碁國際	27.98	服務
8	新廣科技	99.36	製造	58	瑞你強	27.44	服務
9	立精電子	94.55	製造	59	晶豪科技	27.41	製造
10	祥碩科技	86.52	製造	60	力晶積成電子製造	27.27	製造

## Received the "Promising Product of the Year" Award of 2021 EE Awards Asia hosted by ASPENCORE

RichWave's WiFi6 RF Front-End Module (FEM) was awarded the RF/Wireless IC Product Award of 2021 EE Awards Asia hosted by ASPENCORE.

The winner of the EE Awards Asia was selected by ASPENCORE's network user groups in Taiwan and the Asia Pacific via an online poll (accounting for 70% of the total score) as well as a jury vote (accounting for 30% of the total score) by ASPENCORE's global editors and industry experts. According to ASPENCORE, EE Awards Asia received over 300 nomination items from 133 companies worldwide contending for 27 awards across 4 major categories including the "Company Award," "Product Award," "Start-up Award," and "Analyst's Award."

RichWave's WiFi6 RF Front-End Module (FEM) stood out thanks to votes from nearly 10,000 online subscribers of EE Times and EDN in Taiwan and the Asia Pacific to receive the Promising Product of the Year Award, demonstrating the industry's recognition of RichWave's innovative ability and contributions.





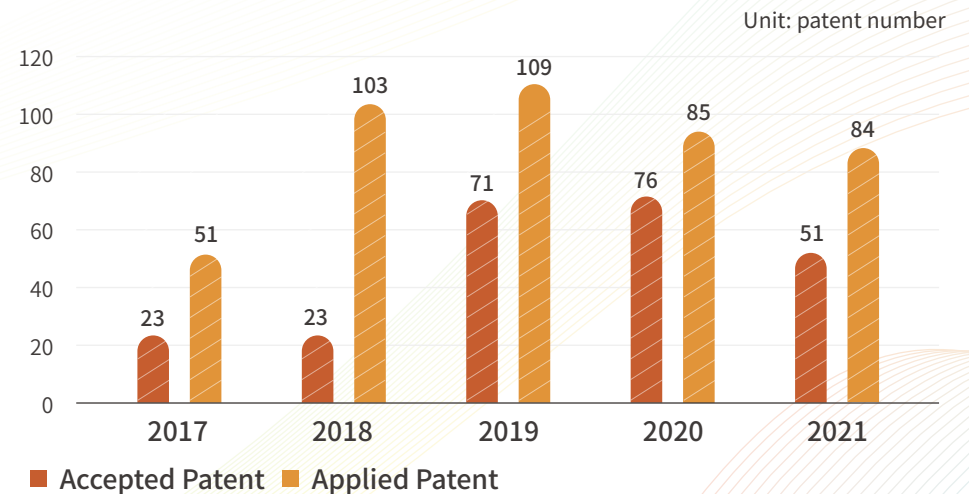
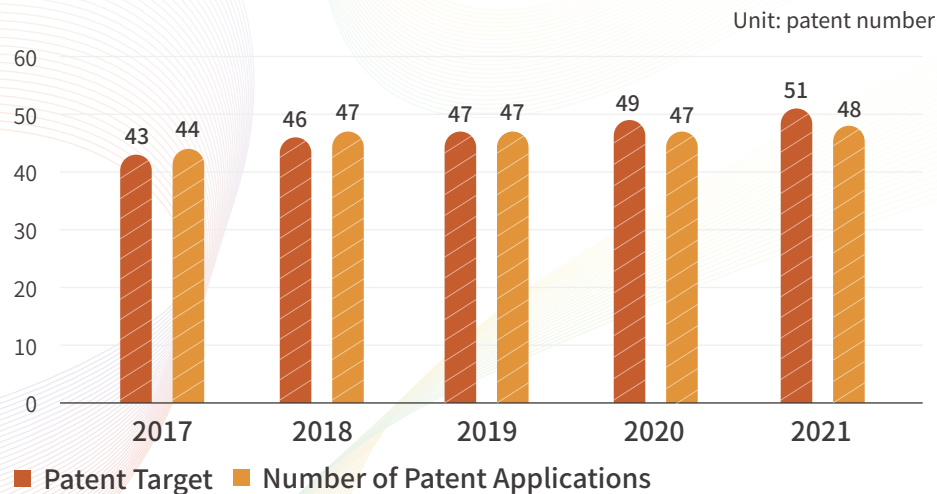
## Patent Management

RichWave is eagerly promoting the smart intellectual property management project to reinforce the company's innovative ability and product competitiveness, as well as to protect our cutting-edge technological accomplishments. The company focuses on the strategic goals of "becoming the leader in the global RFIC market through the application of technology" and "market differentiation" to determine the number of patent applications and grants for the year, encouraging our R&D colleagues to achieve the target. RichWave has formulated the "patent management regulation" document to help our colleagues apply for patents systematically and keep the R&D outcome in the form of patents to safeguard the company's R&D achievements and patent rights. RichWave has established a Patent Review Committee headed by the GM, in charge of reviewing patent applications and their economic benefits, application countries, patent maintenance, as well as offering technical consultations and patent management policies, etc. To incentivize our colleagues to submit patent applications, RichWave has set aside invention patent application bonus, invention patent grants bonus, new patent application bonus, new patent grant bonus, design patent application bonus, design patent grant bonus, and patent infringement reporting bonus to increase the company's patent quality and competitiveness.

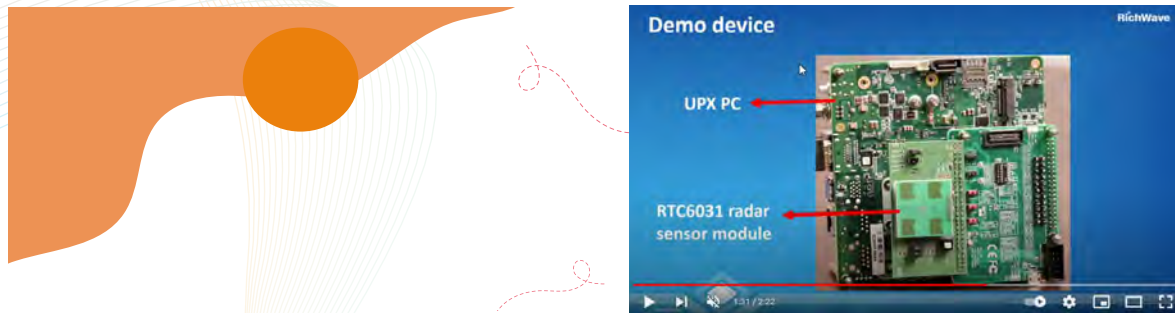
The company reports the number of patents and intellectual properties to the Board of Directors annually in Q4. The status reports on October 28 and December 23, 2021, are as illustrated below:

### Patent target achievement:

The target number of patent applications and the cumulative number of patent applications for 2021 were 51 and 48, respectively, equivalent to an achievement rate of 94%.



Most representative patents in 2021: US10833745B2 and US10530413B2



CMOS radar sensors with functions such as motion detection, distance measurement, presence detection, and signs of life detection are used extensively in lighting, security protection, and smart home applications. As the leading brand in RF technology, RichWave offers clients comprehensive CMOS radar sensor solutions from sensor IC, and algorithm, to reference design. Currently, the company's product portfolio includes the 5.8GHz Doppler radar and 10GHz radar SoC. The 2 patents, US10833745B2 and US10530413B2 allow RichWave to provide our clients with optimized dimension design solutions and enhanced product performance.

#### Personal Computer Applications

Taking the corresponding product RTC6031 as an example, RichWave's CMOS radar sensor is installed on the desktop computer, where the system can automatically detect the user's movement. When the user nears the computer, it will automatically wake up the screen to enhance convenience; when the user leaves the screen, the system automatically locks the screen to ensure data security and increase energy efficiency. Besides this, the system can also detect the user's computer usage duration and physiological values such as breathing and heartbeat to kindly remind the user to adjust his/her computer habit in order to foster physical health.

#### Smart Home Application

RichWave's microwave sensors offer detection functions such as distance, direction, presence, and headcount. If the RTC6031 device is installed in-home air conditioners, the system can detect the presence of people in the house through waveform monitoring and automatically report the relative distance between the user and the air conditioner. In doing so, the air conditioner can adjust the optimal angle of the vents and fan speed, turning it into an integral part of the smart home that keeps the users at the most comfortable temperature while saving energy and money at the same time.

#### For relevant introduction videos



Computer applications



Home applications

#### RichWave MW sensor – The secret weapon to make your air conditioner smarter

RichWave's microwave sensors offer detection functions such as distance, direction, presence, and headcount. By selecting air conditioners equipped with RichWave's MW sensor, it can adjust the optimal angle of the vents and fan speed based on your movements, keeping you at the most comfortable temperature while saving energy and money at the same time

<https://www.youtube.com/watch?v=QIHPb2VyQVE>



## 3.2 Sustainable Supply Chain

### Supply Chain Management

RichWave is a professional IC Design company that does not engage in large-scale production. All product raw material procurement, wafer fabrication, packaging, and testing are carried out by our suppliers and partners. We understand that the main social and environmental impact occurs during the backend manufacturing operation of the value chain, hence we strive to collaborate with our suppliers to strenuously comply with the local environmental and labor laws, as well as implement energy conservation, carbon reduction, and pollution prevention measures in a bid to form a sustainable supply chain for electronic products.

#### Responsible Supply Chain

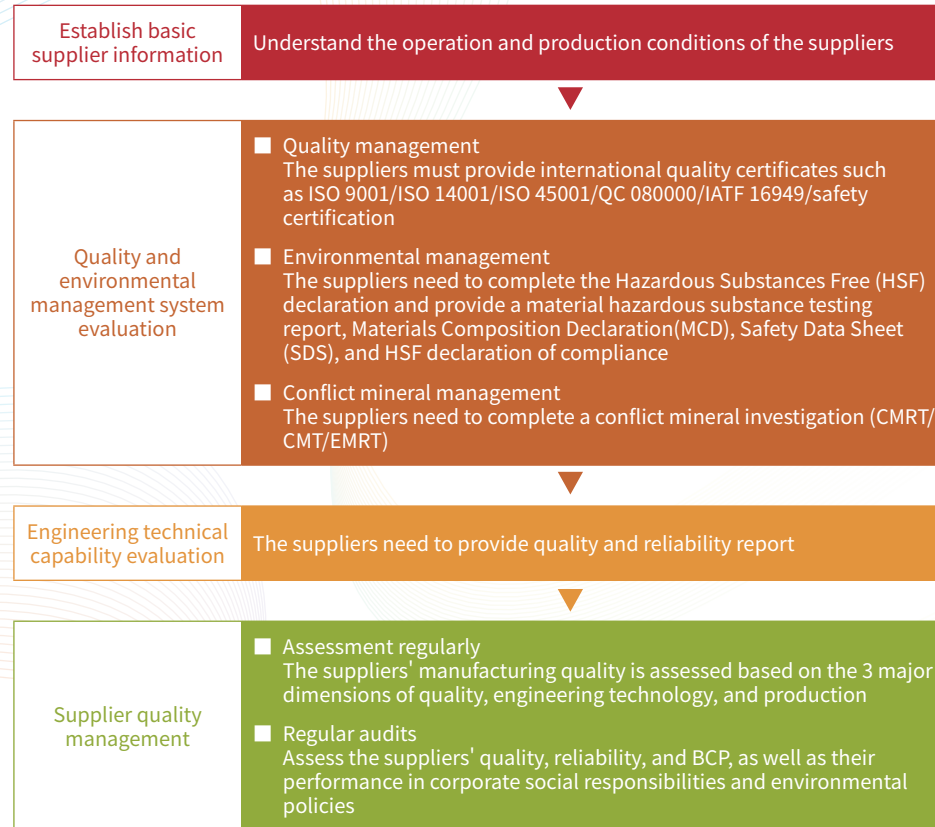
- ▶ 100% of our main suppliers received ISO 14001 environmental management system certification and ISO 9001 quality management system
- ▶ Achieved 100% implementation rate and a pass rate of 100% for ESG on-site audits in 2021
- ▶ Starting in 2022, suppliers are required to comply with ISO 14064-1:2018 GHG inventory-related requirements

To mitigate the product value chain's impact on the local environment and society, RichWave's QA Department is responsible to supervise the value chain's legal compliance in aspects such as environmental protection, occupational safety, and health or labor rights, as well as to ensure the fulfillment of corporate social responsibilities. We have established a comprehensive supplier management process, where the screening of new suppliers involves a detailed review of their corporate social responsibility performance; apart from reviewing their engineering capabilities, we also demand our suppliers provide international quality certification and make sure that they do not use any hazardous substance or conflict minerals before they can be registered as RichWave's suppliers. In 2021, three new suppliers passed the abovementioned ESG risk assessment and became registered suppliers of RichWave, achieving a coverage rate of 100%.

