Coretronic

2022 ESG Report

Coretronic Corporation

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About the Report

Coretronic has been issuing Corporate Social Responsibility (CSR) Reports for 15 consecutive years since 2008. In 2020, the report was officially renamed as the ESG Report, reflecting its expanded scope. The ESG Report covers Coretronic's sustainability strategies, goals, and performance in the areas of E-Environmental, S-Social/Human Rights, and G-Governance. Through the report, Coretronic aims to showcase its comprehensive sustainability achievements and demonstrate its commitment to becoming a sustainable enterprise to its stakeholders.

Structure & Scope [2-2]

- The Report includes seven chapters: Business Operation, Sustainable Development, Corporate Governance, Sustainable Environment, Sustainable Supply Chain, Friendly Workplace, and Social Engagement to showcase the strategies and outcomes to deal with the material topics that Coertronic's stakeholders care.
- This Report discloses information regarding the substantial production, shareholding of 50% or more, significant economic, environmental, and social impacts on the company, as well as the non-controlling and venture capital companies that have upstream or downstream relationships with the company and whose operations can be controlled. This includes Coretronic Taiwan plants (Headquarters, Chunan Plant, Tainan Plant 1, Tainan Plant 2), Coretronic China plants (Kunshan plants: Coretronic Projection (Kunshan), Coretronic Optics (Kunshan); Wujiang plants: Coretronic Optotech (Suzhou), Coretronic Display (Suzhou), Coretronic Optics (Suzhou), subsidiaries Taiwan plants (Optoma, Champ Vision Display, Coretronic Intelligent Robotics, Coretronic Intelligent Cloud Service)
- The main focus of this report is on the sustainability performance of Coretronic's Taiwan and China plants. The sustainability performance of subsidiary companies will be presented in Chapter 8 - "Subsidiary Insights."
- Young Green Energy, uCare Medical Electronics, Innospectra, Coretronic MEMS, Coretronic Reality, Coretronic Intelligent Logistic Solutions, Coretronic Vietnam Company Limited, and Calibre UK Limited do not have major impacts on Coretronic's ESG and human rights. Therefore, their sustainability-related information is not disclosed in this report.
- The scope of the SASB indicator is Coretronic Taiwan plants (Headquarters, Chunan Plant, Tainan Plant 1, Tainan Plant 2), and Coretronic China plants (Kunshan plants: Coretronic Projection (Kunshan), Coretronic Optics (Kunshan); Wujiang plants: Coretronic Optotech (Suzhou), Coretronic Display (Suzhou), Coretronic Optics (Suzhou).

Consolidating Principle

This report's content and structure follow the Global Reporting Initiative (GRI) Standards 2021, and it adopts the sustainability indicators of the Sustainability Accounting Standards Board (SASB). The report includes an index table at the end, providing a comparison between the report's content and the GRI and SASB indicators.

Report Assurance [2-5]

- This report is assured by SGS Taiwan Ltd., adopting the AA1000AS v3 Type 2 high-level assurance, and providing assurance for both the GRI and SASB frameworks.
- The financial data presented in this report is reported in New Taiwan Dollars and is based on the audited financial statements certified by Ernst & Young LLP.
- Coretronic has obtained certifications for ISO 9001, ISO 14001, ISO 14064-1, ISO 50001, ISO 45001, and CNS 45001 through inspections and verification conducted by SGS Taiwan Ltd. and Intertek Testing Services Shanghai Limited.
- Coretronic's three laser projectors have passed the B2B verification for ISO 14067 conducted by TÜV Rheinland Taiwan Ltd.

Publication Time [2-3]

Coretronic publishes its annual sustainability report regularly, which is made available on the official website of Coretronic, as well as on TWSE Market Observation Post System (MOPS). The report is also shared through ESG e-newsletters and the Coretronic Facebook fan page.

- Data collection data for current report: January 1 to December 31, 2022
- Issue time of the last report: June 2022
- Issue time of current report: June 2023
- Issue time of the next report: June 2024

Contact Information [2-3]

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Letter from the Chairman 2-22

In 2022, as the COVID-19 pandemic entered its third year, countries shifted from intense efforts to combat the virus towards a path of peaceful coexistence. Through collective efforts, the situation gradually improved, and people's lives began to return to normal. The economy and industries also started recovering gradually. During this year, we continued to demonstrate strong operational resilience through our robust research and development capabilities, flexible business models, and effective risk management and response strategies. Guided by our core principles of change and innovation, we showcased a solid profitability and operational resilience. We sincerely thank all stakeholders for their support and encouragement, which enabled us to overcome the rapidly changing domestic and international economic situation in the post-pandemic era. With a positive and proactive attitude and an unwavering commitment to creativity, we embraced various challenges and joined hands to envision a sustainable future.

Coretronic has been publishing its annual ESG Report for 15 consecutive years. This report is prepared in accordance with the GRI Standards 2021 issued by the Global Reporting Initiative (GRI) and incorporates sustainability indicators from the Sustainability Accounting Standards Board (SASB). An English version of the report is also released simultaneously to comply with international sustainability standards and strengthen communication with stakeholders. We continuously showcase the company's sustainability performance in the areas of environmental, social/human rights, and economy/governance, aiming to drive sustainable development through innovative technologies. By prioritizing societal needs and leveraging our core capabilities, we promote sustainability projects both internally and externally, working towards our sustainability strategies and goals.

Corporate Governance

As a role model of Coporate Govemance, Coretronic has consistently ranked in the top 5% of corporate governance evaluations for TPEx-listed companies for eight consecutive years. Additionally, it has been among the top 10% of TWSE- and TPEx-listed companies in the electronics industry with a market value of over NT$10 billion for four consecutive years. Coretronic has also been selected for inclusion in the "TIP TPEx ESG Index," "TIP TPEx ESG 30 Index," "TIP TPEx ESG HD TR Index," and "TPEx Labor Employment 88 Index." These achievements highlight the company's highly recognized internal governance mechanisms and sustainable performance. Furthermore, Coretronic has arranged the onilne course named "Awareness of Business Integrity" for all employees. This initiative effectively enhances employees' awareness of ethical business practices and lays a solid foundation for sustainable operations within the organization.

Social Engagement

We are committed to various initiatives such as "Light Wishes for the Rurals", "Farm the Hopes", "Light Pioneer", "Love Followers", and "Dream Walkers". These projects aim to bridge the digital divide between urban and rural areas, promote equal education, and enhance the "Elderly Smile" program to leverage technology in reducing the distance between remote areas and healthcare. We also strive to address the manpower and resource gaps in welfare institutions, enabling the elderly to maintain good physical and mental well-being. Established in 2010, the Coretronic Culture and Arts Foundation actively promotes the "Taiwan Environment Lighting Award" as its core initiative. It extends its reach to government agencies, universities, and the general public, continuously organizing lectures and art education activities to raise awareness of lighting design in the everyday surroundings. Our subsidiary, Optoma, consistently sponsors advanced projection systems for major visual arts exhibitions, successfully integrating core technical expertise with sustainable strategies.

Friendly Workplace

Employees are the core driving force behind the company's continuous growth and sustainable operations. In order to fulfill our responsibility as a sports and well-being enterprise and provide a work environment where employees can feel secure and lead happy lives, we conduct annual salary reviews, enhance employee benefits, implement human rights management and training programs, and organize diverse sports and wellness activities to add value to employees' health. These efforts effectively strengthen employee engagement and foster a sense of belonging, ultimately achieving a balance between work and life. Additionally, we actively invest in employee skills development, revitalizing and strengthening the organizational structure to assist in their career advancement. Through our commitment and strategies that closely align with employee needs, we aim to become a recognized happy enterprise by our colleagues.

Sustainable Environment

With the trend of net-zero transformation and increasingly stringent international regulations, we have made significant green investments in 2022. We have submitted our commitment to the Science Based Targets initiative (SBTi), pledging to **reduce greenhouse gas emissions (Scope 1 and 2) in 2032 by 50% with 2020 as the base year and achieve net-zero emissions by 2050**. Furthermore, we actively participate in domestic and international initiatives such as the Taiwan Climate Partnership, Taiwan Alliance for Net Zero Emissions, CDP, and TCFD. We have also installed multiple solar power systems in our Taiwan and China facilities and increased the procurement of renewable energy to enhance the utilization of clean energy. In the future, we will continue to collaborate with stakeholders to implement various decarbonization initiatives, mitigate greenhouse gas emissions, and expand our green influence. Together, we strive to contribute as responsible global citizens in combating climate change.

In the face of multiple challenges such as inflation, interest rate hikes, and the ongoing pandemic impacting the global economy, as well as the evolving competitive environment and industry trends, Coretronic will continue to provide comprehensive and diversified integrated display solutions customized for our customers, ensuring steady growth. To adapt to the post-pandemic era and global decarbonization initiatives, we will actively establish a sustainable supply chain, integrate internal resources within the group to develop cross-domain intelligent application technologies, and continue to drive projects such as smart manufacturing and intelligent warehousing. We will implement a globalized deployment and localized operations to enhance overall competitiveness. In the future, in addition to striving for value enhancement through proactive innovation, we will continue to align with global sustainable development frameworks. We aim to collaborate with stakeholders to achieve the United Nations Sustainable Development Goals (SDGs) and exert positive influence to co-create a sustainable world.

Wade Chang, Chairman of Coretronic

ESG Performance

Environmental

Net-Zero Objectives
Submitted Carbon Reduction Commitment Letter to SBTi in 2022.
Committed to reduce 25% of carbon in 2025, 50% in 2032, and reach net-zero in 2050.

Participate in domestic and international initiatives
Joined SBTi, CDP, TCFD, Taiwan Climate Partnership, and Taiwan Alliance for Net-Zero Emissions

Obtained ISO 50001 100%
4 plants in Taiwan passed the verification.

Obtained ISO 14064-1 100%
The Companies and plants disclosed in this report have passed the verification.

First Obtained ISO 14067
Implemented in three EX1 laser projectors and passed the verification.

11%
Utilization rate of renewable energy in Taiwan and China plants

100% achieved short-term goals of environmental sustainability
Goals achieved regarding reducing GHGs, power consumption, waste generation, and water usage.

Social

NT$21.95 million
The amount investing in social engagement and social welfare account for 0.9% in the company' annual profit.

5,705 person-hours
person-hours participating in social engagement and welfare volunteering

50,219 people
People benefiting from company's involvement in social and charity projects

133 NGOs
NGO benefiting from the company's participation in social and charity projects

3~5%
Average salary rise in a year

220
Internship opportunities in industrial-academic collaboration

Governance

16%
Net profit attributable to the parent company grew record high in 8 years

NT$6.03
EPS grew record high over 25 years

Selected in ESG Index
TIP TPEx ESG Index, TIP TPEx ESG 30 Index, TIP TPEx ESG HD TR Index, TPEx Labor Employment 88 Index

92%
Completion rate of ESG training courses

99%
Completion rate of integrity management courses

96%
Signing rate of Supplier and Contractors Sustainability Commitment Statement

Awards and Recognitions

Corporate Governance Evaluation System

- Ranked in the top 5% of TPEx-listed companies for 8 consecutive years, only 9 OTC companies in Taiwan have achieved this honor for 8 consecutive years.
- Ranked in the top 10% of TWSE- or TPEx-listed companies in the electronics industry with a market value of over NT$10 billion for 4 consecutive years.

National Enterprise Environmental Protection Award

Silver Award of National Enterprise Environmental Protection Award by the EPA, Executive Yuan for 5 consecutive years.

Taiwan Corporate Sustainability Awards (TCSA)

- Won Golden Award of Corporate Sustainability Report Awards for 6 consecutive years
- Won Transparency and Integrity Leadership Awards for 6 consecutive years
- Won Top 100 Sustainability Corporates Awards for 4 consecutive years
- Won Social Inclusion Leadership Awards 3 times

Net Zero Certificate

Won Net Zero Certificate from the TAISE, which is one among 15 corporates that first received such certificate

Excellence in Corporate Social Responsibility Award from CommonWealth

Won the Corporate Social Responsibility Award from CommonWealth for 11 consecutive years, with a rank of 32 in large-scale corporates in 2022.

Corporate Health Responsibility Award (CHR)

Won the Silver Award of 2022 CHR Corporate Health Responsibility Award from CommonHealth Magazine.

CDP Evaluation

CDP
DISCLOSURE INSIGHT ACTION

- Received Leadership level (A-) rating in Supplier Engagement Rating, which is higher than the average level in the industry, Asia, and the globe.
- Received Management level (B) rating in Climate Change Evaluation, which is higher than the average level in the industry, Asia, and the globe.
- Received Management level (B) rating in Water Security Evaluation, which is higher than the average level in the industry.

Won the Award of Best Companies to Work for in Asia

Joined the competition for the first time and won HR Asia-Best Companies to Work for in Asia

ESG Topics — Environmental

Environmental Sustainability

With the increasing severity of the impacts of extreme climate change on the environment and ecology, Coretronic firmly believes that addressing global warming is an urgent task. Therefore, in 2022, we announced our Net-Zero Statement, committing to **reduce carbon emissions by 25% by 2025, 50% by 2032, and achieve net-zero emissions by 2050**. We are dedicated to minimizing the impact of global warming on the environment, society, and economy and see it as our responsibility as a member of the global supply chain. Coretronic has long been committed to environmental sustainability, with the core principle of "Environmental Sustainability 4G Power." We have established four main themes: "Green Products," "Green Supply Chain," "Green Production," and "Green Lifestyle," to drive continuous environmental sustainability measures. We actively promote carbon reduction initiatives and increase the utilization of renewable energy. We have taken concrete actions to respond to climate initiatives both domestically and internationally. These actions include adopting TCFD (Task Force on Climate-related Financial Disclosures), joining the Taiwan Climate Partnership (TCP) and Taiwan Alliance for Net Zero Emissions (TANZE), responding to CDP (Carbon Disclosure Project) questionnaires on climate change and water security, and achieving management-level (B) ratings. Our Supplier Engagement Rating has also received a leadership-level (A-) rating. We have submitted a commitment letter to the Science Based Targets initiative (SBTi) and will set science-based reduction targets (SBT) based on a 1.5°C scenario, aiming to achieve net-zero emissions by 2050. We are committed to embarking on the path of net-zero sustainability.

CDP — DISCLOSURE INSIGHT ACTION

- Responding to CDP Climate Change questionnaires for 4 consecutive years.
- Received Leadership level (A-) rating in Supplier Engagement Rating, which is higher than the average level in the industry, Asia, and the globe.
- Received Management level (B) rating in Climate Change Evaluation, which is higher than the average level in the industry, Asia, and the globe.
- Received Management level (B) rating in Water Security Evaluation, which is higher than the average level in the industry.

TCFD — TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

- Adopted and signed TCFD in 2020
- 2021~2022 Assessed climate change impacts on finance and generated a risk & opportunity matrix to further analyze the financial risks caused by climate change.
- Continue to carry out risk analysis on energy, carbon emission, and extreme climate, as well as precaution measures.

SCIENCE BASED TARGETS — DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

- Submitted a commitment letter to the SBTi and set science-based reduction targets based on a 1.5°C scenario, aiming to achieve 50% reduction in 2032, and net-zero emissions by 2050 (base year 2020).

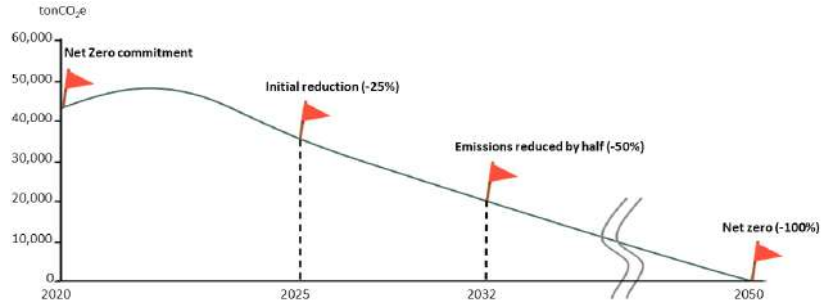
TCP — Taiwan Climate Partnership 台灣氣候聯盟

- Founded in 2021 by 8 corporates to promote net zero emission among Taiwan's supply chain. Connect with the world trend and actively collaborate with climate change initiatives with collective force.
- Joined in 2022 and became the first batch of members.

TANZE — 台灣淨零行動聯盟 Taiwan Alliance for Net Zero Emissions

- Encourage businesses to achieve the goal of "net-zero emissions for office locations by 2030 and production and service locations by 2050" through diverse energy-saving measures, process improvements, and energy substitution methods.
- Awarded the Net-Zero Certificate in 2022, demonstrating our commitment and actions towards becoming a net-zero enterprise through commitment and action.

Coretronic is committed to developing a low-carbon product portfolio and implementing green operations as the cornerstone of our energy-saving and carbon reduction strategy. This includes the development of environmentally friendly technologies, source reduction initiatives, promoting circular economy principles, and pollution prevention measures. We also aim to reduce our reliance on fossil fuels and increase the use of renewable energy sources to mitigate the impact of climate change on the environment. In 2022, solar power generation facilities were installed in our Taiwan facilities, including the Chunan Plant, Tainan Plant 1, and Tainan Plant 2. These solar installations cover 75% of our Taiwan facilities and are still undergoing further expansion. Solar power generation facilities have also been established in our Kunshan and Wujiang plants in China (Coretronic Optotech (Suzhou), Coretronic Display (Suzhou), Coretronic Optics(Suzhou)), with the aim of reducing carbon emissions through self-consumption. Furthermore, we actively engage in green electricity procurement and the purchase of renewable energy certificates to gradually increase our utilization of renewable energy sources, thereby supporting the use of green energy and achieving carbon reduction goals. Our factories also proactively respond to energy-saving policies by implementing various energy-saving measures, initiating equipment replacement programs to upgrade outdated cooling systems and energy-consuming equipment, thus strengthening our carbon reduction efforts. Through these energy-saving and carbon reduction initiatives, our Taiwan plants achieved a 22% reduction in greenhouse gas emissions (Category 1 and 2) intensity in 2022 compared to 2020, moving steadily towards our net-zero emissions target.



2020-2032 Reduction of carbon by 50%

- Replacement with LED light tubes (8%)
- Energy-saving chillers/air conditioners (15%)
- Solar power and green power (10%)
- New clean energy solutions (17%)

2032-2050 Reduction of carbon by 100%

- Alternative energy (hydroelectric /wind/hydrogen energy)
- Green buildings and net-zero buildings
- Green-energy vehicles and transportation
- Low-carbon products and services/clean supply chains
- Carbon fixation/carbon capture/carbon conversion

Future Light Camp 2.0: Play Board Games and Learn Computer Programing to Mitigate Digital Divide

Coretronic launched the Light Pioneer project in 2016 to carry out High-tech Adventure, Digital Interactive Classroom, and Future Light Camp in rural schools in Miaoli. We hope to collaborate with local universities and utilize our core products to reduce digital gap and resolve education inequality. We hope these activities can also respond to the Goal 1, 4, and 17 of SDGs: No poverty, Quality education, and Partnership for the goals.
In 2022, computer programming has been included in the 2019 Curriculum Structure. To balance the learning resources and enable students in rural areas to learn computer programming, we have collaborated with National Yangming Chao Tung University and Papacode to launch Future Light Camp 2.0. It is a three-day programming camp for 4th to 6th grade students at Fuji Elementary School, Miaoli County. Educational board games such as Coding Ocean, Musical Chair, Loop Drawing and Cup Stacking were first used to spark the interest in coding in the children. Abstract and difficult coding concepts such as sequence, instruction debugging, loop, conditional judgment, function were integrated into the games to enable the children to learn while playing. Finally, the children were guided to complete the coding class for the first semester of their first year in junior high in advance through problem-oriented computer programming learning course, Scratch.

Coding Ocean is super fun! It's hard to find the treasure, but once you did, it feels so good! Now that the company gave one set to school, we can play it at school now.

- 5th-grade student at Fuji Elementary School, Miaoli County

Originally, children didn't like programming lessons, but the board game made it interesting. They are able to train their logical thinking during the play. They want to solve the programming questions because they want to play the game. Right now, they kept asking when will be the next session of the camp. It was quite successful.

- Teacher at Fuji Elementary School, Miaoli County

"Coretronic is the first company we collaborated with. From volunteer training to camp organization, company volunteers involved in it actively. Engineers, sales, PM, EHS personnel, factory personnel, and HR colleagues served as lecturers. Some volunteers even brought their family to join the activity. It's very remarkable.

- Papacode, Partner

- Invested $205,584
- Benefited 85 students
- Benefited 2 schools
- 151 volunteers
- 919 person-hours in volunteering

Warm Restaurant: Food, Care, and Love

Taiwan has entered an aged society and is estimated to enter a super-aged society in 2025. Compared to other vulnerable groups, the elderly living alone receive less help. Therefore, Coretronic launched the Elderly Smile Project in 2022. We collaborated with a social enterprise called Silver Gate For Elders to start a project called Warm Restaurant. We deliver food to the elderly by helping the company set up an online food delivery system. The elderly not only receive food, but care and love. More job opportunities were created as well. We assisted the unit in digital transformation to enhance its efficiency and expand its service. On the other hand, we also cooperate with Buy Nearby to purchase local rice for the elderly restaurants in Hsinchu and Miaoli districts, making sure the restaurants have sufficient food to help more elderly.

1,560kg of polished and brown rice	10,305 healthy boxed lunches	24 meal delivery ambassadors	Benefited 10,305 elderly people	1 meal delivery system
Purchased local polished and brown rice from Buy Nearby, a social enterprise, and donated it to **20** senior canteens of communities in Hsinchu and Miaoli, benefiting a total of **7,800** people.	Appointed a **nutritionist** to design a diet plan suitable for the elderly based on the results of the nutrition questionnaire for the elderly, to align the meals with the health needs of the elderly.	Appointed single mothers and part-time workers as food delivery ambassadors to increase their job opportunities and income.	They provided meals and monitored the health and living conditions of the elderly, reporting their findings to the system for immediate follow-up.	Established an online meal delivery management system for **Lushui Village, Hsinchu City** , to improve the efficiency of meal delivery and the number of people served.

Benefited
18,366 people

The Story of Uncle Songshan

Since June 2022, the delivery man delivered food to Uncle Songhan, and cared about his health, which made Uncle Songshan very happy.
In July 2022, the delivery ambassador found Uncle Songshan fainted on the street and saved his life by calling the ambulance. It was found that he fainted due to low blood sugar, causing head injury. Thanks to the delivery ambassador, Uncle Songshan was saved.
In November 2022, Uncle Songshan died in the hospital alone. No one can expect that "See you next time" cannot be realized. We hope that we deliver not just food, but also the care and company. We hope that the elderly living alone would not be lonely and starve.

Ranked in the Top 5% of Corporate Governance Evaluations for TPEx-listed Companies for 8 Consecutive Years

In 2022, the Taiwan Stock Exchange and the Taipei Exchange conducted the 8th Corporate Governance Evaluation. Coretronic stood out among 1,639 TWSE- and TPEx-listed companies, ranking in the top 5% for eight consecutive years in the Corporate Governance Evaluation for TPEx-listed companies. It joined eight other companies in achieving an eight-year streak in the top 5% of corporate governance rankings. This remarkable accomplishment demonstrates Coretronic's excellence in corporate governance and its commitment to maintaining a leading position in the industry. At the same time, Coretronic has been ranked in the top 10% of TWSE- and TPEx-listed companies in the electronics industry with a market value of over NT$10 billion for four consecutive years. This achievement signifies the company's unwavering dedication to implementing the four dimensions of corporate governance evaluation: "Protecting Shareholder Rights and Interests and Treating Shareholders Equitably," "Enhancing Board Composition and Operation," "Increasing Information Transparency," and "Putting Corporate Social Responsibility into Practice." Coretronic continues to demonstrate its strong capabilities and determination as a leader in corporate governance.

Driven by the global sustainability trend, Coretronic recognizes the importance of strengthening the link between the Board of Directors and sustainability performance. In addition to overseeing the company's operations, the Board of Directors plays a crucial supervisory role in various aspects, such as environmental sustainability, corporate social responsibility, integrity management, stakeholder communication, information and cyber security, intellectual property, and risk management. It regularly reviews and supervises the implementation of sustainable development in these areas and urges the management team to make adjustments when necessary. With the significant elevation of the Board of Directors' importance, the composition, functions, and operations of the Board have become the most critical issues in corporate governance.

Top 5% of TPEx-listed companies ▼

Code	Company Symbol	Code	Company Symbol
1259	AN-SHIN	3081	LandMark
3264	Ardentec	3374	Xintec
4105	TTY	4126	PAHSCO
4743	ONENESS BIOTECH	4953	WITS
5347	VIS	5371	Coretronic
6023	Yuanta Futures	6147	CHIPBOND
6589	EirGenix	6613	Novatech
8432	TSH		

Top 10% of TWSE- or TPEx-listed companies in the electronics industry ▼

Code	Company Symbol	Code	Company Symbol
2301	LTC	2303	UMC
2395	ACL	2408	NTC
3034	NOVATEK	3036	WT
3665	BHI (BizLink)	3711	ASEH
5347	VIS	5371	Coretronic

Ranked in the Top 5% of the 8th Corporate Governance Evaluations for TPEx-listed Companies!

Board Diversification Is Key

Board diversification is an essential factor in enhancing the effectiveness of the board of directors and bringing diverse perspectives and independence to the board. Attracting board members with different professional backgrounds, skills, and experiences helps improve the quality of board decisions and effectively supervises the management team.

To fully implement the corporate governance strategy and establish better internal governance mechanisms, Coretronic proactively establishes a functional committee - the Nomination Committee, that is not required by laws. The Nomination Committee consists of three independent directors who seek, review, and nominate candidates for directors and senior executives based on the criteria of professional knowledge, skills, experience, diversity of backgrounds, including gender, and independence. The selection, review, and nomination of the board members of Coretronic in 2022 were discussed and decided by the Nomination Committee and nominated to the Board of Directors and shareholders' meeting.

The 11th Board of Directors emphasizes diversity in terms of gender, age, professional background, and experience. All board members hold Taiwanese nationality. Among the 7 directors, 4 are newly appointed, including 1 female director (14% of all the directors). There are 3 independent directors (43% of all the directors), with 2 of them serving for less than 3 years and 1 independent director serving for 3-9 years. The age distribution of directors is as follows: 1 director aged 41-50, 1 director aged 51-60, and 5 directors aged 61-70.

The professional backgrounds of the Board members cover finance and accounting, legal, IC design, semiconductor, electronics-related industries, and financial industry management. Additionally, there are board members who have served as the president of National Chengchi University and a tenured professor at National Yangming Chiao Tung University. In addition to meeting the basic requirements and possessing professional knowledge and skills, the board members provide feedback based on their expertise through the operation of various functional committees. This facilitates future operational development and ensures continuous supervision and assistance in corporate governance, social inclusion, and environmental sustainability, the three pillars of sustainability.

Selected in ESG Index

TIP TPEx ESG Index
TIP TPEx ESG 30 Index
TIP TPEx ESG HD TR Index
TPEx Labor Employment 88 Index

01

Business Operation

1.1 About Coretronic

1.2 Economic Performance

1.3 Innovative Products

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01 Business Operation

1.1 About Coretronic
1.2 Economic Performance
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1.1 About Coretronic [2-1, 2-6]

Coretronic Corporation was established in the Hsinchu Science Park on June 30, 1992. Since the very beginning, it has positioned itself as an innovative display solution provider. Coretronic was the first LCD backlight module manufacturer in Taiwan and it has taken the lead in developing and mass-producing the smallest and lightest VGA single-panel LCD projectors and XGA DLP projectors in the world through integrated its leading technology, “Optics, Mechanics, Electronic, Thermal Management, Materials and Precision Molds" and other technology. This advancement has opened up a new era for display systems in Taiwan. Our clients include various brand companies of projectors, TVs, laptops, and automotive display. Products are sold in more than 70 countries/regions.

Establishment	June 30, 1992
Capital	NT$3.9 billion
Chairman	Wade Chang
President	Sarah Lin, SY Chen, Ann Wu
Number of Employees	5,318 employees[1]
HQ	No. 11, Lixing Rd., Hsinchu Science Park, Hsinchu 300094, Taiwan, R.O.C.
Global Locations	Taiwan, China, U.S.A, Europe, Vietnam
TPEx-listed	1999 (Stock code: 5371)

1: Employee numbers in Taiwan and China plants (Kunshan and Wujiang plants)

Products and Services

- Visual Solutions

Digital projectors, Laser TV, AiO LED displays, which project large screens via various video signals, and interactive modules, smart connectors, edge blending and image warping processors, and image signal processing boxes; the system is integrated with software to provide the user-friendly complete visual solutions via smart service platform for diverse applications.

- Energy Saving Products

High brightness backlight modules for automobile displays, tablets, notebooks, LCD displays, and LCD TVs; semi-system, system, and whole set assembly of panel modules, electronic whiteboard modules, customized notebooks, LCD displays, and LCD TVs; system solutions for medical, educational, ATM, POS and public digital splicing displays.

Revenue in 2022 | Around NT$49.8 billion

Business Philosophy [2-24]

Coretronic conducts its R&D and innovative efforts with the business philosophy of maintaining secure operations by focusing on its core business. It controls its key patents and core technology via a business strategy of vertical integration. This has made Coretronic the leader in advanced digital projector and LCD backlight technology in Taiwan and also one of the top manufacturers in the R&D of these products worldwide.

- R - Responsibility
- I - Innovation
- S - Superiority
- E - Enterpreneurship

- Professional provider of innovate display solutions
- Leader of digital display technology
- Focus on the core business and operate steadily

- To customers: Commitment to quality and professional service
- To employees: Pursuit of growth and development of potential
- To society: Deeply rooted technology and sustainable development

Milestones

1992 Establishment and listing

- 1992—Incorporated
- 1999—Lisated on TPEx

2002 Expansion momentum

- 2002—Established Optoma Corporation - private brand marketing
- 2002—Established Young Optics Inc. - manufacturing of optical components
- 2004—Established Young Lighting Technology Inc. - manufacturing of optical devices
- 2005—Established Young Green Energy Co. - manufacturing of electronic components, such as power supplies
- 2010—Established Coretronic System Engineering Corporation, engaging in multimedia integration services
- 2010—Established Coretronic Culture and Arts Foundation

2017 Transformation and expansion into other fields

- 2017—Established uCare Medical Electronics Co., Ltd. - intelligent health and sport care solutions
- 2017—Established Champ Vision Display Inc. - innovative smart display solutions
- 2017—Acquired Caliber UK Limited
- 2017—Coretronic System Engineering Corporation was renamed itself Coretronic Intelligent Cloud Service Corporation – digital transformation, smart retail, and smart ads solutions
- 2017—Established Coretronic Intelligent Robotics Corporation - fully autonomous intelligent drone and intelligent robot solutions
- 2017—Established InnoSpectra Corporation - spectrophotometers and cloud service platforms
- 2018—Established Nano Precision Taiwan Limited - precision optical components and optical films
- 2018—Merged subsidiary, Young Lighting Technology Inc.
- 2019—Established Coretronic MEMS Corporation - MEMS technology, components, modules, and solutions
- 2019—Established Coretronic Reality Incorporation – AR and MR solutions
- 2020—Established Coretronic Vietnam Company Limited - backlight and LCD modules
- 2021—Established Coretronic Intelligent Logistics Solutions Corporation - smart IoT, AMR System integration, and lightweight solutions
- 2021—Established Coretronic Robotek (Kunshan) Corporation - intelligent warehousing and manufacturing solutions
- 2021—Established Coretronic Technology (BRVT) Company Limited – backlight modules manufacturing, R&D, and sales in Vietnam

Global Locations [2-1, 2-6]

The manufacturing and business bases of Coretronic, Optoma, Champ Vision Display, Coretronic Intelligent Cloud Service, and Coretronic Intelligent Robotics are located worldwide, including Taiwan, China, Europe, Americas, and other regions in Asia. Additionally, the subsidiary, Optoma, has customer service and marketing bases in Taiwan, Americas, Europe, and China.

Type	Area
HQ	Taiwan: Hsinchu
Branch Office	Taiwan: Tainan
Manufacturing Bases of Visual Solutions	Taiwan: Hsinchu/ China: Kunshan
Manufacturing Bases of Energy Saving Products	China: Suchou, Ningpo, Guanchou, Fuchou Taiwan: Miaoli, Tainan Other regions in Asia: Vietnam
Optoma Customer Service and Marketing Bases	Taiwan: New Taipei City America: U.S.A. Europe: UK, the Netherlands, France, Germany, Norway, Spain China: Shanghai, Hong Kong
Champ Vision Display Operations and Manufacturing Bases	Taiwan: Miaoli China: Kunshan
Coretronic Intelligent Cloud Service Operation Base	Taiwan: Hsinchu
Coretronic Intelligent Robotics Operations and Manufacturing Bases	Taiwan: Hsinchu, Tainan Other regions in Asia: Japan

01 Business Operation

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1.3 Innovative Products
1.4 Intellectual Property Rights
1.5 Customer Service

Material Topic
Economic Performance

GRI
Economic Performance

08 Decent Work And Economic Growth

17 Partnerships For The Goals

1.2 Economic Performance 3-3

Boundary

Coretornic Taiwan plants, China plants (Kunshan plants and Wujiang plants) Optoma, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics Taiwan plants

Materiality

While economy and governance are the major parts of ESG, we will pursue the biggest interest of all shareholders and employees to accomplish the mission of “Deeply rooted technology and sustainable development.”

Strategy

Upholding the mission of leadership in digital display system, we will continue to develop innovative display solutions, and aim at cloud services, AI, and complete solutions for various smart fields.

Evaluation

- Ranked in the top 5% of the Corporate Governance Evaluation of TPEx-listed companies
- Maintain existing customer relationship and expand market share and explore new customers
- Improve core technology and increase patents
- Achieve business profit goals and gross profit enhancement

Performance

- Consolidated revenue totaled NT$49.783 billion, equivalent to the previous year.
- Consolidated business profit totaled NT$2.151 billion, and consolidated net income before tax was NT$3.173 billion, a 14% YoY increase.
- Consolidated net income after tax totaled NT$2.413 billion, and net income attributed to shareholders of the parent company totaled NT$2.359 billion, a 16% YoY increase.
- EPS NT$6.03.

Targets

【2023 Targets】

- Continuous transformation of the business profit model and enhancement of product competitiveness, coupled with lean management and smart manufacturing, are employed to promote efficiency and product quality, ultimately leading to profit generation.
- Establishing a sustainable supply chain and implementing a globalized and localized business approach are key strategies to enhance competitiveness and solidify global market share.
- Mastering core technologies and key components, strengthening the integration of optical and electrical systems, system design and application capabilities, and providing total solutions for innovative display systems.
- Focusing on research and development of high value-added products and various visual imaging solutions, expanding the development of smart platforms including AI, big data, cloud, and smart interaction to bring growth momentum.

【2024-2026 Targets】

- Deepening the core optical technology to expand various application areas of optical components and system products, as well as semi-system products, to strengthen product value-added and price competitiveness, consolidating the global competitive advantage in the display and imaging technology field.
- Developing a data-driven service platform that integrates artificial intelligence, deep learning, computer vision, IoT, and cloud computing. This platform targets the retail, media, and enterprise digital transformation cloud consulting service markets. Focusing on computer vision, AI deep learning, and digital automotive technology, it develops core capabilities such as SLAM navigation solutions based on multi-sensor fusion technology, image recognition, and motion control algorithms. This enables the provision of complete solutions for unmanned aerial vehicles and outdoor autonomous vehicles in application areas such as smart inspection and smart logistics. Actively expanding international brand design and OEM business.
- Utilizing digital optimization technology to coordinate group resource allocation and ensure information security, thereby enhancing the overall organizational efficiency. Defining information flows and system resource utilization required for operations, rapidly providing an integrated information management platform. Designing, planning, and implementing cloud computing architectures, digital platforms, and IoT environments and applications to facilitate the expansion of new business ventures within the group.

Consolidated Financial Statement [201-1, 201-4]

Unit: NT$ Thousand

Item	2020	2021	2022
Net Sales	42,438,336	49,833,368	49,783,157
Operating costs	35,031,579	41,102,386	40,328,961
Gross Profit	7,406,757	8,730,982	9,454,196
Operating Income (loss)	692,089	1,646,426	2,150,622
Non-operating Income, Net	1,144,607	1,138,893	1,022,358
Net Income	1,395,156	2,039,280	2,413,434
Earnings Per Share	3.59	5.12	6.03
Income Tax Expense (profit)	441,540	746,039	759,546
Capital Expenditure	1,146,872	1,465,671	2,239,760
Employee Benefits Expense	7,810,419	8,648,154	8,972,782
R&D Expenses	3,152,490	3,008,812	3,056,452
Total Assets (year-end)	47,275,063	61,470,393	55,857,815
Total Equity Attributable to Owners of the Parent (year-end)	22,895,484	22,152,104	22,729,545
Total Market Value of Equity (year-end)	17,615,857	36,126,655	22,246,825
R&D Tax Credits	1,339,164	1,308,022	1,261,806
Tax Credits	13,621	15,653	93,255
Government Grants	371,528	159,218	110,394

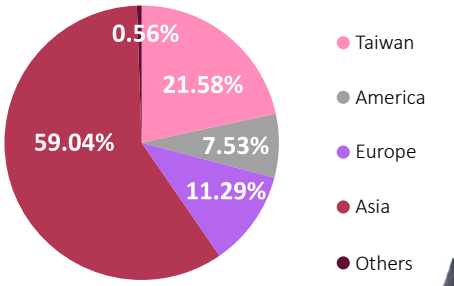
Financial Income/Expenditure & Profit Analysis Report

Item		2020	2021	2022
Financial Structure	Liabilities to Assets Ratio (%)	47.25	60.60	55.10
	Long-term Capital to Property, Plant and Equipment Ratio (%)	350.31	341.77	340.92
Solvency	Liquidity Ratio (%)	180.04	139.23	155.63
	Current Ratio (%)	152.86	109.13	112.27
	Interest Coverage Ratio	13.70	31.32	10.30
Profitability	Return on Assets (%)	3.47	3.87	4.49
	Return on Equity (%)	7.05	9.02	10.51
	Net Income Before Tax to Paid-in Capital Ratio (%)	42.28	71.24	81.15
	Net Profit (%)	3.29	4.09	4.85
	Earnings Per Share (Dollar)/Average Weighted Number of Outstanding Shares	3.59	5.12	6.03
Others	Cash Dividend Per Share (Dollar)	4.0	4.0	4.5
	P/E Ratio	9.77	12.65	10.38
	Cash Dividend Yield	11.41	6.18	7.19

Market Analysis [2-6]

- According to market survey, the estimated shipments of large-size LCD panels were 6.31 million pieces in 2022. The company's total shipments of energy saving products in 2022 were 40 million pieces, and the global market share was about 6.35%.
- The global market of projectors is impacted by the COVID-19, China's zero-COVID policy, Russian-Ukraine War and the sluggish of macroeconomy. Businesses and individuals all cut down on their expenditures. Even though the World Cup boosted the demand, the delivery only increased 2% in global projector market, around 6.15 million pieces. Coretronic's visual products delivery in 2022 was 1.36 million pieces, accounting for 22% in the global market.
- In 4K/UHD and laser projector markets, Coretronic ranked on top.

Sales Distribution for Major Products in 2022



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Boundary

Coretronic Taiwan and China plants (Kunshan plants and Wujiang plants)

Materiality

Non-stop innovation and development is the key factor for a corporate to succeed.

Strategy

- CTO Office is established under the President, and CTO/Technology Center/ R&D Center are set under each business unit to develop and evaluate advanced technologies and manufacturing.
- To enhance core optical technology to broaden the application areas of optical components, system and semi-system products, module core technology, and incorporate intelligent situational applications.
- Develop side-in light guide plates, bottom-up diffuser films, special optical control films, and Mini LED BLM (Backlight Module). Develop slim, compact, energy-efficient, anti-peeping, and high dynamic contrast products.
- Utilize new laser light sources integrated with intelligent voice recognition. Adopt high C/P value DLP from Texas Instruments, which combines high-definition resolution with a wider color gamut coverage. Enhance the differentiation by integrating core intelligent systems and touch controls.
- Continue to deepen our core technologies in optics and system integration, focusing on the research and development of solid-state light source projection products for home and large-scale commercial applications. Our aim is to deliver high-brightness, wide color gamut, and high-resolution solutions. We strive to improve product efficiency, strengthen vertical integration, and enhance cost competitiveness. We also leverage intelligent technologies to develop a data-driven platform that combines artificial intelligence, deep learning, computer vision, the Internet of Things, and cloud computing, all aimed at enhancing the user experience.
- Based on our core technologies in projection optics and direct-view control, and through vertical integration strategies, we aim to acquire key patents and core technologies. This allows us to develop micro-projectors, optical modules for AR/MR glasses, and new applications in the automotive industry, thereby creating differentiation in the market.

1.3 Innovative Products 3-3

Evaluation

- The R&D team presented the annual R&D plan, KPIs, and budget proposal during the year-end meeting. After approval from the business group executives and presidents, the plan was executed. The mid-year and year-end review meetings were held to assess the progress against the KPIs. Additionally, the team promoted CIIP (Control, Item, Improve, Plan) to enhance internal cross-functional communication and effectively manage important issues.
- Actively apply for various governmental compensation to boost more development.
- Encourage employees to submit proposals in order to increase patent number.

Performance

【Energy Saving Products】

- Deepening various high-efficiency light guide plate core technologies, display technologies, and system integration technologies to enhance product competitiveness. For example, the updated IML & MML series light guide plates, combined with special optical film designs, can improve efficiency by 40% to 60% or more compared to traditional BLU (Backlight Unit) designs.
- Mass-producing and developing various models of fifth-generation switchable viewing angle privacy display technology. The sixth-generation privacy module, which is even lighter, thinner, and provides better privacy, has completed the trial production stage and has received recognition from many customers. Plans are underway for its implementation. We have also extended the product range to include automotive and industrial control applications.
- In response to the energy-saving demands of display monitors, we have successfully developed high-efficiency light guide plates with a thickness of 27 inches or below. These modules achieve an efficiency improvement of 15% to 25% compared to existing products.
- In response to the trends of large-size, high-brightness, and high-contrast displays in automotive applications, we have successfully developed LCD displays that combine optical structures, diffuser films, and LED designs. These displays have a slim profile with a thickness of only 2.5 to 4mm and feature 2D dynamic dimming and low light leakage. We have established successful partnerships with customers for the implementation of these displays.
- We have invested in the development of small and medium-sized "front light L.G.P." that rely less on backlight modules for light sources. Instead, these panels can utilize ambient light as the primary light source, aligning with our energy-saving strategy.

【Visual Solutions】

- With our patented laser-phosphor hybrid technology and highly efficient cooling system, we have introduced a new generation of industry-leading products that are energy-efficient, compact, and high-performing. These mainstream models achieve a brightness of up to 4,000 lm while utilizing standard power supply units, further advancing our commitment to green product design.
- Expanding into the field of smart micro projectors, our offerings not only feature compact size and high portability for enhanced convenience but also deliver wide color gamut and high contrast performance. This allows them to withstand ambient light interference, making the application scenarios more diverse.
- We have been developing high-quality ultra-short-throw laser TVs with 8K resolution and an ultra-wide color gamut using our advanced RGB pure laser hybrid technology. By integrating laser light sources with various key technologies, we have enhanced system efficiency and color performance to lower the costs and enhance efficiency.
- We are developing a new generation of the world's smallest and brightest pure laser projectors. Compared to LED light sources, these projectors offer a 40% increase in brightness at the same power consumption.
- We are mass-producing the next generation of 3,000 to 4,000 lm laser phosphor projectors. The system's cooling and noise reduction capabilities have been further improved, with a size that is only 65% of traditional lamp projectors.
- We are continuously pursuing the miniaturization and noise reduction of projectors. We are expanding the use of digital simulation technology to optimize the design process and enhancing the research and development of intelligent technologies. We are also improving system cooling, shock absorption, and noise reduction designs.
- Global market share 22% with the top 1 rank in global DLP projector market.
- ▶ R&D engineers totaled 792 with 36% of them are from Taiwan.
- ▶ Invested NT$1.8 billion in research and development, accounting for 48% of total operating expenses.

Targets

【2023 Targets】

- We continuously research and develop various types of new light guide plates and special optical control films. We also focus on developing high-value display products that are slim, compact, energy-efficient, anti-peeping, and have high dynamic contrast. These products find applications in areas such as automotive head-up displays, touch screen displays, advanced monitors for medical and gaming purposes, all-in-one monitors, slim and smart high-end televisions, and intelligent home display modules.
- We are committed to deepening our core technologies and key components, enhancing our capabilities in optical, mechanical, electrical, thermal, and software design integration, and providing comprehensive system solutions. We focus on the research and development of high-resolution projection products with solid-state light sources. We are expanding our product line of intelligent micro-projection for home use. We also strengthen our cooperation with strategic suppliers and high-quality customers to enhance our competitiveness and solidify our market share.
- We continue to promote high-efficiency and low-cost Entry Pro-AV models, mainstreaming low-end high-brightness models, and driving the comprehensive replacement of traditional mercury lamps. This effort aims to achieve energy savings and carbon reduction.

【2024-2026 Targets】

- Upholding the mission of leadership in digital display system, we will continue to develop innovative display solutions, and aim at cloud services, AI, and complete solutions for various smart fields.
- Deepening the core optical technology to expand various application areas of optical components and system products, as well as semi-system products, to strengthen product value-added and price competitiveness, consolidating the global competitive advantage in the display and visual technology field.
- Leveraging DLP technology to develop high resolution, high luminance, and smart applications; extending simulation to commercial applications and large-scale metaverse immersive applications; implementing cloud architecture, digital platforms, and IoT applications.
- Developing niche products based on the potential needs in the market and provide more promising display products. Integrating software and hardware to provide one-stop service and collaborating with technology units from home and abroad to expand beyond the traditional LCD industry.
- Integrating AI, deep learning, computer visuals, IoT and Cloud computing to develop a data-based service platform.

Visual Solutions PR1-1

We are committed to becoming a world-class provider of comprehensive visual solutions. Over the past two decades, Coretronic's Visual Solutions Business Group has focused its research and development efforts on various projection display technologies, image processing technologies, high-efficiency and high-energy-density light source technologies, AR wearable display technologies, virtual image display technologies, high-power and high-efficiency power supply technologies, system thermal management technologies, system noise and vibration control technologies, high-efficiency optical component and system integration technologies. In response to the maturing market of solid-state light source products in recent years, we have introduced forward-looking technologies such as image recognition, artificial intelligence, and cloud services. This allows us to maintain a competitive advantage in solid-state light sources and 4K/8K ultra-high-resolution projection products. Furthermore, we collaborate with our customers to create advanced projection display solutions that belong to the AIoT era.

Key Technologies

NEW Integrating new-generation laser light source modules and wide color gamut RGB pure laser combined light technology into mainstream laser projectors, ultra-short throw education projectors, and 8K ultra-short throw laser TVs to enhance system efficiency and color performance, achieving a low-cost and high-performance product advantage.

- Continuously researching and developing smart technologies to optimize various automatic adjustment techniques that assist users in installing projectors.
- Continuously pursuing miniaturization and quietness of projectors by improving the heat dissipation efficiency of heat dissipation modules, water cooling systems, and cooling fans, and optimizing shock absorption and noise reduction designs of projector systems.
- Developing new 1-DLP Passive 3D display technology for large public venues.
- Utilizing digital simulation technology to continuously improve component and system designs to enhance efficiency and reduce costs.
- Continuously researching and developing optical modules for wearable displays, in-car and external displays, and AR HUD (Head-Up Display) related display technologies.
- Independently developing and manufacturing key components such as color wheels, actuators, and thermal modules.

Innovative Products

- Mass-producing commercial and educational projectors equipped with the latest generation of blue laser light sources. These projectors offer higher values and serve as a replacement for traditional mercury lamp projectors. Our goal is to achieve energy savings and carbon reduction by promoting the use of these new-generation projectors.

NEW Introducing a new generation of portable smart projectors with RGB laser light sources, offering the highest brightness and best color saturation among comparable products in the market.

- Optimizing the 6,000~8,000 lm entry-level Pro-AV laser projectors, while enhancing the performance, reliability, color reproduction, and price competitiveness of the products.
- Mass-producing 20,000 lm large-scale public display smart control projectors to provide users with an immersive experience.
- Mass-producing a new generation of portable LED light source projectors for home entertainment.
- Mass-producing embedded projection modules for integration into gaming machines and interactive reading devices for children.
- Mass-producing mobile micro projectors that integrate smart projectors, smart speakers, and ambient lighting functions.
- Developing AR glasses optical engine modules.

NEW Mass-producing 4K ultra-short throw laser TVs equipped with the new generation laser phosphor and wide color gamut RGB pure laser combined light technology.

Energy Saving Products PR1-1

NEW Injection Molded Light Guide Plate: Develop new IML (In-Mold Labeling) and MML (Multi-Material Layer) series light guide plates, incorporating special optical film designs. These new plates offer an efficiency improvement of over 40-60% compared to traditional laser LGPs.

- Thermal Rolling High-Efficiency Light Guide Plate: Optimize the manufacturing process and microstructure design to develop new types of RS-IML/CML light guide plates using PC and PMMA materials. These plates offer the advantages of high efficiency, low internal stress, resistance to material adhesion, mold-free production, and high throughput. With a thickness as low as 0.3T, they are suitable for ultra-narrow bezel slim displays.

NEW Energy Star 9.0 Display Monitor: Successfully developed high-energy-efficient thick plate light guide panels for screens up to 27 inches (including), achieving a 15-25% efficiency improvement compared to existing light guide panel products.

- HDR Technology: Mass production of Mini LED local dimming and scanning backlight modules has begun, suitable for narrow bezel gaming laptops and monitors. These modules are combined with self-developed optical alignment splicing light boards and self-made special diffusion plates and printing technology, significantly improving optical performance, image quality, and production stability.
- Privacy Display Technology: By integrating core light guide plates, backlight panels, and special film technology, we have developed the fifth-generation switchable viewing angle privacy display technology. This technology not only achieves lower power consumption and better privacy protection but also allows customers to dynamically switch between desired viewing angles based on different scenarios. This eliminates the need for traditional privacy filters that decrease contrast and inconvenience when applied manually to displays. Currently, multiple models are in production and development. In addition, to meet the demand for lighter, thinner, and more effective sixth-generation privacy modules, we have completed the pilot production phase and have several projects underway. The application of these products will extend to automotive and industrial control sectors. For example, we are applying one-way or two-way privacy display technology to automotive CID (Central Information Display) and passenger displays. Drivers can dynamically switch between desired viewing angles, reducing safety issues caused by light interference while driving. We are currently in discussions with multiple potential customers regarding these projects.

NEW Automotive Application: In response to the trend of large, high-brightness, and high-contrast displays in vehicles, we have successfully developed LCD displays that combine optical structures, diffusion films, LED designs, and have an ultra-narrow bezel (OD) of only 2.5mm to 4mm. These displays also feature 2D dynamic dimming and low light LCD display. We are currently collaborating with customers on further development in this area.

- Backlight Display Unit (BLU): Through our integrated business model, which includes in-house production of open cell, light guide panels, touch screens, and assembly, we have successfully received orders from international customers. We have also integrated the privacy filter technology into the in-house cell cutting and bonding processes, providing end-to-end production services from front-end processes to LCD module assembly.

NEW Display Technology: We are developing a new small-sized front light L.G.P. that utilizes ambient light as the main light source. This helps to reduce the energy consumption of the backlight module, leading to a decrease in overall power consumption of the product.

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1.4 Intelligent Property Rights [3-3]

Each year, Coretronic formulates a product and technology development roadmap based on its operational goals. The roadmap takes into account both quality and quantity considerations. Depending on the specific products and different types and levels of technology, we dynamically adjust the selection of countries, the number of applications, and the types of applications for patent filings. This allows for strategic patent positioning at varying degrees. We also review the pending patent technologies and their scope, identify complementary technological designs and innovations, and align them with the different patent systems and priority claims of various countries. Timely patent applications are filed to fill any gaps in the company's patent portfolio.

For important products or technologies within the company, if the number of existing patents is insufficient, the initial focus is to encourage researchers and developers to actively apply for patents in different technology categories (such as optics, mechanics, thermal management, materials, software, electronic control, etc.) and for different components or modules of the products. This approach aims to establish comprehensive protection. Once a certain number of patents have been accumulated, the emphasis shifts to improving the quality of the patents. In addition, to ensure that the company's products align with patented technologies and receive appropriate protection, patent engineers participate in the product development process according to the requirements of the business units. They engage in technology exploration and apply for corresponding patents.

In addition, the Intellectual Property Department creates patent maps for key technologies and components to be used as references by the research and development units. These maps help the units understand the technologies that have not yet been patented, enabling them to further develop related technologies and fill the company's patent technology gaps.

Patent Protection Measures

- Designated Department: Based on the "Patent and Technology Development Incentive Measures," the Intellectual Property Department is responsible for managing Coretronic's patent application and maintenance-related tasks. Each year, an evaluation is conducted to assess whether the approved patents should be extended or handled in other ways.
- Reward System: The "Patent Heroes List" is established, and the number of patent proposals and the proposers, as well as the content of approved patents, are announced monthly on the company's internal website. The reward system includes proposal rewards, patent certification rewards, patent application rewards, trade secret application rewards, competition rewards, morale encouragement, and special significant benefits. In 2022, the Patent and Technology Development Incentive Measures were updated in China, with an increase in the amount of patent rewards to encourage inventors to submit proposals and increase the number of patent applications. Over NT$2.55 million was granted in rewards, representing a 108% increase compared to 2021.
- Education and Training: Wujiang plants conducted a "Patent Basics" course, providing training for 92 participants on the concept and operational procedures of patent layout.

Intellectual Property Acquisition/Disposal: The "Procedure Manual for Acquiring or Disposing Intangible Assets and Licensing Operations" was formulated to establish principles for handling the acquisition and disposal of intangible assets, including patent rights, trademarks, copyrights, trade secrets, and other intellectual properties. It specifies the procedures and methods to be followed when acquiring intangible assets from third parties or disposing of company-owned intangible assets to third parties.

Management of Technical Business Secrets: The "Regulations for the Management of Technical Business Secret Documents" were established to define the levels, usage methods, and related management practices for technical business secrets.

Patent Management and Objectives

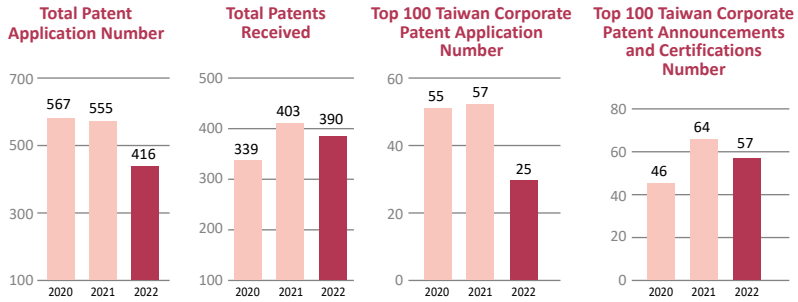
Report intellectual property matters to the Board of Directors annually. In 2022, the patent management system was optimized, with completion of all patent specifications and the implementation of automated system functionality. This reduced manual work and improved information accuracy, enabling effective tracking and management of cases. In collaboration with relevant departments, a comprehensive inventory of the company's projection technology patents was conducted to understand the overall patent value. Furthermore, revisions to the "Patent and Technology Development Incentive Measures" in Taiwan and mainland China have been completed. The existing electronic approval system for patent application proposals was consolidated and improved for both regions.

In 2023, the patent bonus electronic approval system will be enhanced in accordance with the "Patent and Technology Development Incentive Measures."

Patent Performance

In 2022, Coretronic Taiwan and China plants collectively applied for a total of 416 patents worldwide.

Taiwan plants ranked **96th** out of the top 111 Taiwanese corporate invention patent applications by filing 25 invention patents. Additionally, Taiwan plants ranked **58th** out of the top 100 Taiwanese corporate patents granted with 57 patents.



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1.5 Customer Service [2-29]

Coretronic values clients' opinions and set the following mechanisms to enhance clients' satisfaction. We fully understand clients' demands in innovation, product quality, work environment, and occupational safety.

Dedicated Customer Service Mailbox: ser@coretronic.com

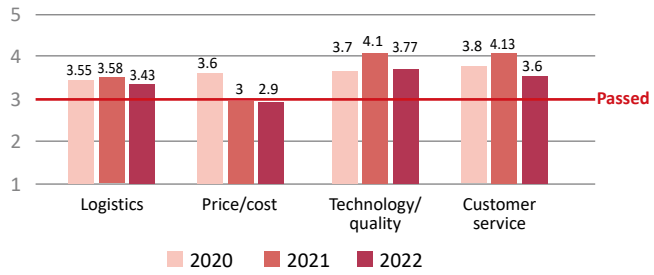
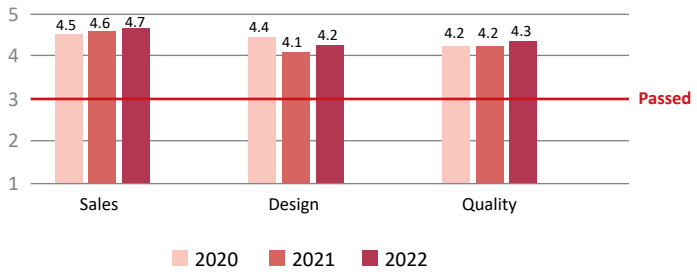
Dedicated Mailboxes for All Products

- Visual Solutions: vsbgsales@coretronic.com
- Energy Saving Products: Industrial backlight/LCM computer@coretronic.com, medical backlight/LCM medical@coretronic.com, industrial display industrial@coretronic.com, commercial display application@coretronic.com, automotive backlight/LCM automotive@coretronic.com

Interview or Phone Inquiry: Our sales representatives communicate with customers regarding their requirements through interviews or phone, covering price advantage, sales support, and product delivery.

Dedicated Customer Service Unit: We arrange a dedicated customer service unit to handle return, customer complaints, subsequent improvement measures, technology introduction, product development, customer service, product quality, and various countermeasures.

Annual Satisfaction Survey

Business Groups	Visual Solutions Business Group	Energy Saving Business Group
Target	Clients whose transaction amount reach 5% or more in the annual sales amount	Clients who have transaction in the year
Item	Logistics, price/cost, technology/quality, customer service	Sales, design, quality
Full Score/ Passing Score	5/3	5/3
Average Score	3.43, a **0.27 decrease** compared to 2021	4.4, a **0.1 increase** compared to 2021
Chart of Satisfaction Level Over the Years		
Management Principles	• In response to customer dissatisfaction and feedback, we promptly communicate with the customers, conduct internal reviews and discussions, and propose solutions that meet their expectations. We strive to gain customer recognition and enhance customer satisfaction. • According to the survey in 2022, the score of price/cost was lower than other aspects. This is because the quotation and price deduction did not meet clients' expectation. In the future, we will focus on internal costs and external competitor prices to propose more competitive pricing, aiming to increase profitability for both parties. We will also continue to negotiate for greater price reductions on behalf of our customers.	• Hold meeting regularly to ensure clients' feedback can be handled. ✓ Client complaint cases: 81, a reduction of 13 compared to 2021. The improvement rate was 100%, goal achieved (100%). ✓ Client satisfaction score in 2022: 4.4, goal achieved (4). • Establish supplier quality monitoring mechanism, improve protection of packaging design, properly manage the quality of supplier materials and engineering process to ensure high yield rate. Yield rate in 2022: 98%, goal achieved (90%).

02

Sustainable Development

2.1 ESG Targets and SDGs

2.2 ESG Management

2.3 Materiality Analysis

02 Sustainable Development

2.1 ESG Targets and SDGs
2.2 ESG Management
2.3 Materiality Analysis

2.1 ESG Targets and SDGs

Coretronic is the light house of the hopes. Based on glorious performance, we light up the society and green the environment, so as to wish everyone a sustainable and bright future.

Based on the core competence, SDGs, International ESG issues, social requirement, and stakeholders' concerns, our ESG Committee, Environmental Protection Committee, Firefly Volunteer Team, and other related units plan and implement ESG projects and strategies together, as well as build the strong and sustainable sharing partnerships between corporation and society with stakeholders.

Goals	Strategy & Performance
E – Environmental	
Enhance Climate Resilience	• Submitted SBTi Commitment Letter on Carbon Reduction and was approved. • Joined the Taiwan Climate Partnership and the Taiwan Alliance for Net Zero Emissions, and obtained the Net Zero Certificate.
Reduce GHGs Emissions Intensity	GHGs emission intensity (Category 1 & 2) **reduced 22%** compared to 2021.
Reduce Electricity Consumption Intensity	Electricity consumption intensity **reduced 23%** compared to 2021.
Increase Renewable Energy Utilization Rate	Through green energy sourcing, procurement of renewable energy certificates, and the installation of solar power plants, the renewable energy utilization rate reached **1%.**
Reduce Waste Intensity	Implemented recycling program and **reduced 5.9%** of waste intensity compared to 2021.
Develop Energy-saving Products	• Founded a product carbon footprint team and a green product development team. • Optimized optical design of projectors, which **saved 17.34 million kWh of power** and **reduced 8,824 tonCO_2e**. • 3 EX1 laser projectors was certified by **ISO 14067**.
Enhance Suppliers' Awareness of Climate-Related Risks	• **112** suppliers joined the annual supplier conference and ESG lectures. • **26** suppliers shared the green projects and performance at the annual conference, with **8** of them had participated for 4 consecutive years.
Promote Environmental Education	Hold **11** green activities.
S – Social	
Narrow Digital Divide	Invite **83** rural teachers and students to join High-tech Adventure, build **2** Digital Interactive Classrooms, and hold **5** Future Light Camps.
Pursue Equitable Quality Education	Sponsor the elementary baseball team and provide the scholarship.
Enhance Healthcare Capacity	Provided online healthcare courses, remote medical services and caregiver training courses to **6** Culture & Welfare Stations in Miaoli.
Provide Good Compensation	Average annual pay raise is **3~5%**
Offer More Job Opportunities	Provided **145** job vacancies; collaborated with **9** schools to provide **220** internships.
Support Sustainable Agriculture	Purchase over **20 tons** of organic vegetables and **15 tons** Miaoli Yuanli rice.
Enhance Employees' Awareness of Human Rights	"Human Rights Policy Course" is mandatory for all employees. The completion rate of the course was **99%**, and **99%** of employees signed the Statement of Human Rights Principles.
G – Governance/ Economy	
Enhance Employees' Awareness of Integrity	"Awareness on Business Integrity Course" is mandatory for all employees, and the completion rate reached **99%**
Enhance Operating Performance	• Net profit attributable to the parent company **increased 16%** • EPS reached **NT$6.03, which is a record high over the past 25 years.**

* These achievements were done by Coretronic Taiwan plants.

02 Sustainable Development

2.1 ESG Targets and SDGs
2.2 ESG Management
2.3 Materiality Analysis

2.2 ESG Management 2-9, 2-13, 2-14, 2-23, 2-24

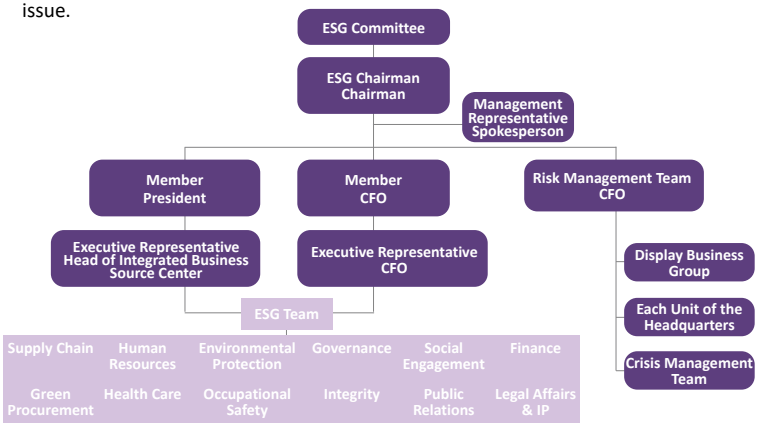
ESG Committee

To implement ESG, the CSR Committee was established in 2008, and was renamed to ESG Committee in 2020. According to "Sustainable Development Guidelines" approved by BOD, the committee is chaired by the Chairman of Coretronic, with presidents and the CFO as members and the spokesperson as the management representative. The ESG Committee also authorizes the executive representative of economic, social, and environmental departments to assist with ESG promotion.

Currently, the ESG Committee is an independently operated unit and the management team regularly reports the implementation of ESG to the Board of Directors every year. The management team makes plans and sets goals for ESG, and regularly reviews the performance. The Board of Directors also regularly reviews and supervises the implementation of sustainable development, and urges the management team to improve when it is necessary.

▸ Implementation

- Committee members and executive representatives review the implementation and outcomes of sustainability on a quarterly basis through briefings. Quarterly meetings are held with the ESG team, where executive representatives and ESG team members attend. Discussions are held regarding the annual ESG report published that year and various sustainability awards to formulate the sustainability plans and goals for the following year.
- The management representative reports the progress of annual plan execution to the Chairman of the Committee, committee members, and executive representatives on a quarterly basis. They also present the annual sustainability achievements and the key sustainability focus areas and plans for the next year at the annual group meeting.
- Committee members and executive representatives- the CFO reports to the Board of Directors annually. The report includes the accomplishments of sustainability projects, the climate change risk management framework and response strategies (TCFD), various environmental indicators, net-zero pathways, renewable energy strategies, and future directions for sustainable development.
- We formulate sustainable policies in accordance with international and government regulations and provide training courses to the members of ESG Team to enhance their implementation of sustainability strategies.
- The annual ESG report is compiled by the ESG Team, then submitted to the management representatives, executive representatives, and committee members for revision in sequence, and then submitted to the Chairman for review and final issue.



Sustainability Promotion

Participate in internal/external training courses, issue quarterly ESG e-newsletters, and share ESG knowledge and activities on electronic/physical bulletin boards to improve employees' ESG awareness and concepts, and then internalize ESG core elements into the company's daily operations. At the same time, we make videos of sustainable activities and publish them through various channels, such as the official website, social media and Wikipedia.

NEW Internal Training Courses- Annual Mandatory Courses on Sustainability

To enhance the sustainability awareness of all indirect employees, we planned two online mandatory sustainability courses in 2022: "Decoding Sustainability" and "Interpreting ESG Reports." The first course focuses on introducing important sustainability terms such as ESG, carbon neutrality, net-zero, greenhouse gases, and provides relevant examples to help employees quickly understand their content and the latest trends. A total of **1,111 participants** attended the course and passed the post-training assessment, resulting in a completion rate of **93%.** The second course introduces the two major sustainability organizations within the company and their areas of responsibility, stakeholders, and material topics. It also teaches employees how to read the annual ESG report. A total of **1,084 participants** attended the course and passed the post-training assessment, resulting in a completion rate of **91%**.

NEW External Training Courses-CDP Climate Change Industry Questionnaire Analysis Training Courses

In order to improve the CDP (Carbon Disclosure Project) questionnaire score and review the company's climate change-related strategies, goals, and performance through the answering process, representatives were sent to participate in an external training course. As a result, Coretronic successfully improved its CDP Climate Change questionnaire score from C grade to B grade.

▸ Multiple Promotion Approaches

- Electronic/Physical Bulletin Board
- Activity Videos (YouTube)
- Social Media (FB/Wikipedia)
- Official Website (ESG section)

- Annual ESG Report (Chinese/English)

- Quarterly ESG E-newsletter

- Annual ESG Report Insight (Chinese/English)

02 Sustainable Development

2.1 ESG Targets and SDGs
2.2 ESG Management
2.3 Materiality Analysis

2.3 Materiality Analysis [2-12, 2-14, 3-1]

According to the requirements of GRI 3 - Material Topics 2021 under the GRI Universal Standards 2021, which are part of the Global Reporting Initiative (GRI) framework, Coretronic is obligated to conduct due diligence. It should disclose in the ESG report the processes through which the company identifies, prevents, mitigates, and addresses its actual and potential negative impacts on the economy, environment, and people (including human rights). Coretronic is also required to document these processes to obtain consensus and approval from relevant internal sustainability organizations within the company. This documentation will serve as the standard process for future identification of material topics.

This report is written in accordance with the aforementioned GRI standards, and the content has been developed following the redefined process for identifying material topics. In contrast to the previous approach of focusing on the "level of stakeholder concern" regarding issues, the redefined process now emphasizes the "level of impact" as the principle for assessing the materiality of topics. This involves identifying the positive and negative impact levels, the scope of impact, and the likelihood of impact occurrence for each topic.

Understand the Organization's Context	Identify Actual and Potential Impacts		Assess the Significance of the Impacts	Prioritize the Most Significant Impacts for Reporting	Review and Manage
Identify Stakeholders Identified 9 types of stakeholders based on dependency, responsibility, influence, diverse perspectives, and tension	Identified the impacts of **24** ESG issues		**One-dimensional Quantitative Survey** **914** copies of Annual ESG Questionnaires **12** copies of Annual Identification and Evaluation of Material Topics Questionnaires **Two-way Qualitative Survey:** **1** interview	✓ ESG issues of high concern ✓ High level of positive/ negative impact ✓ High likelihood ESG team discussion Approval by the Board of Directors	Formulated management approaches to material topics and reviewed them regularly
Collect ESG Issues Sources of topics: Sustainability standards and regulations (GRI, RBA, TCFD, SBTi, CDP, and SASB), United Nations Sustainable Development Goals (SDGs), International Bill of Human Rights, ESG benchmarking companies/ optoelectronics industry/stakeholders' issues of concern.	Identified the impact of ESG issues on the Company	Identified the types of impacts of the Company on the economy, environment, and people (including human rights) • Actual and potential • Positive and negative • Short-term and long-term • Intended and unintended • Reversible and irreversible	Assessed the significance of ESG issues	**11** material topics	Conducted the process of material topics identification **every 2 years**

Understand the Organization's Context

Stakeholders Identification & Engagement [2-29]

Questionnaires were distributed to 138 senior executives within the company, requesting them to identify the nine most influential stakeholders based on the five assessment criteria of AA1000 SES (2015): Dependency, Responsibility, Influence, Diverse Perspectives, and Tension. They were then asked to assign a score of 1 to 9 to each stakeholder, indicating their level of importance (with 1 being the least important and 9 being the most important). The final stakeholder prioritization was determined based on the average scores received.

Stakeholders	Importance for Coretronic	Main Communication Approach and Frequency	Topic of Communication	Response
Employees	Employees are the important asset of the company and the key driving force for our continuous growth and sustainable operation.	Please refer to Chapter 6.4	Salary and Benefits Friendly Workplace Training and Education	6.3 6.4 6.5
Customers	Customers' satisfaction with our products and services is the key to our sustainable operations.	Please refer to Chapter 1.5	Economic Performance Customer Privacy Supply Chain Management	1.2 3.3 5.2
Shareholders & Investors	Shareholders and investors are holders of Coretronic, and we must be responsible for them.	• Spokesperson Contact: 886-3-5772000 #7170 • Service Tel: 886-3-5772000 #1542 • IR Mailbox: ir@coretronic.com • Annual shareholders' meeting, quarterly earnings conference, and quarterly and annual financial report • Investor Relations Office • Official Website (IR), MOPS • Occasionally attend domestic investment forums	Innovation Management Training and Education Economic Performance	1.3 6.5 1.2
Suppliers & Contractors	With the stable support of suppliers and contractors, we can constantly provide perfect products and services.	• Reporting E-mail: 8215@coretronic.com • Enquiry and Grievance Hotline: 886-37-777000 Ext.8215 • Annual Supplier Conference and Awards • RBA, Quarterly and Annual Audit • Green Products Management System (GPMS)	Green Solutions Economic Performance Occupational Health and Safety	4.4 1.2 6.6、6.7
Government Agencies	All operations of the company are under inspection and supervision of relevant government regulations.	• CSR Mailbox: csr@coretronic.com • Occasionally participate in regulatory public hearings, workshops, courses, forums, and lectures. • Arbitration Committee Member of Labor-Management Disputes of Department of Labor Affairs, Hsinchu City Government	Climate Change Occupational Health and Safety Labor and Management Relations	4 6.6、6.7 6.4

Stakeholders	Importance for Coretronic	Main Communication Approach and Frequency	Topic of Communication	Response
Local Communities	Give back to the places we belong to, and make them better.	• CSR Mailbox: csr@coretronic.com • PR Hotline: 886-3-5772000 #1500 • Occasionally hold diverse social activities	Water and Effluents Charitable Activities and Social Engagement Climate Change	4.3 7 4.1
NGOs	Solve social problems with NGOs.	• CSR Mailbox: csr@coretronic.com • PR Hotline: 886-3-5772000 #1500 • Occasionally participate in seminars, forums, and meetings	Climate Change Friendly Workplace Charitable Activities and Social Engagement	4 6.4 7
External Appraisal Institutes	Feedback from external appraisal institutes is key to our improvements.	• CSR Mailbox: csr@coretronic.com • PR Hotline: 886-3-5772000 #1500 • IR Mailbox: ir@coretronic.com • Spokesperson Contact: 886-3-5772000 #7170 • Participate in annual sustainability awards • Annual financial report	Friendly Workplace Labor and Management Relations Occupational Health and Safety	6.4 6.4 6.6、6.7
Media	Monitoring from the media drives us to grow.	• CSR Mailbox: csr@coretronic.com • Spokesperson Contact: 886-3-5772000 #7170 • PR Hotline: 886-3-5772000 #1500 • Occasionally attend IR/sustainability-related events • Occasionally release company news • Official Website (News Center)	Economic Performance Innovation Management Green Solutions	1.2 1.3 4.4

Collect ESG Issues

Refer to GRI Standards, RBA Code of Conduct, TCFD, SBTi, CDP, SASB, UN SDGs, International Bill of Human Rights, ESG benchmarks for companies/electronics manufacturing/photovoltaic industry, and stakeholder concerns to identify annual ESG issues as the core scope for survey questionnaires and interviews.

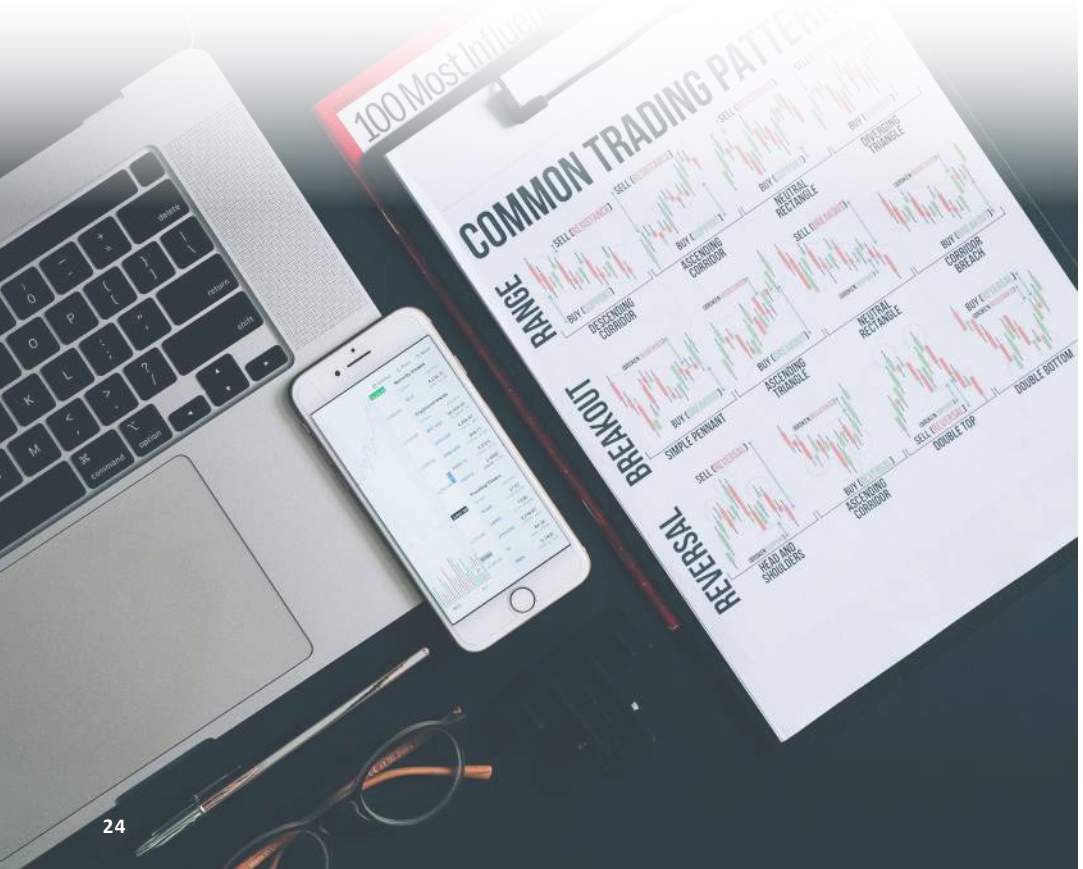
Identify Actual and Potential Impacts

Following the definition of "impacts" in the GRI Universal Standards (2021), identify the impacts of the company's 24 ESG issues on the economy, environment, and people (including their human rights). This includes both actual and potential, positive and negative, short-term and long-term, intended and unintended impacts, and reversible and irreversible impacts.

Assess the Significance of Impacts

Taking into account the company's daily operations as a reference background, assess the significance of positive impacts (benefit) and negative impacts (severity) of the 24 ESG issues, as well as the likelihood of positive and negative impacts occurring, and assign respective scores to each.

- One-dimensional quantitative surveys:
  "Annual ESG Questionnaire" responded by 138 senior executives and 776 stakeholders, and "Annual Identification and Evaluation of Material Topics Questionnaire" responded by 12 members of the ESG Team under the ESG Committee.
- Two-way qualitative survey:
  Conducted one interview with the ESG Team under the ESG Committee.



Prioritize the Most Significant Impacts for Reporting

- Based on the analysis of the "Annual ESG Questionnaire," we have identified the ESG issues that are highly important to both internal and external stakeholders of the company.
- Based on the analysis of the "Annual Identification and Evaluation of Material Topics Questionnaire," we have ranked the ESG issues based on their impact score and likelihood score. Using these two criteria, we have identified the material topics and formulated corresponding management measures.

Impact Type	Impact Level	Likelihood	Measures
Positive	High	High	Implementing such ESG issue brings positive impacts to the company, therefore, it is listed as the annual material topic to maximize the outcomes.
Negative	High	High	If we fail to address the identified ESG issues, it is highly likely to have negative impacts on the company. Therefore, we have classified them as annual material topics and are actively developing improvement measures and strengthening management efforts to mitigate the impact.
Positive	High	Low	Considered as future potential opportunity, and considered it as future directions of company business.
Negative	High	Low	Considered it as risks and formulated relevant countermeasures.
Positive/ Negative	Low	High/Low	Continuous observation and monitoring.

- Approve Material Topics

1. Based on the "Annual ESG Questionnaire" and the "Annual Identification and Evaluation of Material Topics Questionnaire," we have selected ESG issues that have high levels of concern, significant positive benefits, and a high likelihood of occurrence, or issues that have high levels of negative severity and a high likelihood of occurrence, as the annual material topics.
2. After conducting interviews with members of the ESG team under the ESG Committee, discussions were held regarding Coretronic's actual operational performance and the implementation of management policies in the previous year. Based on these discussions, the annual material topics were established.
3. Report to the Board of Directors for approval: Material topics for 2022 ESG report were approved at the Board meeting held on March 13, 2023.

Material Topics Matrix 3-2

[11 Material Topics in 2022]

Economy | Environment | Society (Human Rights)

Order	Item	Material Topics	Order	Item	Material Topics	Order	Item	Material Topics
1	6	Economic Performance	5	10	Information Security	9	14	Waste Management
2	1	Salary and Benefits	6	7	Labor and Management Relations	10	3	Training and Education
3	4	Innovation Management	7	9	Climate Change	11	2	Friendly Workplace
4	5	Occupational Health and Safety	8	8	Green Solutions			

1. “Waste Management” was added to material topics in 2022, while “Charitable Activities and Social Engagement” and “Labor Law Compliance” were deleted.
2. ESG issues with a "positive impact severity" and "likelihood of positive impact" greater than 8.5, or "negative impact severity" and "likelihood of negative impact" greater than 8.5, are considered as material topics.
3. Due to significant positive benefits, “Green Solutions” was added to material topics in 2022 after the discussion by ESG Committee.

Economy | Environment | Society (Human Rights)

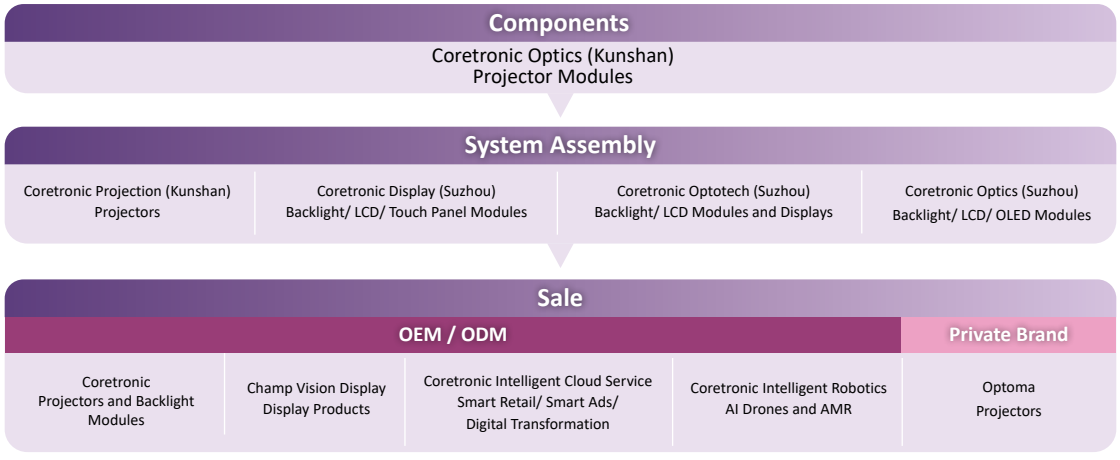
1	Salary and Benefits	7	Labor and Management Relations	13	Non-Discrimination	19	Procurement Practices
2	Friendly Workplace	8	Green Solutions	14	Waste Management	20	Water and Effluents
3	Training and Education	9	Climate Change	15	Materials	21	Customer Privacy
4	Innovation Management	10	Information Security	16	Diversity and Equal Opportunity	22	Equal Remuneration for Women and Men
5	Occupational Health and Safety	11	Charitable Activities and Social Engagement	17	Supplier Human Rights and Labor Management Assessment	23	Forced or Compulsory
6	Economic Performance	12	Supplier Environmental Assessment	18	Anti-Corruption	24	Child Labor

Boundary of the Material Topics [2-2, 2-6]

This report is based on the relationship corporate structure and internal supply chain depicted on pages 106-107 of the 2022 annual report. The identification of material topics was then conducted for entities that have substantial production, shareholding of 50% or more, significant impact on the company's economic, environmental, and social aspects, as well as upstream and downstream relationships with the company and control over their operations, including non-controlling and venture capital companies.

The scope of 2022 ESG report includes Coretronic plants in Taiwan (Headquarters, Chunan Plant, Tainan Plant 1 and 2), plants in China (Kunsha plants: Coretronic Projection (Kunshan), Coretronic Optics (Kunshan); Wujiang plants: Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), and Coretronic Optics (Suzhou), plants of subsidiaries in Taiwan (Optoma, Champ Vision Display, Coretronic Intelligent Cloud Service, and Coretronic Intelligent Robotics).

In addition, regarding the identification of the scope and boundary of aspects outside the organization, we have selected stakeholder groups that are more important to and correlated with our routine operations from among nine stakeholder groups for identification. These stakeholder groups include customers, suppliers, contractors, and local communities.