In terms of existing suppliers, we carry out regular supplier evaluations and irregular supplier audits. Besides assessing the suppliers' quality and reliability, ESG-related scoring items are also incorporated into the supplier audit, and suppliers with scores lower than the requirement will be assisted to make improvements; if their reevaluation results still fail to meet the minimum standards, RichWave will stop purchasing from them or terminate their supplier qualifications. In 2021, we conducted audits on 20 of our main suppliers across three major categories (wafer, packaging, and testing), achieving an audit coverage rate of 100%, and no suppliers exhibited negative ESG impacts.

Furthermore, we convene quarterly supplier meetings to exchange quality and production capacity related opinions with our suppliers, as well as share experiences and reach a consensus in the field of sustainability for the sake of forging a long-term, stable partnership and bolstering the sustainability of the supply chain.

### RichWave's Supplier Management Process



RichWave's QBR meeting and outstanding supplier award in Q1 2021

### RichWave's Supplier ESG Audit Plan

Management Dimension	E (Environment)	S (Social)	G (Governance)
Management strategy	Demand our suppliers to set up a complete set of environmental policies and environmental management system and implement accordingly and timely ensure that their production raw materials are halogen-free and comply with RoHS, REACH regulations, as well as environmental regulations. Furthermore, they must not cause harm to the environment and people.	We believe the suppliers should provide a fair, safe, and healthy workplace for their workers, hence we continue to monitor their labor rights and occupational safety performance to ensure that RichWave's supply chain does not violate labor rights.	To ensure the quality of the products and steady supply, we value our suppliers' production technology, quality yield, and equipment production capacity. We collaborate with our supply chain partners to improve the competitiveness of our products and promote technical upgrades in the supply chain.
Evaluation indicator	<ul style="list-style-type: none"> <li>✓ Suppliers' environmental policy and management framework</li> <li>✓ Environmental management system</li> <li>✓ Environmental substance certification and management (including internal audit)</li> <li>✓ Environmental law compliance</li> <li>✓ Test reports for packaging materials: SDS, HSF declaration of compliance</li> <li>✓ Materials' hazardous substance risk evaluation and control</li> </ul>	<ul style="list-style-type: none"> <li>✓ Human rights commitment                             <ul style="list-style-type: none"> <li>- No child labors</li> <li>- No compulsory labor</li> <li>- Anti-discrimination</li> <li>- No discrimination based on religion, race, social status, nationality, and disability</li> <li>- No corporal punishment, coercion, and language abuse on the employees</li> </ul> </li> <li>✓ Labor rights                             <ul style="list-style-type: none"> <li>- Work hours and remuneration comply with regulations and industry standards</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ Performance of manufacturing system</li> <li>✓ Quality system</li> <li>✓ Reliability control</li> <li>✓ Business Contingency Plan (BCP)</li> </ul>



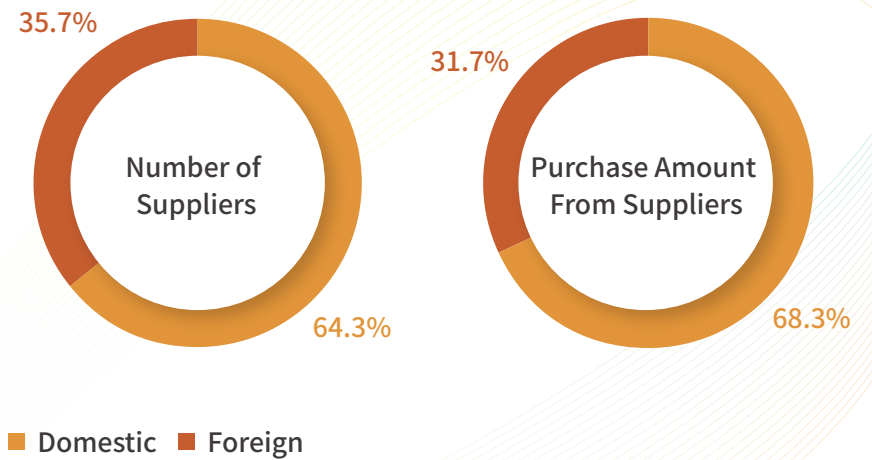
### Certification Statistics of Suppliers

Dimension	Management Standards	FAB		Assembly House		Testing House		Total	
		Total	5	Total	5	Total	3	Total	13
		Number of certified suppliers	Ratio	Number of certified suppliers	Ratio	Number of certified suppliers	Ratio	Number of certified suppliers	Ratio
Economy	ISO 9001 quality management system	5	100%	5	100%	3	100%	13	100%
	IATF 16949 automotive industry quality management system	5	100%	4	80%	3	100%	12	92%
Environment	ISO 14001 environmental management system	5	100%	5	100%	3	100%	13	100%
	QC080000/ SONY GP hazardous substance management	3	60%	5	100%	2	67%	10	77%
Social	OHSAS 18001/ISO 45001 occupational safety and health management	4	80%	5	100%	3	100%	12	92%
	RBA/SA 8000 social responsibility management	2	40%	2	40%	2	67%	6	46%

### Local Procurement

RichWave is aware that raw material transportation-related carbon emissions are an important facet of product carbon emissions throughout its life cycle, hence we have vigorously advocated the local procurement policy, which involves prioritizing local suppliers when making purchases. In 2021, RichWave's procurements from domestic suppliers account for 68.3% of our total procurement amount. In the future, we will continue to implement local procurement on the premise of prompt delivery and lowering supply risks; besides decreasing transport-related carbon emissions and costs, we can also foster developments in the domestic industry economics and reduce our reliance on foreign manufacturers.

### RichWave's Local Procurement Ratio in 2021



### Green Procurement

Green consumption has become an international trend; thus, consumers and enterprises are leaning toward green products and services. At RichWave, we have internalized the concept of environmental sustainability into our procurement policy by choosing products that comply with green and environmental regulations including domestic/overseas environmental labels, energy-saving labels, carbon footprint labels, carbon reduction labels, Energy Star, FSC, and PEFC sustainable forest labels. While mitigating the environmental impact of our operations, the company also benefits from decreased energy expenditures, thus we will continue to materialize green procurement to support the development of green products and industries through real actions.

## Raw Material Management

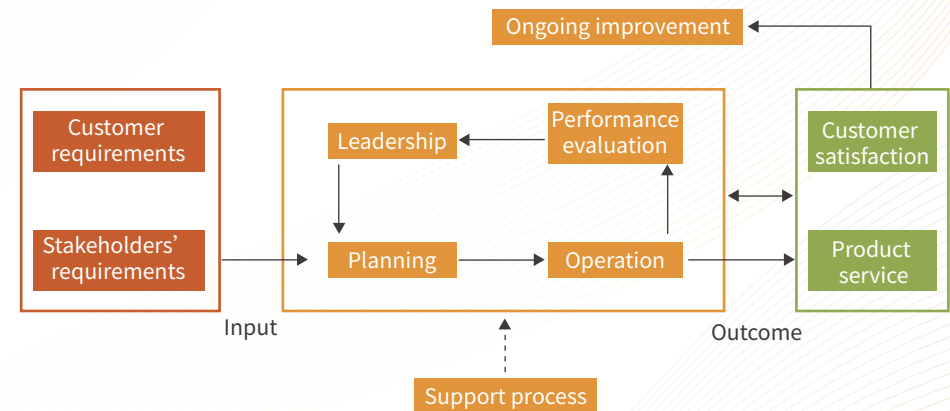
### Chemical Substance Management



RichWave sees maintaining consumers' health and protecting the natural environment as our responsibility. We have not only obtained ISO 9001:2015 and IECQ QC080000 but also the SONY GP (Green Partner) and Samsung Eco-Partner certification by rigorously controlling the chemical substances of our raw materials. To ensure the safety and eco-friendliness of our products, we have stipulated the environmental substance control protocol, demanding our primary suppliers to respond to the survey results after the biannual EU REACH dossier updates are published, and all the suppliers must provide a Certificate of Non-use of REACH, Safety Data Sheet (SDS), and Hazardous Substance Free (HSF) declaration of compliance. In addition, all the suppliers must provide a third-party ICP report to RichWave every year for systematic management purposes. The report must contain

at least the test results for 10 RoHS items and halogen (organic). For other special requirements from our customers including SONY GP, POP 65, and REACH Annex XVII, we will conduct individual reviews and include them in the list of HSF customer rules and legal regulations for management purposes.

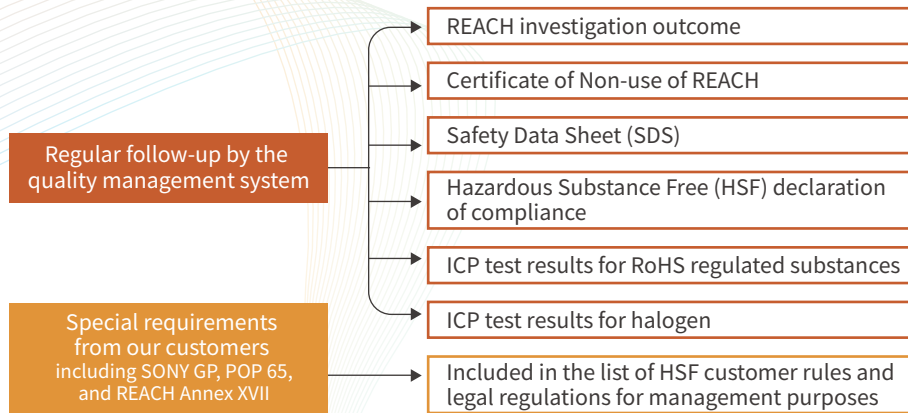
### RichWave's Quality Management Process



In 2021, RichWave has confirmed that 100% of our materials comply with RoHS, halogen-free, and REACH requirements through the management system, and there were no product and service-related health and safety violations. Furthermore, we have included the RoHS, Lead-Free, and Halogen-Free labels on the products' external packaging and product specifications, and third-party ICP test reports for various materials are provided based on the product model number so that consumers can prevent hazardous substances from endangering people's health and the surrounding environment while enjoying convenience brought by modern technology.