▲ Coretronic Internal Supply Chains

●: Disclosed ▲ : Partly disclosed ○: Undisclosed

Material Topics	Specific Topics	Boundaries / Corresponding Chapter	Within the Organization						Outside the Organization		
			Coretronic		Champ Vision Display	Coretronic Intelligent Cloud Service	Coretronic Intelligent Robotics	Optoma	Clients	Suppliers and Contractors	Community
			Taiwan	China	Taiwan	Taiwan	Taiwan	Taiwan			
Economic Performance	Economic Performance	1.2	●	●	●	●	●	●	-	-	-
Salary and Benefits	Market Presence	6.3	●	●	●	●	●	●	-	-	-
	Diversity and Equal Opportunities	6.3	●	●	-	-	-	-	-	-	-
Innovation Management	Economic Performance	1.3	●	●	●	●	●	-	-	-	-
Occupational Health and Safety	Occupational Health and Safety	6.6 / 6.7	●	●	●	●	●	▲	-	●	-
Information Security	Customer Privacy	3.3	●	●	●	●	●	●	-	-	-
Labor and Management Relations	Labor/Management Relations	6.4	●	●	●	●	●	●	-	-	-
Climate Change	Energy	4.1	●	●	●	●	●	▲	-	-	-
	Emissions	4.1	●	●	●	●	●	▲	-	-	-
Green Solutions	Energy	4.4	●	●	●	-	○	●	-	●	-
	Emissions	4.4	●	●	●	-	○	●	-	●	-
Waste Management	Waste	4.2	●	●	●	●	●	○	-	●	-
Training and Education	Training and Education	6.5	●	●	●	●	●	●	-	-	-
Friendly Workplace	Employment	6.1 / 6.3	●	▲	●	●	●	●	-	-	-

Material Topic Management Approaches [3-3]

Environmental

Material Topics	Meaning	Impact	Goals in 2022	Short-term (2023-2025)	Mid-term (2026-2028)	Long-term (2029-2031)	Strategy	2022 Performance
Climate Change	Complete mitigation plans and strategy can enhance company's climate resilience and reduce the impacts on climate change.	**Negative, Actual** Climate change has made it increasingly challenging to predict, prevent, and adapt to the frequency and intensity of extreme weather events. As a result, customers and governments are demanding more rigorous requirements, which have increased operational costs and posed difficulties in securing orders for the company.	GHGs emission intensity in Taiwan plants (Category 1 + 2) reduced 6% (Base year 2019)	10%	14%	17%	• Net Zero Statement • Environmental Sustainability and Occupational Safety and Health Policy • Participate in sustainability initiatives domestically/globally. • Execute carbon reduction actions.	• The coverage of this report is verified by ISO 14064-1. • 4 plants in Taiwan passed ISO 50001 • GHGs emission intensity in Taiwan plants (Category 1 + 2) reduced 49% compared to 2019. • Utilization of renewable energy in Taiwan plants accounted for 1% of annual electricity. • CDP climate change and water safety questionnaires obtained B score. • Carbon reduction commitment submitted to SBTi. • Join Taiwan Climate Partnership (TCP) • Join Taiwan Alliance for Net Zero Emission and obtained Net Zero Certificate. • Build solar power plants.
			China plants set GHGs emission intensity (Category 1 + 2) reduction goal (Base year 2022)	4%	8%	11%		
			Utilization of renewable energy in Taiwan plants accounted for 1% of annual electricity.	5%	6%	8%		
			China plants set goal for utilizing rate of renewable energy accounting	13%	15%	17%		
Green Solutions	Implement green production, management, and green product development to meet the global trend and customer requirements.	**Positive, Potential** By embracing innovation and integrating green concept into our development technologies and manufacturing processes, we can reduce the environmental impact of our products. This not only helps us contribute to sustainability but also provides profitability for our company.	Check the carbon footprint of products produced by new platform	• Establish digital platform for product carbon footprint • Propose mid and long-term goals for 2023			• Environmental Sustainability and Occupational Safety and Health Policy • Implement green design and manufacturing proposals. • Regularly review the carbon footprint of products.	• Check the carbon footprint of 3 EX1 laser projectors and passed ISO 14067 • Self-check the carbon footprint of 14" backlight modules and found that each product reduced 30% of carbon footprint compared to 2021. • Electricity consumption intensity in Taiwan plants reduced 47% compared to 2019. • Optimize optical design of projectors, which is estimated to save 17.34 million kWh of power and reduce 8,824 tonCO_2e. • Molded pulp utilization rate for projector packaging reached 86%. • Improved the light guide plate manufacturing process, and saved 607.6 kWh of electricity and reduced 0.3 tonCO_2e in emissions. • Reduced 0.9 tonCO_2e in emissions by saving power in production and material recycling. • Develop green technology and reduced 280.7 tons of material and reduced 4.2 tonCO_2e in power consumption.
			Electricity consumption intensity in Taiwan Area reduced 13% (Base year 2019)	17%	20%	23%		
			China Area set goal for electricity consumption intensity (Base year 2022)	4%	7%	10%		
Waste Management	Reducing environmental impacts in each phase of product lifecycle is an important indicator for Coretronic.	**Positive, Actual** Properly handle waste can reduce relevant costs and waste generation, reducing the impacts on environment.	Waste intensity in Taiwan reduced 5% (Base year 2019)	9%	12%	15%	• Environmental Sustainability and Occupational Safety and Health Policy • Regularly review waste generation. • Waste reduction proposal • Internal/External audit	• The coverage of this report is verified by ISO 14001. • Waste intensity in Taiwan plants reduced 5.9% compared to 2021, 66% compared to 2019. • China plants calculates all types of waste. • Waste reduction proposal has reduced 2,475 tonCO2e and disposal fee of NT$230,000.
			China Area calculates all types of waste and waste intensity reduction goal is set (Base year 2022)	4%	7%	10%		

Social

Material Topics	Meaning	Impact	Goals in 2022	Short-term (2023)	Mid- and long-term (2024-2026)	Strategy	2022 Performance
Salary and Benefits	Sound compensation and benefits are the key foundation for employees to live happy life and work happily.	**Positive, Actual** Provide salaries that meet the market's standard to recruit talents.	Conduct compensation comparison, adjust salary and bonus.	Carry out annual salary analysis, pay adjustment, and bonus evaluation.	Make appropriate compensation plan based on industries, work functions, and key talents.	Provide motivating compensation based on performance review, potentials, market competency, and internal work balance.	• Average salary adjustment rate in Taiwan was 3~5%. • Average salary adjustment rate in China was 5~7%.
Occupational Health and Safety	Provide safe working environment and protect employees' mental health.	**Negative, Potential** Occupational hazardous events might affect company reputation, reduce the trust of stakeholders, and increase operating costs.	5 occupational injuries in Taiwan plants (excluding traffic accidents)	3		• Environmental Sustainability and Occupational Safety and Health Policy • Regularly review occupational hazardous events and propose countermeasures. • Conduct accident response exercises.	• The coverage of this report is verified by ISO 45001. • 1 occupational injury in Taiwan plants • 11 occupational injuries in China plants • 0 injuries in contractors
			14 occupational injuries in China plants (excluding traffic accidents)	10			
			0 injuries in contractors (excluding traffic accidents)	0			
			Enhance occupational health satisfaction among middle-aged or older employees.	Score 70	Score 80	• Conduct health protection plan for middle-aged or older workers and health risk assessment and management. • Carry out health checkup for middle-aged or older workers. • Hold health-related lectures and professional physician consulting service.	• Provide electrocardiogram screening for middle-aged or older workers. • Complete health protection plan for middle-aged or older workers. • Conduct work suitability evaluation for middle-aged or older workers.
Information Security	Robust information security management and customer privacy protection strategies have been implemented to effectively increase customer trust and strengthen long-term partnerships.	**Negative, Potential** The lack of a comprehensive information security management system may result in the leakage of sensitive information belonging to both the company and its customers, leading to potential damage to the company's reputation.	Implemented ISO 27001: 2013 and formulated relevant ISO documents.	• The number of network service interruptions in the information data center should not exceed 3 times. • The number of service interruptions for critical business systems should not exceed 1 time. • The completion rate of information security education and training for all employees is 100%. • Conduct at least 1 time of weakness scanning on crucial systems every year. • Back up important data twice a year to meet requirements of RPO.	• The number of network service interruptions in the information data center should not exceed 3 times. • The number of service interruptions for critical business systems should not exceed 1 time. • The completion rate of information security education and training for all employees is 100%. • Conduct at least 1 time of weakness scanning on crucial systems every year. • Back up important data twice a year to meet requirements of RPO. • ISO 27001:2022 transition and obtained certification.	Improve information security from 6 aspects: network security, host security, application system security, device security, operational analysis, and information security management.	Implemented ISO 27001, completed 47 four-phase documents, asset inventory, and risk assessment.
			Build information security vertical defense system based on 114 control measures of ISO 27001 to strengthen each information security system.				

Social

Material Topics	Meaning	Impact	Goals in 2022	Short-term (2023)	Mid- and long-term (2024-2026)	Strategy	2022 Performance
Labor and Management Relations	Company and employees should build a good and trustful relationship together.	**Negative, Potential** Poor labor-management relations may lead to the company's violation of relevant laws, which could negatively impact the company's reputation and erode stakeholders' trust in the company.	1 time of annual employee opinions survey	1 time	At least 1 time	Continuously engaging in two-way communication with employees through diverse channels and implementing protective mechanisms to ensure open dialogue, actively addressing and resolving issues.	• The participation rate of annual employee opinions survey in Taiwan was 88%. • The participation rate of annual employee opinions survey in Wujiang: 100% for indirect employees and 79% for direct employees. • Convene labor and ethical management review meetings.
			Build labor and ethical management system.	1 time of labor risk identification	1 time of labor risk identification		
Training and Education	Build diverse training system to enhance competency of employees and supervisors.	**Positive, Actual** Complete and diverse training mechanism effectively enhance employees' competency, work efficiency, and goal achievement rate.	Provide appropriate training based on corporate strategy and survey of functions and demands.	Update training system to adopt digital self-learning resources.	Employees can plan their own learning path based on the work function map.	Continuously establish all-round career map and learning map to cultivate talents.	• Total training hours in Taiwan was 21,114 person -hours; average training hours was 12.8 person-hours. • Total training hours in China was 29,794 person -hours; average training hours was 8.1 person-hours.
Friendly Workplace	Create a more friendly work environment to foster a better work-life balance.	**Positive, Actual** When employees work in a friendly work environment, it can enhance their sense of identification and confidence in the company, ultimately leading to increase work efficiency.	By conducting satisfaction surveys through activities, we can gain insights into the preferences and needs of our colleagues.	Continue to carry out green beautification projects in the factory area to provide employees with a pleasant working environment.	Collect employee opinions and feedback to improve welfare programs and enhance employee satisfaction.	Provide diverse welfare programs to ensure that employees feel the company's care and support for them.	• Awarded the 2022 Hsinchu Science Park Outstanding Company in Promoting Equal Workplace. • Awarded the Silver Award of 2022 CHR Corporate Health Responsibility Award from For CommonHealth Magazine. • Awarded HR Asia- 2022 Best Companies to Work for in Asia.

Economy

Material Topics	Meaning	Impact	Goals in 2022	Short-term (2023)	Mid- and long-term (2024-2026)	Strategy	2022 Performance
Economic Performance	Coretronic aims to pursue the maximum benefits for all shareholders and employees, striving to achieve its mission of "Deeply rooted technology and sustainable development."	**Positive, Actual** Strong economic performance can enhance the trust and investment willingness of stakeholders in the company.	Make profit stably and achieve sustainable operation.	Continuous transition and create profit.	• Implement global expansion. • Boost new business development.	We deeply cultivate innovative display solutions and focus on comprehensive solutions for cloud services, artificial intelligence, and various smart applications.	• Net profit attributable to the parent company was NT$2.359 billion, an annual increase of 16%. • EPS was NT$6.03, which was a record high over the past 25 years.
Innovation Management	Non-stop innovation is key to corporate sustainability and improvement.	**Positive, Actual** Develop products with a high level of professional knowledge to increase product sales.	Strengthen our global competitive advantage in the field of display technology.	• Actively adopt green product design. • Continuously develop our capabilities in optical, mechanical, electrical, thermal, software, materials, and system design integration and application.	• Develop more promising and ultimate display products. • Develop products used in AIoT applications.	Focus on core technologies and develop key techniques.	• Implement module design and develop smart manufacturing to decrease cost and boost competency. • Number 1 market share in the global DLP projector market.

03

Corporate Governance

3.1 Corporate Organization

3.2 Risk Management

3.3 Information Security Management

3.4 Business Integrity

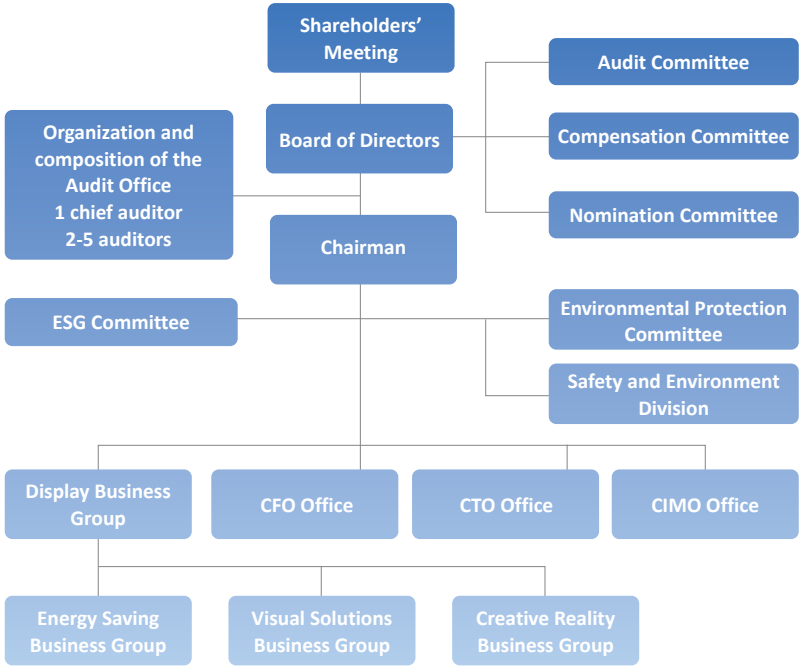
03 Corporate Governance

3.1 Corporate Organization
3.2 Risk Management
3.3 Information Security Management
3.4 Business Integrity

3.1 Corporate Organization

Coretronic abides by the "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" as the guiding principle for its corporate governance practices. Coretronic complies with relevant laws and regulations in terms of corporate governance and internal management mechanisms. It ensures transparency in operational and financial information, prioritizes shareholder rights, and strengthens supervision and management of the company's operations through the board of directors. Additionally, Coretronic has established an audit committee, compensation committee, and nomination committee to facilitate the board's execution of its responsibilities.

To ensure shareholder rights, in addition to disclosing financial and corporate governance information through the company's website and the Market Observation Post System, Coretronic also has a spokesperson and a deputy spokesperson dedicated to handling shareholder suggestions or disputes. The Company implements a spokesperson system and designates specific personnel to collect and disclose company information, fulfilling its legal responsibility and obligation for information disclosure.



Board of Directors 2-9, 2-12, 2-16

The Board of Directors is the highest governing unit of the company and serves as the center for significant business decisions. Its responsibilities include appointing and supervising the company's management team, overseeing operational performance, preventing conflicts of interest, and ensuring compliance with various laws, the company's bylaws, and shareholder resolutions in order to exercise its powers. The Board is committed to maximizing shareholder rights and interests.

The Board of Directors currently convenes at least once per quarter, during which the company's management team presents reports on operational performance. The Board then deliberates and decides on future business strategies and significant policies.

Under the purview of the Board of Directors, there are three functional committees: the Audit Committee, the Compensation Committee, and the Nomination Committee. These committees review and discuss matters before presenting them to the Board for decision-making. Through the scrutiny of these functional committees, the Board fulfills its responsibilities and enhances shareholder interests. In addition, apart from the matters specified in the "Rules of Procedure for Shareholders Meeting," the Board of Directors and the three functional committees report significant events related to governance, finance, society, and investments to the Board. In 2022, a total of 26 significant events were reported to the Board.

Board of Directors Members [2-9, 2-10, 2-11, 2-15]

Job Title	Name	Gender	Background	Titles concurrently held in Coretronic	Attendance rate	Term
Chairman	Wade Chang	Male	• Master of NTU-Fudan EMBA , National Taiwan University • Chairman, Coretronic Corporation	Officer	100%	June 10, 2022 to June 9, 2025
Director	Hsun Chieh Investment Ltd. Representative: Tai-Shung Ho	Male	• Master of Electrical Engineering, National Tsing Hua University • Chairman, Novatek Microelectronics Corporation	None	100%	
Director	Hanns Prosper Investment Corporation Representative: Yu-Chi, Chiao	Male	• Doctor of Business Administration, City University of Hong Kong • Doctor of Business Administration, Fudan University • Chairman and President, HannStar Display Corp.	None	100%	
Director	Han-Ping D. Shieh	Male	• Ph.D. in Electrical and Computer Engineering, Carnegie Mellon Univ. • Life Chair Professor, National Yang Ming Chiao Tung Univ.(NYCU)	None	100%	
Independent Director	Hsing-Yi Chow	Male	• Ph.D. in Business, Indiana University-Bloomington, US • Emeritus Professor, Department of Finance, National Chengchi University	None	100%	
Independent Director	Audrey Tseng	Female	• Master of Business Administration, Executive MBA of National Taiwan University and Fudan University • Advisory member, Bio Taiwan Committee	None	100%	
Independent Director	Hung-Pin, Ku	Male	• BS in Law, National Taipei University • Lawyer, KU, HUNG PIN Law Firm	None	100%	

According to the "Candidate Nomination System" stipulated in the Articles of Incorporation, the Board of Directors' candidates are elected by the shareholders' meeting. In accordance with the "Corporate Governance Best Practice Principles" of Coretronic, the composition of the Board of Directors should consider diversity. Except for Coretronic's presidents, who cannot serve as a director, the Board should establish appropriate diversity policies based on its operations, business model, and development needs. These policies should include, but are not limited to, the following two major aspects:

1. Basic attributes and values: Gender, age, nationality, and cultural background.
2. Professional knowledge and skills: Professional backgrounds (such as law, accounting, industry, finance, marketing, or technology), professional skills, and industry experience.

Coretronic's Diverse Policy, Management Objectives, and Achievement Status

Management Objectives	Achievement Status
Directors concurrently hold managerial positions in the company shall not exceed one third of total directors.	Achieved
Add one female director.	Achieved
The tenure of independent directors on the Board shall not exceed nine years consecutively.	Achieved

Due to Chairman Wade Chang's expertise in business management, leadership decision-making, and forward-looking industry trends, he provides significant contributions to the company's operational development. Therefore, he serves as an officer and offers professional opinions during Board meetings. The Board's rules of procedure include provisions regarding directors' conflict of interest. If a director has a personal or corporate interest in a meeting agenda item, they must disclose the relevant details of their interest during the meeting. If there is a potential risk of harm to the company's interests, they must abstain from participating in the discussion and voting and should recuse themselves. They also cannot act as a proxy for other directors in exercising their voting rights. Additionally, Coretronic has three independent directors who provide advice based on their expertise and experience. When discussing any agenda item, the Board should fully consider the opinions of independent directors, and their agreement or dissenting reasons should be documented in the Board meeting minutes. Furthermore, none of the Board members hold cross-shareholdings with major suppliers.

▶ Directors' Training Courses [2-17]

To enhance the corporate governance capabilities and knowledge of all directors, Coretronic arranges regular training courses for directors every year. In 2022, the total training hours received by all directors amounted to 88.5 hours.

Sustainability

- ESG Trends and Impacts
- ESG Industries, Trends, and Opportunities
- Build Corporate Sustainable Competency in Response to Climate Change
- Trends and Actions to Achieve Net-Zero Carbon Management
- Net-Zero Emissions, Carbon Neutrality, and Legal Compliance

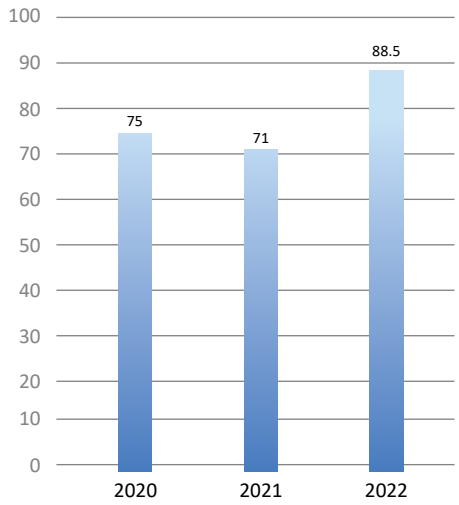
Corporate Governance

- External Innovation-The Key Formula for Sustainable Business Operations
- Corporate Governance Risk Practices- How to Avoid Risky Stocks
- Discovery of Core Competency for the Next Generation
- New Trend of Anti-Money Laundering and Countering Terrorism Financing (Including insider trading prevention)
- Strengthening resilience of information security in the finance industry and risk management
- Corporate Governance and Stock Regulations
- From Corporate Governance to ESG-Examining Sustainable Governance from Risk Perspective
- Internal Stakeholder Equity Awareness Seminar for OTC and Emerging Companies
- Effective Brand Value Protection through Trademark Case Studies

Audit/Finance/Taxation

- Equality Principle for Treating Customers & Protection and Cultivation of financial customers
- Latest Trends and Amendments on Global & Domestic Taxation
- Analysis of the Impact of Taiwan's Anti-Tax Avoidance System and Global Minimum Tax Regime
- 2022 Major Economic Issue Analysis & Forecast
- How to Implement RPA (Robotic Process Automation) to Enhance Internal Control

Directors' Training Hours over the Past Years (hrs)



▶ Performance Evaluation of the Board of Directors [2-18]

Coretronic's Board of Directors established the "Regulations for Performance Assessment of the Board of Director" in April 2018, which were revised in October 2019 and disclosed on the company's website. Each year, a regular internal evaluation of the Board of Directors, individual directors, and various functional committees is conducted using a self-assessment questionnaire. The evaluation is carried out by the designated unit responsible for assessments and covers the period from January 1, 2022, to December 31, 2022. The evaluation results are then submitted to the Board of Directors. Additionally, an external performance evaluation of the Board of Directors is conducted at least once every three years by an independent external professional organization. The most recent external evaluation took place in 2020, and the results were disclosed in the 2020 ESG Report.

- Internal Evaluation Results of the Board of Directors, Board Members, and Functional Committees in 2022

Reviewee	Board of Directors	Board members	Compensation Committee	Audit Committee	Nomination Committee
Self-Evaluation Standards	• Engagement of company operation • Enhance the decision-making quality in the Board of Directors • Composition and structure of the Board of Directors • Election and continual education of the directors • Internal control	• Awareness of the company's goals and missions • Awareness of the directors' duty • Engagement of company operation • Internal relation management and communication • Directors' expertise and continual education • Internal control	• Engagement of company operation • Awareness of the duty of committee members • Enhance the decision-making quality in the committees • Composition and election of the committee members • Internal control	• Engagement of company operation • Awareness of the duty of committee members • Enhance the decision-making quality in the committees • Composition and election of the committee members • nternal control	• Engagement of company operation • Awareness of the duty of committee members • Enhance the decision-making quality in the committees • Composition and election of the committee members
Evaluation Results	Excellent	Excellent	Excellent	Excellent	Excellent

Functional Committees [2-9, 2-20]

Name of the committee	Audit Committee	Compensation Committee	Nomination Committee
Establishment	2010	2012	2020
Members	3 independent directors (Hsing-Yi Chow, Audrey Tseng, Hung-Pin, Ku) serve as members		
Duties/Review Items	• Establishing or revising the internal control system • Effective review of internal control system • Procedures for handling significant financial operations • Matters that involve directors' own interests • Transactions of material assets or derivatives • Loaning, endorsing, or guaranteeing major capital • Offering, issuance or private placement of equity-type securities • Appointment, removal, or compensation of the CPAs • Appointment of finance, accounting, or internal audit managers • Financial reports signed by the Chairman, Executive Manager, and Accounting Manager • Other major items regulated by the company or the competent authority	• Regularly review the "Organizational Regulations of the Compensation Committee" and propose amendments • Develop and periodically review the annual and long-term performance goals for directors and executives, as well as the policies, systems, criteria, and structure for their compensation. • Conduct regular evaluations of the performance goals achievement for directors and executives in the company, and establish the specific content and amounts of their individual compensation.	• Based on the criteria of diverse backgrounds, including professional knowledge, skills, experience, gender, and independence, the company seeks, evaluates, and nominates candidates for directors and senior executives. • Conduct performance evaluations for the Board of Directors, each committee, and individual directors, including assessing the independence of independent directors. • Other items resolved by the Board of Directors to be handled by the committees
Meeting Times	5	3	2
Average Attendance Rate	100%	100%	100%
Tenure of Members	June 10, 2022 to June 9, 2025		

03 Corporate Governance

3.1 Corporate Organization
3.2 Risk Management
3.3 Information Security Management
3.4 Business Integrity

3.2 Risk Management 2-23, 2-24

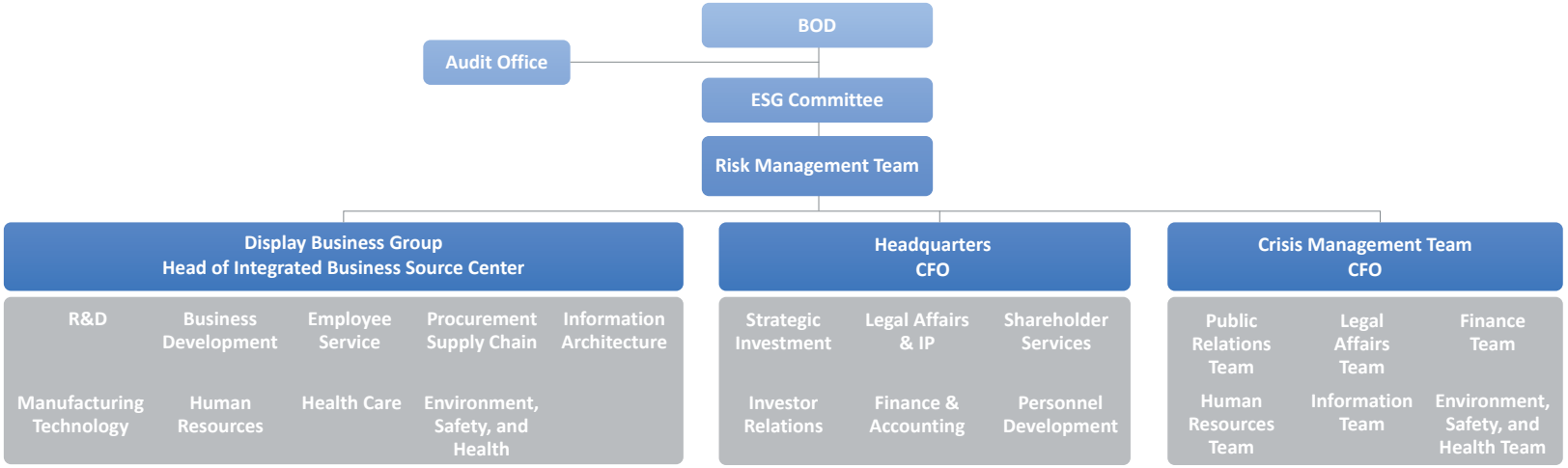
Risk Management Policy

In order to understand the internal and external risks that the company may face, we conduct risk identification to identify the scope of risk management. We continuously monitor potential risks and implement preventive measures based on the latest developments and regulatory requirements in internal audit. This strengthens risk management, enhances crisis response capabilities, and achieves the goal of risk control. By doing so, we aim to promote shareholder value, maintain competitiveness, and establish a foundation for sustainable business operations.

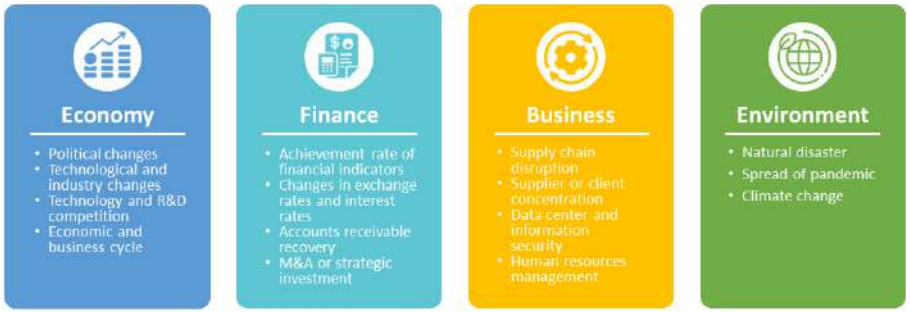
Risk Management Organizations

The "Risk Management Team" integrates various risk management units and reports to the ESG Committee. It is led by the CFO and operates according to the risk management policy approved by the Board of Directors in 2020. The team conducts risk identification and risk control based on established risk factors. This ensures more efficient coordination, self-assessment, and implementation within the risk management organization. A report on the team's operations in 2021 was presented to the 11th 2nd Board Meeting on July 25, 2022. The responsibilities and roles of the risk management organization at various levels are explained as follows:

Organization level	Duty
Board of Directors	Make risk management policy, structure and culture, ensure the effectiveness of such mechanism.
Audit Office	Regularly examine the implementation of risk control in each business unit based on the internal control plan and audit plan, make audit report and track the improvement status.
Risk Management Team	Execute risk management policy made by the Board of Directors, coordinate and communicate with different units on risk management, make plans and decisions, evaluate mid and long-term investment performance to mitigate strategic risks.
Display Business Group	Carry out daily risk management activities, and conduct self-evaluation of risk control.
Each unit of HQ	Financial risk analysis, human resources allocation and response, insurance execution, public relations and external communication, review and establishment of regulations and IP rights.
Crisis Management Team	Goal setting, potential risk surveillance and analysis, risk identification, risk assessment, risk prevention, resolving risks, and recovery from the risks.



Scope of Risk Management



Risk Management Courses

We have conducted risk management courses related to risk identification, information security, climate change, and occupational health and safety. These courses include "Safety Risk Identification and Control," "Environmental Issues Identification," "Production Safety Management and Occupational Safety and Health Products Use and Management," "Occupational Disease Prevention and Control," "Handling of Occupational Accidents," and "Information Security." These courses aim to enhance employees' risk awareness. The total number of participants was 2,658, with a total training duration of 1,718 man-hours.

Risk Management Strategy

Aspect	Top Three Risk Issues	Key Points	Countermeasures
Economy	Drastic change in technology and industry	• The market of large display and LED display becomes fierce • It becomes more competitive for display products as technology is more diverse. • Traditional business model is impacted by e-commerce platforms. • Innovative products should be developed in response to the industrial changes.	• We continuously utilize core technologies in our visual solutions to provide new interactive experiences in areas such as home entertainment, large-screen displays, digital signage, large public space displays, and smart retail. We also expand our customer base and applications in various fields. We are developing smart and Internet-enabled functionalities to expand the application scope of projectors, adding possibilities for various settings and environments. • Customer base and application market should be expanded for energy saving products, focusing on product segments with growing market demand. Emphasis should be placed on the development of technologies for ultra-thin, narrow bezel, touch-enabled, high-resolution, and high dynamic contrast energy-saving displays. This will provide customers with comprehensive and versatile integrated custom display solutions. • We leverage technology and various channels to build new retail trends and expand market applications. • Focusing on the research and development of high-value-added products and various visual imaging solutions, we will deepen our expertise in artificial intelligence, big data, cloud technology, and intelligent interactive solutions. This includes the development of intelligent service solution platforms, aiming to expand and drive new growth opportunities.
Operation	Supply Chain Shortage	• Natural disaster and pandemic causes delay and interruption of production and delivery. • Technology changes fast, and key components are required for new technology. ESG causes higher costs for small suppliers. • ESG causes higher costs for small suppliers.	• We prioritize the control of supply risks for high-risk and critical raw materials. We then set strategic inventory levels and demand quantities based on market demand and supplier delivery speed. We invest in research and development of innovative technologies to enhance our in-house manufacturing capabilities for components. We also collaborate with suppliers and implement regional supply chain strategies, as well as a multi-source procurement approach to ensure a diversified supply. • We maintain close relationships with key component suppliers to understand their capacity and adjust lead time. We actively carry out technical cooperation or strategic alliance with major domestic and foreign manufacturers to facilitate the launch of new products or the acquisition of new technologies. • We conduct regular audits to ensure supplier's delivery capabilities and consistently seek and nurture local suppliers who can provide environmentally compliant and high-quality products. We adhere to a localization-first procurement strategy and aim to reduce carbon emissions by minimizing transportation distances.
	Hard to attract and retain employees	• We provide multiple communication approaches to improve communication with employees. • We provide salaries and welfare that are better than local regulations. • We strengthen employees' professional skills and global insights with various methods. • We advocate work safety and precautions of occupational accidents.	• We provide bilateral communication channel and conduct employee survey to consolidate employees' opinions for further communication. • According to the locations of our operational sites, all employees' salaries meet the minimum wage standards specified by local laws and regulations. We also provide social insurance coverage as required by regulations. In addition to the mandated benefits, we offer additional insurance and welfare measures in compliance with applicable laws and regulations. • With sustainability as a core corporate value, we actively invest in the retraining of employees to revitalize and strengthen our workforce. This is done to promote career development opportunities for our employees. • With the goals of creating a safe and healthy work environment and achieving zero occupational accidents, we strive to provide employees and workers with a healthy and safe working environment.

Key Points for Future Execution

We will focus on significant and emerging risk issues, identify responsible units, and require them to develop management strategies and implement risk control measures. We will continuously monitor, analyze, and identify risks within the scope of risk management, enhance the ability to prevent and respond to crises, and ensure prompt recovery after a crisis. Our goal is to effectively manage risks.

03 Corporate Governance

3.1 Corporate Organization
3.2 Risk Management
3.3 Information Security Management
3.4 Business Integrity

Material Topic
Information Security

GRI
Customer Privacy

09
Industry, Innovation And Infrastructure

3.3 Information Security Management 2-23, 3-3, 418-1

Boundary
Coretronic Taiwan plants and China plants (Kunshan plants and Wujiang plants), Coretronic Intelligent Cloud Service and Coretronic Intelligent Robotics Taiwan plants

Materiality
Implement robust information security management and customer privacy protection strategies to effectively increase customer trust and strengthen long-term cooperative relationships.

Strategy
Establish an internal information security management system based on ISO 27001 and NIST standards. Plan, execute, and review internal security activities, and verify the activities and their associated outcomes to identify any potential gaps in company information security. Take timely corrective actions, track progress, confirm effectiveness, and continuously improve the security measures.

Evaluation
We have established internal information security management SOP based on the ISO 27001 standard. These SOPs are guided by the 14 control objectives and 114 control measures of ISO 27001. We focus on enhancing information security in six major aspects: network security, host security, application system security, device security, operational analysis, and security management. We have implemented a procedure-driven and data-driven approach to improve risk management, establish a layered defense architecture, and enhance overall information security level.

Performance
- Implemented ISO 27001 and completed asset inventory, risk assessment, and the creation of 47 four-tier document templates.
- Strengthened the AI-driven cybersecurity defense framework and combined it with a 24/7 emergency response measure and forensic analysis platform to ensure comprehensive security protection without any vulnerabilities.
- Conducted cybersecurity-related training courses, with a total of 742 participants, and conducted one social engineering exercise.
- 1,069 new employees have completed the "Information Confidentiality and Computer Network Usage Policy" course.
- Strengthened host security protection by implementing a centralized jump server login architecture and adopting two-factor authentication.
- Completed three rounds of operational continuity drills to ensure the accuracy of relevant emergency response procedures and processes.
- Conducted one platform vulnerability scan.
- No customer privacy violations or major security incidents have occurred.

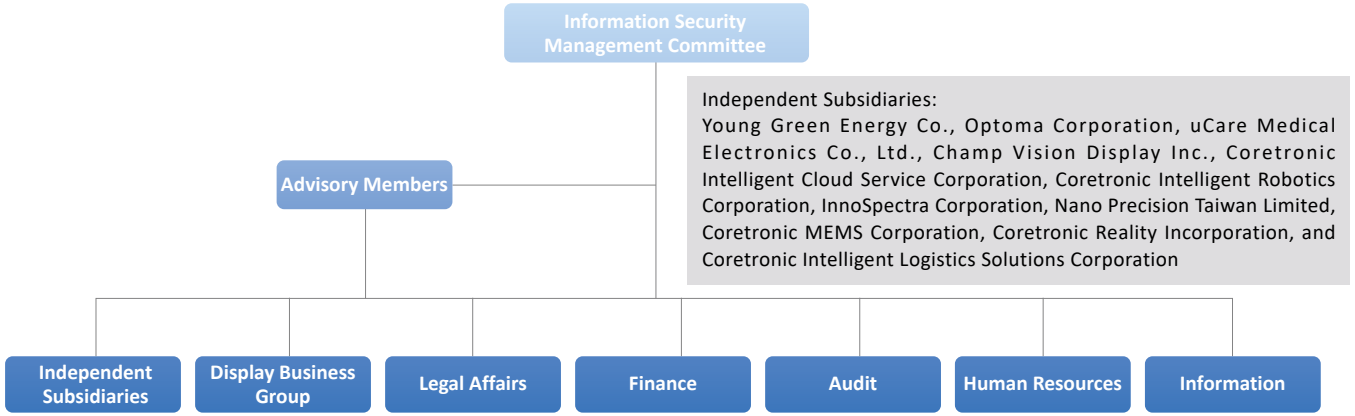
Targets
[2023 Targets]
- Obtain ISO 27001 certification and expand the scope of validation to enhance information security protection.
- Expand the implementation of vulnerability scanning to cover all company's host systems and service platforms.
- Regularly hold social engineering exercises and cybersecurity training.

[2024-2026 Targets]
- Expand the scope of ISO 27001 validation to build a more comprehensive information security protection.
- With vulnerability scanning and improvement measures, enhance and optimize security system protection.
- Complete cybersecurity examination system to achieve annual targets.

To ensure sustainable development and safeguard the company's confidential data and customer privacy, Coretronic established the "Information Security Management Committee" in 2012. This committee is responsible for implementing information security policies and establishing communication mechanisms to effectively prevent information theft, tampering, loss, or leakage. In addition to ensuring the confidentiality, integrity, and availability of information, our efforts also align with ISO 27001 standards and relevant cybersecurity regulations.

Information Security Management Committee

The Information Security Management Committee is responsible for reviewing information security governance policies, supervising the operation of security management, establishing comprehensive security protection mechanisms, enhancing employee awareness of information security, and conducting regular assessments of information security risks. Since 2020, the committee has been providing annual reports to the Board of Directors to update them on the progress and execution of these initiatives.



Information Security Policies

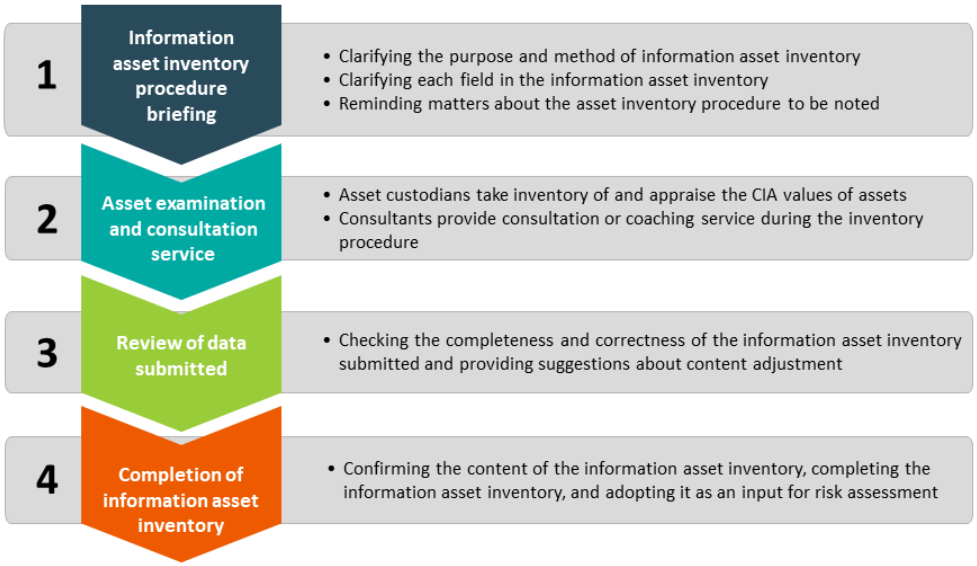
Pursuant to ISO 27001 and NIST standards, information security policies are formulated based on internal actual needs.

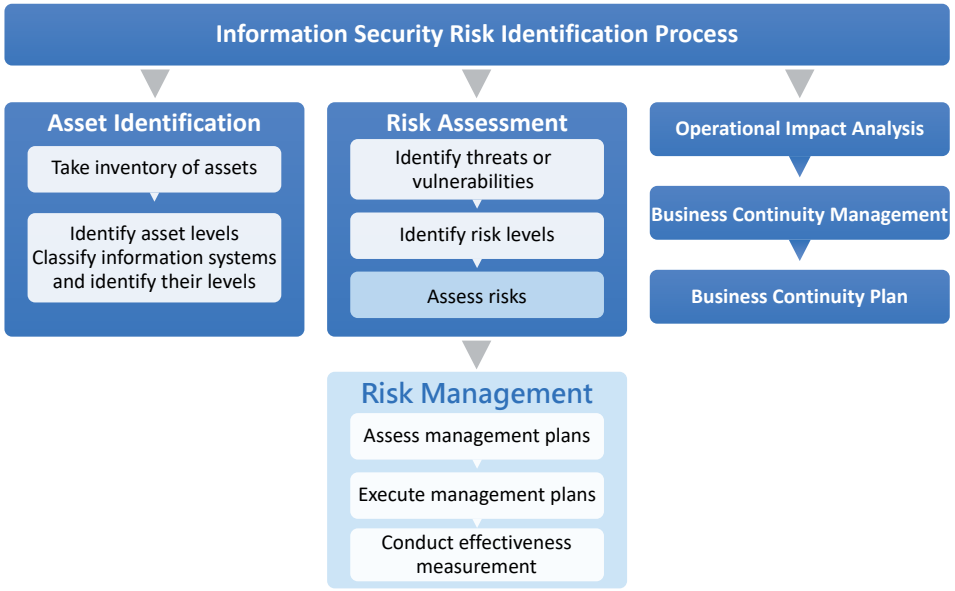
- Each unit of the Information Management Center has established relevant inventories of information assets and identified their owners. Based on the classification of information assets, risk assessments are conducted to identify risks that exceed acceptable levels. Risk management is then implemented to effectively mitigate those risks, and ongoing control measures are implemented to ensure continued risk reduction.
- Relevant personnel should undergo necessary assessments and sign relevant operational procedure documents. When there are changes or staff resignation, they should return their information assets. Both new and existing employees should participate in information security education and training to enhance awareness and concepts of information security protection.
- When entering or exiting the company building and information security control areas, relevant access control and belongings regulations should be implemented.
- It is strictly prohibited for employees to privately set up network devices to connect external networks and the company's internal network. Both internal and external networks should have firewalls, demilitarized zones (DMZ), and necessary security facilities. Important devices should have appropriate backup or monitoring mechanisms to maintain their availability. Employees' personal computers should have antivirus software installed and regularly update virus definitions, and the use of unauthorized software is prohibited.
- Employees should properly safeguard and use personal accounts, passwords, and permissions, and management personnel should regularly check and review them. Important system operation data should be regularly backed up and recovery tests should be performed.
- Security controls should be considered during the initial stages of system development. For outsourced development, control and contractual information security requirements should be strengthened.
- If employees encounter information security incidents, they should report them immediately and follow the procedures outlined in the information security incident handling manual to prevent the incidents from escalating. They should cooperate with relevant departments to resolve the incidents.
- Employees should implement confirmation and review mechanisms in their daily operations to maintain data accuracy. Supervisors should supervise the implementation of information security compliance and enhance colleagues' awareness of information security and legal concepts.
- Coretronic regularly reviews its information security policies in response to government regulations, technological advancements, and business developments. The Information Security Management Committee adjusts its objectives according to the information security policy to ensure the effectiveness of information security practices.

Identification of Information Security Risks

- Policy: Based on the 14 control objectives and 114 control measures of ISO 27001, we strengthen information security in six major areas, including network security, host security, application system security, device security, operational analysis, and information security management. We streamline and digitize the risk improvement process, establish a defense architecture for information security, and enhance overall security level.
- Annual Goals: We establish annual information security management goals and develop evaluation metrics based on their characteristics. Through data-driven indicators and standardized procedures, we provide improvement suggestions and track non-compliance or explicit risks.
- Vulnerability Scanning: To address evolving hacking techniques, we regularly conduct vulnerability scans on systems that provide services. In 2022, a total of 57 system vulnerabilities were identified, and all of them were fixed within three months.

Information Asset Inventory Procedure





Information Security Education Training 2-24

- Security Training: We conducted the "Information Confidentiality and Computer Network Usage Policy" course for new employees, with a total of 1,069 participants. We also offered courses on "Information Security and Social Engineering Awareness" and "Information Security," with a total of 742 participants.
- Security Announcements: In the event of major security incidents at affiliated factories, we issued security awareness announcements to remind employees of related risks and prevent potential operational losses. In 2022, a total of six security announcements were made.
- Social Engineering Drills: We conducted one email social engineering drill for all employees within the group.

Information Security Measures

- Develop a layered defense security architecture to strengthen security across six major areas: network security, host security, application system security, device security, operational analysis, and security management.
- Enhance AI-driven security protection architecture and complement it with 24/7 emergency response measures and a forensic analysis platform to ensure comprehensive security coverage.
- Stay synchronized with international threat intelligence centers to receive real-time threat intelligence updates. Utilize proactive warning analysis engines to effectively block malicious connections and actively capture suspicious behaviors. Additionally, employ professional cybersecurity experts for forensic investigations to enhance hacker defense systems.
- To address system updates for external service provision, conduct at least one platform vulnerability scan and one social engineering drill annually since 2020.

Key Points for Future Execution

We will continue to enhance our information security defense system with a systematic and intelligent approach. We aim to establish an automated detection and alert platform that filters potential risks from a large volume of system logs and records on a daily basis. This allows us to take proactive measures to prevent security breaches. Additionally, to align with international standards, we will persist in implementing and expanding ISO 27001 certification scope to establish a comprehensive security defense mechanism. We will also use annual information security management objectives as evaluation criteria for regular reviews and improvements, ensuring the continuous strengthening of our security defenses.

03 Corporate Governance

3.1 Corporate Organization
3.2 Risk Management
3.3 Information Security Management
3.4 Business Integrity

3.4 Business Integrity [2-24]

Value Business Ethics

Coretronic is committed to upholding business ethics and requires all members of the company to adhere to principles of honesty and integrity. This is done to safeguard the company's assets, rights, and reputation, and to ensure the interests of the company and all stakeholders. In light of this, we have developed the following guidelines and codes of conduct: " Ethical Corporate Management Best Practice Principles," "Operating Procedures and Guidelines for Integrity Management," "Codes of Ethical Conduct," "Responsibility for Business Alliance Code of Conduct Management Manual," and "Supplier Conflict of Interest Management Measures." These documents serve as ethical guidelines for all members of Coretronic and our suppliers. We strictly prohibit any behavior that may result in undue benefits (including improper entertainment, commissions, bribery, hospitality, etc.) obtained through the convenience of one's position, or any actions that could potentially impact the company's reputation and competitiveness.

Supplier Anti-Corruption Policies

Except for the following cases: Taiwan/domiciled publicly listed companies and their affiliated enterprises with a shareholding of 50% or more, suppliers who have publicly announced their compliance with anti-corruption commitments on their official websites, suppliers who have signed procurement contracts containing anti-corruption clauses, suppliers with annual transaction volumes below a certain threshold, suppliers designated by customers, and sole suppliers of specific components, all suppliers of production materials to Coretronic are required to sign an "Integrity Commitment." This is to ensure fair and transparent business transactions between both parties. In the event that a supplier violates anti-bribery and anti-corruption regulations, resulting in damages to the company, necessary legal actions will be taken to seek compensation based on the terms outlined in the supplier's signed Integrity Commitment. In 2022, the signing rate of the Integrity Commitment reached an impressive 99% after excluding suppliers who were not required to sign.

Anti-Corruption Reporting Mailbox [2-25, 2-26]

Coretronic has established the "Complaint Channel for Stakeholders and Employees' Violations of Professional Ethics" email address (8215@coretronic.com) and a dedicated complaint hotline (For Taiwan plants, please dial +886-37-777000, ext. 8215; for China plants, please refer to the phone numbers provided on the official website for Visual Solutions and Energy Saving Products operating locations. For Kunshan plants, please dial ext. 2199; for other plants, please dial ext. 6220). Employees of Coretronic and external individuals can use the aforementioned email address and complaint hotline to seek advice on matters related to the company's integrity-related affairs, report any violations of ethical behavior, and request an independent investigation by the company's internal audit unit conducted in a confidential manner. The identity of the whistleblower will be strictly protected. The investigation report will be submitted to the management level for decision-making, and the handling of reported cases will be subject to internal disciplinary measures or legal actions, depending on the disciplinary measures deemed appropriate.

In 2022, the Taiwan plants did not receive any complaint cases, while the China plants received one complaint case, which was thoroughly investigated and found to have no violation of company regulations. Going forward, Coretronic will continue to implement anti-corruption policies and establish a corporate culture of integrity and ethical conduct.

Integrity Management Designated Unit Implementation Status

- The Board of Directors has approved the "Ethical Corporate Management Best Practice Principles" and assigned the Human Resources department to develop and implement integrity policies and preventive measures.
- Regularly report the implementation of corporate integrity to the Board of Directors on an annual basis.
- Establish a dedicated section for "Employee Code of Ethics," which includes relevant guidelines for integrity, reporting channels, and case studies.
- In addition to their fiduciary duty of good governance, the Board of Directors also oversees the implementation of integrity practices to enhance effectiveness.
- Distribute "Integrity Reminder Cards" to all employees.

NEW In 2022, the Taiwan plants made "Awareness on Business Integrity Course" and "Prevention of Insider Trading Training" mandatory courses for all employees. Employees were required to watch training videos and achieve a score of 80 or above on the post-training assessment to complete the courses. They also had to sign the "Statement of Business Integrity Principles." The total number of employees who should have received the training in 2022 was 1,709, and 1,700 employees completed the training and signed the declaration. The completion rate and signing rate were both 99%.

NEW In 2022, the Kunshan plants and Wujiang plants respectively made "RBA Knowledge Awareness" and "Integrity Management - Employee Ethics" mandatory courses for all indirect employees. The Kunshan plants had 510 employees who should have received and completed the training, with a 100% completion rate. The Wujiang plants had 606 employees who should have received the training, and 597 employees completed it, resulting in a 99% completion rate.

04

Sustainable Environment

4.1 Climate and Energy

4.2 Waste Management

4.3 Water Resource Management

4.4 Green Solutions

4.5 Green Corporation

04 Sustainable Environment

4.1 Climate and Energy
4.2 Waste Management
4.3 Water Resource Management
4.4 Green Solutions
4.5 Green Corporation

Material Topic
Climate Change

GRI
Energy

GRI
Emissions

07 Affordable And Clean Energy

12 Responsible Consumption And Production

13 Climate Action

17 Partnerships For The Goals

Boundary
Coretronic plants in Taiwan and China (Kunshan and Wujiang plants), Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Champ Vision Display, suppliers and contractors.

Materiality
- Global warming and climate change have caused environmental impacts. While limited energy resources have raised the operating cost, it is necessary to actively enforce energy conservation to address the impacts brought by climate change.
- In response to the impacts and challenges of climate change and to implement the relevant controls under the Greenhouse Gas Reduction and Management Act to support the government, we constantly develop and practice 4 major green actions to become the green factory.

Strategy
Environmental Sustainability and Occupational Safety and Health Policy

Evaluation
After planning and establishing the annual targets, budgets, and plans and submitting them to the Environmental Protection Committee for approval, the Safety and Environment Division and facility units implement controls and corresponding plans in accordance with the ISO 14064-1 GHG inventory standard, ISO 14001 environmental management system (EMS), and ISO 50001 energy management system (EnMS).

Performance
- 2015-2022: The Taiwan plants obtained the ISO 14001 certification for 8 consecutive years, achieving the 2022 target.
- 2016-2022: The Chunan Plant obtained the ISO 50001 certification for 7 consecutive years, achieving the 2022 target.
- 2022: The Headquarters, Tainan Plant 1 and 2 obtained the ISO 50001 certification for the first time.
- 2016-2022: The Taiwan plants passed the ISO 14064-1 GHG verification for 7 consecutive years, achieving the 2022 target.
- The Taiwan plants' GHG emissions intensity decreased by 49% from 2019, achieving the 2022 target.
- The Taiwan plants' electricity consumption intensity decreased by 47% from 2019, achieving the 2022 target.
- The Taiwan plants' waste output intensity decreased by 66% from 2019, achieving the 2022 target.
- The Taiwan plants' water consumption decreased by 15% from 2019, achieving the 2022 target.

Targets
- 2023-2025: Continue to implement ISO 14001 and ISO 50001 (Taiwan, Wujiang, and Coretronic Projection (Kunshan) plants), and the ISO 14064-1 GHG inventory (Taiwan and China plants); The Taiwan plants' electricity consumption intensity and GHG emissions intensity will be 17% and 10% less than 2019, respectively. The China plants' electricity consumption intensity and GHG emission intensity will be 4% less than 2022.
- 2026-2028: Continue to implement ISO 14001 and ISO 50001 (Taiwan, Wujiang, and Coretronic Projection (Kunshan) plants), and the ISO 14064-1 GHG inventory (Taiwan and China plants). The Taiwan plants' electricity consumption intensity and GHG emissions intensity will be 20% and 14% less than 2019, respectively. The China plants' electricity consumption intensity and GHG emission intensity will be 7% and 8% less than 2022, respectively.
- 2029-2031: Continue to implement ISO 14001 and ISO 50001 (Taiwan, Wujiang, and Coretronic Projection (Kunshan) plants), and the ISO 14064-1 GHG inventory (Taiwan and China plants). The Taiwan plants' electricity consumption intensity and GHG emissions intensity was 23% and 17% less than 2019, respectively. The China plants' electricity consumption intensity and GHG emissions intensity will be 10% and 11% less than 2022, respectively.

04 Sustainable Environment

4.1 Climate and Energy
4.2 Waste Management
4.3 Water Resource Management
4.4 Green Solutions
4.5 Green Corporation

4.1 Climate and Energy [2-23]

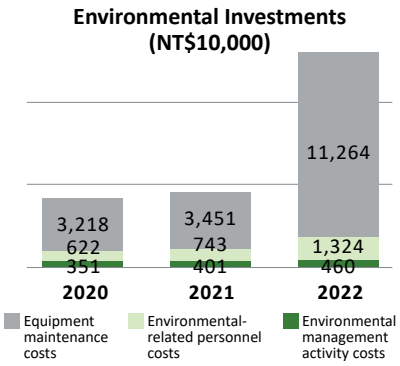
To effectively reduce the significant impact of extreme climate change on the economy, society, and environment, we introduced the TCFD framework since 2020 to reassess climate change risks and established energy-saving and carbon-reduction strategies based on low-carbon products and green operations to mitigate the greenhouse effect. In addition, in response to the Paris Agreement, we set the carbon reduction target based on SBT* 1.5°C scenario. In 2022, we officially proposed our commitment to achieving net-zero emissions. **We aim to reduce GHG emissions (Category 1 and 2) by 25% by 2025, 50% by 2032, and reach net-zero emissions by 2050.** We have also submitted our carbon reduction commitment to SBTi and received approval. To achieve our vision of net-zero emissions, we will reduce the use of fossil fuels, increase the use of renewable energy, and engage in innovative low-carbon technology transformation. We will also establish internal carbon pricing in consideration of the environmental cost of business carbon emissions. In 2022, we inventoried GHG emissions and identified Category 1 to 6 emission sources with ISO 14064:2018 within the boundaries covering the operational control facilities of Headquarters, Chunan Plant, Tainan Plant 1 and 2, Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan).

*Science Based Targets (SBT): The reasonable carbon reduction limit of industries and businesses across the globe is calculated scientifically within the total carbon emissions to control warming within 1.5°C.

Environmental Targets and Performance

★ Baseline: 2019

Year	Measure	Target			Performance of the Taiwan plants in 2022
		Indicator	Taiwan	China	
Short-term 2020-2022	Continually Implement Environmental Management System	Reduce GHG emissions intensity (Category 1 and 2)	6%	-	• ISO 14001, ISO 50001, and ISO 14064-1 certification, achieving the short-term target. • GHG emissions intensity (Category 1 and 2) decreased by 22% from 2021 (decreased by 49% from 2019), achieving the short-term target. • The electricity consumption intensity decreased by 23% from 2021 (decreased by 47% from 2019), achieving the short-term target. • The waste intensity decreased by 5.9% from 2021 (decreased by 66% from 2019), achieving the short-term target. • The water consumption increased by 2% from 2021 (decreased by 15% from 2019), achieving the short-term target. • Renewable energy: 1% of annual electricity consumption, achieving the short-term target. • 11 green activities, achieving the short-term target. 1. 5,558 participations in World Earth Day activities. 2. For six consecutive years, we adopted the Long Fong Fishing Port coastline and organized annual coastal cleanup, cleaning up 2 tons of marine debris. 3. Environmental education facilities tour (Hoyenshan Ecology Museum and Taijiang National Park). 4. Ecological and environmental mutual benefit activities (“Finding Leopard Cats in Sanyi” and Taijiang National Park) 5. Collected 4,174 points for the "Green Point" initiative. • Annual environmental investments exceeded NT$130 million, nearly doubling the investments in 2021.
		Reduce electricity consumption intensity	13%	-	
		Reduce waste intensity	5%	-	
		Reduce water consumption	8.4%	-	
		Renewable energy use: % annual electricity consumption	1%	-	
		Number of green activities	6	-	
Medium-term 2023-2025	The Taiwan plants, Wujiang plants, and Coretronic Projection (Kunshan) have implemented environmental management systems.	Reduce GHG emissions intensity (Category 1 and 2)	10%	4%	
		Reduce electricity consumption intensity	17%	4%	
		Reduce waste intensity	9%	4%	
		Reduce water consumption	12%	4%	
		Renewable energy use: % annual electricity consumption	5%	13%	
		Number of green activities	7	4	
Long-term 2026-2028	The Taiwan plants, Wujiang plants, and Coretronic Projection (Kunshan) continue to implement environmental management systems.	Reduce GHG emissions intensity (Category 1 and 2)	14%	8%	
		Reduce electricity consumption intensity	20%	7%	
		Reduce waste intensity	12%	7%	
		Reduce water consumption	15%	7%	
		Renewable energy: % annual electricity consumption	6%	15%	
		Number of green activities	8	5	



Breakdown of costs:

- Environmental management activity costs: air pollution control, water pollution prevention, waste disposal, noise control, and other management expenses.
- Environmental personnel costs: management system maintenance and environmental training expenses.
- Equipment maintenance costs: environmental protection, equipment maintenance, the purchase of energy-saving equipment to mitigate climate change, and other expenses.

TCFD Framework [2-29]

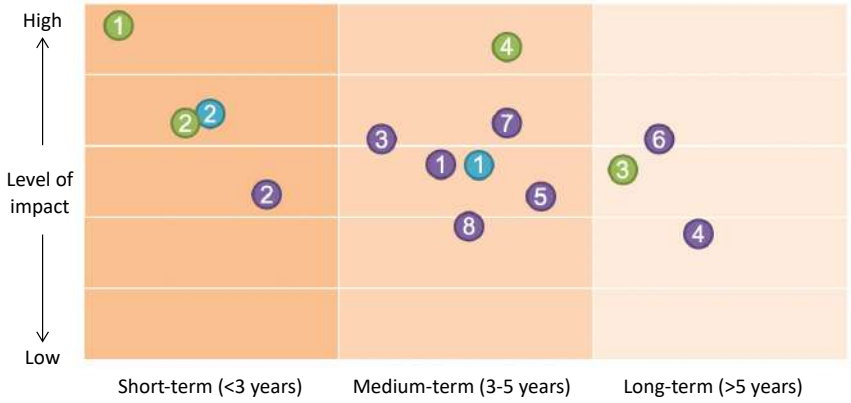
Core Element	Strategy and Action	Implementation in 2022
Governance	• The BOD regularly reviews the risks and opportunities associated with climate change. • The ESG Committee regularly reports TCFD strategies and results to the BOD. • The Environmental Protection Committee and Sustainable Energy Committee are responsible for setting goals and plans and implementing relevant strategies with the TCFD team. • Participate in national and international initiatives.	• The ESG Committee is led by the chairman, and the executive representative–CFO, reports annually to the BOD at the board meeting on the implementation of sustainability projects, TCFD framework and strategies, various environmental indicators, net-zero pathway, renewable energy strategies, and plans for sustainable development. • The chairman signed Coretronic's Net Zero Statement. • The Environmental Protection Committee and its Sustainable Energy Committee are responsible for setting short-, medium-, and long-term environmental goals and strengthening the implementation of strategies. • The TCFD team, headed by the CFO, with members spanning safety and environmental, facility, accounting, finance, stock affairs, investor relations, public relations, procurement, manufacturing, production management, sales, product management, and R&D departments. • Signed up to support the TCFD and joined the Taiwan Climate Partnership and the Taiwan Alliance for Net Zero Emissions.
Strategy	• Identify risks and opportunities of climate change in the short, medium and long term through interdepartmental discussions. • Assess the potential operational and financial impacts of significant climate risks and opportunities on the Company. • Conduct situational analysis and SBT targets.	• The Environmental Protection Committee will call up various units to set short, medium and long-term environmental sustainability targets through cross-functional discussions, identify climate risks and opportunities in the short, medium and long term, and then present the potential operational and financial impacts caused by climate change based on the identification results. • Committed to developing low-carbon technologies and designing low-power, energy-efficient green products. • In response to the Paris Agreement, we set the carbon reduction target based on SBT 1.5°C scenario. • Plan strategies and set the goal for net zero emissions.
Risk Management	• Use the TCFD framework to identify the Company's risks related to climate change. • Based on the results of climate risk identification and ranking, plan corresponding solutions. • Integrate climate risk identification and evaluation into the enterprise risk management process.	• Assess the types of potential operational and financial impacts caused by climate-related risks and opportunities. • "Climate Change" has been included in the risk management process and became one of the material topics in 2022.
Metrics and Targets	• Set management indicators related to climate change • Regular inventory of greenhouse gas emissions in accordance with ISO 14064-1. • Review and manage energy performance regularly in accordance with ISO 50001. • Set climate change management targets and regularly review the progress and actual performance of achieving the targets.	• Set GHG emissions, electricity savings, water savings, renewable energy use, and waste reduction as climate change performance indicators. Review the target implementation results quarterly and annually to mitigate environmental impacts. • We have continued to obtain GHG inventory certificates since 2016 and expanded the scope of GHG inventory to Category 3~6 in 2020 in accordance with ISO 14064-1:2018, and will continue to implement carbon reduction measures based on the carbon inventory results. • The Taiwan plants have implemented the ISO 50001 Energy Management System. Through energy-saving equipment replacement projects and various energy-saving measures, we have effectively reduced GHG emissions intensity. • We have submitted a commitment letter to SBTi, pledging to set net-zero targets and decarbonization pathways based on the SBT 1.5°C scenario. We aim to reduce GHG emissions (Category 1 and 2) by 50% by 2023 and achieve net-zero emissions by 2050. By implementing measures such as installing solar plants, increasing the use of renewable energy, upgrading energy-efficient equipment, and implementing energy-saving production management, we are gradually achieving the SBT reduction and net-zero target. • In 2022, we installed solar plants with a total capacity of 499.85 kWh in our Chunan Plant and Tainan Plant 2. These installations will start operation in 2023, and we expect our renewable energy use to reach 5%. Coupled with our green electricity wheeling and purchase of renewable energy certificates, we continue to make progress in renewable energy development. • The three EX1 laser projectors are Coretronic's first batch of projectors to pass the ISO 14067 verification. They will be a reference for the future development of sustainable products.

Climate-related Risks and Opportunities Matrix [201-2]

Coretronic actively joins and follows international initiatives. When there are significant changes in climate regulations or progress in net-zero phases, we identify the climate risks and opportunities and quantitatively assess the category, intensity, and likelihood of potential impacts for each risk and opportunity. We then grade and prioritize the risks and opportunities based on the assessment results. Additionally, we formulate improvement strategies and solutions for high-impact and short-term risks and opportunities to reduce negative impacts and enhance organizational climate resilience, creating more business opportunities. Regarding the potential financial impacts caused by climate change, we have obtained relevant financial data. Once the calculation methodology is confirmed, we will be able to estimate the financial impacts, costs, or revenues.

In 2021, we conducted a climate change risks and opportunities assessment and impact analysis based on the TCFD framework. We identified 10 risks and 4 opportunities. For the high-impact and short-term transition risk, "Low-carbon product standards and labels," and the opportunities, "Promotion of low-carbon green production" and "Use of recycled materials," we have developed innovative solutions for low-carbon products. Additionally, for the physical risk of "Rising temperature," we have formulated energy-saving and carbon-reduction strategies.

Climate Risks and Opportunities Matrix



Transition Risks	
1	Total greenhouse gas amount control, carbon taxes, and carbon fees
2	Low-carbon product standards and labels
3	Regulatory requirements renewable energy
4	Uncertainty about climate change mitigation and adaptation regulations
5	Demand for low-carbon products and services
6	Investment in energy-saving and carbon reduction technology
7	Innovative low-carbon technology or service transformation
8	Clients' preference for more energy-efficient products and services with low environmental impact

Physical Risks	
1	Rising temperature
2	Flooding/drought
Opportunities	
1	Promotion of low-carbon green production
2	Use of recycled materials
3	Provision of products or services with low environmental impacts
4	Development of innovative low-carbon products and services

Type	Categories	Items	Potential Financial Impacts
Risks	Legal	Total greenhouse gas amount control, carbon tax, and carbon fee	Operating costs ↑
		Low-carbon product standards and labels (e.g., carbon labels)	Operating revenues ↓ ; Operating costs ↑
		Regulatory requirements renewable energy	Operating costs ↑ ; Capital costs ↑
		Uncertainty about climate change mitigation and adaptation regulations	Operating costs ↑
	Technology	Demand for low-carbon products	Operating revenues ↓
		Investment in energy-saving and carbon reduction technology	Operating costs ↑ ; Capital costs ↑
		Innovative low-carbon technology transformation	Operating costs ↑ ; Capital costs ↑
	Market	Clients' preference for more energy-efficient products with low environmental impact	Operating revenues ↓
	Extreme Weather	Rising temperature	Operating revenues ↓ ; Operating costs ↑ ; Capital costs ↑
		Flooding/drought	Operating revenues ↓ ; Operating costs ↑
Opportunities	Resource Efficiency	Promotion of low-carbon green production	Operating revenues ↑ ; Operating costs ↓ ; Capital costs ↑
		Use of recycled materials	Operating revenues ↑ ; Operating costs ↓
	Products/Services	Provision of products with low environmental impacts	Operating revenues ↑ ; Capital costs ↑
		Development of innovative low-carbon products	Operating revenues ↑ ; Operating costs ↓

Climate Risks and Opportunities Coping Strategies [201-2]

▶ Transition risk, "Low-carbon product standards and labels," and the opportunities, "Promotion of low-carbon green production" and "Use of recycled materials."

Together with our subsidiary, Optoma, we assessed the environmental impacts caused by our mainstream product, the EX1 laser projectors (EX1-1, EX1-2, and EX1-3), at each stage of their product life cycle. We also conducted a carbon footprint analysis of the product based on ISO 14067. Please refer to Chapter 4.4 of this report for details. To better understand the environmental footprint of other projector series at each stage of their life cycle, we will establish a carbon footprint calculator database, which will serve as a reference for future sustainable product design.

▶ Physical risk, "Rising temperature"

In response to temperature changes, which directly impact the energy consumption of the HVAC equipment in our plants, we have devised strategies to improve energy efficiency, upgrade energy-saving equipment, develop renewable energy sources, and conserve energy and resources to mitigate and adapt to the impacts of rising temperatures and drastic fluctuations.

Net-Zero Target and Progress

- We have declared our commitment to "25% reduction in GHG emissions (Category 1 and 2) by 2025, 50% reduction by 2032, and net-zero emissions by 2050." We have also joined national and international initiatives, such as the Taiwan Climate Partnership, Taiwan Alliance for Net Zero Emissions, TCFD, CDP, and SBTi.
- We have submitted a commitment letter to SBTi, pledging to set targets based on the "1.5°C scenario" absolute reduction approach.
- For four consecutive years, we were invited to participate in the CDP questionnaire. In 2022, we received Management level (B) rating in Climate Change Evaluation, which is higher than the industry, Asian, and global average scores (C), and the category of Governance, Scope 1 & 2 Emissions (incl. verification), Risk Management Processes, and Emissions Reduction Initiatives received Leadership level (A/A-) rating. Besides, we received Management level (B) rating in Water Security Evaluation, which is higher than the industry average scores (B-), and the category of Water Risk Assessment received Leadership level score (A). As for Supplier Engagement Rating, we received Leadership level (A-) rating, which is higher than the industry, Asian, and the global average scores (C), and the category of Supplier Engagement and Scope 3 Emissions (incl. verification) received Leadership level (A) rating for two consecutive years.
- In 2022, the Taiwan plants' GHG emissions (Category 1 and 2) were 7,972.7 tonCO_2e, which is lower than the expected net-zero pathway and in line with our expected net-zero progress.

GHG and Energy Management

We have taken the SBT 1.5°C scenario as the reduction goal in setting a carbon reduction pathway to net zero. Using 2020 as the baseline, we aim to reduce GHG emissions (Category 1 and 2) by 50% by 2032 and achieve net-zero emissions by 2050. We plan to gradually achieve the SBT reduction and net-zero targets by installing solar equipment, increasing renewable energy use, upgrading energy-saving equipment, and implementing energy-saving production management.

At Coretronic, purchased electricity is the main source of GHG emissions. Hence, we set the renewable energy consumption target at 1% in 2020 and began to purchase the renewable energy certificate (REC). As of 2022, the Taiwan plants have achieved this target for three consecutive years. In the future, we will continue to install solar equipment in our plants, purchase more renewable energy wheeling, and obtain renewable energy certificates to further increase the use of renewable energy.

In addition, we actively participate in national and international initiatives, such as the Taiwan Climate Partnership, the Taiwan Alliance for Net Zero Emissions, submitting a commitment letter to SBT, implementing TCFD, and responding to CDP questionnaires. We also perform carbon offsets, develop green technologies, establish internal carbon pricing, strengthen green innovation practices and mitigation measures, improve the energy efficiency of HVAC systems, make factory equipment more energy-efficient, and install energy-saving lighting. We strive to be a leader in energy efficiency and carbon reduction in the industry and gradually achieve SBT reduction and net-zero targets.

Strategy	Performance in 2022
• The Environmental Protection Committee establishes environmental sustainability policies and regularly reviews carbon reduction performance to achieve GHG reduction targets. • Conducted a GHG inventory in accordance with ISO 14064-1 and passed the verification. • Set SBT carbon reduction targets. • Established the "Sustainable Energy Committee" under the Environmental Protection Committee to strengthen the net-zero trajectory and energy solutions. The committee will regularly review energy efficiency performance to achieve energy-saving targets. • Implement the ISO 50001 Energy Management System to identify opportunities for reducing energy consumption. • Improve energy-saving performance and energy efficiency through regular maintenance, improvement, and equipment replacement; optimization of processes; and system integration. • Review the energy consumption status of each plant and establish corresponding energy-saving measures. • Install solar systems to increase renewable energy use and achieve renewable energy targets.	• 2022: The Taiwan plants' GHG emissions (Category 1 and 2) intensity decreased by 22% from 2021 (a 49% reduction from 2019), achieving the short-term target. The China plants' GHG emissions (Category 1 and 2) intensity decreased by 49% from 2021. • 2016-2022: The Taiwan plants passed the ISO 14064-1 GHG verification for 7 consecutive years. The China plants passed the ISO 14064-1 GHG verification for the first time in 2022. • 2022: The Taiwan plants implemented the ISO 50001. (The Chunan Plant obtained the ISO 50001 certification for 7 consecutive years.) • 2015-2022: The Taiwan and China plants have implemented 311 energy-saving solutions, saving 28.15 GWh of electricity and reducing 16,450 tonCO_2e (equivalent to the annual carbon uptake of approximately 43 Daan Parks). • 2022: The Taiwan plants' electricity consumption intensity was 23% less than 2021 and 47% less than 2019, achieving the short-term target. The China plants' electricity consumption intensity was 22% less than 2021. • 2016-2022: The Taiwan plants have purchased renewable energy (green power, renewable energy certificates, and green electricity wheeling) for 7 consecutive years. This is equivalent to using 810,000 kWh of renewable energy, with a cumulative reduction of 419.6 tonCO_2e. • 2018-2022: The solar equipment of Tainan Plant 1 accumulated a total output of 1.38 GWh of solar energy, with an estimated cumulative reduction of 708 tonCO_2e. • 2022: The China plants' solar equipment output more than 5.17 GWh of solar energy, accounting for 14.5% of the China plants' electricity consumption of that year, with an estimated reduction of 2,949 tonCO_2e .

▶ GHG Inventory 305-1, 305-2, 305-3, 305-4, 305-5

- We conduct annual GHG inventory in accordance with ISO 14064-1, covering seven types of gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The inventory allows us to monitor the current GHG use and verify the effectiveness of our reduction efforts. At this stage, although not subject to regulatory control to be required to carry out inventory and reduction, we have set greenhouse gas reduction targets in stages and review annually for continuous improvement. Also, we inventory the energy consumption, improve the efficiency of equipment, manage energy use status and install renewable energy equipment to maximize the use of energy, so as to achieve the goal of greenhouse gas reduction and the low-carbon goals with scientific management of data.
- Implementation of GHG Systematic Management

2009	2016 - 2018	2019	2020	2021	2022
We established an internal management mechanism to independently inventory the GHG emissions in Taiwan plants.	Plants in Taiwan entrusts a third-party to conduct ISO 14064-1 GHG verification.	Added independent inventory of GHG Category 3~6 of plants in Taiwan and GHG Category 1~2 in Coretronic Display (Suzhou) and Coretronic Optotech (Suzhou).	Taiwan plants added Category 3 to 6 to the ISO 14064-1 GHG verification.	• Tainan Plant 2 began to accept ISO 14604-1 GHG verification. • Added independent inventory of GHG Category 1~2 in Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan) .	• The Taiwan plants passed the ISO 14064-1 GHG verification for five consecutive years. • The China plants passed the ISO 14064-1 GHG verification for the first time.

- In 2022, the Taiwan plants' GHG emissions (Category 1 and 2) decreased by 235.5 tonCO_2e from 2021 because the plants implemented energy-saving measures, such as installing solar systems, introducing magnetic levitation chillers, monitoring equipment electricity consumption, reducing energy consumption, managing nighttime energy use, and improving lighting efficiency. In addition, using renewable energy has reduced the use of purchased electricity, thereby reducing GHG emissions. The emissions intensity for Category 3 to 6 increased from 2021 because the scope of material inventory was expanded in 2022, now covering a more complete range of purchased raw materials. In the future, the GHG inventory will be conducted using the same standard.
- In 2022, the China plants' GHG emissions (Category 1 and 2) decreased by 17,498.6 tonCO_2e from 2021 because of the plants' efforts to address climate change and achieve carbon peak by setting carbon reduction goals, developing renewable energy sources, implementing energy-saving measures, enhancing energy use management, and using renewable energy, thereby reducing the use of purchased electricity.

Area	Taiwan			China[1]		
Plant	Headquarters, Chunan Plant, Tainan Plant 1	Headquarters, Chunan Plant, Tainan Plant 1 and 2		Wujiang Plants	Wujiang and Kunshan Plants	
Indicator/Year	2020	2021	2022	2020	2021	2022
Direct Emissions—Category 1 (tCO_2e)	246.1	223.1	246.1	552.6	678.8	1,655.5
Indirect Emissions—Category 2 (tCO_2e)	7,465.8	7,985.1	7,726.6	16,377.7	38,858.2	20,382.9
Total GHG Emissions—Category 1+2 (tCO_2e)	7,711.9	8,208.2	7,972.7	16,930.3	39,537.0	22,038.4
GHG Emissions Intensity—Category 1+2 (tCO_2e/NTD 100m)[2]	43.6	30.5	23.9	167.6	99.1	50.5
Indirect Emissions—Category 3 (tCO_2e)[5]	1,647.1	1,493.1	1,307.7	-	-	59,964.2
Indirect Emissions—Category 4 (tCO_2e)[5]	7,699.7	6,158.6	41,511.1	-	-	563,858.6
Total GHG Emissions—Category 1-6 (tCO_2e)	17,058.7	15,859.8	50,791.5	-	-	645,861.1
GHG Emissions Intensity—Category 1-6 (tCO_2e/NTD 100m)[2]	96.4	59.0	152.5	-	-	1,481.3

1: The category of GHG emissions calculation of the China plants: 2020: Coretronic Display (Suzhou) and Coretronic Optotech (Suzhou); 2021-2022: Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan)

2: The scope of revenue by year
2020: Taiwan plants—Coretronic, Young Green Energy, uCare Medical Electronics, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Innospectra, Coretronic MEMS, and Coretronic Reality; China plants—Coretronic Display (Suzhou) and Coretronic Optotech (Suzhou)
2021-2022: Taiwan plants—Coretronic, Young Green Energy, uCare Medical Electronics, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Innospectra, Coretronic MEMS, Coretronic Reality, and Coretronic Intelligent Logistic Solutions; China plants—Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan)

3: Since 2020, the Taiwan plants have conducted GHG inventory and verification based on ISO 14064-1:2018. The China plants conducted a self-imposed GHG inventory based on ISO 14064-1:2006 for 2020-2021. Since 2022, the China plants have conducted GHG inventory and verification based on ISO 14064-1:2018, where Category 1 = Scope 1, Category 2 = Scope 2, and Categories 3-6 = Scope 3.

4: The coefficient of Taiwan plants' carbon emissions in 2022 refers to the carbon emissions data of the Bureau of Energy in 2022, where 1 kWh = 0.509 kgCO_2e. The coefficient of China plants' carbon emissions refers to the "Notice on Doing a Good Job in the Reporting and Management of Greenhouse Gas Emissions of Enterprises in the Power Generation Industry from 2023 to 2025," where 1 kWh = 0.5703 kgCO_2e. The GWP values refers to the GWP of the IPCC 2021 Sixth Assessment Report, and the scope of the inventory is based on the Operational Control Law.

5: Category 3 inventory items include upstream transportation and distribution, downstream transportation and distribution, employee commuting, and business travel. Category 4 inventory items include purchased goods, solid and liquid waste disposal, and asset use.

▶ Energy Management System

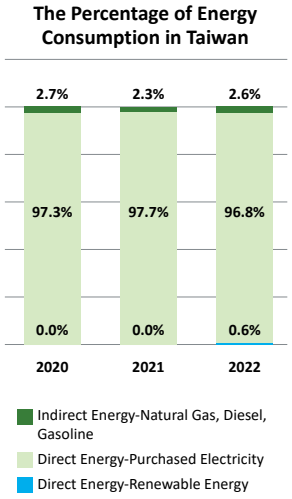
In 2022, the chairman signed the Net Zero Statement and publicly committed to "reduce GHG emissions (Category 1 and 2) by 50% by 2032 and achieve net-zero emissions by 2050." As a result, we have established the "Sustainable Energy Committee" under the Environmental Protection Committee to strengthen the implementation of net-zero and energy solutions. Additionally, the Taiwan plants have implemented the ISO 50001 Energy Management System and obtained the certification, effectively saving electricity, reducing energy consumption, and lowering operating costs.

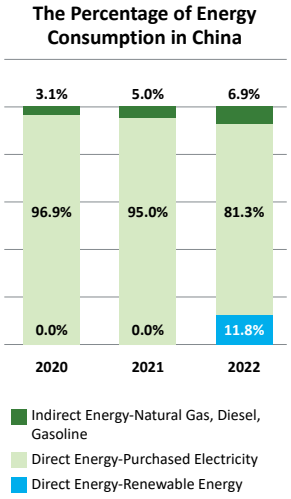
- 2016-2022: The Chunan Plant obtained the ISO 50001certification for 7 consecutive years.
- 2022:The Headquarters, Tainan Plant 1 and 2 obtained the ISO 50001certification for the first time.
- 2022: The Taiwan plants' electricity consumption intensity was 23% less than 2021 and 47% less than 2019, achieving the short-term target.

▶ Status of Energy Consumption 302-1, 302-3, 302-4

In 2022, the total energy consumption in Taiwan was 15,601 MWh, and 43,942 MWh in China. The energy consumption in both regions is mainly from electricity use. The Taiwan plants' total annual electricity consumption was 15,201 MWh (97% of energy consumption), and the China plants' was 40,912 MWh (93% of energy consumption). Natural gas, gasoline, and diesel consumption each accounted for less than 7%. Each plant proposes programs to improve the resource and energy efficiency and regularly reviews the implementation status of the goal regularly by the Environmental Protection Committee.

Area			Taiwan			China		
Item/Year		Type	2020	2021	2022	2020	2021	2022
Direct Energy	Renewable Energy[1] (MWh)[2]	Renewable	0	0	96	0	0	5,171
	Purchased Electricity (MWh)	Non-renewable	14,413	15,907	15,105	31,113	49,016	35,741
Indirect Energy	Liquefied Petroleum Gas (MWh)	Non-renewable	0	0	0	0	0	0
	Natural Gas (MWh)	Non-renewable	262	233	245	897	1,234	2,198
	Diesel (MWh)	Non-renewable	15	30	32	24	310	184
	Gasoline (MWh)	Non-renewable	130	104	123	87	1,057	648
Total Energy Consumption (MWh)			14,820	16,274	15,601	32,121	51,617	43,942
Total Intensity of Energy Consumption (1 MWh/NTD 100m)[3]			83.7	60.5	46.8	117.7	129.4	100.8





1: Includes electricity consumption from solar self-consumption and green electricity wheeling.

2: 1 MWh = 0.0000036GJ

3: The scope of revenue by year

2020: Taiwan plants—Coretronic, Young Green Energy, uCare Medical Electronics, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Innospectra, Coretronic MEMS, and Coretronic Reality; China plants—Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan)

2021-2022: Taiwan plants—Coretronic, Young Green Energy, uCare Medical Electronics, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Innospectra, Coretronic MEMS, Coretronic Reality, and Coretronic Intelligent Logistic Solutions; China plants—Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan)

▶ Energy-Saving Measures and Performance

- The Taiwan plants' electricity consumption intensity decreased by 23% from 2021 (47% from 2019) because of the implementation of 35 energy-saving measures, including upgrading the chillers, switching to LED bulbs in the entire plant, and monitoring electricity consumption. These measures have slowed down the electricity demand, leading to a decrease in overall energy consumption.
- China plants have implemented energy-saving improvement solutions since 2018. For example, to respond to the extreme weather caused by global warming and climate change, the plants used the energy-saving lighting equipment, introduced the energy-saving measures to the air-conditioning system, and reviewed and shared the improvement actions with the Environmental Protection Committee on a quarterly basis. In 2021, the expansion of Wujian plants [established Coretronic Optics (Suzhou)] increased the electricity consumption intensity. To reduce energy consumption, we built solar plants at Wujiang plants to replace ordinary electricity consumption with clean energy in order to reduce the intensity of electricity consumption. As a result, the China plants' electricity consumption intensity in 2022 decreased by 24% from 2021.
- Since 2015, we have reduced electricity consumption by implementing energy-saving projects in three directions, including HAVC systems, electric lamps, and other electricity consumption. In 2019, Wujiang plants started to implement energy-saving measures, and in 2020, we acquired "levitation chillers and flow optimization control equipment" to replace energy-consuming HVAC equipment. In 2021, the Kunshan plants and Tainan Plant 2 started implementing energy-saving measures. From 2015 to 2022, the Taiwan and China plants implemented 311 energy-saving solutions, reducing 28.15 GWh of electricity and 16,000 tonCO_2e, equivalent to the annual carbon uptake of 43 Daan Parks.
- In 2022, the Taiwan and China plants implemented 72 energy-saving measures, reducing 15.3 GWh of electricity and 8,614 tonCO_2e.

Item \ Area/Year	Taiwan			China		
	2020	2021	2022	2020	2021	2022
Total Electricity Consumption (MWh)[1]	14,413	15,907	15,201	31,113	49,016	40,912
Total Electricity Conservation by Energy-Saving Projects (MWh)	1,922	2,346	1,827	446	2,111	13,473
Total Carbon Reduction of Energy-Saving Projects (tCO_2e)	965	1,178	930	353	1,672	7,684
Electricity Consumption Intensity (1 MWh/NTD 100m)[2]	81.4	59.1	45.6	114.0	122.8	93.8

1: The total electricity consumption of the plants includes purchased electricity and renewable energy (solar self-consumption and green electricity wheeling).
2: The scope of revenue by year
2020: Taiwan plants—Coretronic, Young Green Energy, uCare Medical Electronics, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Innospectra, Coretronic MEMS, and Coretronic Reality; China plants—Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan)
2021-2022: Taiwan plants—Coretronic, Young Green Energy, uCare Medical Electronics, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Innospectra, Coretronic MEMS, Coretronic Reality, and Coretronic Intelligent Logistic Solutions; China plants—Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan)

▶ Renewable Energy

Commitment and Target

- 2020-2022: The annual renewable energy usage of the Taiwan plants accounts for 1% of the annual electricity consumption of the entire plants.
- 2023-2025:
  The annual renewable energy usage of the Taiwan plants will account for 5% of the annual electricity consumption of the entire plants.
  The annual renewable energy usage of the China plants will account for 13% of the annual electricity consumption of the entire plants.
- 2026-2028:
  The annual renewable energy usage of the Taiwan plants will account for 6% of the annual electricity consumption of the entire plants.
  The annual renewable energy usage of the China plants will account for 15% of the annual electricity consumption of the entire plants.

Strategy

- 2016-2017: Purchased green power
- 2018:
  Tainan Plant 1 established a solar plant on the roof.
- 2018-2022:
  Purchased renewable energy certificate (T-REC) for 5 consecutive years.
- 2020: Set the target of the renewable energy usage.
- 2021: Solar plants were established on the roofs of Wujiang plants.
- 2022:
  Coretronic Optics (Suzhou) installed a phase 2 solar system, and Coretronic Projection (Kunshan) installed a solar system.
  The Chunan Plant and Tainan Plant 1 use green power supply, and the Headquarters and Tainan Plant 2 purchased renewable energy certificates, achieving the goal of using renewable energy.