### RichWave's Chemical Substance Management Framework



### Overview of green product certifications and labels obtained by RichWave

IECQ QC080000 certificate



RichWave's products have obtained RoHS, Lead-Free, and Halogen-Free labels

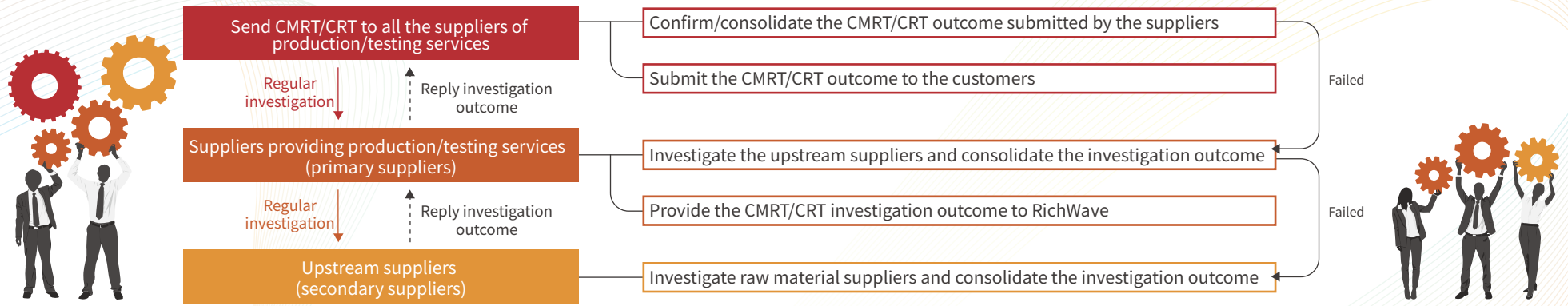
### Conflict Mineral Management

Conflict minerals such as tantalum, tin, gold, and tungsten are obtained from the DRC that are often associated with armed conflicts, endangerment of the local environment, and human rights. Since tantalum, tin, gold, and tungsten are important raw materials in the manufacturing of electronic products, how to prevent human rights violations and environmental damages resulting from the purchase of conflict minerals has become a key challenge for the management of the electronic product supply chain.

RichWave has stipulated in the environmental substance management protocol the conflict mineral control requirements that must be abided by the suppliers. We have prohibited our suppliers from using conflict minerals (including tantalum, tin, gold, tungsten, and other minerals or derivatives from the DRC and surrounding countries/regions that are deemed to have been associated with sponsoring armed conflicts in the said countries/regions). In addition, we have also established a comprehensive conflict mineral management process to conduct conflict mineral investigations on our primary and secondary suppliers. The system is used to identify and adequately control conflict mineral-related risks.



### RichWave's conflict mineral management process



### Implementation status of RichWave's conflict mineral investigation

Conflict Mineral Investigation Method		Implementation Outcome
Regular investigation	Irregular investigation	
When the Responsible Minerals Initiative (RMI) publishes a new version of the Conflict Minerals Report Template (CMRT) and Cobalt Reporting Template (CRT), our suppliers are asked to update the findings of their conflict mineral investigation.	Download the latest approved smelter list from RMI's website about every 6 months and compare it to the details provided by our suppliers. Any unapproved smelters should be confirmed with the suppliers and an update should be conducted.	In 2021, RichWave carried out CMRT and CRT investigations on 16 primary suppliers and smelters <ul style="list-style-type: none"> <li>■ Conflict mineral investigation response rate: 100%</li> <li>■ Conflict mineral investigation pass rate: 100%</li> </ul>



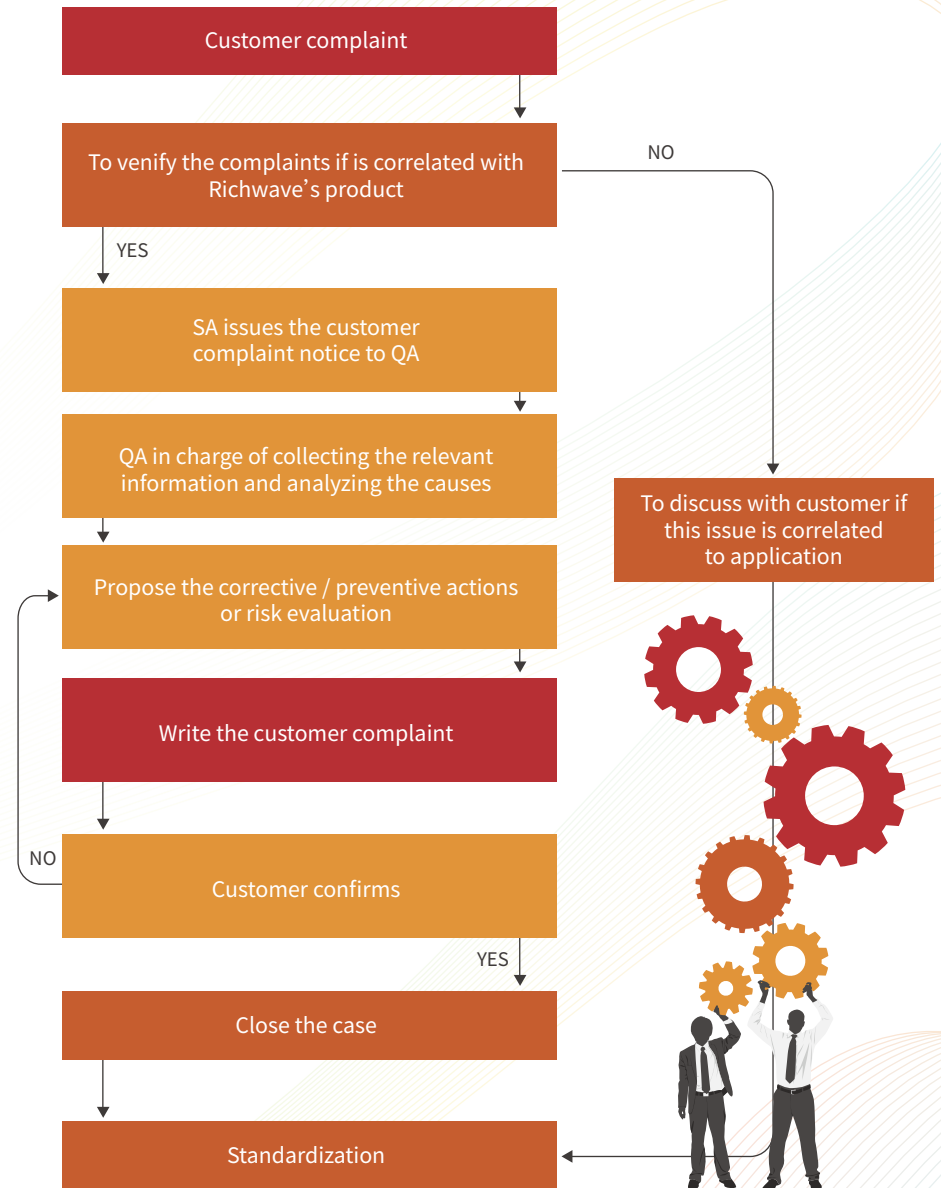


## 3.3 Customer Care

### Customer Relationship Management

The retain and development focus for customers is one of RichWave's six major core values. We emphasize that customer satisfaction always comes first and continue to refine our product quality to meet the customers' needs. In terms of execution, we have engaged in multidimensional system communication through the global customer support system and think from our customer's perspectives to resolve their problems proactively. Moreover, we collaborate closely with the R&D team to convey the customers' needs and develop diverse products that cater to the customers' requirements. RichWave has created our market image and brand value through such an approach and in turn, engendered a high level of customer satisfaction and stickiness. We value the opinion of every customer, hence we have formulated the "customer complaint management protocol" to process customer complaints efficiently and actively review the potential cause of the complaint to prevent the problem from reoccurring. As for our customers' opinions, we will categorize and archive them and prepare the "customer complaint notice" to make sure that relevant data is processed and managed effectively. Next, we will strive to clarify the problem, collect relevant information, and coordinate various departments to improve and offer responses; the customers' satisfaction with the improvement solutions is confirmed before the case is brought to a conclusion. Additionally, we have devised the "customer product return/exchange SOP" for product return/exchange operations that are closely associated with customer satisfaction to ensure that our customers can enjoy a good product return/exchange experience, thereby maintaining a high level of customer satisfaction towards the company's services.

### Customer complaint handling process

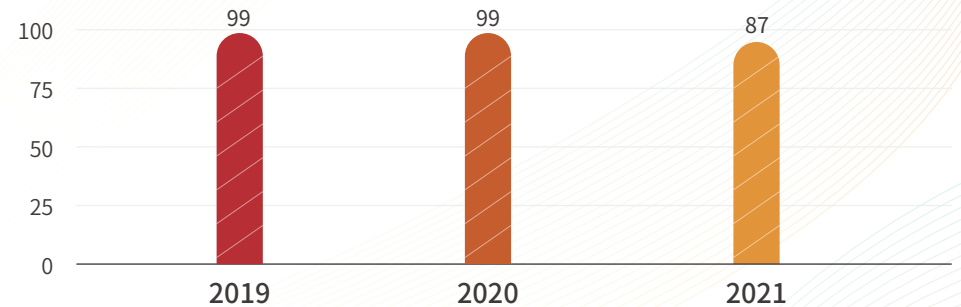


To ensure the customers' needs are documented, analyzed, and responded effectively, RichWave has established an annual customer satisfaction survey mechanism using the 5-point Likert scale, while the customer satisfaction survey questionnaires are retrieved via email and fax. In 2021, RichWave expanded the scope of the satisfaction survey from the top 5 distributors to the top 5 end clients in 6 major sales regions including Taiwan, South China, East China, South Korea, Japan, Europe, and the US, totaling 30 important end customers. The contents encompass dimensions such as product quality and package labeling, technical expertise and problem-solving efficiency, sales professionalism and service attitude/efficiency, product delivery, and return policy. Various business units of the company will propose improvement plans based on the outcome of different evaluation indicators to maintain customer relations and optimize RichWave's service capacity. In 2021, despite the challenges of COVID-19 and SoC shortage, we have achieved an overall customer satisfaction level of 87 points; in particular, customer satisfaction levels in Taiwan and Korea exceeded 90 points. Generally speaking, RichWave's customers are very satisfied with our service attitude, demonstrating an exceptional satisfaction level of over 90 points. Some customers have expressed their appreciation for RichWave's full support in times of sudden increase in demand. In regard to the aspects that require improvement as pointed out by our customers including the consolidation of product packaging and expanding the diversity of our 5G product selections, we will review and optimize these issues to continue accumulating and elevating the end customers' brand satisfaction and stickiness towards RichWave.