Performance in 2022

- 2021-2022: The Wujiang plants [Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), and Coretronic Optics (Suzhou)] installed solar systems with capacities of 1,207 kWh, 3,994 kWh, and 653.4 kWh, respectively.
  2022: Three solar systems at Wujiang plants generated 4,711,087 kWh of electricity, reducing 2,687 tonCO_2e.
- 2022: The Kunshan plants [Coretronic Projection (Kunshan) and Coretronic Optics (Kunshan)] installed solar systems with a capacity of 618.9 kWh, generating a total of 459,805 kWh of electricity and reducing 262 tonCO_2e.
- 2022: The China plants' renewable energy consumption exceeded 5.17 GWh, accounting for 14.5% of the electricity consumption of the entire plants.
- 2022: The Chunan Plant and Tainan Plant 1 obtained 96,290 kWh of renewable energy through green electricity wheeling. The Headquarters and Tainan Plant 2 purchased 75,000 kWh of renewable energy certificates (75 T-RECs). The total reduction was 87.2 tonCO_2e.
- 2022: The Taiwan plants used more than 170,000 kWh of renewable energy, accounting for 1% of the electricity consumption of the entire plants.

1: The electricity consumption shown in the table refers to purchased electricity.
2: The emission factor used for calculating the China plants' carbon emissions is 0.5703 tonCO_2e/MWh, which is the average emission factor of the national grid in 2022.

04 Sustainable Environment

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4.3 Water Resource Management
4.4 Green Solutions
4.5 Green Corporation

Boundary
Coretronic's Taiwan and China plants (Kunshan and Wujiang plants), Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, suppliers/ contractors

Materiality
Reducing environmental impacts across each stage of the product life cycle is one of the important environmental indicators for the company.

Strategy
Ensure proper waste disposal by following Environmental Sustainability and Occupational Safety and Health Policy to improve waste recycling and waste reduction rate. Set targets and regularly monitor and review the progress.

Evaluation
- Follow the ISO 14001 Environmental Management System standard to implement control measures and corresponding plans. Achieve waste reduction targets by improving waste-to-resource practices, increasing recycling rates, implementing waste classification, deepening awareness of waste disposal, and other measures.

Performance
- The Taiwan plants' waste intensity was 5.9% less than 2021 and 66% less than 2019, achieving the short-term target.
- Statistics of all types of waste in the China plants.
- By implementing solutions such as increasing the types of packaging materials for recycling, promoting a circular economy, and lightweighting chemical containers, we have reduced 2,475 tonCO_2e and saved NT$230,000 in material procurement and waste disposal costs.
- The Taiwan and China plants audited 36 waste disposal contractors, with a 100% audit completion rate.

Targets
- 2023-2025: Continue to implement the ISO 14001 (Taiwan plants, Wujiang plants, and Coretronic Projection (Kunshan)). The Taiwan plants' waste intensity will be 9% less than 2019. The China plants' waste intensity will be 4% less than 2022.
- 2026-2028: Continue to implement the ISO 14001 (Taiwan plants, Wujiang plants, and Coretronic Projection (Kunshan)). The Taiwan plants' waste intensity will be 12% less than 2019. The China plants' waste intensity will be 7% less than 2022.
- 2029-2031: The Taiwan, Wujiang, and Coretronic Projection (Kunshan) will continue to implement the ISO 14001. The Taiwan plants' waste intensity will decrease by 15% from 2019. China plants' waste intensity will decrease by 10% from 2022.

04 Sustainable Environment

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4.2 Waste Management 306-1, 306-2

The waste produced by Coretronic's operational activities is mostly non-hazardous. However, hazardous industrial waste, such as flammable mixtures and electronic components, is produced during the R&D test process, which is incinerated and physically treated. We manage hazardous waste through output control and the categorization of scrap materials to reduce the amount of hazardous industrial waste. We also require suppliers to control waste disposal processes, fulfilling our commitment to environmentally friendly practices.

The Taiwan plants, Wujiang plants, and Coretronic Projection (Kunshan) have implemented and received the ISO 14001 certification. We examine waste output, removal, treatment, and recycling processes in different stages of the product life cycle. In addition, we reduce waste through systematic management and develop audit plans to avoid illegal practices or environmental risks from improper waste disposal. In 2022, the Taiwan plants continued to strengthen waste management, implementing classification controls and reusing packaging materials. As a result, the waste intensity decreased by 5.9% from 2021 and 66% from 2019, achieving the short-term target. The China plants' waste intensity in 2022 was 14.6. We aim to reduce environmental impacts by promoting domestic waste reduction, producing systematic statistics, and reviewing our achievements regularly.

* Coretronic Optics (Kunshan) is an upstream supplier of Coretronic Projection (Kunshan), and their environmental management systems are combined. In the future, they will undergo ISO 14001 certification upon customer request.

Strategy	Performance in 2022
• Enhance waste management and increase resource recycling percentage. • Design products with reduced size and materials to minimize waste output. • Use recycled materials to achieve waste reduction and recycling. • Commission qualified contractors for waste disposal.	• The Taiwan plants' waste intensity was 5.9% less than 2021 and 66% less than 2019, achieving the short-term target. • The China plants have collected data on all categories of waste since 2022. • Implemented 8 recycling and reusing measures for packaging materials, reducing 2,462 tonCO_2e and saving NT$150,000 in the purchase of wooden pallets and waste disposal costs. • Tainan Plant 1 recycled and remanufactured trays, with 0.3 tons of trays recycled and 0.6 tonCO_2e reduced in 2022. • The Kunshan plants have lightened chemical containers, reducing 2.6 tons of hazardous waste and 0.8 tonCO_2e in 2022, as well as saving NT$40,000 in waste disposal costs. • The Taiwan and China plants audited 36 waste disposal contractors, with a 100% audit completion rate.

Waste Output 306-3, 306-4, 306-5

Coretronic is fully committed to waste reduction, reuse, and recycling. By incorporating circular economy practices into product manufacturing, strengthening waste reduction at the source, and pollution prevention, we continue to improve our waste management performance.

We classify waste into hazardous and non-hazardous waste based on their environmental impact. We further categorize non-hazardous waste into domestic waste, recyclables, reusable materials, and general industrial waste. We divide the waste into 5 categories based on their disposal status. In addition to domestic and recyclable waste, other waste is generated during manufacturing. In 2022, the Taiwan plants' waste output was 495.7 tons, increasing from 2021 because of capacity expansion. Among the waste, hazardous waste accounted for 0.8%, non-hazardous direct disposal waste accounted for 46.5%, and non-hazardous recyclable waste accounted for 52.7%. The China plants' waste output was 6,367.1 tons. Among the waste, hazardous waste accounted for 0.4%, non-hazardous direct disposal waste accounted for 11.7%, and non-hazardous recyclable waste accounted for 87.9%.

Category	Area	Taiwan			China
	Item/Year	2020	2021	2022	2022
Hazardous Waste[1]	Total	9.9	4.1	4.2	24.2
	Direct Disposal—Incineration	2.7	3.1	2.8	7.1
	Direct Disposal—Other disposal methods	7.2	1.0	1.4	0
	Recycle—Reuse for original purpose	0	0	0	6.0
	Recycle—Regeneration	0	0	0	11.1
Non-Hazardous Waste[2]	Total	549.0	432.4	491.5	6,342.9
	Direct Disposal—Incineration	189.8	200.8	228.4	743.9
	Direct Disposal—Landfill	0	0	0	0
	Direct Disposal—Other disposal methods	0	8.7	2.0	0
	Recycle—Reuse for original purpose	58.9	0.9	3.6	0
	Recycle—Regeneration	300.3	222.0	257.5	5,599.0
Total Waste Output (ton)		558.9	436.5	495.7	6,367.1
Waste Intensity (ton/NTD 100m)[3]		**3.4**	**1.7**	**1.6**	**14.6**

1: Mercury lamps, empty bottles, waste liquids, electronic waste, and other waste determined by local environmental protection authorities to be hazardous. Sorted and collected according to hazard characteristics and disposed of by qualified waste contractors.

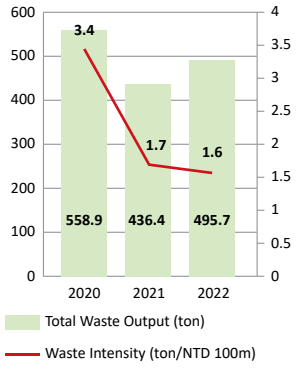
2: Recyclable and reusable waste, including domestic waste, non-classifiable combustible general industrial waste, waste plastics, waste paper, scrap metal, and waste designated for reuse. Recyclable and reusable waste is collected and processed by qualified local recycling companies. Other waste is transported to processing facilities by qualified disposal companies according to the disposal methods of the waste.

3: The scope of revenue by year
2020: Coretronic, Young Green Energy, uCare Medical Electronics, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Innospectra, Coretronic MEMS, and Coretronic Reality
2021-2022: Taiwan plants—Coretronic, Young Green Energy, uCare Medical Electronics, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, Innospectra, Coretronic MEMS, Coretronic Reality, and Coretronic Intelligent Logistic Solutions; China plants—Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan)

4: All generated waste is transported by qualified waste disposal to approved treatment facilities, with no disposal transfer involved.

5: The waste output, transfer, and disposal data are sourced from the EPA's Industrial Waste Report and Management System and the Jiangsu Province Pollution Source "One Enterprise, One File" Management System. The data on recycling and reuse are sourced from the plants' internal records and accounting statements.

Waste Output Status in Taiwan



Waste Reduction Strategy

▶ Reusing Packaging Materials

In 2022, Coretronic implemented 8 recycling measures for packaging materials, achieving a recycling rate of 97%. Our recycling achievements, measured by the number of items, are as follows: 97% of trays, 90% of pallets, 74% of plastic pads, and 100% of cardboard boxes. A total of 1,195 tons of packaging materials were recycled and reused, reducing 2,462 tonCO_2e and saving NT$150,000 in wooden pallet procurement costs (According to the Low Carbon Sustainable Information System website, each metric ton of waste produces 2.06 tonCO_2e).

▶ Circular Economy Alliance

- Reusing wooden pallet prototypes: Since 2017, we have collaborated with local transportation suppliers to recycle and reuse 490 tons of wooden pallet prototypes in logistics transportation, reducing 1,010 tonCO_2e and saving NT$2.23 million in wooden pallet purchase and waste disposal costs.
- Remanufacturing trays: From 2021 to 2022, Taiwan Plant 1 recycled and remanufactured 1.4 tons of scrap trays, reducing 2.9 tonCO_2e.

NEW Lighten Chemical Containers

Kunshan plants replaced the 500 mL glass bottles with 2.5 L plastic buckets for ethanol storage, reducing 0.768 kilograms of hazardous industrial waste generated per liter of ethanol used. In 2022, we reduced 2.6 tons of waste and 0.8 tonCO_2e, saving RMB 9,153 (approximately NT$40,000) in waste disposal costs. According to the Carbon Footprint Information Platform website, each metric ton of hazardous industrial waste disposed of in landfills produces 0.3 tonCO_2e.

▶ Product End Processing Tracking

To ensure legal use of recycled products, Coretronic establishes explicit waste management regulations and performs on-site audit of the legal compliance and back-end disposition capability of the waste disposal service suppliers every year. If any nonconformities are identified, guidance is provided with an admonition received by the supplier concerned, and the nonconformities are subject to follow-up actions for improvement. If nonconformities are not removed, the waste disposal agreement will be terminated to ensure legal and appropriate disposal of waste. In 2022, audits of 36 suppliers rendering the services of wood pallet recycle and disposal of industrial and hazardous industrial waste and waste electronic components were scheduled and completed with a completion rate of 100%. The results of the audits did not show any nonconformities.

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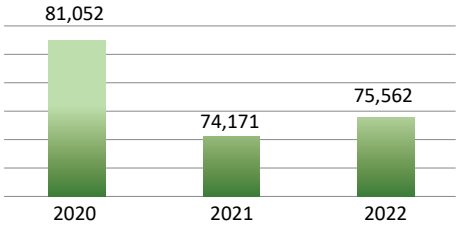
4.3 Water Resource Management

The water demand of plants in Taiwan and China is mainly for air conditioning, drinking water, cleaning, irrigation and group meals, and the users are employees, visitors and contractors. Since the manufacturing process does not require water, the impact on the environment is not significant. However, considering that water resource is the major international sustainability issue, we have adopted recycling and water conservation measures to reduce the impact, and at the same time, we have strengthened disseminating the messages on water conservation to prevent the crisis of water shortage in the dry season in advance.

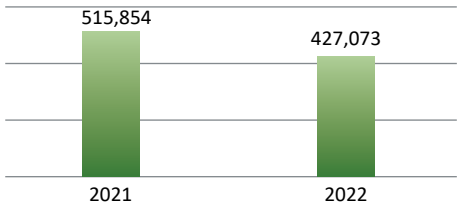
Water Management Strategy

- Maximize water usage efficiency.
- Enhance the importance of water conservation for the upstream and downstream value chains.
- Set water conservation goal and conduct regular review to achieve the target.
- Continue to promote various water conservation plans to reach the water conservation efficiency.
- Discover possible measures for water conservation through the daily management and inspections.
- Promote water resource education and enhance the water usage efficiency for stakeholders.

Water Use in Taiwan (ton)



Water Use in China (ton)



Water Use

The issue of water resources is a common concern worldwide. Coretronic has set the water reduction target, even though water resource is not the major concern for its operation environments, by educational propaganda on water usage and promoting water conservation and recycling measures. In 2022, the Taiwan plants' water consumption was 2% more than 2021 but was 15% less than 2019, achieving the short-term target. In 2022, the Taiwan plants' water consumption increased because of the increase in the number of employees. However, we have formulated water conservation and recycling measures that are more proactive to achieve the water reduction target.

Since 2021, the China plants have implemented water management by promoting water reduction programs for offices, operation areas, and plant systems. In 2022, the water consumption was 427,073 tons, 17% less than 2021. We have also set short-, medium-, and long-term water reduction targets. We aim to mitigate the impacts of climate change through more proactive water-saving measures.

Water Conservation Strategy–Recycling Systems and Water-Saving Devices

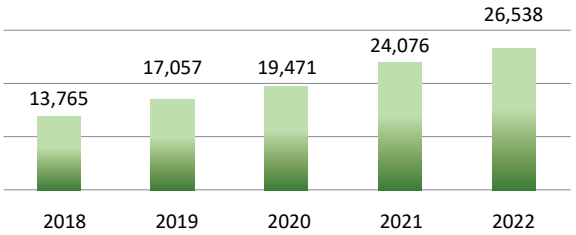
- The Taiwan and China plants are equipped with recycling systems, mainly collecting surface water, air conditioning condensate, and rainwater for landscape irrigation and secondary water supply for domestic use. Additionally, we implement measures such as adjusting the water change concentration of HVAC, installing tap water savers (flow controllers and sensors), monitoring water use in dining areas, and reducing water use for cleaning to achieve short-term water reduction targets.
- From 2018 to 2022, the Taiwan plants recycled and saved 100,907 tons of water. In 2022, the China plants also started implementing recycling and water-saving measures, recycling and saving 15,665 tons of water. The water-saving measures of all the plants reduced 208.7 tonCO_2e.

Water Conservation Performance

Area	Taiwan					China
Item/Year	2018	2019	2020	2021	2022	2022
Water Conserved (ton)	11,769	14,212	16,405	16,822	16,924	11,032
Water Recycled (ton)	1,996	2,845	3,066	7,254	9,614	4,633
Total Water Conserved and Recycled (ton)	13,765	17,057	19,471	24,076	26,538	15,665
Carbon Reduction (tCO_2e)[1]	2.20	2.59	2.96	3.66	4.27	193.0

1: The carbon produced per unit of water in the Taiwan plants is calculated based on the values published by Taiwan Water Corporation. The carbon produced per unit of water in the China plants is calculated based on the coefficient in the GHG inventory of that year.

Water Conserved and Recycled in Taiwan



04 Sustainable Environment

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Material Topic
Green Solutions

GRI Energy

GRI Emissions

07 Affordable And Clean Energy

12 Responsible Consumption And Production

13 Climate Action

17 Partnerships For The Goals

Boundary
Coretronic's Taiwan and China plants (Kunshan and Wujiang Plants), suppliers/contractors

Materiality
Based on the product life cycle, develop green products that reduce environmental impact, improve energy efficiency, can be easily disassembled and recycled, and are low-carbon and environmentally friendly. Collaborate with suppliers and customers to "provide users with convenient, safe, and energy-efficient sustainable products."

Strategy
We use green thinking in technology development and green materials in product development to reduce material and energy consumption, minimizing environmental impact.

Evaluation
The R&D Unit sets and plans annual targets, budgets, and projects and submits them to the "Green Product R&D Team" for review. Upon approval, the development stage commences. The R&D Unit regularly reviews the progress and continuously promotes relevant projects.

Performance
- Three EX1 laser projector models have implemented ISO 14067 and passed the verification.
- For the past seven years, we have conducted our own carbon footprint inventory of our products. The carbon footprint of each 14-inch backlight module decreased by 30% from 2021.
- Compared to other projectors with similar bulbs, the EX1 laser projector can save 45% in energy use.
- By continuously optimizing the photoelectric design of the projectors, we estimate saving 17.34 GWh of electricity per year and reducing 8,824 tonCO_2e.
- Improved the LGP process to reduce the energy consumption of production, saving 607.6 kWh of electricity and reducing 0.3 tonCO_2e.
- Enhanced the optical brightness technology of BLM, reducing the lighting power consumption by 37%. We estimate saving 8,278 kWh of electricity and reducing 4.2 tonCO_2e.
- For projector shipments, the molded pulp used in the packaging materials for fixed paper stands increased to 86%.
- Recycled and remanufactured 5,957 scrap trays, reducing 0.3 tons of waste and 0.6 tonCO_2e.
- Enhanced the volume design of the EX1 laser projector, increasing the loading rate of sea transportation by 16.6%. We estimate that each unit can reduce 3 kgCO_2e and 5.3% of carbon emissions.
- The size reduction and slim design of BLM and optical film reduced the weight by 280.7 tons and reduced 578.2 tonCO_2e.
- The purchase of green raw materials accounts for 87% of the total purchase of raw materials.

Targets
- 2023-2031: Use recyclable packaging materials and environmentally friendly design, improve and enhance product performance, inventory product carbon footprint, establish coefficient databases, and use recycled materials.

04 Sustainable Environment

4.1 Climate and Energy
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4.4 Green Solutions 2-23, 305-5

Green Materials

▶ Strategy

- Actively procure green raw materials to fully implement green supply chain management.

NEW To reduce raw material consumption and implement a circular economy, the product casing of specific EX1 laser projector models uses 50% PCR plastic. In 2022, 512 kg of PCR plastic was used, and cardboard boxes with 85% recycled pulp were used for shipping.

▶ Performance

Year	2020	2021	2022
The amount of green material procurement (NTD 10,000)	1,536,714	2,309,956	2,135,307
The amount of material procurement (NTD 10,000)	1,597,902	2,381,431	2,448,863
The percentage of green material procurement	96%	97%	87%

Green Manufacturing

NEW Responsible Team

- Product Carbon Footprint Project Team: In response to the Product Carbon Footprint Project for the EX1 laser projectors, the Product Carbon Footprint Project Team is established. The head of the Technical Development Strategy Center serves as the convener, and 27 executives and employees from the R&D and Manufacturing Departments are assigned as team members who will receive training to facilitate the product carbon footprint assessment.
- Green Product R&D Team: Held meetings regularly and proposed 36 low-carbon product development projects. Among them, low-carbon technologies for LGP and lightweight designs have been implemented in mass production. In addition, automotive customers are encouraged to reuse packaging materials, creating sustainable business opportunities together.

NEW Product Carbon Inventory Platform

- Based on the inventory results of the EX1 laser projectors, we will build a digital platform and database for product carbon inventory according to the BOM. This will be an important tool for promoting green products and carbon reduction in the future.
- We will collect the relevant coefficients of LCM and backlight module. In 2023, we plan to develop a carbon inventory platform to identify the carbon emission hot spots of the products and effectively manage product carbon emissions.

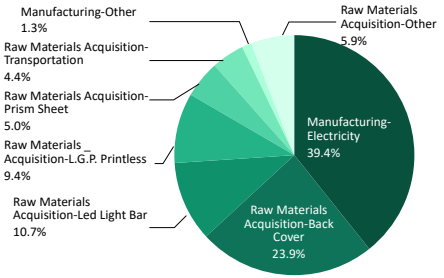
▶ Product Carbon Footprint Inventory

NEW ISO 14067: Select 3 mainstream models of the EX1 laser projectors to undergo the ISO 14067 Product Carbon Footprint B2B inventory and verification. Based on the inventory results, the stage with the highest carbon footprint is the B2B "Raw Material Acquisition." In the future, we will build a product carbon footprint database tool and address carbon emission hot spots by changing raw materials, selecting low-carbon materials, and incorporating recycled materials. We will improve our product designs and continue to develop sustainable products with green advantages for consumers.

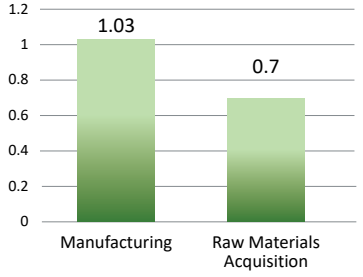
- Independent Inventory: Since 2016, we have conducted independent carbon inventory of our backlight modules. We have always embraced green thinking and continue to promote lightweight designs, energy efficiency in production, and diverse energy-saving measures. In 2022, the carbon footprint of our 14-inch backlight modules was 1.73 kgCO_2e per unit, a 30% reduction per unit from 2021. In the future, we will continue to promote energy-saving initiatives, increase the use of renewable energy, design green products, reduce carbon emissions from transportation, and develop low-carbon products.

Emissions Statistics During the Lifecycle of the 14-inch BLMs			
Life Cycle Stage	Category	Carbon Emissions (kg)	Percentage (%)
Manufacturing	Electricity	0.68	39.4%
	Other	0.02	1.3%
Raw Materials Acquisition	BACK COVER	0.41	23.9%
	LED LIGHT BAR	0.19	10.7%
	L.G.P. PRINTLESS	0.16	9.4%
	PRISM SHEET	0.09	5.0%
	Transportation	0.08	4.4%
	Other	0.10	5.9%

The Percentage of Carbon Emissions in the Product Lifecycle Stage



Carbon Emissions During the Lifecycle of the 14-inch BLMs (kg/pcs)



▶ Light Guide Plate Manufacturing Process Improvement: Regulate the production temperature and save 0.25 kWh of electricity per hour. In 2022, the total production time was 2,430.4 hours, with electricity saving of 607.6 kWh and carbon reduction of 0.3 tonCO_2e.

Green Packaging

- Molded pulp packaging: In 2022, for projector shipments, the molded pulp used in the packaging materials for fixed paper stands increased to 86%, a significant increase of 18% from 2021.
- Use cardboard boxes made from recycled pulp for shipping: Waste cartons and coated paper (photocopies, books, and newspapers) generated from manufacturing and the office are sent to paper mills for recycling by qualified environmentally friendly waste disposal companies. We also purchase paper products made from 80% to 100% recycled pulp with eco-labels from downstream paper product manufacturers. In 2022, we purchased and used 1,380,778 cardboard boxes made from recycled pulp for shipping.
- Recycle and remanufacture scrap trays: When the trays are recycled repeatedly and can no longer be used, we commission tray suppliers to remanufacture all the scrap trays, achieving the goal of "turning waste into resources, finding alternatives to natural resource exploitation, full recycling, and zero waste." In 2022, 5,957 scrap trays were recycled and remanufactured, reducing 0.3 tons of waste and 0.6 tonCO_2e.

NEW Green Transportation

- By optimizing the volume design of the EX1 laser projector, the loading rate of sea transportation increased by 16.6%. Each projector can reduce approximately 3 kgCO_2e and 5.3% of carbon emissions.
- Prioritize transportation with lower carbon emissions, such as sea transportation, which is expected to achieve an 11% carbon reduction. Combine shipments to reduce the demand for dedicated vehicles. Based on Kunshan plants' transportation route simulation, we estimate achieving a 17% carbon reduction.

Green Design 302-5

- R&D Patent: By integrating green thinking into technology development, we actively apply for R&D patents to design eco-friendly products to successfully help customers conserve energy and reduce carbon emissions. In 2022, 62% of the Taiwan plants' proposals were related to energy saving and carbon reduction, 11% more than 2021.
- Projectors and Visual Solutions
  - Constantly optimized the lighting design of projectors to save about 17.34 GWh of electricity and reduce 8,824 tonCO_2e each year, 14.5% more efficient than 2021.
  - Solid-state Illumination (SSI) projectors are more energy-efficient than lamp-based projectors. Among them, the EX1 laser projector, compared to other projectors with similar bulbs, can save 45% in energy use.
  - The power consumption of the standard operating mode and standby mode complies with the energy efficiency standards of the European Union.
  - The safe auto off function (including automatically shut off without input signals and sleep mode).
  - Reducing the design of back-end process (electroplating, paint spraying, and printing) of products.
  - Use of LED and laser eco-friendly solid-state illumination (SSI) and other mercury-free materials for a completely mercury-free projector.
  - Compared to traditional short-throw projectors, projectors using LED and laser SSI have a five-time longer life without the need of bulb replacement to reduce environmental protection.
- Backlight Module (BLM)
  - Lightweight design: Tainan Plant 1 reduced composite film thickness and redesigned the mechanism for the original model, reducing the use of optical composite film and backplane thickness, and the average weight was reduced by approximately 11%. In 2022, we produced approximately 3,739,693 units, reducing 2.5 tonCO_2e and the weight by 1,222 kg.
  - NEW Low-carbon technology: Tainan Plant 1 enhanced the optical brightness technology, reducing the lighting power consumption by 37%. We produced 2,700 units in 2022. Based on daily use of 10 hours over 365 days, we estimate saving 8,278 kWh of electricity and 4.2 tonCO_2e annually.
- Optical Film

  In addition to enhancing the optical structure design, Wujian plants reduced the POP thickness from 0.45 mm to 0.32 mm by introducing MOP. The optical performance remains unchanged. Additionally, Wujiang plants implemented lightweight designs for smaller products, reducing the average weight by approximately 29% for each product. In 2022, we manufactured 2,736,529 units of 14-inch, 43-inch, 50-inch, and 55-inch products. We reduced the product weight by 279,475 kg compared to the original design, reducing 575.7 tonCO_2e.

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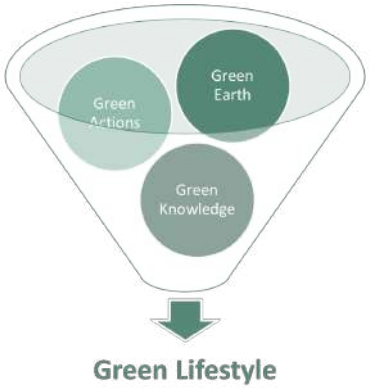
4.5 Green Corporation

We have initiated the “Green Lifestyle Program” based on “Environmental Sustainability 4G.” We invite stakeholders to participate in "Green Earth, Green Actions, and Green Knowledge" activities to produce green energy and mitigate the environmental impacts of climate change. This will also raise employee awareness of environmental sustainability and reduce water consumption and carbon emissions in our operations, so we can build a green enterprise together.



Performance in 2022

- Held 15 green activities, and the Taiwan plants recruited 47 environmental volunteers, with a total of 21,446 participations.
- Offered environmental education courses, providing 4,589 person-hours of environmental education.
- In support of World Earth Day, we organized the "Turning off Lights for One Hour" activity, with 13,013 participants, saving 1,700 kWh of electricity and reducing 1 tonCO_2e.
- In support of World Car Free Day, the China plants organized the "Car Free Day" activity, with 608 participants, reducing 7,847 km of mileage driven by fuel vehicles and 1.85 tonCO_2e.
- In support of World Food Day, the China plants organized the food-saving activity, with 5,500 participants.
- The Taiwan plants adopted 5 public toilets, providing better toilet facilities for residents. A total of 254,000 residents have benefited from this initiative, reducing 1.9 tonCO_2e of waste carbon emissions.
- 2015-2022: Participants have climbed over 190 million steps in the stair climbing activity, equivalent to climbing 84,797 Taipei 101 buildings, saving 2.71 GWh of electricity and reducing 1,406 tonCO_2e.

Green Lifestyle Program

Climate change has become the most pressing and impactful global sustainability issue in recent years. Therefore, we aim to address this issue by continuously implementing environmentally friendly measures and the "Green Lifestyle Program." We will work with stakeholders to implement "Environmental Sustainability 4G" to expand our green influence, accumulate green energy, and contribute to the sustainable management of Earth.

In 2022, we put our internal online environmental education courses on the Coretronic App, allowing employees to watch them with their families, which was well received. Additionally, we engage in environmental public welfare activities, respond to the requests of local government agencies, adopt public toilets and coastlines, and donate the benefits of the environmental activities, gradually expanding our green influence from the inside out.

Item \ Year	Strategy	2020	2021	2022
Green Earth	International Day Activities	1. 2,548 participations in green activities 2. 6,912 person-hours of environmental education 3. Monthly publication of environmental posters 4. Adopted 1 km of the Long Fong Fishing Port coastline 5. Organized 1 beach clean-up 6. Collected 2,921 green points 7. Supported the "A Green Habit, A Better Earth" activity 8. Adopted 4 public toilets 9. Sponsored NT$37,100 for environmental protection charity events	1. 4,471 participations in green activities 2. 7,526 person-hours of environmental education 3. Monthly publication of environmental posters 4. Adopted 1 km of the Long Fong Fishing Port coastline 5. Organized 1 beach clean-up 6. Collected 2,943 green points 7. Continued to support the "A Green Habit, A Better Earth" activity. 8. Adopted 4 public toilets 9. Sponsored 2,000 bottles of straw-decomposing bacteria to farmland in Hsinchu County 10. Sponsored NT$579,200 for environmental protection charity events	1. 21,446 participations in green activities 2. 4,589 person-hours of environmental education 3. Monthly publication of environmental posters in the Taiwan plants 4. The Taiwan plants adopted 1 km of the Long Fong Fishing Port coastline 5. Organized 4 clean mountain and water activities 6. The Taiwan plants collected 4,174 green points 7. Continued to support the "A Green Habit, A Better Earth" activity 8. The Taiwan plants adopted 5 public toilets 9. The Taiwan plants sponsored 2,000 bottles of straw-decomposing bacteria to farmland in Hsinchu County for 2 consecutive years 10. The Taiwan plants sponsored NT$549,000 for environmental protection charity events 11. Organized 3 international day activities, with 19,121 participations
Green Knowledge	• Environmental Education E-learning Platform • Environmental Posters • Ecological Environment Education • Environmental Education Courses			
Green Actions	• Adopting Coastline and Public Toilets • Sponsoring Environmental Protection Charity Events • Beach Clean-ups • Collect Green points • Community Development			

Note: The performance data for 2020-2021 only includes the Taiwan plants. Since 2022, the China plants has also participated in the “Green Lifestyle Program.”

▶ Green Earth—International Day Activities

World Earth Day

- Turning off Lights for One Hour: For three consecutive years, we declared the "Climate Emergency" initiated by the social enterprises, Greenvines, Taiwan Environmental Information Association (TEIA), and B Lab Taiwan. We organized the "Turning off Lights for One Hour" activity in support of World Earth Day, with 13,013 participants, including the Taiwan and China plants' employees and their families, 26 elementary schools, and 29 suppliers. Through these green actions, we are investing in our planet and making positive and sustainable changes. This activity saved approximately 1,700 kWh of electricity and reduced 1 tonCO_2e.
- Through the "Green Products Exchange" activity, we recycled waste batteries, CDs, iron cans, aluminum cans, PET bottles, aluminum foil packs, and donated receipts in exchange for eco-friendly products, putting sustainability into action in our offices. A total of 366 employees participated, exchanging 596 eco-friendly items and recycling 4,338 batteries. Additionally, we donated 175 invoices to the Tainan City Mangrove Protection Association.

World Food Day NEW

October 16, 2022 was the 42nd anniversary of World Food Day. The China plants organized 2 food-saving activities to encourage employees to cherish food. We invited employees to sign the commitment and held a book exhibition to raise awareness. During lunchtime, we also organized a "Finish Your Food" activity to encourage people to only take what they could finish, reducing food waste. A total of 5,500 people participated in these activities.

World Car Free Day NEW

In support of World Car Free Day, the China plants encourages employees to take public transit, bike, or walk to work instead of driving fuel cars to reduce the air pollution caused by cars. We wish to raise employee awareness about environmental protection by practicing sustainability. In 2022, we organized 7 of these activities, reducing the mileage of fuel vehicles by 7,847 km and reducing 1.85 tonCO_2e.

▶ Green Knowledge

Environmental Education Facilities Tour

- Finding Leopard Cats in Sanyi: We invited employees and their family members to visit the Hoyenshan Ecology Museum in Sanyi to learn about the mountain ecosystem, geology, and ecological conservation. We offered them an opportunity to see the unique geological formation and biodiversity of Huoyanshan. There were 87 participants, with 261 person-hours of environmental education.
- Taijiang National Park Tour: We invited employees and their families to learn about the Taijiang saltwater wetland, the importance of bird migration and wetland conservation, and ecological relationships. The goal was to raise awareness about the environment and our attitude towards it. There were 76 participants, with 228 person-hours of environmental education.

Themed Environmental Activities NEW

- Creative Pot Painting: We invited employees to paint discarded flower pots and plant regenerated plants from the factory. There were 19 participants, with 19 person-hours of environmental education.
- Eco-friendly Cardboard Dinosaurs: Employees showcased their creativity by making dinosaurs from discarded cardboard boxes, putting recycling into action and creating beautiful works of art. There were 30 participants, with 90 person-hours of environmental education.
- Eco-friendly Art Exhibition for Families: We invited employees and their families to the "Waste Sorting" art exhibition at the Kunshan Library. There were 21 participants, with 84 person-hours of environmental education.

Online Environmental Education Platform

- Environmental Education Videos: Employees can watch environmental education videos with their families on the website or Coretronic's App. We have accumulated 1,403 person-hours of online environmental education.
- Environmental Education Video Quiz: We organized a quiz with prizes to encourage employees to watch environmental education videos. We also awarded green points to employees in support of the government's green lifestyle policy. A total of 375 people participated.

▶ Green Actions

Adopting Public Toilets

The Chunan Plant and Tainan Plant 1 have supported the government's toilet adoption program for 3 consecutive years. They have adopted 5 public toilets in the local area, providing better toilet facilities for the residents and reducing waste by providing water-soluble toilet paper. A total of NT$79,000 was invested in this initiative, benefiting 254,000 residents and reducing 1.9 tonCO_2e of waste carbon emissions.

Sponsoring Straw-Decomposing Bacteria

Since 2021, we have joined the "Environmentally Friendly, Air Quality Improvement" action and provided straw-decomposing bacteria to farmers in Hsinchu County, allowing them to use straw-decomposing bacteria instead of burning straw, effectively improving air pollution. In 2022, we sponsored NT$470,000 in purchasing 2,000 bottles of straw-decomposing bacteria, which can be used in 200 hectares of rice fields, accounting for approximately 5% of the rice fields in Hsinchu County and reducing approximately 1,800 tonCO_2e.

Clean-up Activities

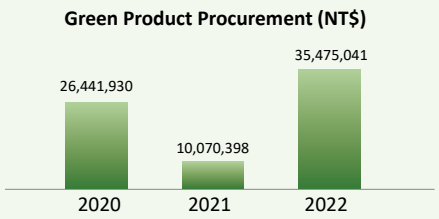
- Beach Clean-Up: Since 2017, we have adopted and maintained the Long Fong Fishing Port coastline. In 2022, we signed a contract to adopt the Long Fong Fishing Port coastline until 2025. We organized annual beach clean-ups at the Long Fong Fishing Port. Executives led employees to clean up 350 kg of marine debris. In the past 6 years, we have cleaned up 2 tons of marine debris.
- Mountain and Water Cleaning: The China plants organized 3 mountain and water cleaning activities to protect the natural environment and preserve the ecosystem. There were 54 participants, cleaning 299 kg of garbage. Through these activities, we aim to raise employee awareness about environmental issues and promote environmental consciousness. Additionally, as part of river restoration efforts, Wujiang plants released 660 fish into Lake Tai, breathing new life into the lake.

"Rise Up" Stair Climbing Activity

- We installed our self-developed counter on each floor to record the carbon footprint reduction by stair climbing. Since 2015, we have organized the "Rise Up" stair climbing activity to increase awareness about energy saving and carbon reduction within our company.
- By improving machine stability, implementing friendly participation mechanisms, introducing fun competitions with rewards, and encouraging employees to climb the stairs in groups, we have demonstrated our commitment to internalizing green practices within our organization. Our President, Ms. Sarah Lin, even invited employees to climb the stairs with her, leading by example to promote this activity.
- From 2015 to 2022, participants climbed over 190 million steps in this activity, equivalent to climbing 84,797 Taipei 101 buildings. This activity saved 2.71 GWh of electricity and reduced 1,406 tonCO_2e, equivalent to 3.65 Daan Parks.

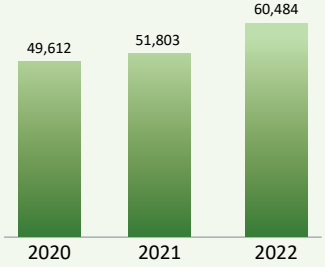
Increasing Green Product Procurement

- In support of the EPA's green procurement policy of implementing "recyclable, low pollution, and resource-efficient" practices, we prioritize procuring low pollution, recyclable, and resource-efficient products, products made from green building materials, products labeled low impact, and products with small environmental impact throughout their life cycles (raw material acquisition to disposal). We encourage suppliers to develop green products and aim to enhance the production level of green products in Taiwan. We also participate in green procurement programs to minimize environmental impact and promote green consumption.
- In 2022, the Taiwan plants declared approximately NT$35.48 million in green product procurement, a significant increase of 252% from 2021. This can be attributed to the procurement of FSC-certified materials in the processes of Tainan Plant 2 (27% of the total amount) and the increase in green transportation (HSR) and computer procurement expenses across all plants.



Using More Recycled Paper

- To protect the environment and reduce GHG emissions, we prioritize using FSC/PEFC-certified paper for office and sanitary purposes.
- In 2022, we purchased 36,028 packs of eco-label tissue, 24,456 packs of recycled paper, and FSC-certified eco-label paper products.



05

Sustainable Supply Chain

5.1 Supply Chain Management Strategy

5.2 Responsible Supply Chain Management

5.3 Green Alliance

05 Sustainable Supply Chain

5.1 Supply Chain Management Strategy
5.2 Responsible Supply Chain Management
5.3 Green Alliance

5.1 Supply Chain Management Strategy 2-6, 2-26, 2-29

Suppliers are important partners in our sustainable operations. Coretronic has 1,688 suppliers in the Taiwan and China plants (including 1,511 domestic suppliers, accounting for 90%, and 177 foreign suppliers). We classify and manage suppliers based on their characteristics and the goods/services they provide. We prioritize local procurement to promote local economic development, ensure operational stability, accelerate production efficiency, and minimize carbon emissions from transportation.

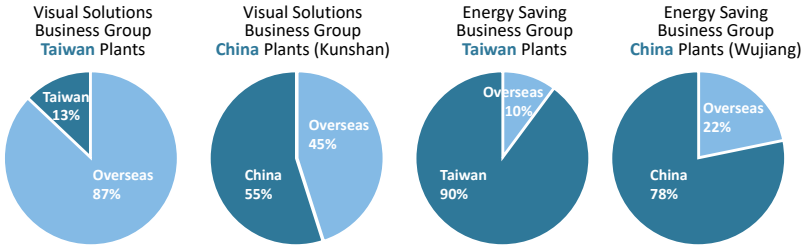
To achieve "sustainability and mutual benefit" with our suppliers, we have developed the "Sustainable Supplier Management Regulations" for production material suppliers. We require our suppliers to adhere to the regulations, conduct risk assessments and audits, provide training and guidance, and at the annual supplier conference, we acknowledge outstanding suppliers and discuss sustainability trends to ensure the sustainable operation of our suppliers. In addition, we have established the "RBA Code of Conduct Management Handbook" according to the RBA Code of Conduct to manage our suppliers. We urge our suppliers to prioritize ethical practices, labor rights, environmental protection, and health and safety issues. We thoroughly implement risk management and BCP to establish a sustainable supply chain. If our suppliers have any suggestions or inquiries about sustainability, please contact us at CSR@coretronic.com.

Supplier Type		Production Material Suppliers		Non-Production Material Suppliers	
Definition		Suppliers of product manufacturing raw materials		Suppliers of non-product manufacturing raw materials	
Location of Suppliers		Domestic	Overseas	Domestic	Overseas
Location of Coretronic Plants	Taiwan	182	93	592	30
	China	351	35	386	19

Strategy		2022 Goals	2022 Performance	2023-2025 Goals
Legal Compliance	Sustainability Supplier Management Regulations	Organize the content of the Sustainability Supplier Management Regulations	Implement the Sustainability Supplier Management Regulations	Generate ISO documents of the Sustainability Supplier Management Regulations
	Supplier and Contractor Sustainability Commitment Statement	Signing rate 80%	Signing rate 96%	Signing rate 85%
Risk Assessment & Audit	RBA self-assessment questionnaire & onsite audit	Audit rate 100%	Audit rate 100%	• Conduct RBA audit for production material suppliers • Audit rate 100%
	Online Sustainability Questionnaire Platform	Organize the Online Sustainability Questionnaire Platform	Consult the third party about building the platform	NEW Build the Online Sustainability Questionnaire Platform within the Online Green Supply Chain Platform
	Annual financial risk assessment on suppliers	Assessment rate 100%	Assessment rate 100%. Risk management strategies were provided to 2 suppliers with moderate risk and 2 suppliers with low risk.	Assessment rate 100%. Corresponding strategies were made.
	Annual audit, quarterly review	Audit rate 100%	Audit rate 100%	Audit rate 100%
Training	GPMS platform	Build a data collection platform for power reservation, waste reduction, water conservation, and green power.	Complete platform organizing	NEW Build Online Green Supply Chain Platform
	Online Green Supply Chain Platform	Organize Online Green Supply Chain Platform		
Sustainability	Annual Supplier Meeting & Best Supplier of the Year Award	An annual supplier meeting and award ceremony for outstanding suppliers were held respectively in Energy Saving and Visual Solutions Business Group.	An annual supplier meeting and award ceremony for outstanding suppliers were held respectively in Energy Saving and Visual Solutions Business Group. A total of 112 suppliers attended the events.	Regularly hold annual supplier meeting and award ceremony for outstanding suppliers
	Supplier alliance	Cooperate with suppliers in carrying out waste recycling plan.	A total of 14 suppliers attended the event. The response rate was 98%.	Continuously work with suppliers in carrying out waste recycling plan.

Local Procurement

We recognize the impact of the environmental footprint in the procurement of raw materials and components. Therefore, local procurement is a key strategy in finding suppliers. We also encourage our suppliers to prioritize local procurement to protect the environment. Please refer to the figure below for the procurement percentage in 2022. Among them, the Visual Solutions Business Group of the Taiwan and China plants (Kunshan) has a lower percentage of local procurement because the key components must be purchased from specific foreign suppliers to maintain product quality. Efforts will still be made to purchase other components locally.



05 Sustainable Supply Chain

5.1 Supply Chain Management Strategy
5.2 Responsible Supply Chain Management
5.3 Green Alliance

5.2 Responsible Supply Chain Management [2-29]

Regulations

▶ **Supplier and Contractor Sustainability Commitment Statement**

To effectively manage the sustainable supply chain, we established relevant management measures in 2021. We developed the "Supplier and Contractor Sustainability Commitment Statement" based on the RBA Code of Conduct and required all production material suppliers (excluding customer-specified suppliers and affiliated companies) to sign it. This ensures their compliance with RBA 7.0, "Green Product Warranty" (guaranteeing their products meet the "Green Product Procurement Specifications" and providing RoHS tests and lab reports certified by a third party, environmentally hazardous substance questionnaire, lead-free component reliability report, SDS, COA, and comprehensive test reports), "Responsible Minerals Procurement Policy", "Declaration on Non-Use of Conflict Mineral", "Integrity Commitment", and "Environmental Sustainability and Occupational Safety and Health Policy." In 2022, 500 suppliers were required to sign the "Supplier and Contractor Sustainability Commitment Statement," and 479 suppliers have already signed, with a signing rate of 96%.

▶ **Conflict Minerals Management**

We consider conflict-free minerals as key raw materials and manage them accordingly. We do not accept gold, tantalum, tin, tungsten, cobalt, and mica illegally mined from the Democratic Republic of the Congo and neighboring conflict regions. Therefore, we established a "Responsible Minerals Procurement Policy" and "Declaration on Non-Use of Conflict Mineral" based on the RBA Code of Conduct and added them to the "Supplier and Contractor Sustainability Commitment Statement." In addition, we announced conflict mineral control requirements to suppliers at the annual supplier conference. All production material suppliers must sign the "Supplier and Contractor Sustainability Commitment Statement" and comply with conflict minerals regulations. We also publish relevant policies and investigation results on our official website.

The Visual Solutions Business Group conducts a more detailed conflict minerals investigation on production material suppliers using RMI CMRT 6.22 and EMRT 1.11 questionnaires. The response rates are 94% and 91%, respectively. In the future, we will re-evaluate the recipients of the questionnaires and consider excluding customer-specified suppliers or suppliers who have declared their compliance with conflict minerals regulations. We will also guide non-compliant suppliers to make improvements to increase the response rate.

The Energy Saving Business Group conducts investigations on suppliers of production electronic materials using RMI CMRT 6.22, EMRT 1.02, and EMRT 1.11 questionnaires. The response rates are 100%.

Risk Assessment [2-23]

- RBA Self-Assessment Questionnaire: To effectively assess the sustainability risks of production material suppliers, we send the RBA self-assessment questionnaire to all suppliers who require an RBA audit. This allows suppliers to self-assess their sustainability performance before their on-site RBA audit.
- NEW Online Sustainability Questionnaire Platform: To better understand the ESG sustainable development of suppliers and to facilitate their transformation into sustainable supply chains, we conducted a sustainability questionnaire investigation in 2021. We plan to establish an "Online Sustainability Questionnaire Platform" in the "Online Green Supply Chain Platform" by 2025, allowing suppliers to complete it online. Based on their self-assessment results, we can evaluate suppliers' awareness and level of sustainability management to plan appropriate improvement measures for suppliers. Since 2022, we have also discussed with third-party verification agencies to explore more efficient, comprehensive, and credible ways to assess and investigate suppliers' sustainability risks.
- Strategic Material Stocking System: We prioritize controlling and managing key raw materials with high supply risks. Based on market demand and supplier delivery speed, we determine the number of days and quantities of the material stocking to ensure a stable supply of raw materials and reduce the risk of the supplier impacting company operations. In the future, we will continue to seek and cultivate local suppliers who can provide high-quality products that meet environmental protection standards. We will prioritize local procurement to shorten transportation distances and reduce carbon emissions.
- Annual Supplier Financial Risk Assessment: Since 2020, the Procurement Department has provided the Finance Department with a list of suppliers with potential risks approved by business unit supervisors for the annual supplier financial risk assessment. The Finance Department rate the risk level based on the supplier's open financial data, financial statements, and reports from third-party credit investigation companies (such as Dun & Bradstreet or companies cooperating with a credit insurance company). The final results are submitted to the CFO for approval, and the Procurement Department removes high-risk suppliers based on the results. In 2022, we conducted a financial risk assessment on 4 suppliers. Based on the results, we rated 2 suppliers as moderate risk and 2 as low risk. We have formulated risk management policies accordingly.

▶ **COVID-19**

Target	Strategy	Performance
• **Prevent supply disruption** • **Improve supply performance and resilience** • **Strengthen the labor flexibility and adaptability of employees**	**【Visual Solutions Business Group】** • In response to the COVID-19 situation in various regions, we are exploring production and supply solutions for Taiwan and China. We have multiple suppliers for the same component, and we prepare a 2-week to 1-month inventory of finished goods to ensure the stable operation of Kunshan plants. • In accordance with government policies, we investigate China suppliers' employee attendance, PCR tests, logistics, inventory, financial status, and availability of anti-pandemic supplies. We develop different response strategies for different policies in various regions and coordinate resources when necessary to ensure the stable production of all products and deliver them to customers on time. • April 2022 Kunshan Lockdown: We integrated organizational resources and implemented remote production. We arranged precise supplier shipment schedules to maintain stable production and ensure on-time delivery so our operations are not interrupted.	• All suppliers have maintained stable production. • 100% delivery rate and material readiness rate. • Kunshan plants is operating stably and has not been affected. • Kunshan Lockdown ✓ Used Coretronic Optics (Suzhou) as a transshipment depot to facilitate supplier delivery. ✓ Relocated the production base to Tainan Plant 2. ✓ When the pandemic slowed down, we sought approval from the local government approval for closed-loop production to reduce operational impact.
	【Energy Saving Business Group】 • Implement regional supply chain and multi-source procurement. • Ensure the supply capability of suppliers through regular evaluation mechanisms. • Establish a remote supply system operation mechanism.	• Promote the verification mechanism for suppliers of the same type of goods. • 100% completion of annual supplier evaluations and audits. • Conduct remote operation drills for procurement personnel.

Audit

▶ **RBA Audit**

Supplier Type	Audit Target			Audit Method	Passing Score	Number of suppliers to be audited	Actual number of suppliers audited	Audit Rate	Number of qualified suppliers	Passing Rate
New Suppliers	First-time transaction suppliers[1] (excluding affiliates, customer-specified suppliers, special materials suppliers)			Questionnaire/ On-Site Audit	60	11	11	100%	11	100%
Existing Suppliers	Visual Solutions Business Group (Kunshan plants)[2]		Customer-specified first-tier suppliers of electronics, components, plastics, packaging materials, and outsourcing (at least 5 suppliers per category)[3]	Questionnaire/ On-Site Audit	60	16	16	100%	16	100%
	Energy Saving Business Group	Taiwan plants	Suppliers with over 20 transactions in the year (excluding packaging materials suppliers and suppliers without subsequent delivery plans)	On-Site Audit	80	11	11	100%	11	100%
		Wujiang plants	We select suppliers with more than 5 transactions per year and conduct on-site audits of 10-20% of local key component manufacturers of a certain size. (excluding affiliates, customer-specified suppliers, special materials suppliers)	On-Site Audit	60	23	23	100%	23	100%

1: In 2022, the Taiwan plants of the Energy Saving Business Group did not acquire any new suppliers that met the RBA audit requirements.

2: Starting in 2023, the Taiwan plants of the Visual Solutions Business Group will conduct RBA audits on qualified existing suppliers to ensure the implementation of the audit system and meet customer requirements.

3: In 2022, there were fewer than 5 suppliers in some categories among the 5 types of actual purchases. The actual number of suppliers was only 16.

▶ **Annual Audit**

Coretronic provides guidance to suppliers to deliver higher-quality products. The Quality Assurance Department conducts on-site audits annually on designated key component manufacturers. The audit includes evaluating and documenting aspects such as ensuring shipment quality, handling quality anomalies, verifying the testing methods and standards of environmentally prohibited substances, reviewing internal environmental audit plans, promoting environmental substance information, and testing equipment records. Coretronic's Visual Solutions Business Group has developed its own e-audit platform, increasing data management reliability, work efficiency, and supplier handling efficiency. The platform allows for the arrangement of audit items and rules based on different business needs or audit targets, providing accurate guidance to suppliers and achieving win-win cooperation.

Business Group/Plant		Audit Target	Audit Method	Passing Score	Number of suppliers to be audited	Actual number of suppliers audited	Audit Rate	Number of qualified suppliers	Passing Rate
Visual Solutions Business Group (Taiwan and Kunshan plants)		Suppliers with over 120 transactions or key component suppliers in the previous year.	Questionnaire/On-Site Audit	80	48	48	100%	48	100%
Energy Saving Business Group	Taiwan plants	Suppliers with over 20 transactions in the year (excluding packaging materials suppliers and suppliers without subsequent delivery plans)	On-Site Audit	80	11	11	100%	11	100%
	Wujiang plants	Suppliers with over 5 transactions in the year (excluding affiliates, customer-specified suppliers, special materials suppliers)	On-Site Audit	70	102	102	100%	102	100%

▶ **Quarterly Audit**

Business Group	Audit Target	Audit Item	Audit Criteria	Number of suppliers to be audited	Actual number of suppliers audited	Audit Rate	Number of qualified suppliers	Passing Rate
Visual Solutions Business Group (Taiwan and Kunshan plants)	Suppliers in the mass production stage	Delivery time Cooperation Quality	80	162	162	100%	162	100%
Energy Saving Business Group (Taiwan and Wujiang plants)	Suppliers in the mass production stage with 5 or more transactions.		Suppliers are graded A to C	283	283	100%	283	100%

Training

▶ Green Product Management System (GPMS)

This platform includes the Announcement, Material Composition Declaration Request (MCD), and Supplier List sections. The Announcement section on the homepage provides information such as the updated green product specifications and GPMS training videos to help suppliers follow the correct regulations and use the correct forms. This section allows purchasers and engineers to check the upload status of supplier documents and maintain the directory of raw material suppliers. In addition, suppliers can fill in the RoHS 2.0, SVHC, and SDS information, and administrators can download reports according to the product model BOM.

NEW Online Green Supply Chain Platform

To enhance suppliers' awareness of sustainability and help them become sustainable supply chains, the Online Green Supply Chain Platform was organized in 2022 that includes online courses, sustainability columns, uploading signed documents of sustainable supply chains, online sustainability questionnaire platform, and a conflict mineral survey. The platform will be built around 2023-2025.

▶ AEO Trade Security Training Conference for Suppliers: To enforce the security management of supply chain trade, we hold AEO Trade Security Training Conferences regularly. In 2022, 42 suppliers attended the conference.

05 Sustainable Supply Chain

5.1 Supply Chain Management Strategy
5.2 Responsible Supply Chain Management
5.3 Green Alliance

5.3 Green Alliance 2-29

Annual Supplier Conference & ESG Lectures

Since 2017, we have promoted responsible supply chain practices, working with suppliers to improve quality, cost, delivery, sustainability, safety, and health. We have improved our supply chain management through on-site counseling and face-to-face communication, fulfilling our sustainability commitments. To continuously strengthen supply chain resilience and improve adaptability, we organized two online sustainability supplier conferences in 2022, with 112 participants. The topics discussed include sustainability trends, climate change impacts on operations, net-zero targets, green supply chain initiatives, green manufacture, product concepts, and future plans. We will continue to work with our suppliers to achieve a win-win supply chain relationship. We encourage our supply chain partners to prioritize climate change issues and take more environmentally friendly actions to create a sustainable supply chain together.

Location	Kunshan Plants	Wujiang Plants
Number of Participants	42	70
Main Topics	• ESG Trends and Sustainable Environment • Case studies of smart manufacturing/automation management, smart supply chain cloud platform, and Coretronic Robotek (Kunshan). • Best Supplier of the Year Award: Energy Saving and Emissions Reduction Award, Sustainability Award, and Excellence Award. • 2 suppliers shared their experiences.	• Green product design from a global environmental perspective. • Incorporate sustainability thinking into the supply chain and carbon footprint management to achieve carbon neutrality goals. • Sustainable environmental trends and sharing of achievements by green companies. • Introduction to green products, regulatory requirements, and implementation results.

Supplier Partnership Recognition by CDP

The 2022 CDP Supplier Engagement Rating recognized Coretronic for outstanding performance. We achieved a **leadership level score of A-**, higher than the industry, Asian, and global average scores (C). Coretronic is committed to supplier partnerships and value chain partnership engagement for climate change mitigation and adaptation. The evaluation criteria include "Supplier Engagement," "Targets," "Scope 3 Emissions," "Overall CDP Climate Change Score," and "Governance." Coretronic achieved the leadership level score of A for 2 consecutive years in the "Supplier Engagement" and "Other Indirect GHG Emissions" categories. In the future, we will continue to invest in value chain management and work with our suppliers and customers to bring the best operational resilience.

Circular Economy Collaboration with Suppliers

We implement waste recycling programs with our suppliers to recycle packaging materials (e.g., plastics and paper) and use reusable packaging for shipping. Besides, we have reduced the raw material consumption for packaging or containers and promoted circular economy concepts, such as recycling and waste reduction, to protect the environment. In 2022, 14 suppliers participated in recycling acrylic protective sheets, cardboard boxes, trays, pallets, foam boxes, and other materials, achieving a 98% recycling rate.

Best Supplier of the Year Award

▶ Kunshan plants presented the "Energy Saving and Emissions Reduction Award," "Sustainability Award," and "Excellence Award" to 22 outstanding suppliers of the year. The "Energy Saving and Emissions Reduction Award" is presented to suppliers who recycle packaging materials and use reusable plastic frames for delivery. The "Sustainability Award" is presented to suppliers who completed deliveries during the pandemic, with priority given to Kunshan plants. The "Excellence Award" is presented to suppliers who made significant contributions to achieve customer demands despite the impact of the pandemic.

▶ Wujiang plants presented the "Green Product HSF Excellent Management Award," "Energy Saving and Emissions Reduction Award," and "Sustainability Award" to 11 outstanding suppliers of the year. The "Green Product HSF Excellent Management Award" is presented to suppliers who provide materials complying with green product requirements and demonstrate excellent performance overall. The "Energy Saving and Emissions Reduction Award" is presented to suppliers who implement carbon-reducing measures during the transaction period, such as electricity conservation, water conservation, and waste management. The "Sustainability Award" is presented to suppliers whose supply performance and adaptability help improve the resilience of the supply chain system within a specified period.

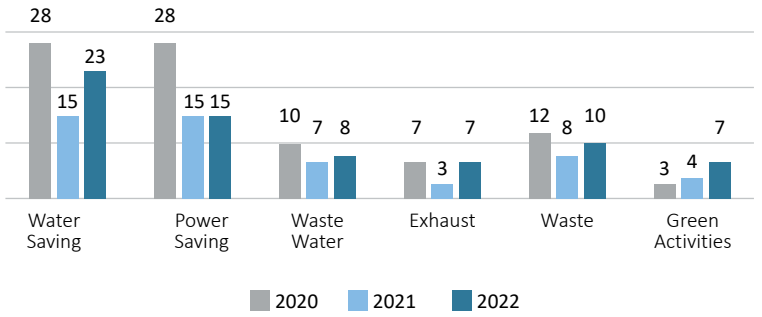
Promoting Supplier Energy Conservation and Carbon Reduction—Sustainable Supply Chain Practices at Wujiang plants

▶ Since 2019, Wujiang plants have encouraged suppliers to save energy and reduce carbon emissions. In 2022, **26** suppliers participated, with **8** of them participating for 4 consecutive years.

▶ Wujiang plants hold supplier conferences regularly, inviting outstanding suppliers to share their energy-saving experiences, as well as discussing the impact of COVID-19 and ways to strengthen sustainable supply chain management. The goal is to improve supply chain crisis response and adapt to climate change.

▶ Together with our suppliers, we will continue to take green actions to reduce the impact of enterprise risks and build a sustainable supply chain.

Number of Suppliers Implementing Green Solutions (2020-2022)



Best Supplier of the Year Award

06

Friendly Workplace

6.1 Workforce Overview

6.2 Human Rights Management

6.3 Remuneration and Benefits

6.4 Communication Channels

6.5 Talent Development

6.6 Health Care

6.7 Safe Workplace

06 Friendly Workplace

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6.1 Workforce Overview

Employee Distribution by Type of Contract [2-7]

Region	Type of Employment Contract	Male	Female	Total
Taiwan	Non-fixed-term Employees[1]	915	693	1,608
	Fixed-term Employees[2]	33	12	45
	Total Employees in Taiwan	**948**	**705**	**1,653**
China	Non-fixed-term Employees[1]	2,209	1,456	3,665
	Fixed-term Employees[2]	0	0	0
	Total Employees in China	**2,209**	**1,456**	**3,665**
Total Employees		**3,157**	**2,161**	**5,318**
Gender Ratio		59%	41%	100%
Total Senior Executives[3]		**492**	**207**	**699**

1: Regular employees, including direct and indirect personnel.
2: Irregular employees, including consultants, contracted personnel, interns, and students receiving cooperative education.
3: Senior executives refers to leaders of business groups, sub-business groups, business units, independent centers, and centers, as well as independent senior officers.

Employee Distribution by Type of Employment [2-7]

Region	Type of Employment	Male	Female	Total
Taiwan	Full-time Employees[1]	946	705	1,651
	Part-time Employees[2]	2	0	2
	Non-guaranteed Hours Employees[3]	0	0	0
	Total Employees in Taiwan	**948**	**705**	**1,653**
China	Full-time Employees[1]	2,209	1,456	3,665
	Part-time Employees[2]	0	0	0
	Non-guaranteed Hours Employees[3]	0	0	0
	Total Employees in China	**2,209**	**1,456**	**3,665**
Total Employees		**3,157**	**2,161**	**5,318**

1. Personnel with an agreed standard work week of 40 hours.
2. Personnel with an agreed standard work week of less than 40 hours.
3. Personnel with no guaranteed minimum work hours.

Worker Distribution [2-8]

Region	Type of Work	Male	Female	Total
Taiwan	Dispatched Workers[1]	3	14	17
	Others[2]	108	101	209
	Total Workers in Taiwan	**111**	**115**	**226**
China	Dispatched Workers[1]	357	210	567
	Others[2]	158	124	282
	Total Workers in China	**515**	**334**	**849**
Total Workers		**629**	**463**	**1,092**
Gender Ratio		58%	42%	100%

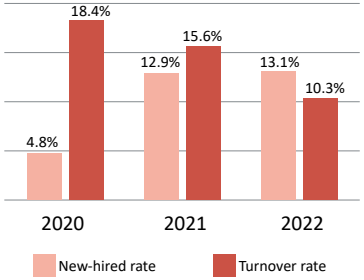
1. Personnel and hourly workers who are directly involved in production lines.
2. Resident staff (e.g., café and catering staff, security guards, and cleaning workers), non-resident staff (e.g., transport drivers), and contractors.

New Employees and Departed Employees in Taiwan [401-1]

Age / Metric	Male				Female				Total			
	New-Hired	% of Current Employee in Taiwan	Departed	% of Current Employee in Taiwan	New-Hired	% of Current Employee in Taiwan	Departed	% of Current Employee in Taiwan	New-Hired	% of Current Employee in Taiwan	Departed	% of Current Employee in Taiwan
< 30	55	50.5%	15	13.8%	50	53.8%	10	10.8%	105	52.0%	25	12.4%
30 - 50	53	7.9%	72	10.7%	55	10.5%	54	10.3%	108	9.0%	126	10.5%
> 50	4	2.4%	18	10.7%	0	0.0%	2	2.3%	4	1.6%	20	7.8%
Total	112	11.8%	105	11.1%	105	14.9%	66	9.4%	217	13.1%	171	10.3%
% of Current Employee in Taiwan	6.8%	-	6.4%	-	6.4%	-	4.0%	-	13.1%	-	10.3%	-

- New-hired rate: Total number of new employees of all genders in all age groups in Taiwan / total number of employees in Taiwan at the end of the year
- Turnover rate: Total number of departed employees of all genders in all age groups in Taiwan / total number of employees in Taiwan at the end of the year
- The number of employees, new employees, and departed employees in the table above do not include students receiving cooperative education (i.e., students who return to school after three months at Coretronic) and interns on short-term programs (i.e., employees' children in summer internships and interns in industry-academia collaboration programs who must leave Coretronic upon expiration of contract).

2020~2022 Turnover Rate in Taiwan



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6.2 Human Rights Management 2-23, 2-24

As a corporate citizen in the electronics industry, Coretronic agrees to not only comply with the RBA Code of Conduct, as well as recognize and observe various international human rights conventions, such as the Universal Declaration of Human Rights, the United Nations Global Compact, the United Nations Guiding Principles on Business and Human Rights, and the International Labor Organization, but also eliminate any infringement or violation of human rights and clearly set out our commitment to fair and equal treatment and respect for workers while abiding by the relevant laws and regulations promulgated by the government.

Aside from conforming to local laws and regulations related to labor and gender equality at work in regions where our operations are located, we have also formulated human rights protection and labor policies, as well as implement related measures. We continue to promote human rights policies, practices, and principles, ensure that all our employees are aware of human rights through the signing of the human rights code, and bolster their literacy in various areas so that they are able to cope with different challenges in a reasonable manner.

Targets and Performance in Human Rights Policies

Policy	Target	Performance in Taiwan throughout 2022
Diversity, Inclusion, and Equal Opportunities	• Ensure no disparate treatment in employee recruitment, promotion, and compensation based on race, class, language, ideology, religion, party affiliation, place of ancestry, place of birth, gender, sexual orientation, age, marital status, physical appearance, physical or mental disability, or past union membership. • Ensure development opportunities for ethnic minorities without affecting operational efficiency and overall fairness. • Set out the aforesaid equality commitments in the “Operating Procedures for Employee Recruitment.”	• No cases of discrimination were reported at Coretronic. • In terms of gender, the male-to-female employee ratio at Coretronic was about 3:2 due to the nature of jobs at our company. • The male-to-female pay ratio across all employee categories was about 1:0.973, reflecting nearly equal pay for both male and female employees at Coretronic.
No Child Labor	Do not accept applications for positions at Coretronic from applicants under the age of 16, except for interns receiving cooperative education in accordance with the rules and regulations promulgated by the government, and disclose the aforesaid commitment in the “Operating Procedures for Employee Recruitment” and related procedure forms.	• No person under the age of 16 was recruited by Coretronic. • All manpower outsourcing units engaged by Coretronic did not employ child labor, including people under the age of 16 for industry-academia collaboration programs and summer internships, as required by law.
Compliance with Minimum Wages	• Pay all employee salaries according to the minimum wage levels stipulated in local laws and regulations in regions where our operations are located, and take out social insurance for all employees in compliance with the relevant laws and regulations. • Provide insurance and benefits beyond those required by law. • Set out the aforesaid commitments in the “Coretronic Corporation Work Rules.”	• The starting monthly pay for both male and female first-line employees (direct workers) was NT$25,250, which was in line with the minimum wage standard in Taiwan.
Reasonable Working Hours	• Set up a work hour system and management plans according to local laws and regulations in regions where our operations are located. • Make overtime work arrangements in accordance with the relevant laws and regulations with employees’ consent based on operational needs, and provide employees with overtime pay or compensatory day-off according to their wishes. • Set out the aforesaid commitments in the “Coretronic Corporation Work Rules,” the “Regulations Governing Work Hours Management,” the “Regulations Governing Overtime Management,” and related procedure forms.	• We made a special arrangement for the “Golden Week” by giving five-day flexible leave so that employees can rest with peace of mind. • Night broadcasts and patrols were arranged to prevent excessive work hours for employees. • The “attendance and work hours push notification” was introduced to promptly remind employees and their supervisors of their attendance status, as well as prevent excessively long work hours among employees.

Policy	Target	Performance in Taiwan throughout 2022
Workplace Health and Safety	• Actively carry out various health promotion activities, as well as conduct post-activity effectiveness assessments and develop improvement strategies, with a view to ensuring that all employees are able to receive good health care, and creating a healthy, safe, comfortable, and friendly workplace for all employees. • Establish the Occupational Safety and Health Committee, which is tasked with reviewing matters related to occupational health and safety and rolling out annual occupational health and safety targets while promoting a safe workplace and the prevention of occupational disasters on an ongoing basis.	• Artworks and music installations were set up in public spaces to help employees relieve stress at work and enhance workplace health. • Various sports events such as stair climbing competition and company-wide sports day were held with the aim of encouraging employees to exercise and maintain their health. • For more details on the disease prevention measures implemented by Coretronic in response to the COVID-19 pandemic, please refer to Chapter 6.6. • For more details on Coretronic's safe workplace policies and measures, please refer to Chapter 6.7.
Freedom of Association	• Establish the Employee Welfare Committee to protect employees' welfare, where employee representatives are elected to the committee in accordance with the law to protect employees' rights. • Encourage employees to take part in leisure and welfare activities, and protect employees' right to establish clubs and societies in accordance with the "Regulations Governing the Management and Subsidiaries of Club and Society Activities by the Employee Welfare Committee."	• For more details on various employee welfare measures provided by Coretronic, please refer to Chapter 6.3. • A total of six clubs and societies were established, with each receiving a subsidy of NT$38,000.
Collective Bargaining	Convene labor-management meetings on a regular basis in accordance with the "Labor Standards Act" and the "Regulations for Implementing Labor-Management Meeting," where labor representatives are elected by employees to conduct labor-management negotiations on company operations and employee issues, with the aim of safeguarding employees' rights, creating a win-win labor-management system, establishing a two-way communication channel between employer and employees, and maintaining harmonious labor-management relations.	Labor-management meetings are convened by each Coretronic plant on a quarterly basis. In 2022, a total of 16 labor-management meetings were convened, with the minutes of these meetings disclosed on our intranet site to ensure open communication of opinions.

Human Rights Training

We conducted the "Human Rights Policy Course" at plants in Taiwan, which was mandatory for all employees. Out of the 1,709 employees required to attend this program in 2022, 1,700 completed this course and signed the "Statement of Human Rights Principles," representing a 99% training completion and signing rate.

Channels of Complaints Against Human Rights Incidents [2-25, 2-26]

- We have established a series of communication channels, including the 8585 hotline (+886-37-777000 ext. 8585) and mailbox (8585@coretronic.com), physical suggestion mailboxes, employee information portal (EIP), employee forum, labor-management meetings, and the Employee Welfare Committee, which are made available for employees to report any problems.
- Several channels of complaints against violations of professional ethics for stakeholders and employees have been provided on our official website, so that external personnel can lodge a complaint or file a report.
- Each complaint will be transferred from the receiving unit to the responsible unit before communication is established with the employee involved according to the content of the subject matter.
- The issues related to each complaint and the corresponding processing results will be reviewed and retained by the audit office to ensure that each complaint is handled in a reasonable manner and in compliance with the relevant laws and regulations.

NEW

Management Review

In an effort to implement the spirit of the RBA, we established the labor and ethics management system and convened the first labor and ethics management review meeting to complete the audit of the management review, evaluation, and management procedures, as well as objectives and management plans in 2022. We are scheduled to implement labor and ethics management by objectives and risk assessments starting in 2023.

Future Plans

We will continue to implement human rights policies in each aspect of our operations management, with a view to deepening the understanding of human rights policies among employees and managers at Coretronic.

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6.3 Remuneration and Benefits [3-3]

Boundary

Coretronic plants in Taiwan and China (Kunshan and Wujiang plants)

Materiality

Comprehensive remuneration and benefits serve as the core foundation for "living in peace and working with contentment" among employees. Providing competitive salaries as the basis for "living in peace" and giving rewards to employees with excellent performance as an encouragement for "working with contentment" are the prerequisites for the sustainable development of a company.

Strategy

- Set up a competitive pay structure based on market pay analysis.
- Grant incentive pay based on personal performance.

Evaluation

- Take stock of the distribution of wages and salaries at Coretronic on a regular basis and keep abreast of the overall market situation through industry pay analysis.
- Set up a pay structure that is more competitive than the market for key job categories.
- Grant operational bonus and employee remuneration (bonus) based on individual and team performance.
- Make annual pay adjustments according to individual performance and potential so that employees' salaries are more competitive in the market.

Performance

- The starting monthly pay for male and female first-line employees (direct workers) was NT$25,250 in Taiwan, RMB 2,430 at Kunshan plants, and RMB 2,400 at Wujiang plants, all of which met the local minimum wage standards.
- The male-to-female pay ratio across all employee categories was 1:0.973 in Taiwan, 1:0.919 at Kunshan plants, and 1:0.974 at Wujiang plants, reflecting nearly equal pay for both male and female employees at Coretronic.
- Annual pay adjustments were implemented once at a rate of 3% to 5% in Taiwan and 5% to 7% in China in 2022.
- Average annual pay for full-time non-management employees in Taiwan: NT$1,245,000
- Median annual pay for full-time non-management employees in Taiwan: NT$1,137,000

Target

- 2023: Conduct market pay comparisons, pay adjustments, and bonus evaluation based on pay analysis.
- 2024-2026: Set up an appropriate pay mechanism according to industry, key responsibilities, and key talent, aimed at encouraging employees to pursue achievements and self-realization.

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Material Topic
Friendly Workplace

GRI
Employment

03 Good Health And Well-Being

08 Decent Work And Economic Growth

10 Reduce Inequalities

Boundary

Coretronic plants in Taiwan and China (Kunshan and Wujiang plants)

Materiality

As goal orientation and fast pace are the norm in the technology industry, creating a friendly workplace atmosphere is essential to helping employees adjust their pace and maintain high performance on an ongoing basis, thereby achieving work-life balance.

Strategy

Maintain employees' physical and mental health and enhance their sense of identification at work, thereby building an employer brand for Coretronic.

Evaluation

- Enhance diversity in activities to increase exchanges between employees and interaction with their families.
- Create a positive atmosphere to build a harmonious organizational ambience.
- Review participation rates and conduct questionnaire surveys upon completion of events.

Performance

- Honored as the HR Asia "Best Companies to Work for in Asia 2022."
- Received the "Silver Award of 2022 Corporate Health Responsibility (CHR)" from CommonHealth Magazine.
- Won the "2022 Business Unit with Outstanding Performance in Promoting Workplace Equality at Hsinchu Science Park" award.
- Provided employees in Taiwan with free breakfast and afternoon tea once a month and distribute movie tickets to employees so as to bring joy to employees' lives.
- Gave employees better leave benefits than those stipulated in the Labor Standards Act (including five-day paid leave during the "Golden Week" and volunteer leave with no upper limit to leave application hours).
- Organized 129 activities and events such as major festival events, handicraft classes, online activities, tree planting, and small outdoor trips, with 51,551 participants in total.

Target

- 2023: Roll out the greening activities to provide employees with a good workplace.
- 2024-2026: Develop a work-from-home mechanism to address problems related to population aging and long-term care, as well as bolster employees' sense of identification at work to build an employer brand for Coretronic.

Labor Union [2-30]

Company Name / Item	Date of Establishment	Collective Agreement Signed with Labor Union	Number and Percentage of People Covered in Collective Agreements
Coretronic Projection (Kunshan)	July 2014	Collective Agreements Collective Agreements on Wages	975 people, comprising all employees at Coretronic Projection (Kunshan)
Coretronic Optics (Kunshan)	December 2020		105 people, comprising all employees at Coretronic Optics (Kunshan)
Coretronic Display (Suzhou)	July 2015	Collective Agreements Collective Agreements on Wages Collective Agreements on Labor Safety and Health Collective Agreements on Special Protection for Female Employees	352 people, comprising all employees at Coretronic Display (Suzhou)
Coretronic Optotech (Suzhou)	June 2019		559 people, comprising all employees at Coretronic Optotech (Suzhou)
Coretronic Optics (Suzhou)	May 2021		1,674 people, comprising all employees at Coretronic Optics (Suzhou)

Pay System [202-1, 405-2]

A sound and competitive pay and benefit system is an indispensable element in creating a happy workplace as it can substantially boost employees' morale at work. With a commitment to upholding the principle of fairness, we determine pay offers for employees based on their education level, career background, and work experience, so there is no issue of unequal pay due to factors such as gender, age, race, nationality, and religion.

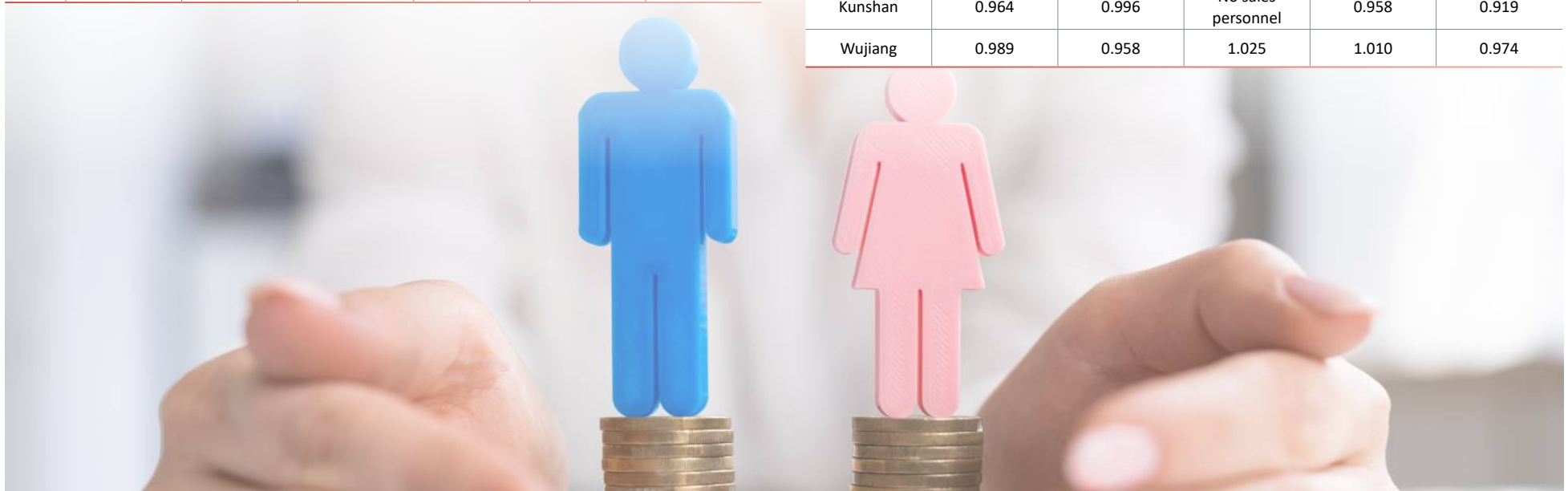
▶ Standard pay and local minimum wages for first-line employees (direct workers)

	Taiwan		Kunshan		Wujiang	
	Standard monthly pay	Standard pay-to-local minimum wage ratio	Standard monthly pay	Standard pay-to-local minimum wage ratio	Standard monthly pay	Standard pay-to-local minimum wage ratio
Male	NT$25,250	1	RMB 2,430	1.066	RMB 2,400	1.053
Female						

▶ Gender Pay Equality

We calculate the gender pay ratio according to job category and job grade at each primary operating location after determining the average pay in each group, and then express this ratio in terms of male employees. At Coretronic, gender pay gap arises as a result of job grade, job category, the number of male and female employees, and job performance rather than gender. The overall gender pay ratio is not disclosed for the time being.

Region / Job Category	R&D Personnel	Production Personnel	Sales Personnel	Administrative Personnel	Overall Gender Pay Ratio
Taiwan	0.986	0.999	0.967	0.964	0.973
Kunshan	0.964	0.996	No sales personnel	0.958	0.919
Wujiang	0.989	0.958	1.025	1.010	0.974



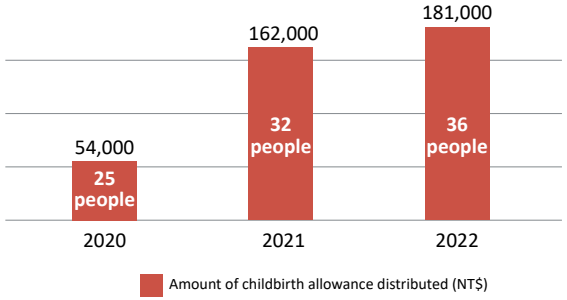
Employee Benefits [401-2]

Item / Region	Taiwan	China
Profit and Achievement Sharing (Applicable to full-time employees)	• Employee bonus (depending on operational and individual performance in the current year) • Production performance bonus, operational performance bonus, and patent development bonus • Recognition for outstanding R&D personnel, senior employees, and top-performing employees • Employee stock ownership (to be implemented whenever appropriate)	• Employee bonus (depending on operational and individual performance in the current year) • Production performance bonus, operational performance bonus, and patent development bonus • Recognition for outstanding R&D personnel, senior employees, and top-performing employees
Comprehensive Employee Care	• Free group insurance for all employees, accident insurance for expatriates and their dependents, overseas travel insurance, and regular consultation services from group insurance brokers at Coretronic plants • Annual health checkups (better than required by law), employee health management, comfortable recreational space, and professional medical consultation • Comprehensive retirement system and workplace conditions with gender equality • Flexible working hours, transport service, and factory shuttle bus service • Friendly parking spaces for injured and sick employees	• Free group insurance for all employees and regular consultation services from group insurance brokers at Coretronic plants • Employee health management, comfortable recreational space, and professional medical consultation • Workplace conditions with gender equality • Flexible working hours, transport service, and factory shuttle bus service
Various Benefits	• Cash vouchers for Labor Day, Mid-autumn Festival, and Dragon Boat Festival, and birthday gift vouchers • Marriage allowance, childbirth allowance, travel subsidies, hospitalization allowance, condolence allowance, miscarriage consolation allowance, and club subsidies • Family day, club activities, and year-end annual dinner • Canteen, smart café, convenience store, employee recreation center, multipurpose employee fitness center, and yoga classroom • Free breakfast and afternoon tea once a month, as well as two movie tickets per person each year • Organic vegetable boxes on a regular basis	• Cash voucher for Mid-autumn Festival and birthday gift voucher • Cash gifts for marriage and childbirth, travel subsidies, as well as funeral and condolence allowance • Year-end annual dinner and quarterly recreational activities • Canteen, convenience store, and employee service center
Women's Care	• Parental leave, family care leave, maternity leave, paternity leave, menstrual leave, and prenatal checkup leave • Breastfeeding room • Indoor parking spaces for pregnant employees • Affiliated nurseries and kindergartens • Priority access to meal pick-up for pregnant employees	• Maternity leave, paternity leave, and prenatal checkup leave • Breastfeeding room • Indoor parking spaces for pregnant employees • Priority access to meal pick-up for pregnant employees • Half-day off for female employees on International Women's Day
Better leave Benefits than Those required by Law	• Golden Week: Five-day paid leave • Volunteer leave: Employees participating in volunteer activities organized by Coretronic during holidays are entitled to volunteer leave for the same number of hours spent on such activities with no upper limit to leave application hours each year.	None

Allowances and Subsidies

Item / Region	Taiwan	China
Childbirth Allowance	Each employee and his/her spouse can apply for this allowance, where an allowance of NT$5,000 is granted for each child. In the event of more than one child delivered in a single birth event, an additional allowance of NT$1,000 is granted for each child delivered.	Each employee and his/her spouse can apply for this allowance, where an allowance of RMB 100 is granted for each child. In the event of more than one child delivered in a single birth event, an additional allowance of RMB 100 is granted for each child delivered.
Marriage Allowance	NT$2,000 per person	RMB 200 per person
Miscarriage Consolation Allowance	NT$2,000 per time (unlimited)	None
Travel Subsidy	NT$3,000 per person	None

Distribution of Childbirth Allowance in Taiwan from 2020 to 2022

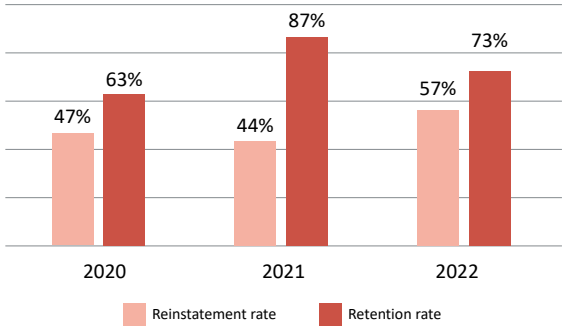


Parental Leave [401-3]

Gender / Item	Male	Female	Total
A. Number of employees eligible for parental leave	108	84	192
B. Number of employees who applied for parental leave	1	11	12
C. Number of employees to be reinstated after parental leave	4	17	21
D. Number of employees reinstated after parental leave	2	10	12
E. Number of employees reinstated after parental leave in 2021	3	8	11
F. Number of employees who remained on the job one year upon reinstatement after parental leave in 2021	3	5	8
G. Reinstatement rate (D/C)	50%	59%	57%
H. Retention rate (F/E)	100%	63%	73%

Note 1: The statistics on parental leave in the table above include employees in Taiwan who are eligible for parental leave between 2019 and 2022.
Note 2: Parental leave is not available in China.

Parental Leave in Taiwan from 2020 to 2022



Retirement [201-3]

- For employees in Taiwan on the whole, we make monthly contributions to employees' pension accounts in accordance with the Labor Standards Act and the Labor Pension Act. For employees who meet the retirement requirements under the old pension system, we make contributions in full amount as pension reserve funds to our company's pension account in accordance with the relevant laws and regulations, which is sufficient to pay pension to eligible employees retiring in the current year, so as to protect the rights of retiring employees.
- For employees in China, we make monthly contributions to the endowment insurance for employees in accordance with the "Social Insurance Law of the People's Republic of China" and the "Provisions of Jiangsu Province on Basic Old-Age Insurance for Enterprise Employees."
- For top-performing senior employees who have applied for retirement, we invite them to serve as consultants, with the intention of passing on their extensive experience to other employees. This initiative not only enables retired employees to offer us professional consulting services, but also provides them with a stage to contribute to the development of our company on an ongoing basis.