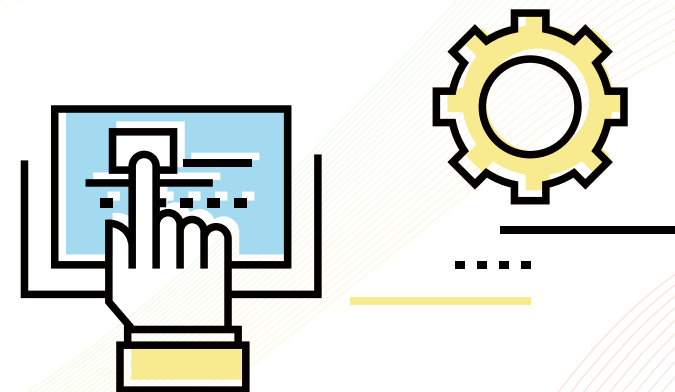
### RichWave's Product Defect Rate: DMMP (Number of Defective Chips/Total Shipment)

	2020	2021	2022 Target
Target of Defective Parts per Million (DPPM)	Average $\leq$ 200	Average $\leq$ 100	Average $\leq$ 50
Defective Parts per Million (DPPM)	16	3.1	

### Average Satisfaction Level Over the Years




- \* Satisfaction level calculation = Total score of the item/full score of the item
- \* Investigation target for 2019 and 2020 consisted of the top 5 distributors; investigation target for 2021 consisted of the top 5 end clients in the respective sales regions





# 4 Employee Care



4-1 Human resources management	50
4-2 Labor relations	54
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## Chapter Highlight

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- 💡 We value our employees' health by hiring medical staff to conduct regular on-site health services 3 to 4 times a month.
  - 💡 We value the workers' rights, diversity and inclusion; there was no violation of human rights in 2021.
  - 💡 In 2021, RichWave organized numerous professional and general knowledge courses across different disciplines, training a total of 488 persons and accumulating 2,240 hours of training.
-

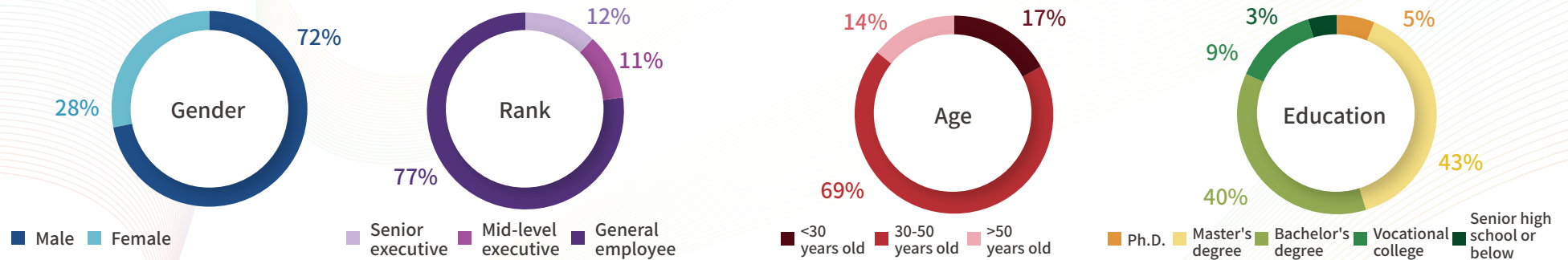
## 4.1 Human Resources Management

Talents are the core asset of the IC industry, thus RichWave actively invests resources in recruiting outstanding talents and establishing diverse talent recruitment channels, offering competitive remuneration to attract and retain suitable talents. Furthermore, we have established a comprehensive training system that caters to our employees' needs in a bid to enhance the company's competitive edge.

### Talent Structure and Talent Recruitment

RichWave had 298 employees in 2021, consisting of 71.8% male and 28.2% female workers. In terms of full-time domestic employees, women account for 3.7% of the company's executive positions. During recruitment, RichWave offers everyone a fair employment opportunity based on their advantages and work experiences, regardless of their race, religion, nationality, and gender. However, since the industry requires more engineering and science-related talents, the ratio of male employees tends to be higher. RichWave continues to support workplace diversity and inclusiveness. In 2021, we have hired a total of 5 employees with disabilities, which is higher than the ratio stipulated by the government.

#### RichWave's Employee Structure in 2021



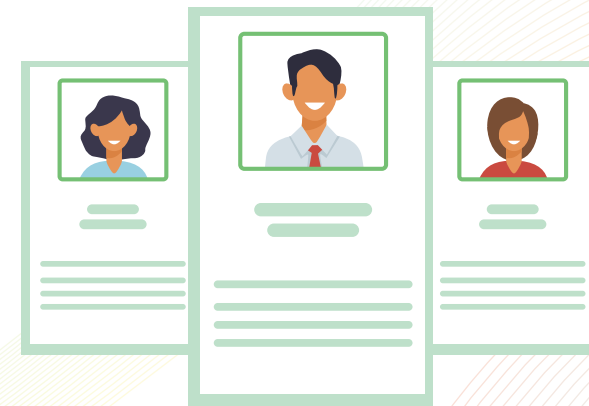
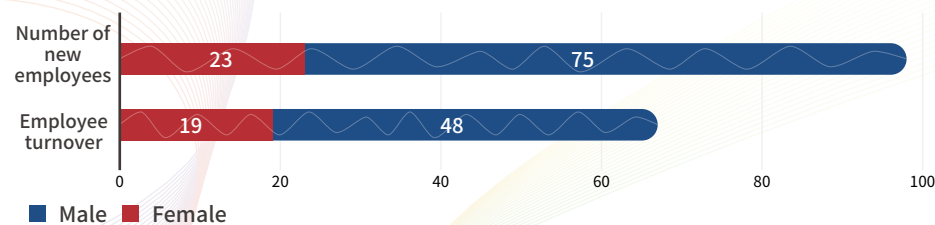


To generate momentum for growth, RichWave vigorously recruits and retains key talents, searching for outstanding employees through 104 Job Bank and LinkedIn. Since the company values the cultivation of professional talents, we have forged a long-term and close partnership with schools to engage in industry-academe collaboration in higher technical education. We have developed a wide range of cutting-edge technologies in different technological fields with various schools for the sake of keeping abreast of the latest international trends and recruiting key talents.



In 2021, RichWave hired 98 new full-time employees (75 men and 23 women), accounting for 32.7% of the workforce. In the same year, 67 full-time employees (48 men and 19 women) resigned from RichWave, accounting for 16.7% of the workforce.

### Number of Domestic Full-time New and Resigned Employees in 2021



## Employee Remuneration and Appraisal

### Performance Appraisal

RichWave's performance management system and development system helps our employees to attain optimum work performance and showcase their core values through ongoing target focus, two-way dialogue, real-time feedback and performance evaluation, thereby realizing the best organizational and individual performance.

RichWave's employee performance evaluation takes place over different stages, assessing our employees' annual work performance and setting their future career development goals through initial target setting, mid-term appraisal and year-end appraisal. The performance appraisal outcome is used as a reference for making human resources-related decisions such as employee performance bonuses, promotion, as well as talent development. In 2021, 100% of RichWave's employees regularly received performance appraisals and career development reviews, regardless of their gender or rank within the company.



Goal setting	Goal setting must conform to the SMART principle (Specific, Measurable, Achievable, Relevant and Time-Bound)
Mid-term appraisal	Goal and standards revision, daily performance feedback, regular review
Year-end appraisal	Performance review, performance appraisal, ongoing improvement and development

### Remuneration Policy

RichWave sees employees as important assets of the company and values their benefits and welfare. We provide a competitive remuneration system that adjusts our employees' salaries based on the overall performance of the company and personal performance. If the company has earned a profit for the year, we will set aside at least 8% of the profit as employee bonus, which will be awarded to our employees in the form of stocks or cash dividends (to be decided by the Board of Directors) based on their performance.

Per information from the MOPS, RichWave's full-time, non-management employees' "average salary" in 2021 was NT\$1,480,000 and the "median salary" was NT\$1,205,000. If broken down according to industry category, RichWave's average salary<sup>1</sup> is considerably higher than employees in other similar companies in the "Electronics Components Manufacturing Industry" based on the information from the Earnings Exploration and Information System by the Director-General of Budget, Accounting, and Statistics, Executive Yuan.

### Remuneration of Full-time, Non-Management Employees

Item	2019	2020	2021
Number of Full-time, Non-Management Employees	206	236	276
Total salary (NT\$1,000s)	259,679	307,648	408,426
Average salary (NT\$1,000s)	1,261	1,304	1,480
Median salary (NT\$1,000s)	1,097	1,073	1,205

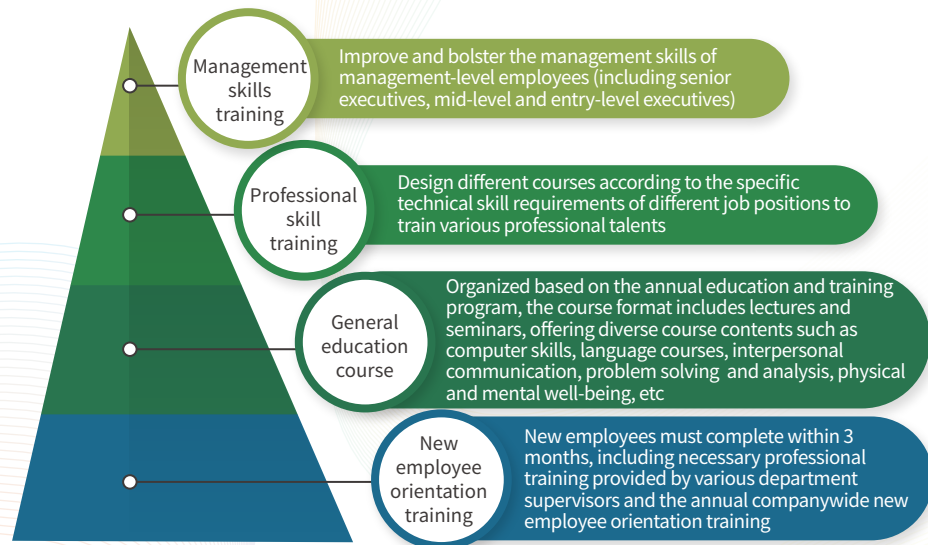
Note: full-time, non-management employees refer to an employee who has satisfied the company's regulations in terms of normal work hours and who are not managers as defined by Letter Taiwan-Finance-Securities (III) No. 920001301.

1. According to the Earnings Exploration and Information System by the Director-General of Budget, Accounting and Statistics of the Executive Yuan, the average monthly salary of employees in the Electronics Components Manufacturing Industry in 2021 was NT\$82,640 (averaging NT\$992,000 per annum)



## Training and Education

RichWave continues to provide a comprehensive training structure including new employee orientation training, management skill training, professional skill training and general education. Diverse learning and development opportunities are provided to our employees during various stages of their careers to ensure that the talent training program meets the expectations of the company, the environment, and employees. In 2021, RichWave has organized several types of professional and general education courses including technical courses such as IC integration technology, big data for cities and legal concepts such as patent infringement introduction, and workplace communication skills. In total 488 people received 2,240 hours of education and training.



Type	2020		2021	
	Number of trainees	Number of training hours	Number of trainees	Number of training hours
Management skill training	62	376	12	24
Professional skill training	52	104	333	1,294
General education course	368	736	58	116
New employee orientation training (including safety and health education and training)	72	278	85	806
<b>Total</b>	<b>554</b>	<b>1,494</b>	<b>488</b>	<b>2,240</b>

## Professional Knowledge Enhancement



## Physical and Spiritual Growth

Work-life balance engenders better performance and quality of life. Since 2021, RichWave has devised a series of physical and spiritual well-being lectures to let our employees take charge of their physical and spiritual conditions. By learning positive thinking techniques, they can alleviate their stress and emotions to overcome difficulties at the workplace and discover happiness. The courses were well received by the employees, and RichWave will continue to plan health-related courses in the future such as office stretching exercises and healthy diets to improve our colleagues' health awareness and management, in turn creating a decent work environment.



## 4.2 Labor relations

RichWave strives to create a harmonious, equal, and safe workplace by offering diverse employee benefits, establishing diverse employee communication channels, maintaining the employees' human rights and valuing workplace safety in order to minimize potential dangerous events.

### Employee Health and Well-being

#### Insurance Benefits

On top of basic labor and health insurance, RichWave has also planned comprehensive group insurance that encompasses life insurance, major illness insurance, accidental injury insurance, medical insurance and cancer insurance, where all the insurance expenses are paid by the company. Apart from caring about our colleagues, we also look after their families' health protection and life, where full-time employees may purchase RichWave's group insurance for their spouses, children and parents, thereby providing their families with the same level of protection from the company. For colleagues going on overseas business trips, we will provide them with travel insurance to offer them more adequate protection.

#### Maternity Policy

RichWave's "Workplace Maternal Health Protection Plan" is devised based on the "Occupational Safety and Health Act," adopting the necessary safety and health measures to ensure the physical and spiritual health of our pregnant, postpartum, and breastfeeding female employees. Additionally, RichWave offers on-site nurses and physicians to provide them with health services including employee interviews and health risk identification during the maternal health protection period, as well as offering them pregnancy

and breastfeeding health guidance and consultation. When there are health-related concerns, they will engage in health protection interviews and relevant medical health instructions.

To offer our employees peace of mind when starting a family and to allow them to strike a balance between work and life, RichWave offers parental leave regardless of gender and it will not affect the employees' full attendance bonus, performance appraisal or result in other unfavorable disciplinary actions. In 2021, 12 people qualified for parental leave (including 3 women and 9 men), of which 67% of female workers applied for parental leave without pay and all of their applications were approved. When their parental leave was over, 50% of the female colleagues were reinstated.

Item	2020		2021	
	Men	Women	Men	Women
Number of qualified unpaid parental leave applicants (A)	3	3	9	3
Number of unpaid parental leave applications (B)	--	1	--	2
Number of employees who shall reinstate after parental leave (C)	--	1	--	2
Number of employees who have reinstated after parental leave (D)	--	1	--	1
Number of employees who have reinstated after parental leave the year before last (E)	--	0	--	--
Number of employees who have worked for one year after reinstatement (F)	--	0	--	--
Parental leave without pay application rate (B/A)	--	33%	--	67%
Reinstatement rate (D/C)	--	100%	--	50%
Retention rate (F/E)	--	100%	--	--



## Retirement System

RichWave has formulated retirement regulations for our full-time employees and we have established a Labor Pension Oversight Committee according to the Labor Standards Act, where a specific ratio of the employees' monthly salary is set aside as a retirement pension. The fund is handed over to the Labor Pension Fund Oversight Committee and deposited into the special account of the Bank of Taiwan.

The Labor Pension Act was promulgated on July 1, 2005, adopting the contribution system. The employees can choose the pension provisions from the "Labor Standards Act" or the Labor Pension Act and retain their service duration accrued from before. For employees applicable to the Labor Pension Act, the company will contribute no less than 6% of their salary to their personal pension account every month.

The retirement system of the company's employees is designed according to the regulations of the Labor Standards Act and the Labor Pension Act, where monthly contributions are made to the pension fund and handed over to the Labor Pension Oversight Committee's dedicated account for savings and expenditure purposes. Since the Labor Pension Act was promulgated on July 1, 2005, employees may choose between the pension provisions from the "Labor Standards Act" (old system) or the Labor Pension Act and retain their service duration accrued from before (new system). For employees applicable to the Labor Pension Act, the company will contribute no less than 6% of their salary to their personal pension account every month. Furthermore, the company has contributed pension on account and acknowledged pension as liability according to the pension actuarial report by a qualified actuary as stipulated by the International Accounting Standards (IAS) 19 "Employee Benefits."

## Other Employee Benefits

Item	Description
Bonus and allowance	Gift money for 3 major festivals and birthday vouchers, marriage, childbirth and funeral allowance, travel allowance, and other bonuses. Full-time employees are entitled to this benefit while other bonuses are given based on the company's business conditions.
On-site healthcare service	Taipei office healthcare service: 3 times a month Hsinchu office healthcare service: 4 times a month Conduct new employee physical examination and employee health examination, offer professional advice and health consultations for concerned items. For personal or other health consultation requirements, one may ask the contact person to make an appointment with the medical personnel.
Employee health examination	The company provides our employees with employee health examinations to bolster employee healthcare.
Non-weekday overtime meal and transport subsidy	To compensate our colleagues for their hard work, RichWave offers free meal-ordering service and transport subsidy in addition to the overtime allowance as required by the Labor Standards Act.

## Employee Welfare Committee

RichWave's Employee Welfare Committee consists of representatives from various departments and it is in charge of coordinating and planning diverse company activities such as annual outdoor staff day and employee birthday celebration, allowing them to unwind and alleviate their stress, thereby achieving work-life balance. Furthermore, to enhance the physical and spiritual well-being of our colleagues, we have promoted proper entertainment and recreational activities to improve their work efficiency, foster camaraderie and bonding. RichWave encourages our colleagues to form clubs in the workplace.



Monthly employee birthday celebrations and afternoon tea activities are held from time to time during different festivals



Diverse clubs in the workplace



2022 RichWave year-end banquet





## Employee communication

Various department supervisors at RichWave will convene meetings from time to time to establish a communication channel between management and the employees. The employees' attendance is closely monitored to offer them timely assistance and care in case of an emergency. To help our employees achieve various objectives including "understanding the company's operations," "understanding the executives," "improving the workplace," and "building consensus," RichWave has created a communication platform and organized communication meetings to efficiently assist our employees to understand the company, implement the company's policies, as well as resolving colleague and workplace-related problems. We strive to listen to the opinions and voices of our coworkers and provide an ongoing two-way communication platform to let our employees propose questions and receive speedy responses.

Taking the regularly hosted employee communication meetings and labor meetings as examples, RichWave invites employee representatives and senior executive representatives to engage in a face-to-face dialogue to discuss relevant issues. This is beneficial for fostering mutual understanding and rapport between the company and the employees.

### Company's quarterly meeting



Moreover, for matters pertaining to Article 11,13,16 of the Labor Standards Act, collective bargaining will be conducted according to the following advanced notification period:

- ☑ For employees who have worked for more than 3 months but less than a year, a 10-day advanced notification is needed.
- ☑ For employees who have worked for more than a year but less than 3 years, a 20-day advanced notification is needed.
- ☑ For employees who have worked for more than 3 years, a 30-day advanced notification is needed.

### RichWave News

To strengthen internal communication, RichWave published the inaugural issue of "RichWave News" in December 2021 to let our employees understand the company's status and operational strategies; the newsletter also includes application columns and industry status, offering insights into the latest patent information and technological trends, thereby improving our employees' thinking and endowing them with an international business perspective. At the same time, it also serves to convey information about the Welfare Committee's activities to effectively achieve horizontal and vertical communication.



# Human Rights Assessment

## Human Rights Policy and Measures

RichWave sees our employees as the most important assets, hence we strive to provide them with meaningful work and a safe and healthy workplace with outstanding remuneration and benefits. Furthermore, we also encourage our colleagues to strike a balance between work and life by looking after their family, making friends and developing personal hobbies. In the future, RichWave will continue to implement the company's human rights policy based on the "UN Guiding Principles on Business and Human Rights" and "Responsible Business Alliance (RBA) Code of Conduct."



**1 Diversity and Equality**  
RichWave provides equal employment opportunities according to personal strengths and work experience, and we will not discriminate based on race, ancestry, language, ideology, religion, political party affiliation, nationality, place of birth, gender, sexual orientation, age, marital status, appearance, facial features, disability, or union membership.

**2 Non-discrimination**  
RichWave has formulated procedures to supervise and cooperate with the country's applicable affirmative action policies to address verifiable discrimination complaints. Any verifiable discrimination complaints will be investigated and dealt with in a comprehensive and impartial manner. Let us work together in a fair, happy workplace.

**3 Banning of Child Labor**  
RichWave has complied with government regulations and only accepts candidates over 18 years old to apply for the company's position. When reporting for duty, new employees' identity will be verified to ensure that the company abides by the regulation banning child labor.

## Specific Goals and Mitigation Measures

Applicable Scope	Employees working shifts, nighttime hours, and long hours	All employees
Policy	"Abnormal Workload-induced Disease Prevention Program"	"Prevention Plan for Workplace Violation" "Statement on the Prevention of Workplace Violence"
Goals and Conducts	Prevent abnormal workload-induced illnesses including cerebrovascular and cardiovascular diseases among our employees by offering them protection measures.	<ul style="list-style-type: none"> <li>Prevent employees from physical or mental harm at the workplace as a result of other people's behaviors.</li> <li>The annual goal is to achieve 0 incidents.</li> </ul>

Applicable Scope	Employees working shifts, nighttime hours, and long hours	All employees
Mitigation Measures	<ul style="list-style-type: none"> <li>Use the blood test items in the employees' physical or health exam reports to estimate the risk level of cardiovascular disease before further evaluating the workload risk level.</li> <li>On-site doctors conduct interviews with relevant employees and the follow-up is carried out by on-site nurses.</li> <li>If the employees' health is not developing as expected or there are concerns about their health, it is important to contact the unit supervisor, the employee in question and the physician to discuss the situation.</li> </ul>	<ul style="list-style-type: none"> <li>Regularly organizes unit supervisor and employee training to let them understand and identify workplace abuse.</li> <li>Provide an open workplace violence consultation and complaint channel: -Complaint hotline: 03-6008999 #333 -Complaint email: <a href="mailto:hr@richwave.com.tw">hr@richwave.com.tw</a></li> <li>Public announce the zero-tolerance principle towards workplace abuse during internal meetings and on the system bulletin board.</li> <li>The HR and Administration Department has formed a task force responsible for officiating task force meetings, guiding the investigation operation, implementing risk prevention and making resolutions.</li> </ul>
Remedies	Classify the employees' risk factors into low, medium, and high according to the evaluation outcome and implement remedies based on these 3 conditions.	<ul style="list-style-type: none"> <li>If employees experience workplace abuse, they may file a complaint through the relevant channels. After the complaint is received, the company will appoint a case officer to coordinate the subsequent process.</li> <li>A risk evaluation is conducted annually to ascertain the residual risk after the control measures have been applied and the new risks, as well as to review their suitability and effectiveness.</li> </ul>

## Annual Implementation Status

Item	Content	Annual Goal for 2022
Company's internal communication regulations	Provide relevant legal compliance promotion during the new employee orientation training	Quarterly
Regular anti-bullying campaign	Public announce the zero-tolerance principle toward workplace abuse during internal meetings and on the system bulletin board	Annually
Risk assessment	A risk evaluation is conducted annually to ascertain the residual risk after the control measures have been applied and the new risks, as well as to review their suitability and effectiveness. In 2021, no human rights issues or persecutions occurred.	No violations of human rights took place



## 4.3 Occupational Health and Safety

RichWave sees employees as the company's most valuable asset, hence the Employee Manual was formulated in accordance with the Occupational Safety and Health Act and relevant bylaws. Besides regularly conducting workplace safety inspections and monitoring, training and promotions are also carried out to bolster the employees' emergency response capabilities. RichWave has yet to implement ISO 45001, but it is expected to be introduced by 2023.