Item / Region		Taiwan	Kunshan	Wujiang
Percentage of Pension Contribution	Employer	Old pension system: 2% New pension system: 6%	16%	16%
	Employee	Old pension system: 0% New pension system: 0% ~6%	8%	8%
Pension Plan		Old pension system: Company pension account New pension system: Personal pension account	Endowment insurance (employee account)	

▶ LOHAS Workplace

129 activities with the participation of 51,551 people

Mid-autumn Brisk Walk, Online Barbecue Battle, and Jade Rabbit Game

The Chunan Plant organized the "Brisk Walking via App" activity, which replaced barbecue in real life with online barbecue. In this activity, participants had the opportunity to win prizes as long as they completed the exercise goals specified in the barbecue nine-box grid and connected the boxes. This activity was aimed at encouraging employees to celebrate the Mid-autumn Festival in a low-carbon and healthy way. A total of **259** employees took part in this activity, representing a **90%** participation rate at the Chunan Plant.

The Headquarters organized the "Jade Rabbit Game," in which participants could win PX Mart gift vouchers by pushing the Jade Rabbit doll into the designated spot. This activity not only enabled employees to move their body during working hours, but also enhanced the festive atmosphere and invigorated relationships among employees. A total of **96** employees took part in this activity.

Halloween Decoration Fun

Employees were invited to showcase their creativity in "monster beauty" and decorate the workplace in teams based on the Halloween theme, with the intention of enlivening the mood at all departments and creating a Halloween atmosphere. The top three decorations were selected via an online poll, with gift vouchers awarded to the winning teams. A total of six teams took part in this activity and garnered up to **6,041 votes** in total.

Cycling around Sun Moon Lake

According to the results of the "Activity Favorability Survey," the number one physical activity that Coretronic employees were interested in was the "One-day Trip." Therefore, in late autumn and early winter, our employees and their families were invited to cycle around Sun Moon Lake, enjoy the comfortable environment in the area, savor local specialties, and experience a wonderful tea time by the lake, which successfully bolstered relationships among employees. A total of **192** employees and their dependents participated in this event and gave an average satisfaction score of **9.4 points** (out of 10 points).

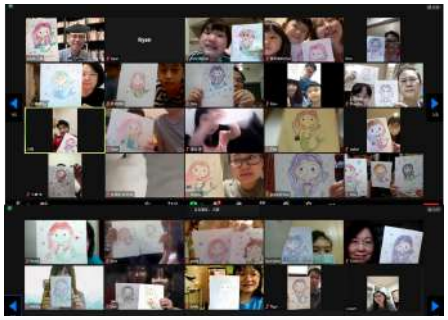
Tree Planting and Care

In conjunction with the tree planting activities organized by the Forestry Bureau, a tree planting instructor was invited to not only teach Coretronic employees the correct method to plant trees and explain the ways to care for trees, but also guide them to complete the process of planting a tree through a series of steps from soil digging to soil covering. A total of **120** trees were planted by **25** outstanding employees and new employees at Coretronic.

Parent-Child Illustration Online Class

Seeing a pattern come to life on paper through a series of steps from sketching and finalizing an illustration to coloring in 60 minutes not only brings a sense of satisfaction and achievement, but also serves as a great way to relax the body and mind.

Anyone with no foundation in art and talent in painting could easily pick up illustration skills in this class, and have a good time painting with their family after completing the class. The participants in this class created **100** pieces of artwork in total and gave an average satisfaction score of **9.7 points** (out of 10 points).



Handmade Love on Mother's Day and Father's Day

A handicraft instructor was invited to conduct "clasp case bag" and "key and coin pouch" handicraft classes, in which employees were introduced to leather and learned leather sewing skills so that they can quickly pick up these skills and make their own clasp case bags and key and coin pouches. A total of **215** employees attended these classes and gave a satisfaction score of over **9.5 points** (out of 10 points).

06 Friendly Workplace

6.1 Workforce Overview
6.2 Human Rights Management
6.3 Remuneration and Benefits
6.4 Communication Channels
6.5 Talent Development
6.6 Health Care
6.7 Safe Workplace

Material Topic
Labor and Management Relations

GRI
Employment

03 Good Health And Well-Being

08 Decent Work And Economic Growth

10 Reduce Inequalities

6.4 Communication Channels 2-25, 2-26, 2-29, 3-3, 402-1

Boundary
Coretronic plants in Taiwan and China (Kunshan and Wujiang plants)

Materiality
While companies need employees to achieve operational performance, employees also need companies to provide a stage for them to showcase their abilities and earn a living. It takes both parties to establish a sound labor-management relationship with mutual trust.

Strategy
- Hold labor-management meetings on a quarterly basis in Taiwan.
- Hold BU (business unit) communication meetings on an annual basis.
- Establish diversified and smooth two-way communication channels.
- Notify employees of major changes in operations at least four weeks in advance.

Evaluation
Conduct annual employee opinion/satisfaction surveys in Taiwan and Wujiang plants.

Performance
- A total of 16 labor-management meetings were held in Taiwan.
- An annual employee opinion survey was conducted in Taiwan, with an 88% participation rate among employees.
- An annual employee opinion survey was conducted in Wujiang plants, with a 100% participation rate among indirect employees and a 79% participation rate among direct employees.
- The Visual Solutions Business Group in Taiwan held two annual meetings, which saw the participation of 224 people.
- The Energy Saving Business Group in Taiwan held three BU communication meetings, which saw the participation of 118 people.

Target
- 2023: Carry out annual employee opinion surveys and then conduct necessary communication after compiling employees' opinions, as well as perform annual labor rights risk identification.
- 2024-2026: Include employee opinions in the agenda of management meetings, so that management receives stakeholders' recommendations to carry out corresponding assessments.

<table>
<tr><th>Communication Channel</th><th>Plant</th><th colspan="4">Description / Performance in 2022</th></tr>
<tr><td>Labor-management meeting</td><td>Taiwan</td><td colspan="4">Labor-management meetings are convened once every quarter. In 2022, a total of 16 labor-management meetings were convened to report the operating status of each plant, employees' problems, and corresponding improvement measures.</td></tr>
<tr><td></td><td>Kunshan</td><td colspan="4">Labor-management meetings are convened occasionally. In 2022, a total of 15 meetings were held by the Employee Welfare Committee to learn about employees' life and work-related problems and address their problems, so that they can concentrate on their work, thereby ensuring smooth production and on-time delivery.</td></tr>
<tr><td>Employee Welfare Committee meeting</td><td>Taiwan and China</td><td colspan="4">The Employee Welfare Committee meets at least once every quarter. In 2022, a total of 15 meetings were convened by the Employee Welfare Committee to discuss the operations of the committee and its future activity plans, carry out reviews based on the results of activity satisfaction surveys, and develop improvement measures.</td></tr>
<tr><td>Mailbox</td><td>Taiwan
Kunshan
Wujiang</td><td>8585@coretronic.com
1885@coretronic.com.cn
6885@coretronic.com</td><td rowspan="2">Taiwan
Number of complaints: 3
Complaint issues: Dining and IT equipment
Closure rate: 100%</td><td rowspan="2">Kunshan
Number of complaints: 68
Complaint issues: Labor-management relations, welfare activities, and interpersonal relations in the workplace
Closure rate: 100% (complaints must be closed within one month after they are filed)</td><td rowspan="2">Wujiang
Number of complaints: 84
Complaint issues: Labor-management relations, dining and dormitory, remuneration and benefits
Closure rate: 100% (complaints must be closed within one month after they are filed)</td></tr>
<tr><td>Hotline</td><td>Taiwan
Kunshan
Wujiang</td><td>886-37-777000 #8585; 886-800-299-988
86-512-57360000 #1885
86-512-85168838 #4885; 86-512-63828588 #6885</td></tr>
<tr><td>Physical suggestion mailbox</td><td>Taiwan and China</td><td colspan="3">Physical suggestion mailboxes are placed on each floor of buildings, at the entrance of workshops, and in the dormitories at each plant.</td><td>The human resource unit at each plant not only conducts and coordinates two-way communication with employees and the units involved in their opinions, but also makes improvements on an ongoing basis and addresses employees' complaints while maintaining the smooth operation of communication channels with employees.</td></tr>
<tr><td>Annual employee opinion survey</td><td>Taiwan</td><td colspan="4">

Indirect employees: Indirect employees can express their opinions on their job contents, the work environment, and our company in the "Annual Employee Suggestion" field on the online performance appraisal system.
Direct employees: One face-to-face communication meeting was held with direct employees who underwent paper-based performance appraisal.
Survey results: 88% of Coretronic employees took part in the survey, where 322 of them provided valuable suggestions, representing a 23% proposal rate. Each year, the human resource unit compiles the top three issues at each sub-business group and submits them to the executive vice president of each business group for reference. Any issue that needs to be addressed by the administrative unit will be forwarded to the relevant unit for subsequent improvement and evaluation.
Improvement measures:

<table>
<tr><th>Employee Recommendation</th><th>Improvement Measure in 2022</th></tr>
<tr><td>Provide employees with ergonomic office chairs</td><td>A total of 1,400 ergonomic office chairs were brought in to fully replace old office chairs.</td></tr>
<tr><td>Provide free coffee for employees</td><td>All plants in Taiwan provided free coffee for employees, while three new coffee machines were installed for use by employees at the Headquarters.</td></tr>
<tr><td>Fix uneven roads at the entrance and exit of the Chunan Plant and install additional descending devices at Tainan Plant 2</td><td>Improvements have been made in collaboration with the Chunan Township Office, factories around the Chunan Plant, and the factory affairs department at both the Chunan Plant and Tainan Plant 2.</td></tr>
<tr><td>Set up additional scooter parking spaces and signage in the parking lot at Tainan Plant 2</td><td>A total of 405 indoor parking spaces for scooters have been added to the parking lot at Tainan Plant 2.</td></tr>
<tr><td>Replace moldy ceilings at Headquarters caused by aging building and humid weather</td><td>The health management unit at the Headquarters performed assessments with resident doctors from National Taiwan University Hospital Hsinchu Branch, while planning was conducted by both the Environment, Safety and Health Center and the Factory Affairs Department at the Headquarters. Replacement works commenced in 2022 and were scheduled for completion in January 2023.</td></tr>
</table>
</td></tr>
<tr><td></td><td>Wujiang</td><td colspan="4">For different types of employees, annual employee opinion surveys are conducted using different questionnaire items. The results of these surveys are detailed as follows:

Indirect employees: The "Annual Employee Suggestions" field was added to the online performance appraisal system, so that employees who took part in online performance appraisal can express their opinions on their job contents, the work environment, and our company. The participation rate among indirect employees excluding probationary employees, short-term interns, employees with long-term work injuries, and employees on leave without pay who did not participate in the appraisal, was 100%, with a total of 54 recommendations for improvement collected in the survey. Coretronic continues to track the status of improvements in response to the types of problems raised by employees and the improvement period designated for these problems.
Direct employees: The participation rate among direct employees was 79%, with a total of 14 recommendations for improvement collected in the survey. According to the survey results, employees were more satisfied with the abundance of communication channels we provide and the speed of solving problems. On the other hand, they also proposed a number of recommendations for improvement, such that ensuring the freshness of fruits for employees, enabling employees to check their pay and attendance statuses via WeChat, increasing the number of friendly workplace activities, and setting up a channel for direct employees to apply for resignation online.
</td></tr>
</table>

Communication Channel	Plant	Description	Performance in 2022
Annual meeting	Taiwan	In 2022, a total of 2 annual meetings were convened by the Visual Solutions Business Group, where the head of each unit explained its development strategies and directions for the next six months to colleagues. A total of 224 employees attended these meetings and discussed 21 issues in these meetings.	
BU communication meeting	Taiwan	In 2022, a total of 3 BU communication meetings were convened by the Energy Saving Business Group to explain its operations strategies and directions, the areas of concern to customers, and its future prospects. A total of 118 employees attended these meetings.	
Coretronic APP	Taiwan and China	• The Coretronic app is an app designed exclusively for Coretronic employees that is equipped with a series of features, including company directory, push notifications (announcements), document approval, affiliated store discounts, café ordering and order pickup notification, meeting room finder, parking space finder, environmental education videos, and mental health observation station. • In light of the COVID-19 pandemic, other useful functions such as clock-in, clock-out system, recording of body temperature, weekly COVID-19 prevention and control surveys, and COVID-19 vaccination data have also been added to the app to enhance the effectiveness of COVID-19 prevention and control.	
NEW Communication platform on LINE	Taiwan	Production line operators can obtain information about Coretronic and ask questions in real time using this platform. The relevant units will respond to their questions and offer assistance within two days.	
Employee assistance program (EAP)	Taiwan	We provide the 0800 external professional consulting service hotline, which enables employees to seek consultation on problems related to family and marriage, parenting, interpersonal relations, personal emotions, legal advice on purchase and sale disputes, traffic accident settlement, inheritance of property, civil and criminal cases, and management free of charge. This service saw the participation of 39 people in 2022.	
Newcomers forum	Taiwan	For probationary employees, newcomers forums are held once every quarter, where various games and activities are carried out in order for new employees to know each other better and learn about their respective departments. Moreover, a performance management course is also conducted exclusively for new employees so that they can establish a better understanding of Coretronic's performance rating and system regulations through this course.	
NEW Newcomer connection program	Taiwan	• Newcomers will undergo three stages in this program, namely adapting to the environment, learning while working, and probationary evaluation, over a 12-week period after they report for duty, so that they can swiftly integrate into their respective teams and successfully pass the three-month probationary period. • We have put in place a two-way feedback mechanism, which comprises a newcomer satisfaction survey and questionnaire, and mentors' observations and feedback on newcomers' performance over the three-month probationary period.	
Employee information portal (EIP)	Taiwan and China	Various types of announcements and information on rules and regulations, resource reservations, joint operations, and group insurance are uploaded onto Coretronic's employee information portal (EIP).	
Employee forum website	Taiwan	The employee forum website includes various types of discussion areas such as flea market, charitable information, and living information.	
Employee Welfare Committee website	Taiwan	The Employee Welfare Committee website shares information on the Employee Welfare Committee, clubs, recreational and leisure activities, company-exclusive discounts, and affiliated stores.	
Employee services on WeChat	Wujiang	We have opened a WeChat public account for employee services with a variety of contents, including personnel workflow, the latest information, pay and benefits, employee complaints, and employee training. The public account's WeChat posts are updated on a regular basis.	
Employee Assistance Day	Kunshan	7 sessions of Employee Assistance Day were held in 2022. In an effort to encourage employees to express their ideas as well as listen to other opinions and accept them, employees who attended the event were not only given small gifts on the spot, but can also replace their ID cards and lanyards at the event venue.	
Employee Appreciation Day	Wujiang	In 2022, 4 sessions of Employee Appreciation Day were held to help employees address problems related to compensation, performance appraisal, insurance, canteen, and dormitory, thereby increasing employee satisfaction. Employees who attended the event were given small gifts on the spot.	
Assistant forum	Wujiang	Assistant forums are held once every six months. In 2022, a total of 2 assistant forums were held to improve workflow methods, simplify non-essential processes, and strengthen communication with assistants to ensure a smoother workflow.	
Supervisor forum	Wujiang	In 2022, a total of 4 supervisor forums were held to communicate the difficulties faced by supervisors in daily first-line management work, invite the heads of various departments to address their problems on the spot, and educate supervisors on personnel policies.	
President's forum	Wujiang	In 2022, a total of 2 president's forums were held to communicate the difficulties faced by supervisors in daily first-line management work, invite the President or the heads of various departments to address their problems on the spot, and educate supervisors on personnel policies.	

06 Friendly Workplace

6.1 Workforce Overview
6.2 Human Rights Management
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6.5 Talent Development
6.6 Health Care
6.7 Safe Workplace

6.5 Training and Eductation [3-3]

Boundary
Coretronic plants in Taiwan and China (Kunshan and Wujiang plants)

Materiality
People are the foundation of a company. By building a training system with diversified development, a company can continuously enhance the competitiveness of both employees and managers through training and development mechanisms at different levels in hopes of achieving corporate sustainability.

Strategy
- Stimulate the potential of employees and develop high-quality talents with a combination of theories and practices based on operational needs, as well as build a learning organization culture and continuously accumulate our intellectual capital through the transfer and management of knowledge and experience, with a view to achieving corporate sustainability.
- Actively engage in the re-engineering of employee competencies, as well as invigorate and bolster the organization of human resources with corporate sustainability as our core value, in order to assist employees in their career development.

Evaluation
Aside from having the human resource center and the talent development center to formulate annual plans in various areas such as corporate culture, youth training, and internal talent training, we also actively engage in the development of management talents to enhance succession planning and organization, as well as promote the establishment of self-initiated study groups among employees to create the atmosphere of a learning organization.

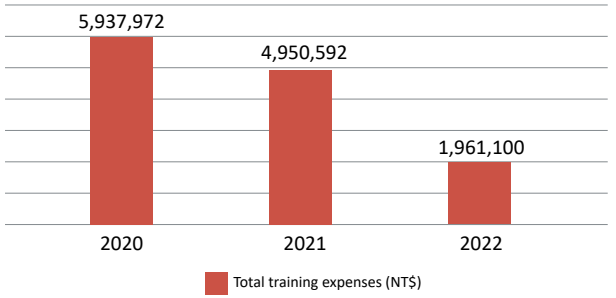
Performanc
- Plants in Taiwan conducted 21,114 person-hours of training in total, equivalent to 12.8 hours of training per person on average.
- Plants in China conducted 29,794 person-hours of training in total, equivalent to 8.1 hours of training per person on average.
- Won the HR Asia “Best Companies to Work for in Asia 2022.”
- Established the Core Competency Academy, which conducted eight courses including “Optical, Mechanical, and Electronic Training” and “Comprehensive Mentoring Skills.” These courses have seen the participation of 382 people.
- New Manager Training Program: This program assisted newly appointed department heads in mastering their roles and positions in the operations of the organization, and helped them quickly get on track with their roles. A total of five courses were conducted in this program, which saw the participation of 164 people in total and a 44% increase in skills performance during post-training evaluation.
- Leadership Study Group: This study group developed middle and senior management’s leadership skills and formulated seven action plans to be continuously implemented at various business units.
- Comprehensive Mentoring Skills Program: In this program, mentors were guided to implement different mentoring methods according to newcomers’ stages of adaptation. This program trained a total of 32 mentors, who produced 19 newcomer lesson plans after completing this program as internal teaching SOP at their respective departments.
- International Talent Development: The TOEIC 700 Intensive Course was conducted, where 50% of the participants in this course successfully reached the English proficiency threshold for promotion.

Target
- 2023: Develop creative solutions to problems in talent management and demonstrate concrete results, as well as expand the integration of digital resources into self-directed learning through training system updates.
- 2024-2026: Continuously develop an all-round career map and learning blueprint to cultivate management talents, thereby laying the groundwork for corporate sustainability.

By upholding the philosophy that "people are the most important asset of a company," we not only bolster employees' job knowledge and skills through a variety of channels and platforms, but also allow employees to experience the R.I.S.E. concept in corporate culture (i.e., responsibility, innovation, sustainability, and entrepreneurship) and develop common values and attitudes among them through experiential learning and action learning. In addition, employees can attend systematic training programs to become experts in management or specific professions, and also realize their dreams on the international stage through Coretronic's global expansion plans, job rotations in different regions, and foreign language studies.

According to the trend of training performance in Taiwan from 2020 to 2022, we spent a total of NT$1,961,100 on employee training in 2022, down from NT$2,989,492 in 2021. However, there was a substantial increase in the number of trainees and training hours in 2022 due to the emergence of online training courses and the reduction of in-person courses driven by the COVID-19 pandemic, which in turn enabled sharing of training resources among various plants. At the same time, we also conducted internal lecturer training programs aimed at continuously guiding employees to serve as internal lecturers, while making efforts to facilitate the transfer of practical and professional skills and experience through the coaching mechanism, which not only helps subordinates develop their competencies, but also greatly reduces training expenses. Meanwhile, the number of trainees and training hours at plants in China in 2022 were 12,761 people and 29,794 person-hours, respectively, which incurred RMB174,902 in training expenses.

Training Expenses in Taiwan from 2020 to 2022

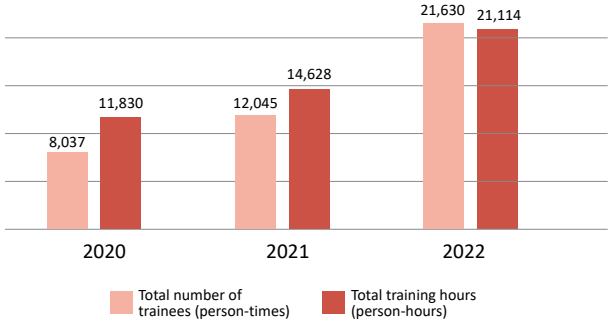


Average Hours of Training per Employee in 2022 [404-1]

Region	Gender	Job Grade[1]					Job Category				
		Senior Management	Middle Management	First-line Management	Non-management Personnel	Total	R&D Personnel	Sales Personnel	Administrative Personnel	Production Personnel	Total
Taiwan	Male	6.3	12.9	18.0	10.0	11.3	12.6	17.3	6.9	9.5	11.3
	Female	4.2	9.2	19.4	14.8	14.7	10.6	14.3	11.4	17.6	14.7
	Total	5.9	12.2	18.4	12.3	12.8	12.3	15.4	9.7	14.2	12.8
China	Male	1.8	10.6	22.2	5.9	7.2	17.9	16.9	11.7	6.2	7.2
	Female	1.0	13.1	27.1	8.0	9.5	14.8	19.1	20.1	7.4	9.5
	Total	1.7	11.2	24.1	6.8	8.1	17.0	18.7	17.2	6.6	8.1

1: Senior management refers to leaders of business groups, sub-business groups, business units, independent centers, and centers, as well as independent senior officers. Middle management refers to division heads. First-line management refers to department heads and section chiefs. Non-management personnel refer to the remaining employees.

Number of Trainees and Training hours in Taiwan from 2020 to 2022



Training and Development Channels [404-2]

As continuous innovation and excellent quality are two of the most important competitive advantages, we design and develop a variety of learning tools and activities to form the best training portfolio. Employees can adopt different training channels, such as internal training (i.e., on-the-job training, self-directed learning, and digital learning) and external training, based on their personal time and learning style to meet their job and personal development needs.

For employees whose career has ended or whose employment is terminated, we not only issue proof of employment for them, but also provide them with information on career transition assistance programs hosted by government agencies to ensure that they are continuously employable or help them manage their lives during retirement.

Training and Development Programs (with a full score of 10 points in program satisfaction surveys)

▶ Special Programs

Program Title	Content	Performance in 2022
NEW **RISEMON Corporate Culture Experience Camp**	In an effort to enhance new employees' sense of identification with the organization, we reorganize the modules for the Corporate Culture Experience Camp by adopting the ideas in Pokémon games and integrating various elements such as gym battles and RISEMON cards into the modules to swiftly catch the eye of the new generation of participants.	• A total of three such camps were held and participated by 94 people who gave a satisfaction score of 9.2 points. • The majority of participants revealed that they were able to establish a better understanding of the RISE spirit through the activities in the camp, and thus bolster their sense of identification with Coretronic.
Internal Lecturer Coaching Class	• The Human Resource Department provides one-on-one coaching for internal lecturers specializing in professional competencies to develop competency modules and materials and conduct internal courses • Lecturers design suitable course contents by competency with the participants and carry out teaching using a variety of methods.	• We have developed the public edition of teaching materials for a total of five R&D competency courses. • A total of 134 people attended the R&D competency courses and gave a satisfaction score of 9.4 points. The participants reported that they were able to apply what they have learned from these courses in their work.
NEW **TTT Internal Lecturer Training Program**	• With a view to raising awareness of the need to cultivate others among managers and top-performing employees, an internal lecturer training program is conducted to assist employees in planning teaching activities and learning a variety of teaching methods. • The participants in this program will conduct courses in 2023 to impart knowledge in professional fields within our company.	• We conducted the internal lecturer training program once in 2022, which successfully trained a total of 24 internal lecturers. The participants in this program gave a satisfaction score of 9.5 points. • A thanksgiving event was held on Teacher's Day, where a total of 192 thank-you cards were collected and given to internal lecturers.
NEW **Knowledge to Go in the Pocket**	A variety of self-learning channels have been established so that employees can learn anytime and anywhere using their computers or mobile devices.	• Five selected articles spanning four major themes, namely "General Competency," "Leadership Management," "Professional Skills," and "International Perspectives," were published on a biweekly basis. • This program garnered a total of 528 views, while 146 people took on the challenges in this program.
Core Competency Academy - Comprehensive Mentoring Skills	The "Comprehensive Mentoring Skills" handbook has been developed to compile digital learning resource and roll out a self-learning development map.	A total three competency micro-courses covering "influence," "cross-team collaboration," and "negotiation skills" were conducted with a total of 248 views.
Enterprise Mentoring Class (Kunshan plants)	With the aim of encouraging employees to develop a diverse range of skills, enhancing their knowledge and skill reserves, and thus helping our company nurture and retain a variety of technical talents, we have applied to the government and obtained the qualifications to conduct courses and issue three types of skills certificates for electronic equipment assembly and alignment technician (intermediate level), computer programmer (advanced level), and draughtsman (intermediate level).	We conducted the "Draughtsman (Intermediate Level)) Course" and the "Computer Programmer (Advanced Level) Course," which was attended by 37 people in total who also received a vocational skills certificate after completing these courses. We received a subsidy of RMB 25,350 from the Chinese government for conducting these courses.

▶ International Talent Training

Since 2011, we have made English language proficiency as a requirement for promotion and clearly set out the English proficiency criteria for each job grade and job category.

Program Title	Content	Performance in 2022
General English Program	In an effort to meet employees' oral language needs, we have set up an AI-based oral language practice mechanism in combination with oral language resources on online English platforms to thematically improve employees' English language proficiency.	• A total of 26 people participated in this program. According to the results of the program satisfaction survey, the participants gave a score of 8.1 points for the usefulness of this program to improving their listening skills. • Over 70% of the participants in this program have made progress and reached Level 1 and above after more than six months of learning.
NEW **International Talent Development Program**	With the aim of effectively keeping tabs on employees' foreign language skills, we improve employees' English language proficiency by holding an English proficiency test and implementing corresponding measures to promote the use of English language. • The "TOEIC 700 Intensive Course" is conducted to provide video resources for learning English. • The rules and procedures for foreign language subsidy applications have been formulated so that employees can arrange their own learning plans. • The "Weekly TOEIC Quiz" conducted to create an English learning environment within our company.	• TOEIC 700 Intensive Course: The participants in this course gave a satisfaction score of 9.3 points. Around 50% of the participants successfully fulfilled the English language proficiency requirement for promotion. • Weekly TOEIC Quiz: This activity was conducted over the course of six weeks, which saw the participation of 877 people in total.
NEW **Korean Language Enhancement Program**	In order to establish closer ties with our South Korean customers, we have introduced a six-month Korean language beginner's course so that employees can learn the correct Korean pronunciation and carry out basic conversations in Korean.	The participants in this program gave a satisfaction score of 9.3 points. Around 80% of the participants met the learning outcomes, thereby meeting the expectations of this program.

Management Talent Training

Program Title	Content	Performance in 2022
NEW **Leadership Study Group**	With this study group in place, senior management leads middle management to read books together, with the intention of building a common language and tacit understanding within departments while facilitating communication and bolstering a sense of belonging among departments. Managers are also given specific roles in this study group to enhance their leadership skills on an ongoing basis.	• This study group guided its members to finish reading a series of books and came up with 7 action plans that were applicable to their work. • This study group held a total of 15 reading sessions, which not only helped to establish an informal channel of communication within departments, but also enhanced cohesion within the organization.
New Supervisor Training Program (for division level)	Centered on the six skills required of newly appointed section chiefs and division managers, this program is conducted in the form of a golf tournament, where it features 54 common scenarios in organizational communication. In this program, 18 management skills are imparted to the participants with the aim of developing an integrated management language within the organization.	• The participants in this program gave a satisfaction score of 9.7% and recorded a 100% post-program action plan delivery rate. • The results of evaluation conducted by the participants' managers three months after the training program has ended confirmed that the participants' management skills have improved significantly. • The participants also shared what they have learned from this program at their respective departments, which in turn expanded the benefits of learning the featured skills in this program.
NEW **New Manager Training Program (for department level)**	• This program assists newly appointed department managers in learning about their roles and positioning within the organization. • This program involves five stages of training based on the skills required for daily management, aimed at gradually building the basic management skills of managers and helping them get on track with their roles.	• We conducted five sessions of this program, which saw the participation of 164 people over 606 person-hours in total. • The participants in this program gave a satisfaction score of 9.5 points and recorded a 44% increase in skills performance during post-training evaluation.
NEW **Comprehensive Mentoring Skills Program**	This program helps mentors understand their roles and responsibilities, master coaching and mentoring skills, and implement different mentoring methods according to newcomers' stages of adaptation, thereby effectively enhancing mentors' mentoring skills.	• A kick-off meeting was held by senior management to explain their reasons for promoting mentoring and their expectations of mentoring. A total of 55 people attended the meeting. • The participants in this program gave a satisfaction score of 9.5 points, including 9.5 points for the practicality and usefulness of the content of this program to their work. • This program trained a total of 32 mentors, who produced 19 newcomer lesson plans after completing this program as internal teaching SOP at their respective departments. • The mentors were graded on their professional knowledge, teaching skills, as well as care and assistance for mentees based on the Youth's Employment Ultimate Program. They were given an overall score of 98 points.
Supervisor Academy (Wujiang plants)	First-line supervisors (new foremen): Training on basic management methods	• A total of 10 classes were conducted under this program, where the lecturers guided the participants to read manuals, discuss common first-line management issues, such as how to hold morning meetings effectively, how to deal with employee resignation, and how to handle leave applications, practice the ways to cope with these issues, and implement them after class. • A total of 393 people were trained in this program, which recorded a 100% participation and pass rates among them. The participants in this program gave a satisfaction score of 93 points.
Team Leader Training Camp (Kunshan plants)	• Management, general studies, production management, and practical courses are conducted in this camp. • This camp aims to improve the overall abilities of team leaders, strengthen cohesion among team leaders within our company, and boost their competitiveness.	• A total of 11 courses were conducted in this camp. • We organized three sessions of the Team Leader Training Camp, which trained a total of 70 people.

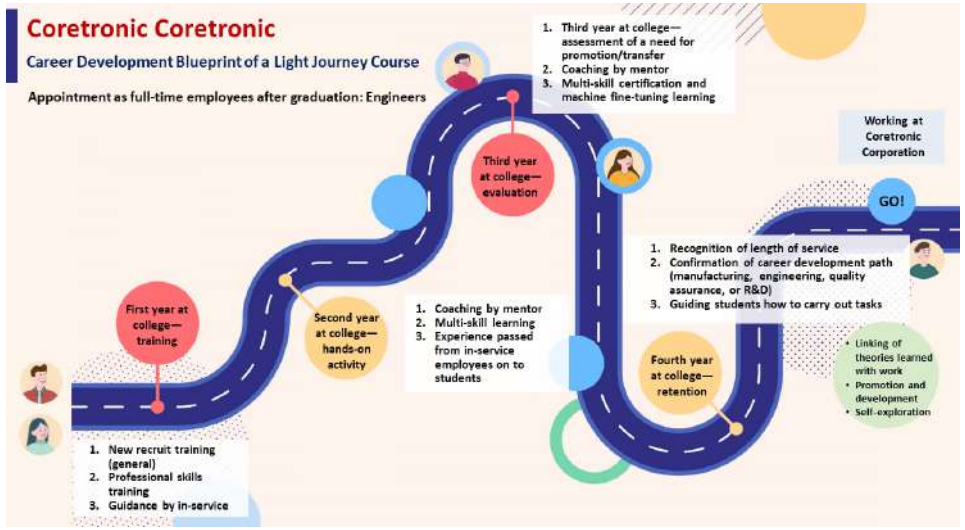
Professional Talent Training

Program Title	Content	Performance in 2022
NEW **Automotive Product Knowledge Training**	This program raises employees' awareness of "zero defect" and enhance their knowledge on product development, process design, supplier control, as well as automotive specifications and processes, with a view to enhancing quality management for automotive products.	• A total of 11 courses, including interpretations of IATF 16949/VDA 6.3 clauses, the five core tools, and auditor training, were conducted in this program. • The participants in this program gave a satisfaction score of 9.1 points, including 9.0 points for the practicality and usefulness of the content of this program to their work as they were able to directly apply what they have learned from this program to their work and the amendment of clauses in ISO standards. We are expected to be granted the IATF 16949 certification in 2023.
Core Competency Academy	• In this program, a competency map is developed as the framework for subsequent recruitment and selection, training and development, performance management, and organizational design to nurture core talents. • This program continues to focus on the development of knowledge (K), skills (S), and attitude (A) required for each job category (e.g., R&D, sales, administration, and operations) and each level. • The competency gap among employees is analyzed to identify the areas we need to develop and strengthen, so that we can formulate concrete action plans to enhance organizational effectiveness.	• We held discussions with internal experts on the competencies with the biggest gap among employees in each job category across the optical, mechanical, and electronic field and formulated a complete training roadmap for these competencies. A total of five R&D competency courses were conducted, which saw the participation of 134 people who gave a satisfaction score of 9.4 points. The participants revealed that these courses were practical as they were able to apply what they have learned. • We also took stock of employees' sales competencies and formulated a comprehensive training roadmap for the competencies with the biggest gap among employees. We are expected to conduct sales training programs in 2023.

Youth Empowerment

Cooperative Education and Industry-Academia Collaboration Program NEW

- Collaborating school and university: Chung Shan Industrial & Commercial School (CSIC) and Cheng Shiu University (CSU)
- Number of participants: 126
- Collaboration methods
  - ▶ Recruit overseas compatriot students for a three-year vocational senior high school in Taiwan and a four-year technical and vocational college/university after graduation in collaboration with the K-12 Education Administration under the Ministry of Education (MOE), the Overseas Community Affairs Council (OCAC), as well as CSIC and CSU.
  - ▶ Set up the "Journey of Light Program" to connect the curriculum and cultivate high-quality talents required for the development of the key industries in Taiwan, with a view to ensuring a stable supply of high-quality manpower.
- Measures
  - ▶ Designed the curriculum for the professional content required by Coretronic in collaboration with CSIC and CSU so that both theory and practice can go hand in hand.
  - ▶ Made a NT$400,000 donation to pay for COVID-19 isolation and quarantine expenses as well as related entry and resettlement costs in order to reduce the financial burden of overseas compatriot students.
  - ▶ Formulated a comprehensive development plan and establish a scholarship system aimed at enabling students with expertise to stay in their job and further studies, where each university student can receive a NT$240,000 scholarship, and also an additional bonus if the student stays in his/her job after graduation.



5th NTHU Enterprise Talent Development Program

- Collaborating university: National Tsing Hua University (NTHU)
- Number of participants: 11
- Collaboration methods: Coretronic's R&D team serves as instructors, aimed at guiding students to design products and plan projects on their own, enhance their professional knowledge, develop communication, coordination, and teamwork skills, and learn about Coretronic's operations in advance.
- Featured events:
  - ▶ A total of eight courses were conducted based on a series of themes, namely "Introduction to Projectors," "Quality Management," "Optical Specifications in Projectors," and "Operating Environment in Factories."
  - ▶ The participants in this program conducted the "Projector Market Questionnaire Survey" to understand students' projector preference and needs, and compiled respondents' desired product features. The results of data analysis were presented in the form of a dashboard and provided to Coretronic as a basis for future product development and improvements.
  - ▶ In September 2022, we organized the Enterprise Talent Development Program Exhibition at NTHU to showcase the achievements of this program. Aside from displaying the analysis results of the aforesaid survey, the exhibition was also equipped with Coretronic's interactive product - the LCT Light Curtain Touch Screen Solution - to present an interactive gaming experience to the visitors. Furthermore, the LCT Light Curtain Touch Screen Solution can track the touch trajectory through the built-in camera sensors and turn any wall into an interactive interface, which made this event more complete and intriguing.

NEW Performance highlights

- ▶ As the participants in this program established a deeper understanding of Coretronic, this event has successfully helped Coretronic build a good corporate image. Furthermore, 60 students who took part in the interactive experience session in this event also got to know more about Coretronic and learn about the future development potential of the projector industry.
- ▶ As of now, a total of 299 people has signed up for this program, where 59 students have been selected for collaboration. Specifically, one of these students have joined Coretronic as an employee for four years, and is currently a key talent being developed by Coretronic.

Summer Internship

- Number of interns: 14
- Collaboration method: Employees' children or undergraduate students in general are invited to undergo internship at Coretronic during summer vacation and provide them with practical training so that they learn about the workplace and the different skills they require at work in advance. Their direct supervisors not only provide interns with professional guidance in a comprehensive manner, but also offer them all-around advice on their careers and studies in the future.
- Featured events:
  - In light of the COVID-19 pandemic, the "Completion Ceremony and Achievement Presentation" was held online with Microsoft Teams in order for students to demonstrate their summer vacation achievements and share their internship experience. The interns' supervisors were also invited to listen to their achievements and give them advice and encouragement.
  - The Corporate Culture Experience Camp was carried out with the intention of guiding interns to learn about Coretronic's corporate culture and get to know each other better through games so as to facilitate collaboration with them in the future.

4th Dream Walkers · Earn Your Future

- Collaborating university: Cheng Shiu University (CSU)
- Number of participants: 6
- Collaboration methods
  - Third-year students: NT$200,000 scholarship per student
  - Final-year students: One-year internship and NT$100,000 scholarship per student
- One-year internship
  - Each student is provided with free accommodation, higher pay than the minimum wage, and NT$100,000 scholarship.
  - Students can learn about Coretronic's products and design process at the Headquarters, as well as engineering and manufacturing processes at Tainan Plant 2.
  - With regular visits from university faculty members, Coretronic can work with CSU to jointly design courses, so that what students have learned can better meet the needs of the industry, thus realizing the goal of "employment upon graduation."
- Performance highlights
  - Five final-year students who were selected for this program in 2020 and 2021 became engineering assistants during the internship.
  - Since 2019, two students who were selected for this program have become full-time engineers at Coretronic after completing the one-year internship, thereby achieving the goal of this program.

Employment Explore Supporting Program for High School Graduates

- Target: Encourage high school graduates to explore and define their life direction through workplace, learning, and international experience.
- Number of participants: 2
- Collaboration method: The Taiwanese government provides each youth in this program with NT$10,000 per month for studies, employment or entrepreneurship. Coretronic offers youths in this program full-time positions.
- Performance highlights: A total of 10 openings were made available for youths in this program, where two of them were hired and have worked at Coretronic's Production Department and Engineering Department for a year.

MOE Industry-Academia Cooperative PhD Project NEW

- Target: Assist universities in fostering the integration of knowledge and action among doctoral candidates by establishing a system where dissertation research is jointly supervised by universities and industry, so as to cultivate practical R&D capabilities among doctoral candidates.
- Number of participants: 1
- Collaboration methods
  - Participants are required to take courses at the university in the first and second year of their doctoral studies, and then engage in corporate R&D in the third and fourth year before completing their dissertation in the fifth year.
  - Donate NT$200,000 to the university for cultivating participants in this program each year.
- Performance highlights: This program helped Coretronic advance R&D efforts in various key projects.

Performance Evaluation 404-3

We carry out performance appraisal twice a year. All employees at plants in Taiwan, except for employees on probation, leave without pay or fixed-term contracts, as well as all employees at plants in China, except for probationary employees, employees with long-term work-related injuries, short-term interns, and employees on leave without pay, are required to participate in performance appraisal. With Coretronic being a performance-oriented company, there is no issue of unequal treatment due to gender at our company.

Region	Gender	Job Grade [1]					Job Category				
		Senior Management	Middle Management	First-line Management	Non-management Personnel	Total	R&D Personnel	Sales Personnel	Administrative Personnel	Production Personnel	Total
Taiwan	Male	92%	97%	97%	93%	94%	97%	96%	92%	87%	94%
	Female	86%	100%	96%	95%	95%	90%	98%	96%	95%	95%
	Total	91%	98%	97%	94%	94%	96%	97%	95%	91%	94%
China	Male	100%	100%	99%	81%	82%	99%	100%	97%	81%	82%
	Female	100%	100%	100%	90%	91%	97%	100%	97%	90%	91%
	Total	100%	100%	100%	85%	86%	98%	100%	97%	84%	86%

1: Senior management refers to leaders of business groups, sub-business groups, business units, independent centers, and centers, as well as independent senior officers. Middle management refers to division heads. First-line management refers to department heads and section chiefs. Non-management personnel refer to the remaining employees.
2: The percentages shown in the table above are calculated using the total numbers of employees at plants in Taiwan and China as denominators.

06 Friendly Workplace

6.1 Workforce Overview
6.2 Human Rights Management
6.3 Remuneration and Benefits
6.4 Communication Channels
6.5 Talent Development
6.6 Health Care
6.7 Safe Workplace

Material Topic
Occupational Health and Safety

GRI
Occupational Health and Safety

03 Good Health And Well-Being

08 Decent Work And Economic Growth

10 Reduce Inequalities

6.6 Health Care [3-3]

Boundary
Coretronic plants in Taiwan and China (Kunshan and Wujiang plants) and contractors

Materiality
Coretronic provides employees with a safe workplace and ensure their physical and mental health, so that they can work with peace of mind and achieve outstanding performance.

Strategy
Continue to foster health promotion, reduce the risks of occupational disasters and pandemics, and create a safe and health workplace environment in compliance with the international occupational health and safety management system.

Evaluation
- The Safety and Environment Division formulates annual targets, budgets, and plans, which are submitted to the Occupational Safety and Health Committee for review, and implements relevant strategies to obtain the ISO 45001 Occupational Safety and Health Management Systems certification.
- In addition to implementing health protection measures based on employees' health problems and needs, the Health Management Department also develops annual health promotion plans and organizes a variety of health promotion activities.
- The Pandemic Response Team not only formulates and implements relevant COVID-19 prevention measures, but also provides employees the latest pandemic information and sufficient supplies for COVID-19 prevention

Performance
- We successfully obtained the ISO 45001 certification with a 100% pass rate.
- We conducted regular reviews of accidents on an annual basis and proposed prevention and improvements plans, which saw a 100% achievement rate.
- A total of 32 disaster response exercises and fire drills were carried out, which saw the participation of 8,696 people over 10,853 person-hours in total.
- The "iHealth Program" implemented with the aim of improving employees' metabolism with smart fitness equipment and exercise guidance from professional coaches. A total of 99 employees participated in this program, which saw a 92% exercise prescription achievement rate, a total weight loss of 88.4 kg, and a 55% decline in body fat among the participants in this program.
- A total of 40 health promotion activities were held, which saw the participation of 1,336 people in total.
- Up to 90.2% of employees and dispatched workers at Coretronic plants in Taiwan have received two doses of COVID-19 vaccine, which was **higher than** the average full vaccination rate across Taiwan. Meanwhile, 94.7% of employees at Coretronic plants in China were fully vaccinated, which was **higher than** the requirements of local government agencies.