### Occupational Risk Management

RichWave's operating locations consist of mainly offices. To protect our employees' occupational safety, workplace protection measures implemented annually include public area fire safety inspection, labor work environment monitoring, new employee safety and health education and training, and access control system. Further details and implementation status are elaborated below:



Item	Frequency	The year of 2020	The year of 2021	Annual Goal for 2022
Public area fire safety inspection	Semi-annually	--	A public area fire safety inspection was carried out on September 6, 2021	Based on the regulations of the Tai Yuen Hi-Tech Industrial Park
Conduct labor work environment monitoring	Semi-annually	--	Labor work environment monitoring was carried out in Hsinchu and Taipei on August 23 and September 10 and the results comply with legal standards.	Semi-annually
Conduct employee health examination	Annually	241 employees	306 employees	310 employees
New employee safety and health education and training	As needed	Reinforce new employee education, training and promotion, endowing employees with emergency response capabilities and safety awareness. Bolster the employees' awareness and reduce accidents caused by unsafe behaviors. The education and training implemented in recent years include:		Quarterly
		Number of sessions: 3 Education and training: 72 persons Education and training hours: 36 hours	Number of sessions: 2 Education and training: 65 persons Education and training hours: 265 hours	
Fire safety and CPR promotion	As needed	The Hsinchu County Government Fire Bureau conducted a fire safety promotion and CPR demonstration at RichWave. Due to the pandemic, our colleagues in Taipei joined the Hsinchu office online to enhance their fire evacuation and emergency rescue-related knowledge, as well as their fire safety awareness.		Annually
		--	Conducted on December 20, 2021	
Health information bulletin	As needed	The company's internal bulletin provides health education-related promotion to let our employees understand health and hygiene-related information.		3 times a year
Access control system	Ongoing	Integrated security systems in various areas provide access control and protect the safety of the company's properties.		Ongoing



RichWave's internal safety and health promotion website (health and hygiene-related information is updated in real time)



RichWave's fire safety lecture and CPR promotion in 2021



RichWave's annual employee health examination in 2021

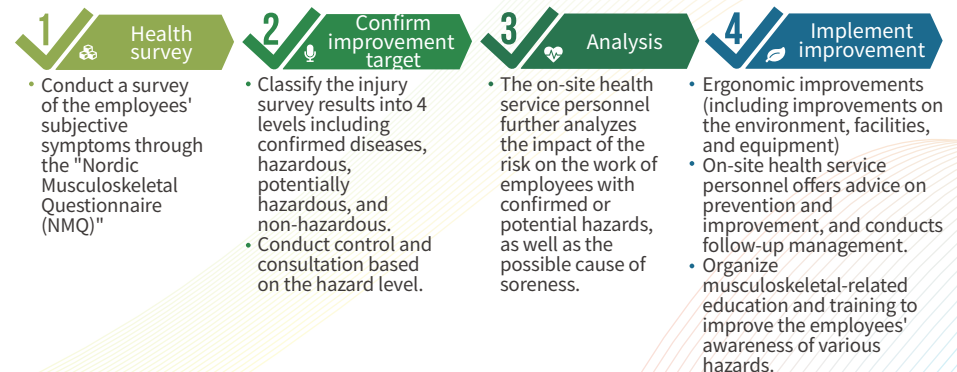


Per the regulations of the "Occupational Safety and Health Act," RichWave reports relevant occupational disasters to labor inspection agencies within 8 hours. If danger is imminent in the workplace, the operations will be stopped immediately and all the workers will be evacuated to safe place. When workers are faced with immediate danger at the workplace, they may stop their operations and retreat to a safe place without endangering other workers and report the incident to their direct supervisor immediately. RichWave rigorously adheres to the regulations of the "Occupational Safety and Health Act"; we do not dismiss or reassign the abovementioned employees, and we do not deduct their salaries during work suspension or enforce other disciplinary measures on them.

On-site healthcare service



To prevent employees from suffering occupational injuries and illnesses (such as muscle/bone injuries, ergonomic hazards) due to prolonged exposure to an ill-designed work environment, repetitive actions and incorrect postures, RichWave has stipulated the "Ergonomic Risk Prevention Plan" and implemented relevant measures to prevent work-induced muscle/bone injuries or diseases.





# 5 Environmental Management



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## Chapter Highlight

- 🔦 In 2021, Energy Use Intensity (EUI) decreased by 6.2% compared to last year
- 🔦 In 2021, compared to last year average water consumption per person decreased by 2.8%

RichWave has always paid attention to environmental protection, striving to reach a balance between corporate operations and co-prosperity/co-existence with the environment by launching electronic products featuring exceptional performance and green concepts. Consequently, while materializing the environmental management policy and controlling the environmental impact of our operations, we also pro-actively engage in supply chain and environmental management, supervising and guiding our supply chain partners to fulfill their environmental responsibilities in a bid to create a green semiconductor value chain.

### Environmental Management Target

Starting from 2022, RichWave will implement annual energy-saving, carbon reduction and GHG reduction plans, as well as the management of other wastes for 3 straight years, striving to achieve the management policy goal of reduction by 1%.

### RichWave's Environmental Management Policy

#### Recycling Compliance with International Laws – Support Green Environmental Protection

Continue to monitor changes in domestic and foreign environmental policies and regulations to ensure that the company's operations comply with the law. Launch green products that comply with the international environmental regulations and development trends, as well as satisfy the customers' environmental requirements.

#### Recycling Implement Environmental Management – Resource Recycling and Reuse

Apply ISO 9001:2015 and IECQ QC080000 management system to realize total environmental management; electronic wastes are recycled by qualified disposal contractors and reused as resources to unleash the benefits of a circular economy.

#### Recycling Encourage Total Participation – Promote Ongoing Improvement

Continue to promote environmental concepts and education to RichWave's colleagues and support relevant activities by the government and environmental groups; regularly review our environmental performance to examine and improve inadequacies.

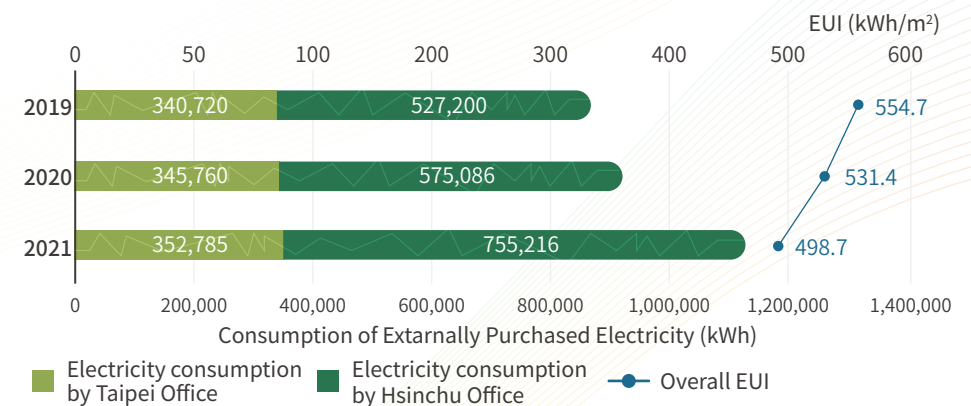
## 5.1 Energy Management

### Energy Utilization

RichWave is in the IC Design industry and consumes mainly externally purchased electricity. We do not have any high energy-consuming heating equipment or production process. To realize energy management, we regularly calculate our electricity consumption to monitor RichWave's energy utilization, where ongoing improvements are implemented based on the calculation results.

In 2021, RichWave consumed 3,988.8 GJ of externally purchased electricity, an increase of 20.3% compared to last year. This is attributed to the constant increase in the company's used space due to the growth in sales. In 2021, our EUI was 498.7 kWh/m<sup>2</sup>, a reduction of 6.2% compared to last year, indicating RichWave can effectively improve energy efficiency to realize green sustainability while pursuing corporate growth.

### RichWave's Energy Consumption Over the Last 3 Years



Note:

1. RichWave offices' electricity consumption is divided according to the proportion of the total electricity consumption of the building and the floor area of the space leased by RichWave.
2. Please refer to the latest 2021 per-unit calorific value table of energy products from the Bureau of Energy, MOEA for the conversion factor for the calorific value conversion factor of externally purchased electricity.
3. The overall EUI is the ratio of electricity consumption (kWh) to the floor area (m<sup>2</sup>) of RichWave's operating locations in Taiwan.



## Green Operations

RichWave sees environmental sustainability as our responsibility, hence we uphold the philosophy of green environmental protection during our business process, where the Management Department regularly reviews the rationality of energy use, consolidates energy management policies, as well as plan and implement various energy-saving and carbon reduction projects in conjunction with the IT Department. These include the annual energy-saving improvement solutions, office energy conservation campaign, air conditioner improvement measures and the introduction of energy-saving equipment and technology, etc. Moreover, RichWave emphasizes engineering development of the high performance and low power consumption products in order to elevate the energy efficiency of our product. Richwave has already obtained ISO 9001:2015/IECQ QC080000 certification along with the SONY GP (Green Partner) and Samsung Eco-Partner certifications. We also expect to introduce ISO 14001 environmental management system and ISO 14064 GHG inventory in 2022 to minimize the environmental resource depletion during our business process by establishing a sound environmental management mechanism. The ultimate goal is to improve RichWave's corporate sustainability and meet the expectations of our customers and the general public expectation toward green operations.

## RichWave's Energy-Saving and Carbon Reduction Goals and Performance

2021

Action Plan		Description	Annual Performance
Improve energy efficiency	Replace lights	Some of the T5 lights (56W) were replaced with T5 LED lights (40W)	<ul style="list-style-type: none"> <li>Decreased electricity consumption by 327.36 kWh</li> <li>Decreased GHG emissions by 164.3 kgCO<sub>2</sub>e</li> </ul>

Note:

1. Since lighting equipment does not have a dedicated electricity meter, hence the estimation of reduced electricity consumption is carried out by calculating the power difference between the old and the new equipment. Furthermore, the annual electricity saved is assessed under the assumption that the equipment operates 10 hours a day and 22 days a month.
2. Reduction in GHG emissions is calculated based on the annual electricity saving and the Electricity Carbon Emission Factor announced by the Bureau of Energy. However, since the 2021 Electricity Carbon Emission Factor hasn't been announced, the calculation was conducted based on 0.502kg CO<sub>2</sub>e/kWh which is the 2020 Electricity Carbon Emission Factor announced by the Bureau of Energy.

## RichWave's Energy-Saving and Carbon Reduction Plan

- 1 After introducing the ISO14064-1 in 2022, we implement our annual energy-saving and carbon reduction plans effectively.
- 2 **Office energy conservation campaign**  
Encourage our employees to turn off lights and computers that are not being used, as well as switch off the conferencing system after the meeting to lower energy consumption.  
Office lighting switch compartmentalization.  
By compartmentalizing the office lighting switches, we can prevent wasting energy in areas that are not being used.
- 3 **Air conditioner improvement measures**  
In terms of air conditioners, RichWave has launched data center air-conditioned environment improvement measures through the IT Department (such as optimizing conditioned air circulation in the data center, reducing air leak, adequately increasing temperature, etc.), as well as adjusting the system to decrease air conditioner wear. In terms of office air conditioner energy-saving management measures, we have increased the ambient temperature and reduced the operating hours and quantity of air conditioners without affecting the normal operation of equipment and personnel to achieve the goal of energy conservation.
- 4 **Introduce energy-saving equipment and technology**  
Continue to evaluate the feasibility of introducing new energy-saving technologies such as replacing traditional lighting fixtures with LED energy-saving lights.
- 5 **Continue to develop products**  
Low energy consumption and high performance as part of company's important indicators.
- 6 **Reduce papers and waste**  
Reinforce digitization and encourage our employees to bring their cups and chopsticks/spoons when purchasing beverages and eating to minimize paper consumption and waste generation.
- 7 **Adopt trees every year**  
Increase the carbon sink effect and lower carbon emissions.

## 5.2 Climate Change Responses and GHG Management

### Climate Change

After the Paris Agreement, climate change has become a high-profile topic among governments and businesses around the globe. Particularly, changes in GHG emissions regulations and extreme climate may bring about a significant impact on business operations and people's welfare. In light of this, RichWave continues to strengthen our climate resilience and we have identified the following climate-related risks and opportunities that may have financial impacts in order to formulate corresponding response strategies.

#### Climate-related Risks and Opportunities and Response strategies

Type	Impact	Response Strategy	Annual Action
Physical Risk	Water shortage	Water-saving measures	Water-saving action plan
	Heavy rainfall causing flooding	Create a typhoon contingency plan	Typhoon contingency plan
Transitional Risk	Environmental and carbon footprint regulations	Waste management measures, improve recycling and reuse ration and energy-saving action plans	Waste reduction measures and energy-saving action plan
Opportunity	Apply a more efficient production and distribution process	Save energy by decreasing electricity consumption	Replace traditional lights with energy-saving LED lights
		Increase the temperature of AC ice water intake	Energy-saving air conditioner
		Switch off often-idling equipment	Equipment energy-saving action plans

### GHG Management

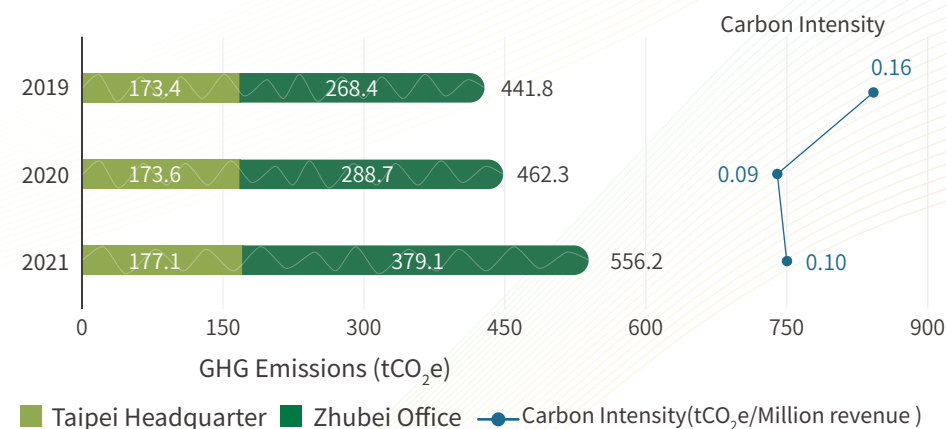
#### Operational GHG Management

Faced with global climate change, RichWave has not only vigorously adopted a wide range of response measures but also strives to mitigate GHG emissions. As a member of the IC R&D industry, RichWave's emissions are

mainly attributed to the consumption of externally purchased electricity. Consequently, we have conducted a scope 2 GHG inventory every year, where the inventory results are reviewed and improved. In the future, we will progressively expand the scope of our GHG inventory in an effort to establish a comprehensive GHG inventory and management structure.

The scope 2 GHG emissions of RichWave in 2021 was 556.2 tCO<sub>2</sub>e; with an expansion in the operating space, the said figure is an increase of 20.3% compared to 2020. To decrease GHG emissions during our business operation, RichWave has pro-actively implemented various energy-saving solutions (for details of specific measures, please refer to the "Green Operations" chapter.)

#### RichWave's GHG Emissions Over the Last 3 Years



Note:

1. A GHG emissions inventory is conducted using the operational rights method, taking into account our operating characteristics, only externally purchased electricity was inventoried.
2. Scope 2 GHG emissions are calculated based on activities x annual Electricity Carbon Emission Factor announced by the Bureau of Energy. In particular, since the 2021 Electricity Carbon Emission Factor has yet to be announced, the calculation was conducted based on the 2020 Electricity Carbon Emission Factor of 0.502kg CO<sub>2</sub>e/kWh as announced by the Bureau of Energy.



## Other Indirect GHG Emissions Management

RichWave's business operations include IC R&D, design and sales, where manufacturing is completely reliant on the processing of our supply chain partners. The supply chain is an important link in mitigating product life cycle carbon emissions, hence we stress scope 3 GHG management and vigorously promote the reduction of GHGs outside of the organization's operation. RichWave firmly believes that by increasing the performance of our high-power, energy-efficient products and constantly refining and implementing supply chain energy management, we can minimize the carbon footprint and carbon emissions of various terminal electronic products. In doing so, the company will be able to attain the sustainability of energy resources on the planet while offering consumers high-performance, high-quality products.



### Green Product Design

We have taken the environmental impact of the products' life cycle during the IC design stage and continue to facilitate innovations in energy-saving designs. Besides effectively reducing energy consumption during the production process and lowering production costs, RichWave can also decrease energy consumption while using the products, thereby mitigating production/consumption costs with our suppliers and consumers, as well as cherishing the Earth and engendering a green, sustainable future.



### Supply Chain Carbon Management

To promote supply chain carbon reduction, we have requested our suppliers obtain international quality certifications such as ISO 9001/ISO 14001/OHSAS 18001/QC 080000/IATF 16949 to prevent the production process's negative impact on the environment. In addition, we have conducted an audit of our 20 primary suppliers across the 3 categories of wafer, packaging and testing to make sure that they comply with the local environmental laws, as well as to engage in ongoing improvements in terms of energy conservation and GHG emissions reduction. Also, the zero-carbon objective and action plan guidelines for 2030 and 2050 have been formulated.



### Green Transportation

In terms of the daily commute, we encourage our colleagues to make use of public transport or carpool; in terms of business travel, besides asking our colleagues to utilize public transport, they are encouraged to conduct meetings using the video conferencing system to minimize carbon emissions from transportation.

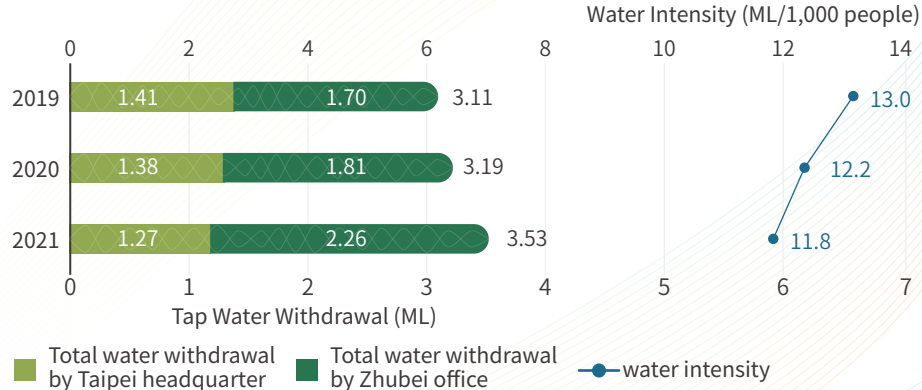
### 5.3 Water Consumption

As the concentration of GHGs in the atmosphere rises, global climate change intensifies every year, triggering changes in the rainfall patterns that in turn exacerbate the problem of uneven rainfall distribution in Taiwan. In 2020, water shortages occurred frequently in Taiwan, compelling the government and enterprises to pay attention to the scarcity of water resources and their impact on production and operations. In light of this, RichWave has already completed the water risk evaluation in our operating locations in Taiwan. Our Taipei headquarter and Zhubei office are classified as low risk by the World Resources Institute (WRI)'s Aqueduct Water Risk Atlas.

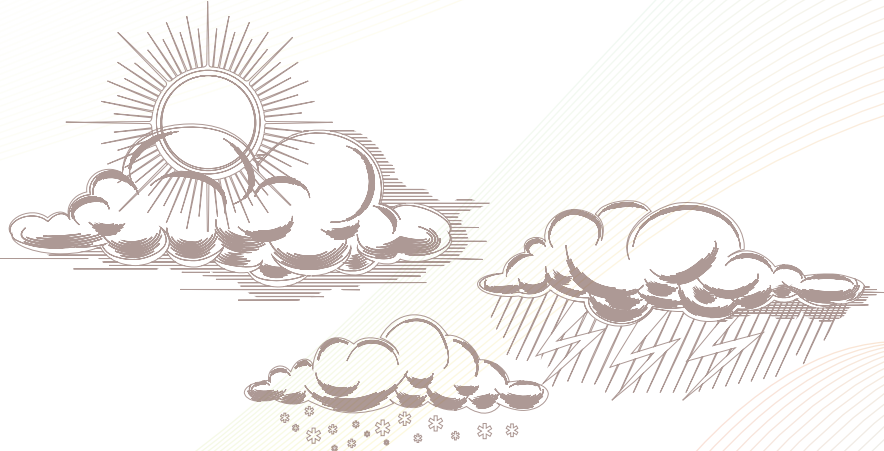
Water consumption at RichWave's operating locations mainly consists of tap water for office use and we do not withdraw water from water shortage zones. We consumed 35,300 liters of tap water in 2021, an increase of 10.5% compared to the previous year. However, water per capita was lowered by 2.8%. We will continue to enforce water stewardship for the sake of elevating water efficiency and making sure water resources are utilized most efficiently.

We believe that water is an extremely valuable shared resource, so we regularly control our water consumption in our daily operations and continue to conduct water-saving campaigns, hoping to instill water conservation awareness in our colleagues' everyday life. Additionally, the office building's management sector utilizes recycled water to irrigate flowers and plants and water-saving toilets are installed to minimize water consumption.

RichWave's Water Consumption Over the Last 3 Years



- Note:
- RichWave's office water withdrawal is divided according to the proportion of the total electricity consumption of the building and the floor area of the space leased by RichWave.
  - The overall water intensity of RichWave's operating locations in Taiwan is the proportion between tap water withdrawal (ML) and the number of employees (1,000 people)

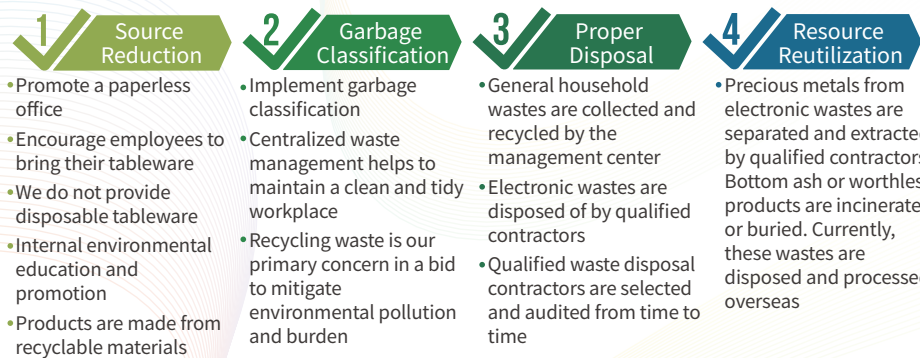




## 5.4 Waste Management

RichWave's operating locations do not engage in production and the waste generated consists of mainly office waste. We generate electronic wastes from laboratory tests and product samples preserved for QA purposes; these include hazardous wastes such as electronic scraps and defective products. RichWave has established a dedicated waste management unit in charge of hazardous waste declaration and disposal. It is also responsible for monitoring waste disposal to make sure that the process complies with the government's environmental policies and regulations.

To materialize responsible production and mitigate the potential environmental impact of our operating wastes, RichWave has implemented the following waste management strategies in various stages.



In 2021, RichWave's waste disposal was 29,803.5 kg, comprising mainly of general business wastes (97.8%) of total wastes generated. The remainder consists of hazardous wastes (2.2% of total waste). The total waste generated by RichWave in 2021 was 15.4% higher than in 2020 due to an increase in the number of company employees and product shipments.

### RichWave's Electronic Wastes Generated Over the Last 3 Years

Waste Category	Processing Method	2019	2020	2021
General business waste	Incineration (kg)	22,499.8	24,977.3	29,179.2
Hazardous business waste	Recycling (kg)	367.8	172.2	624.3
Total (kg)		22,867.6	25,149.5	29,803.5

Note:

- The general business waste consists of household garbage generated by the offices. This is calculated based on the average amount of general waste generated per person per day in 2019, 2020 and 2021 published on the statistics found on EPA's environmental statistics website, under the assumption that the employees work 8-hour shifts daily.
- The hazardous business waste consists of electronic scraps and defective products



# 6 Social Care



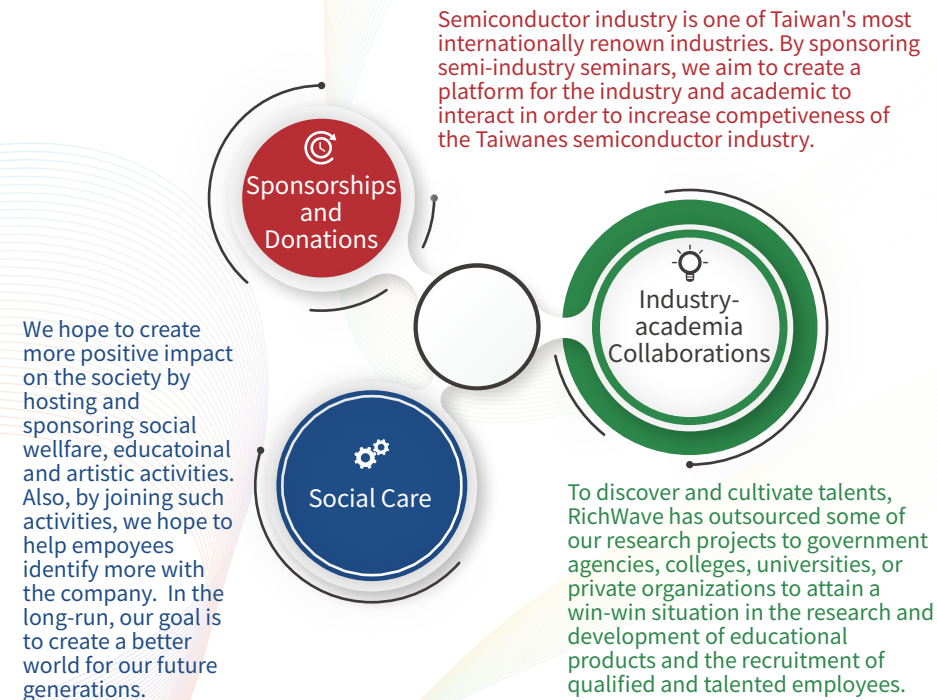
## Chapter Highlight

- 💡 In 2021, we engaged in industry-academia collaboration to sponsor and donate a total of NT\$3 million in scholarships.
- 💡 Social care actions taken amid the outbreak of Covid pandemic in Taiwan: Raised NT\$300,000 for 300 gift boxes to vulnerable group in the community.



## 6.1 Industry–Academia and Public Welfare Activities

RichWave strives to achieve outstanding performance in the industry and meet our stakeholders' expectations. Also, we want to fulfill corporate social responsibilities by giving back to society. RichWave achieves public welfare through "industry-academia collaborations", "sponsorships and donations", and "social care". Our goal is to give back to the community that has helped us develop our business.



### 2021 Public Welfare Achievement

Public Welfare Theme	Target	Content and Benefits
Industry-academia Collaborations	NTU SoC Center: Analog electronics research	Through industry-academia collaborations, we hope to enhance fundamental research, establish IP and improve product performance.
	NSYSU Department of Applied Mathematics: Radar algorithm research	
	NYCU Institute of Communications Engineering: RF circuit research	
Sponsorships and Donations	Teach for Taiwan (TFT)	By sponsoring concerts and lectures for children and students, we hope to create an equal and high-quality educational environment.
	TEDxNYCU	
	32 <sup>nd</sup> VLSI Design/CAD Symposium	Facilitate exchanges within the industry and help the academia to understand and master the latest technology, industry trends, and demand.
	Donation to the NYCU International College of Semiconductor Technology	Develop Taiwan's next generation semiconductor technology, cultivate professional, advanced talents, and consolidate the international influence of Taiwan's semiconductor industry.

11<sup>th</sup> Annual Benefit Concert

RichWave cares about charity event, so we have sponsored the 11th Annual Philanthropic Concert – Huashan 2021 Peter and the Wolf Music Concert together with Huashan Social Welfare Foundation and TFT. The concert took place on April 10, 2021, at the Hsinchu Performing Arts Center. Conductor Professor Li Chen-Sheng led the Taichung City Symphony Orchestra to stage a scintillating performance complemented by the aerial images of director Chi Po-Lin to showcase the unique beauty of Taiwan's countryside to the audience. During the pandemic, RichWave intends to propagate love and philanthropy through music, so that everyone can appreciate the strength and magnificence of love in society.

For many years, RichWave has been encouraging our employees to engage in social interactions to find ways to spread love and give back to society. To bring positive energy to society, we aspire to provide love and warmth to more children and families in need.





## Love in Christmas

In 2021, the COVID-19 pandemic erupted in Taipei City, and the number of confirmed cases skyrocketed. Fear and anxiety cloud the heart of every citizen of Taipei. In particular, low-income families were among the hardest hit. They were already struggling to make ends meet under low income. The pandemic did nothing but added fuel to the fire. By Christmas, they might even be wondering if they can make it till the next year.

In order to help them, RichWave and local NPOs joined forces to launch the "Love in Christmas" event. Every employee participated enthusiastically in this event. In total we have donated a total of NT\$300,000 for this event. The money was used to prepare 300 gift boxes filled with scarves, gloves, socks, foods, drinks, masks, and toilet paper. We started giving out these gifts box in December by delivering them to every low-income households. The whole event started in Christmas and lasted till the Chinese New Year. We hoped that the gift boxes will warm up their hearts and encourage them during this hard time.

Other than delivering gift boxes, the families were invited to join the "Love in Christmas Banquet" on December 17, 2021. RichWave's employees volunteered to help and serve the families. At the banquet, every family received a gift box and NT\$1,000 supermarket coupons. The event also entertained them with performance activities creating a joyful and heartwarming ambiance.



## WiFi Education

In order to contribute to the society and help cultivating WiFi talents for Taiwan, RichWave always tries to find ways to advance wireless communic knowledge by education. In 2021, we visited the St. Aloysius Technical School in Hsinchu County to introduce the fundamental knowledge of WiFi and AP router to grade 12 senior high school students from the Electronics Department. In addition, the company donated two routers to the school to help reinforce their networking facility. The course content includes the history of WiFi, communication fundamentals, wireless communication techniques, performance indicator, AP router configuration, circuit board introduction, RF front-end product introduction, etc. RichWave team members comes from Application Engineer, Field Application Engineer, and technical marketing departments. Teaching is a way of active learning. Through teaching, RichWave employees learn to consolidate their knowledge and apply it in a new way. Also, through teaching activity, employees cohesiveness and recognition towards the Company will be reinforced.



# GRI Standards Content Index

GRI Standard Disclosure Items			
GRI Standard	Disclosure Title	Pages	Remark
General Disclosures			
102-1	Name of the organization	7	
102-2	Activities, brands, products, and services	7	
102-3	Location of headquarters	7	
102-4	Location of operations	7	
102-5	Ownership and legal form	7	
102-6	Markets served	7	
102-7	Scale of the organization	7-8	
102-8	Information on employees and other worker	50	Only cover permanent employees
102-9	Supply chain	41-43	
102-10	Significant changes to the organization and its supply chain	4	
102-11	Precautionary Principle or approach	29-31	
102-12	External initiatives	9	
102-13	Membership of associations	9	
102-14	Statement from senior decision-maker	2	
102-16	Values, principles, standards, and norms of behavior	26-28	
102-18	Governance structure	23-24	
102-40	List of stakeholder groups	14-18	
102-41	Collective bargaining agreements	--	No collective bargaining agreements in 2021
102-42	Identifying and selecting stakeholders	14	
102-43	Approach to stakeholder engagement	14-18	
102-44	Key topics and concerns raised	19-21	
102-45	Entities included in the consolidated financial statements	--	For more detail please visit the Consolidated Financial Report website
102-46	Defining report content and topic Boundaries	4	
102-47	List of material topics	19	
102-48	Restatements of information	--	This is RichWave's first Corporate Sustainable report
102-49	Changes in reporting	--	This is RichWave's first Corporate Sustainable report
102-50	Reporting period	4	
102-51	Date of most recent report	--	This is RichWave's first Corporate Sustainable report

GRI 102  
General Disclosures (2016)



GRI Standard Disclosure Items			
GRI Standard	Disclosure Title	Pages	Remark
GRI 102 General Disclosures (2016)	102-52 Reporting cycle	4	
	102-53 Contact point for questions regarding the report	4	
	102-54 Claims of reporting in accordance with the GRI Standards	4	
	102-55 GRI content index	72-73	
	102-56 External assurance	--	No external assurance for the year
Material Topics			
Integrity management			
GRI 205 Anti-corruption (2016)	103-1 Explanation of the material topic and its Boundary	19-21	
	103-2 The management approach and its components	26-28	
	103-3 Evaluation of the management		
	205-2 Communication and training about anti-corruption policies and procedures	28	
	205-3 Confirmed incidents of corruption and actions taken	26-28	No corruption happened in 2021
Risk Management			
Risk Management	103-1 Explanation of the material topic and its Boundary	19-21	
	103-2 The management approach and its components	29-31	
	103-3 Evaluation of the management approach		
Supplier Management			
Supplier Management	103-1 Explanation of the material topic and its Boundary	19-21	
	103-2 The management approach and its components	41-46	
	103-3 Evaluation of the management approach		
GRI 308 Supplier Environmental Assessment (2016)	308-2 Negative environmental impacts in the supply chain and actions taken	41	
GRI 414 Supplier Social Assessment (2016)	414-2 Negative social impacts in the supply chain and actions taken	41	
Energy Management			
GRI 302 Energy (2016)	103-1 Explanation of the material topic and its Boundary	19-21	
	103-2 The management approach and its components	62	
	103-3 Evaluation of the management approach		
	302-1 Energy consumption within the organization	62	
	302-3 Energy intensity	62	
	302-4 Reduction of energy consumption	63	

GRI Standard Disclosure Items				
GRI Standard	Disclosure Title	Pages	Remark	
<b>Customer Health and Safety</b>				
GRI 416 Customer Health and Safety (2016)	103-1	Explanation of the material topic and its Boundary	19-21 45	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	34	No violation of product and service information and labeling issue in 2021
<b>Marketing and Labeling</b>				
GRI 417 Marketing and Labeling (2016)	103-1	Explanation of the material topic and its Boundary	19-21 45-48	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
	417-1	Requirements for product and service information and labeling	34	No violation of product and service information and labeling issue in 2021
	417-2	Incidents of non-compliance concerning product and service information and labeling		
<b>Customer Privacy</b>				
GRI 418 Customer Privacy (2016)	103-1	Explanation of the material topic and its Boundary	19-21 32-34	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	33-34	No complaints concerning breaches of customer privacy in 2021
<b>Innovation Management</b>				
Innovation Management	103-1	Explanation of the material topic and its Boundary	19-21 36-39	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		
<b>Customer Relationship Management</b>				
Customer Relationship Management	103-1	Explanation of the material topic and its Boundary	19-21 47-48	
	103-2	The management approach and its components		
	103-3	Evaluation of the management approach		



GRI Standard Disclosure Items			
GRI Standard	Disclosure Title	Pages	Remark
Other Topics			
GRI200:Economic			
GRI 201 Economic Performance(2016)	201-1 Direct economic value generated and distributed	8	
GRI 204 Procurement Practices (2016)	204-1 Proportion of spending on local suppliers	43	
GRI300:Environmental			
GRI 303 Water and Effluents (2018)	303-3 Water withdrawal	66	
GRI 305 Emissions (2016)	305-2 Energy indirect (Scope 2) GHG emissions	64	
GRI 307 Environmental Compliance (2016)	307-1 Non-compliance with environmental laws and regulations	34	No violation of environmental laws and regulations issue in 2021
GRI400:Social			
GRI 401 Employment (2016)	401-1 New employee hires and employee turnover	51	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	55-56	
	401-3 Parental leave	54	
GRI 403 Occupational Health and Safety (2018)	403-3 Occupational health services	59-60	
	403-5 Worker training on occupational health and safety	59	
	403-6 Promotion of worker health	59-60	
GRI 404 Training and Education (2016)	404-1 Average hours of training per year per employee	53	
	404-3 Percentage of employees receiving regular performance and career development reviews	52	
GRI 412 Human Rights Assessment (2016)	412-2 Employee training on human rights policies or procedures	58	
GRI 413 Local Communities (2016)	413-1 Operations with local community engagement, impact assessments, and development programs	69-71	
GRI 419 Socioeconomic Compliance (2016)	419-1 Non-compliance with laws and regulations in the social and economic area	34	No violation of laws and regulations in the social and economic area issue in 2021