Target
- 2023: Pass the ISO 45001:2018 certification process; maintain a record of less than 3 work-related injuries at Coretronic plants in Taiwan, less than 10 work-related injuries at Coretronic plants in China, and 0 work-related injury among contractors' employees; promote the Happy Mature Age Program, implement the Middle-aged and Elderly Employment Program, increase the number of health screening items, as well as carry out risk assessments, provide health guidance and consultation with doctors, and implement health promotion measures based on risk assessment results at Coretronic plants in Taiwan; organize health knowledge seminars, and hire professional doctors and coaches to provide medical consultation and fitness coaching services at Coretronic plants in China.
- 2024-2026: Pass the ISO 45001:2018 certification process; maintain a record of less than 3 work-related injuries at Coretronic plants in Taiwan, less than 10 work-related injuries at Coretronic plants in China, and 0 work-related injury among contractors' employees; as well as proactively organize a variety of health promotion activities, adopt e-health management, and also strive to promote good health behaviors to employees' families.

"How to add value to employees' health" has always been an issue of concern to us. With support and commitment from our management, we have created a friendly and healthy workplace while raising employees' health awareness, keeping tabs on employees' health data, and tracking and managing high-risk employees. We even continue to promote various health promotion measures despite disruptions caused by the COVID-19 pandemic. With "prevention of metabolic syndrome" as our primary target in 2022, we rolled out the "iHealth Program," an intelligent gym that runs on the uGym software developed by our subsidiary, uCare Medical Electronics, with the aim of cultivating an exercise habit among employees and encouraging them to exercise for a healthy body and mind in a systematic manner. In addition, we were awarded the work-life balance subsidy from the Ministry of Labor to hold stress relief classes for employees, thereby protecting employees' physical and mental health in a comprehensive manner.

Health Management [403-3]

▶ Annual health examination

- Taiwan plants: Annual health examination is conducted at a frequency higher than required by law. Employees with abnormal health examination results are immediately notified of their situation and given assistance in referring them to a doctor. At the same time, we also take the initiative to offer employees with a blood sugar level of more than 100mg/dl before meals free glycated hemoglobin tests to facilitate early detection and treatment. Since middle-aged and elderly employees are more prone to cardiovascular diseases, employees over 45 years old and those with stage 2 hypertension are provided with free electrocardiogram tests.
- Wujiang plants: Employees engaging in special operations (e.g., forklift operators, electrical and low-voltage electrical technicians, etc.) undergo annual health examination as required by the RBA. A total of 59 employees engaging in special operations underwent annual health examination in 2022.

▶ Annual health examination for employees engaging in special operations

- Taiwan plants: The health examination items for such employees in Taiwan include noise, lead, n-hexane, dust, cadmium, and nickel. A total of 86 employees engaging in special operations were examined for such items, representing a 100% participation rate.
- China plants: The health examination items for such employees in China include dust, acetone, butanone, benzene, toluene, xylene, n-heptane, isopropanol, methanol, cyclohexane, tin dioxide, noise, ionizing radiation, acrylic acid, laser radiation, ultraviolet radiation, and anhydrous ethanol. A total of 605 employees engaging in special operations were examined for such items, representing a 100% participation rate. For employees with abnormal health examination results, arrangements will be made for them to undergo re-examination and follow up. If such abnormal test results appear for two consecutive times and these items belong to occupational contraindications, the employee involved will be transferred to other positions so as to avoid health hazards arising from repeated exposure. In 2023, a total of 13 employees at Kunshan plants were transferred to other positions due to abnormal health examination results.

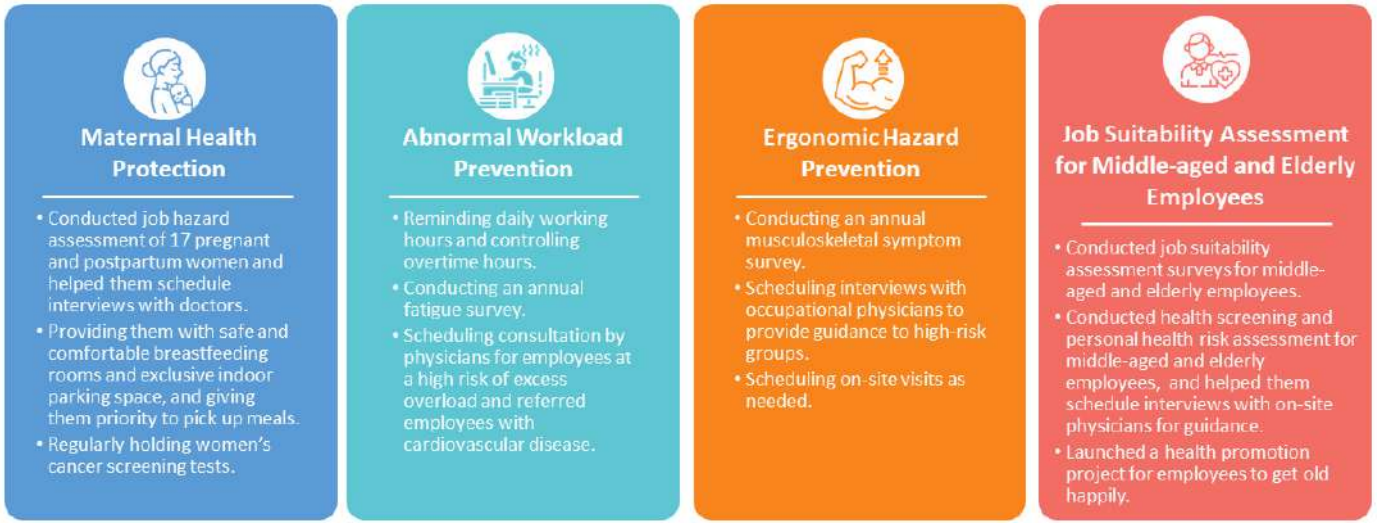
Health Protection [403-3, 403-10]

In line with emerging workplace health issues under the Occupational Safety and Health Act, we are working with occupational safety and health personnel and occupational disease specialists to jointly implement four programs in workers' physical and mental health management, ranging from hazard identification, risk assessment, and risk control to effectiveness evaluation, in hopes of effectively minimize the risks of exposure to hazards and occupational diseases among employees.

▶ Operations manuals are formulated in response of maternal health, human factors engineering, and abnormal workload (plants in Taiwan).

▶ Wujiang plants selected 22 types of high-risk jobs according to the results of human factors assessments, in order to provide health guidance and formulate improvement measures.

No cases of occupational diseases were reported at Coretronic in 2022.



▲ Health protection measures in Taiwan plants

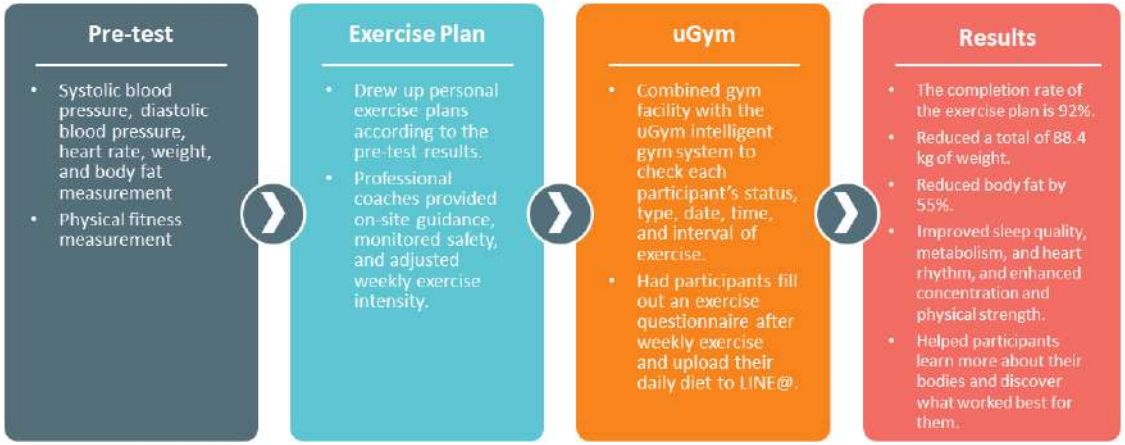
Health Promotion 403-6

40 activities with the participation of **1,335**

We continue to formulate annual health promotion programs based on annual health examination results and employees' health needs, and conduct various health promotion activities such as cancer screening for women, influenza vaccination, and nutrition and essential oil seminars, with a view to raising employees' health awareness and creating a healthy, lively, comfortable, and friendly workplace. Thanks to these initiatives, we were honored with the "Silver Award of 2022 Corporate Health Responsibility (CHR)" by CommonHealth Magazine.

▶ The "iHealth Program," an intelligent gym developed by Coretronic

According to employees' health examination results from 2018 to 2021, there has been a continuous rise in the proportion of employees with metabolic syndrome over the years. Since metabolic syndrome is closely connected to dietary and living habits, we can avoid threats from a host of chronic diseases if we take proactive efforts to correct the metabolic syndrome situation. In an effort to address the metabolic syndrome problem among our employees, we specifically invited 99 employees with metabolic syndrome to attend a total of five training sessions over a four-week period via the "iHealth Program," an intelligent gym that runs on the uGym software developed by our subsidiary, uCare Medical Electronics, with the aim of cultivating an exercise habit among employees and encouraging them to exercise for a healthy body and mind in a systematic manner, so as to maximize the benefits of a healthy workplace.



COVID-19 Prevention Measures [2-23]

2022 was a year with a staggering increase in the number of COVID-19 cases around the globe. Under the leadership of the CFO, who was also the pandemic prevention commander at Coretronic, the Pandemic Response Team continued to collect information on the COVID-19 pandemic, adjust relevant COVID-19 prevention measures on a rolling basis, and make group-wide announcements on COVID-19 prevention in accordance with the COVID-19 prevention policies promulgated by the Central Epidemic Command Center (CECC). At the same time, the Pandemic Response Team also continued to monitor employees' health status, encourage employees to get vaccinated, ensure that employees keep their environment clean and disinfected from time to time, remind employees to cut down on overseas travel, and provide them with COVID-19 travel kits to minimize the risk of COVID-19 infection and protect employees' health in a comprehensive manner.

▶ Monitor employees' health status

- Employees were continuously required to fill out the COVID-19 survey form and record their body temperatures on a daily basis. Any employees with discomfort and related symptoms were denied entry into plants and required to report their cases to the relevant authorities and seek medical treatment immediately.
- Employees who were diagnosed with COVID-19 were required to report their cases to the relevant authorities according to COVID-19 reporting mechanism and undergo home isolation based on the instructions provided in the relevant announcements. The Health Management Department would proactively track their health status and provide them with care, as well as verify their health status before they return to work at plants.
- Employees with long COVID-19 conditions were provided with health consultation and referred for follow-up treatment.
- Logistical support for accommodation staff and COVID-19 prevention-related work were put in place in light of the lockdown of Kunshan City.

Wujiang plants developed the Real-time PCR ID Card Scanner to improve the efficiency of real-time PCR tests and reduce cross-infection among personnel. These scanners were not only provided to Kunshan plants, but also donated to the Jiangsu Wujiang Comprehensive Free Trade Zone Administration, thereby demonstrating our COVID-19 prevention capabilities.

Plants in China were equipped with adequate COVID-19 antigen test kits and medications for COVID-19 treatment for use by employees in need at any time. In addition, these plants also conducted real-time PCR tests on all employees, which saw the participation of 530,000 people in total, as required by local management committees.

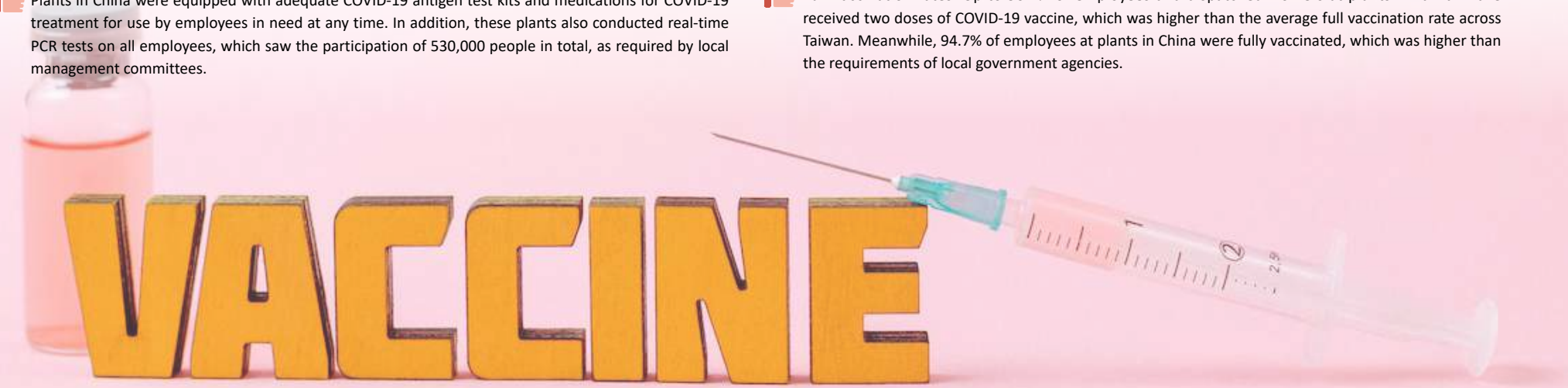
▶ Adjust COVID-19 prevention and management measures at plants on a rolling basis

- We increased the frequency of disinfection in public areas within plants, and engaged professional cleaning companies to carry out comprehensive environmental disinfection in the event of multiple COVID-19 cases in the office area to avoid the spread of COVID-19 infections.
- We required employees to take their meals at their own seats and reduced the number of seats at canteens and cafés.
- We made mask wearing and social distancing mandatory for all personnel entering plants, and restricted the number of people in meeting and training rooms.
- Hand sanitizers were made available in meeting rooms, at the entrance of elevators, canteens, and cafés for use by employees.

▶ Implement access control for external personnel

- Visitors and guests were required to fill out a health declaration before entering plants.
- We restricted the area where external personnel such as customers, guests, customers, and vendors can move around within plants.
- Employees returning from overseas business trips were required to carry out COVID-19 prevention and management in accordance with the COVID-19 prevention rules promulgated by the Taiwan Centers for Disease Control (TCDC).

Full vaccination rates: Up to 90.2% of employees and dispatched workers at plants in Taiwan have received two doses of COVID-19 vaccine, which was higher than the average full vaccination rate across Taiwan. Meanwhile, 94.7% of employees at plants in China were fully vaccinated, which was higher than the requirements of local government agencies.



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As employees are the key driver for continuous innovation and sustainable development at a company, providing employees with a safe workplace is the responsibility of a company. With "building a safe and healthy workplace" and "zero occupational disaster" as our safe workplace management targets, we endeavor to ensure that employees and workers at Coretronic are able to work in a healthy and safe workplace.

Occupational Safety and Health Management System 403-1, 403-2, 403-7, 403-8

We have fully institutionalized environment, safety and health management (ESH) regulations so that our employers and workers comply with them. In addition, we have formulated our own safety and health policies while regularly reviewing our safety and health performance, enhancing personnel training, implementing risk management, and conducting on-site inspections on a regular basis to ensure that our workplace is safe. The scope of internal and external verification of occupational safety and health management systems in 2022 covered the number of employees and workers reported in "Occupational Disaster Management."

Aside from implementing occupational safety and health management in accordance with the relevant laws and regulations in different countries and introducing hazard prevention measures and related management regulations according to the nature of different workplaces, we have also established occupational safety and health organizations and the Occupational Safety and Health Committee, which are led by senior executives. Occupational safety and health personnel at plants are responsible for auditing the third-party verification of our occupational safety and health management system based on the ISO 45001 standards, with a 100% pass rate at plants in Taiwan and Wujiang, as well as Coretronic Projection (Kunshan). Plants in Taiwan have also been awarded the CNS 45001 certification. We hope to achieve the goal of continuous improvement with the implementation of various work plans in the management cycle to reduce the occurrence of occupational disasters, and thus ensure the safety and health of all our employees and stakeholders.

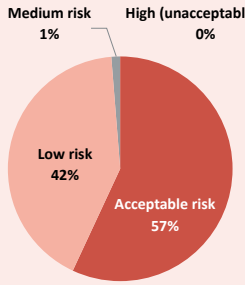
* As Coretronic Optics (Kunshan) is the upstream supplier of Coretronic Projection (Kunshan), the workplace safety systems at both companies are managed collectively. We will seek to obtain the ISO 45001 certification for the workplace safety system at customers' request in the future.

Occupational Safety Risk Management 403-2

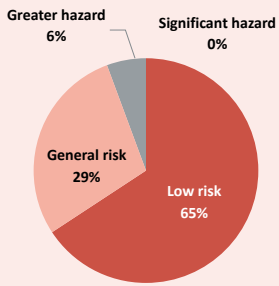
Coretronic has established the Rules for Hazard Identification and Risk Assessment. The management unit pushes each department to review and revise hazard identification and risk assessment data on an annual basis. Before making changes to processes, equipment, raw materials, and operating environments, we carry out identification of hazards, such as chemical, physical, ergonomic, biological, and other occupational safety and health hazards (including social and psychological hazards). We also require the relevant personnel in charge of hazard identification and risk assessment to undergo at least three hours of risk assessment training. Each unit carries out classification of equipment or manufacturing processes in different operating environments, and makes an inventory of duties and operations according to potential hazards arising therefrom. After recording each step in an operation in the "Hazard Identification and Risk Assessment Form" in coordination with the operating procedures of each department, each unit converts hazards into risk levels according to their severity and likelihood of occurrence, and then determine and adopt the corresponding risk controls. We formulate improvement plans and make continuous improvements in response to higher-risk hazards identified by plants each year, so as to provide our employees and workers with a safe workplace. In the event of a major occupational disaster, we will classify the disaster as a high-risk hazard and implement risk control. Plants in Taiwan and China completed risk assessments for various operations and reported no unacceptable risk or significant hazards in 2022.

According to the occupational safety and health regulations in both Taiwan and China, the employer or the responsible person in the workplace must stop operations and evacuate all employees to safe location when there is an imminent danger in the workplace. If an employee opines that there is a potential hazard in the duties he performs, the employee should stop the operation and retreat to a safe location without endangering the safety of other workers, and report the situation to his/her immediate supervisor. As stipulated in the relevant operating procedures, no punishment will be imposed on employees who take the initiative to report such hazards and retreat to a safe location due to concerns over occupational safety hazards.

Hazard Identification and Classification in Taiwan for 2022



Hazard identification and classification in Mainland China for 2022



Occupational Safety and Health Organization 403-4, 403-7, 403-8

Plants in Taiwan and China have established their own occupational safety and health units to plan, supervise, and carry out labor safety and health-related work. With a view to ensuring the smooth rollout and implementation of occupational safety and health-related work, we continue to make improvements in response to personnel, equipment, and environmental risks and raise employees' safety awareness based on the Plan-Do-Check-Act (PDCA) management mechanism, with a view to achieving the goal of zero occupational disaster together.

Occupational Safety and Health Performance Indicators

- Occupational safety and health accident/incident investigation
- Severity of occupational disaster
- Deficiencies or recommendations in ESH audit
- Follow-up on ESH management plans
- Internal and external communication and dissemination of opinions
- Chemicals management compliance
- Change management compliance
- Waste management compliance
- Health management compliance
- Follow-up on corrective, prevention, and improvement measures
- ESH license compliance
- Implementation of self-inspections
- Participation in ESH education and training
- Contractor's ESH management compliance

Consultation, Involvement and Communication of Occupational Safety Issues [403-4]

In an effort to create a comfortable and safe workplace and facilitate labor-management communication, plants in Taiwan convene Occupational Safety and Health Committee meetings on a regular basis, while plants in China also convene Occupational Health Management Committee meetings and safety routine meetings. The aforesaid committees, which consist of managers at all levels, occupational safety and health personnel, and labor representatives, are tasked with proposing recommendations on the occupational safety and health policies formulated by Coretronic, as well as deliberating on, coordinating, and making recommendations on occupational safety and health-related matters. These committees meet every quarter to make decisions on the planning and operation of the occupational safety and health system, and announce the corresponding results in writing or by electronic means. Meanwhile, employees at Coretronic are encouraged to propose occupational safety-related recommendations on the Environment, Safety and Health Opinion Platform, where the management unit will provide voluntary assistance after receiving the recommendations, and no punishment will be imposed on those who provide such recommendations. In addition, we organize contractor coordination meetings each year to educate and consult contractors on occupational safety issues, as well as communicate these issues to them. In 2022, a total of 24 occupational safety and health committee meetings and 62 contractor coordination meetings were convened by plants in Taiwan and China. No work safety-related disputes were reported in 2022.

Percentage of Labor Representatives in the Occupational Safety and Health Committee at Plants in 2022		Taiwan				China	
Items Discussed and Negotiated	Frequency	Every Quarter					
• Continuous promotion of a safe workplace and occupational disaster prevention • Continuous promotion of energy saving, carbon reduction, and industrial waste reduction at plants • Regular training to raise employees' safety and health awareness • Continuous rollout of ESH audit • Management review to ensure the effective operation of the ESH management system	**Plant**	Headquarters	Chunan Plant	Tainan Plant 1	Tainan Plant 2	Kunshan plants	Wujiang plants
	Number of Labor Representatives	9	13	8	3	6	6
	Number of Committee Members	16	21	21	9	13	15
	Percentage	56%	62%	38%	33%	38%	30%

Occupational Safety and Health Training [403-5, 403-7]

In order to ensure that each employee is familiar with occupational safety and health-related laws and regulations and our occupational safety and health management mechanism, we have established the operating procedures for occupational safety and health training, and conduct occupational safety and health programs for employees in accordance with the law and job requirements to enhance employees' understanding of occupational safety and health. In 2022, plants in Taiwan and China conducted occupational safety and health training with the participation of 30,912 people over 439,537 person-hours in total. On-the-job occupational safety and health training includes on-the-job training for occupational safety and health supervisors, occupational safety and health personnel, supervisors involved in hazardous operations, fire prevention management personnel, members of the Occupational Safety and Health Committee, and regular employees.

Training Performance in 2022		
Item	Taiwan	China
Number of new employees attending occupational safety and health training	1,078	17,390
Number of employees attending annual fire protection or civil defense regiment training	351	6,933
Number of employees attending on-the-job occupational safety and health training	1,838	2,345
Number of contractors attending annual in-house training	956	21
Total number of participants	4,223	26,689
Total person-hours of training	11,601	427,936

Disaster Response Exercise [403-5, 403-7]

In an effort to inculcate the concept of disaster prevention in employees and bolster the crisis awareness and emergency response capabilities of our emergency response team, we not only review our emergency response plan on a regular basis, but also conduct fire drills periodically in collaboration with the fire department at plants to strengthen employees' response capabilities through practical exercises. In 2022, plants in Taiwan and China conducted a total of 32 disaster response exercises and fire drills, which saw the participation of 8,696 people over 10,853 person-hours in total.

Occupational Disaster Management 403-2, 403-7, 403-9

- In order to reduce the occurrence of occupational accidents and manage the risk of occupational disasters in a systematic manner, we have not only formulated the operating procedures for work-related injury and accident management, but also set up the "Accident Reporting, Work-related Injury, and Environment, Safety and Health Anomaly Handling Record" platform to record the causes of accidents and keep track of the corresponding corrections and improvements. In the event of a work-related injury, we immediately re-examine and assess the hazards and risks involved to bolster disaster prevention. At the same time, we also implement accident analysis and make necessary improvements through regular internal inspections, compliance with accident management regulations, as well as the reporting system and investigation mechanism to ensure that the workplace is safe. In 2022, a total of 7 near-misses and one work-related injury (excluding traffic accidents), which was a scald injury, were reported at plants in Taiwan. Accident investigations, analysis, and safety promotion for these cases have also been completed, thereby achieving our target in 2022.
- At Chunan Plant, an average of 301 employees at Chunan Plant took part in the Safety and Health Self-management Campaign hosted by the Industrial Safety and Health Association and joined the "Disaster-free Work Hours Record Campaign" each month from March 27, 2019 to December 31, 2022. As of the end of 2022, we have accumulated a total of 2,155,464 hours in disaster-free work hours. In the future, we will devote ourselves to maintaining a safe workplace with the goal of "zero disaster in the workplace."
- In 2022, a total of 11 work-related injuries were reported at plants in China, including 8 slip and fall accidents and 3 machinery pinch-point injuries, thereby achieving our target in 2022. Specifically, Wujiang plants recorded a total of 9 work-related injuries in 2022, an increase of 2 cases from 2021. In an effort to effectively prevent occupational disasters, Wujiang plants planned to conduct safety training for operators at various stations such as automated equipment at production lines, assembly lines, and jigs while educating employees to maintain concentration when walking, adding more warning signs on machinery and equipment, and ensuring the implementation of the 5S methodology in the workplace. Moreover, the Wujiang plants also planned to implement on-site inspections to reduce the occurrence of occupational disasters. On the other hand, with a total of 2 work-related injuries reported at Kunshan plants in 2022, these plants will continue to strengthen education and training for operators and implement on-site management and disaster prevention operations to achieve our annual targets.

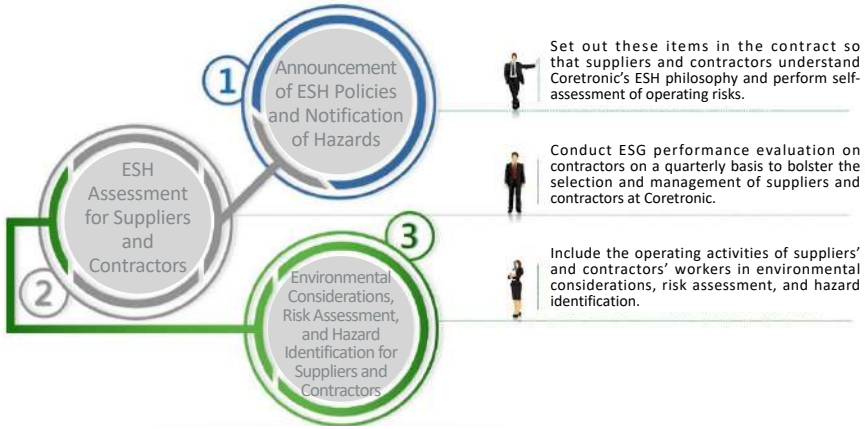
Region	Taiwan [5]		China [5]	
Work-related Injury Rates in 2022	Employees [4]	Workers [4]	Employees [4]	Workers [4]
Number of hours worked	3,019,048	435,944	9,153,560	2,971,928
Rate of fatalities as a result of work-related injury [1]	0	0	0	0
Number of high-consequence work-related injuries (excluding fatalities) [2]	0	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities) [2]	0	0	0	0
Number of lost day due to disability	5	0	691	0
Number of recordable work-related injuries [3]	1	0	11	0
Rate of recordable work-related injuries [3]	0.3	0	1.2	0

1. Rate of fatalities as a result of work-related injury = Number of fatalities as a result of work-related injury / number of hours worked x 1,000,000
2. Rate of high-consequence work-related injuries (excluding fatalities) = Number of high-consequence work-related injuries (excluding fatalities) / number of hours worked x 1,000,000. The number of high-consequence work-related injuries refers to the number of people who were medically diagnosed with a serious injury or illness as a result of an occupational disaster.
3. Rate of recordable work-related injuries = Number of recordable work-related injuries / number of hours worked x 1,000,000. The number of recordable work-related injuries at plants in Taiwan refers to the number of occupational injuries that should to be reported as required by the Occupational Safety and Health Administration, whereas the number of documentable occupational injuries at plants in China refers to the number of occupational injuries recorded in accordance with our company's rules and regulations.
4. Employees and workers: Figures for plants in Taiwan are calculated based on the statistics on occupational injuries reported from January to December 2022, whereas figures for plants in China are calculated based on the data provided in the human resource system.
5. Plants in Taiwan include Headquarters, Chunan Plant, Tainan Plant 1, and Tainan Plant 2, whereas plants in China include Kunshan plants (Coretronic Projection (Kunshan) and Coretronic Optics (Kunshan)) and Wujiang plants (Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), and Coretronic Optics (Suzhou)).

Contractor Management 403-7

Aside from employees, contractors are also our important partners. With a view to ensuring the health of our partners, maintaining safety at our facilities, and implementing our commitment to a workplace health and safety, plants in Taiwan have put in place clear operating rules for supplier and contractor management while carrying out contractor evaluation on a regular basis to ensure that contractors meet the rules for entry into plants. At the same time, we attach great importance to communication with other workers and notification of hazards to them as we require construction contractors to attend the "Contractor's Workplace Hazard Notification and Agreement Meeting" before entering plants, as well as make it compulsory for all construction workers to undergo "Contractor's Environment, Safety and Health Training Program." We also engage in effective management of construction applications and control of pre-, mid-, and post-construction management via an electronic construction application system.

With the implementation of contractor safety and health management, **no** contractor accident has been reported at plants in Taiwan for eight years in a row from 2015 to 2022, while **no** contractor accident was reported at plants in China in 2022.



▲ Norm for supplier and contractor management

07

Social Engagement

7.1 Charity Care

7.2 Light Pioneer

7.3 Dream Walker

7.4 Elderly Smile

7.5 Coretronic Culture and Arts Foundation

Vision

Plan

Firefly Volunteer Team Departments

- Lighting Wishes for the Rurals
- Farm the Hopes
- Love Followers
- Light Pioneer
- Dream Walkers
- NEW Elderly Smile

Performance

Target 2022 — Achievements in 2022

Indicator	Target 2022	Achievements in 2022	Achievement percentage	
Investment Amount	NT$20.25 million	NT$21.95 million	108%	
Number of Beneficiaries	27,767 people	50,219 people	181%	
NGOs Benefiting from plans	79 units	133 units	168%	
Number of Volunteers	822 person	785 person	96%	
Volunteer Hours	5,874 person-hours	5,705 person-hours	97%	
High-tech Adventures	6 sessions	4 sessions	67%	(2 sessions were canceled due to the pandemic)
Digital Interactive Classrooms	6 classrooms	2 classrooms	33%	(achieved the targets at this stage)
Future Light Camps	5 sessions	5 sessions	100%	

- Won the TCSA “Social Inclusion Leadership Award” for the third time
- Received USR Hub subsidies under the Higher Education Sprout Project launched by the Ministry of Education for 3 consecutive years
- Won the Second Prize of “Buying Power—Social Innovation Products and Services” from the Small and Medium Enterprise Administration, Ministry of Economic Affairs

Target 2023

- 2 High-tech Adventures
- 8 Future Light Camps
- Sponsor School Teams
- Meals Delivery and Medical Services for the Elderly
- Scholarship
- 1 Baseball Camp
- Annual Volunteer Day

07 Social Engagement

7.1 Charity Care
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7.1 Charity Care

Since 2011, we have initiated a series of social charity programs, including "Light Wishes for the Rurals," "Farm the Hopes," and "Love Followers." In addition to looking after the vulnerable groups in remote townships across Miaoli, Hsinchu, and Tainan over the long run, we also maintain active collaboration with social enterprises and purchase organic crops from local small farmers on a regular basis for stakeholders' consumption, with a view to not only taking care of their help, but also helping farmers financially.

Rice Donation in 2022

We have donated over **25 tons** of Miaoli Yuanli rice in an effort to support local farmers for **11 years** in a row. In 2022, we donated **1,705.2 kg** of Yuanli rice in total to the Huashan Social Welfare Foundation, the Kaohsiung City Firefly Children's Welfare Service and Care Association, and the Chinese Christian Relief Association.

Performance in "Charity Care" from 2011 to 2022

Investment Amount	Children Benefiting from Plans	Number of Beneficiaries	Number of Volunteers	Number of Volunteer Hours	NGOs Benefiting from Plans	Procurement of Local Agricultural Products
NT$45.03 million	12,100 children	27,554 people	713 people	2,727 person-hours	214 units	348 tons

Farm the Hopes in 2022

- We purchased **20 tons** of organic vegetables worth about **NT$1.5 million** from social enterprises "Buy Nearby" and "Earth Friend Organic."
- We purchased **15** tons of Miaoli Yuanli rice from social enterprise "Buy Nearby" as a gifts for shareholders, and recruited **20** children with intellectual development disorders from two sheltered workshops in New Taipei City to do packing work.
- We purchased **667.5 kg** of fair trade coffee beans for our employees from social enterprise "OKOGREEN."

Fulfill Kids' Dreams on Children's Day in 2022 NEW

We conducted **six sessions** of the "Rainbow Gun Workshop" in collaboration with Club Bing Beng at Yu Ying Elementary School Longteng Branch, Daping Elementary School, and Nan Juang Elementary School in Miaoli County. In these workshops, a total of **141** students were not only able to learn about optics as introduced in the natural science textbook through experiments and create their own children's day gift - a rainbow gun, but also receive a can of popcorn each, in hopes that these students can turn what they have learned into reality through these workshops, boost their learning motivations, and build self-confidence, thereby creating their own rainbow dreams.

Exchanging Love and Warm on Christmas Day in 2022

As we extend our love to the mountainous region in eastern Taiwan, our employees donated a record-breaking amount of **NT$610,000** in total. These donations were used for buying practical and fashionable sport backpacks and tasty popcorn for **577** students, while all these items were delivered either with the help of the Firefly Volunteer Team or by mail with a view to spreading blessings to a total of **11** elementary schools across Nantou County, Yilan County, and Taitung County, including Min Ho Elementary School in Shuili Township, Shuanglong Elementary School and Kindergarten in Xinyi Township, Li Hsing Elementary School and Kindergarten in Ren'ai Township, Han Si Elementary School and Kindergarten in Datong Township, Yong Le Elementary School in Su'ao Township, Chi Mei Elementary School and Kindergarten in Ruisui Township, Si Lin Elementary School and Kindergarten in Wanrong Township, Chang Liang Elementary School and Kindergarten in Yuli Township, Sin She Elementary School and Kindergarten in Fengbin Township, Wu Ling Elementary School and Kindergarten in Yanping Township, and Taiyuan Elementary School and Kindergarten in Donghe Township.

In addition, part of the donations were channeled to several charity programs such as the "Save the Children from Starvation" program hosted by the World Peace Association and the "Reunion with Love" program hosted by the Huashan Social Welfare Foundation, which provided **131** students and elderly people in need with month-long sumptuous breakfast and reunion dinner dishes.

Second-hand Treasures in 2022 NEW

We donated **273** used office chairs to a total of **19** elementary schools in Hsinchu County and Miaoli County, including Shilin Elementary School, Siang Bi Elementary School, and Wen Shui Elementary School in Tai'an Township; Peng Lai Elementary School, Tianmei Elementary School, and Nan Juang Elementary School in Nanzhuang Township; Lin Sen Elementary School in Yuanli Township; Hai Bao Elementary School and Tong Guang Elementary School in Houlong Township; Wurong Elementary School and Li Lin Elementary School in Dahu Township; Zuntou Elementary School and Wumei Elementary School in Tongxiao Township; Nei Wan Elementary School in Zhuolan Township; Shi Tan Elementary School in Shitan Township; Daping Elementary School in Sanwan Township; Jingping Elementary School and Shinleh Elementary School in Jianshi Township; and Tao Shan Elementary School in Wufeng Township, thereby reducing **5,061 kg** of carbon emissions.

Love Followers in 2022

In an effort to promote and realize ESG, we established the "Firefly Volunteer Club" in 2011 but changed its name to "Firefly Volunteer Team" in 2015. In 2018, we instituted the "Management Regulations for Firefly Volunteer Team" to include **paid volunteer leave** during holidays, a volunteer reward system, annual volunteer assembly, annual volunteer day, and volunteer training courses. A total of **143** volunteers at Coretronic are categorized into different volunteer groups, namely "Charitable Volunteers," "Environmental Protection Volunteers," and "Product Volunteers," which are in charge of charity, environmental protection, and product introduction and installation, respectively.

"Thanks to the Company for holding the technology camps on holidays, so that I could serve as a volunteer with my children to assist with teaching. I hope that everyone can invite more partners to join the big family of Firefly Volunteer Team.

Yammi Chen, Deputy Manager, Special Contribution Award Winner
Chung Cheng Volunteer Team of Hukou Township, Hsinchu County, and Xinshi Elementary School Volunteer Team
Contributed 837.5 hours to social charity activities between 2019 and 2021.

675.5 hours of **paid volunteer leave**	22 people participated in the **annual volunteer assembly**	11 won **Service Awards**	1 won **Special Contribution Award**	22 people participated in **volunteer training courses**
Employees who participate in the Company's holiday volunteering activities are eligible to apply for an equal number of hours of volunteer leave, with no upper limit.	At the assembly, outstanding volunteers were recognized, annual accomplishments and future plans were presented, and volunteer experiences was shared.	Volunteers who have served more than 20 hours per year were awarded gift vouchers and certificates of merit.	Between 2019 and 2021, volunteers who participated in the most volunteer activities or had the longest volunteer hours were awarded gift vouchers, certificates of merit, bonuses, and one public commendation.	The Rainbow Gun Workshop was organized to enable volunteers to take turns serving as instructors during future camps.

Run for Love in 2022 NEW

As a sports enterprise, we once again organized the “Run for Love,” a road running event that has been suspended for two years due to the COVID-19 pandemic, with the aim of continuously integrating sports into our corporate culture and promoting work-life balance. A total of **343** employees and their family members took part in this charity road run to run for love. A number of top executives at Coretronic, including CFO Mr. Franck Ho, Vice President Mr. Robert Hsueh, former CQO Mr. CK Lin, and InnoSpectra Corporation President Mr. William Hsu, led the running during this event, which consisted of the 3 km and 10 km event categories.

This year, we not only specially invited our retired employees and their family members to visit us, but were also honored to welcome a number of visually impaired runners to take part in this event. In addition, we also adjusted the 10 km event category to time and rank male and female runners separately, thereby successfully attracting more female runners to sign up for this event.

Aside from inviting **four** social welfare organizations, namely the Huashan Social Welfare Foundation, the World Peace Association, the Man Fair Sheltered Workshop, and the Hsinchu City Intellectually Disabled Welfare Association to set up booths for charity sale, we also engaged the Hsinchu County Blind Welfare Association to provide massage services, invited a dance team from Tai Sing Elementary School in Miaoli County to present an exciting Atayal traditional dance performance, and donated all the registration fees collected from this event to the Huashan Social Welfare Foundation as our sponsorship for the 20th “Reunion with Love” program.

Videos of “Run for Love” in 2022

Volunteer Day in 2022

Following our collaboration with social enterprise “GIVE CIRCLE” for the third consecutive year, we invited our employees to donate their old items at home to small and medium-sized social welfare organizations and vulnerable families, as well as engaged a couple of suppliers, namely Chia Teng Industrial Corp. and Sandbox Smart Technology Co., Ltd. to provide **52** used cardboard boxes in celebration of this meaningful event. This time, we added cosmetics to the collection l ist in conjunction with the “Meet Your Beautiful Self” charity makeup program hosted by the Work Development and Holistic Education Association to assist women, elders, and disabled friends who may not even own a complete set of cosmetics and skin care products in making themselves beautiful and confident through makeup. As this addition gained widespread support from our female employees, they proactively promoted this event and even raised funds to increase the popularity of this event.

- 106 employees participated
- Donated 1,698 items
- Benefited 1,937 people
- Donated to 29 NGOs
- Reduced carbon emissions by 1,261 kg

“Thanks for sharing the new sneakers. The teenager was very happy because the sneakers he received fit his feet and are very comfortable.

By World Peace Association

07 Social Engagement

7.1 Charity Care
7.2 Light Pioneer
7.3 Dream Walker
7.4 Elderly Smile
7.5 Coretronic Culture and Arts Foundation

7.2 Light Pioneer - Bridging the Digital Divide

With the launch of the "Light Pioneer" program in 2016, we have rolled out three initiatives, namely "High-tech Adventure," "Digital Interactive Classroom," and "Future Light Camp," and conducted these events at rural schools in Miaoli County, in hopes of bridging the digital divide and overcoming educational inequality between urban and rural areas alongside our customers and local universities with our core products and expertise to balance resources for coding education in rural areas, initiate efforts to introduce coding to students, teach children how to think and reason, and enhance their logical thinking skills.

01 High-tech Adventure in 2022

We invited **83** students and teachers from **four** elementary schools in Miaoli County, including Da Nan Elementary School and Li Lin Elementary School in Dahu Township, as well as Gin San Elementary School and Nei Wan Elementary School in Zhuolan Township to visit our company's headquarters and Chunan Plant, so that they can learn and experience various technology products, operate drones in simulation, make their own VR Smart Headset, visit Green Roof, and find out our company's achievements in environmental activities.

03 Future Light Camp 1.0 in 2022

Firefly Volunteer Team and IM-specific volunteer team from National United University held **2** Future Light Camps 1.0 at Nan Pu Elementary School in Nanzhuang Township and Yung Shing Elementary School in Shitan Township, Miaoli County. We made good use of all devices in Digital Interactive Classroom to teach **47** rural students basic/advanced programming language, VR smart helmet and Rainbow Gun assembly, and share environmental protection knowledge.

Thanks to this program, National United University was awarded a grant of **NT$475,000** by the Ministry of Education under the "Higher Education Sprout Project - University Social Responsibility Hub Promotion" program **three times**.

Performance in "Light Pioneer" from 2016 to 2022

Number of Beneficiaries	Number of Volunteers	Number of Volunteer hours	High-tech Adventures	Digital Interactive Classrooms	Future Light Camps
3,320 people	992 people	6,898 person-hours	30 sessions	31 classrooms	16 sessions

02 Digital Interactive Classroom in 2022

We built the Digital Interactive Classrooms equipped with an ultra-short-throw projector, projection film, and infrared pen for **two** elementary schools, namely Nei Wan Elementary School and Gin San Elementary School in Zhuolan Township to boost teachers' digital teaching capabilities and enhance students' willingness to learn and competitiveness.

Since the launch of this program in 2017, we have built **31** Digital Interactive Classrooms for rural schools in Miaoli County and Nantou County. With the never-ending advances in technology products, we will formulate a more comprehensive digital teaching solution for these schools in hopes of helping even more rural students and teachers in the future.

04 Future Light Camp 2.0 in 2022 NEW

Volunteers from the Firefly Volunteer Team and their family members joined forces with students from the Department of Electronics and Electrical Engineering, National Yang Ming Chiao Tung University and Papacode to conduct **10** hours of training on coding for **19** volunteers and **30** students. After completing the aforesaid training, these volunteers and students organized **3** Future Light Camps 2.0 for **85** fourth to sixth grade students at Fu Ji Elementary School in Gongguan Township, Miaoli Township.

Coding-related board games such as Coding Ocean, Musical Chair, Loop Drawing and Cup Stacking were first used to spark the interest in coding in the children. Abstract and difficult coding concepts such as sequence, instruction debugging, loop, conditional judgment, function were woven into the games to enable the children to learn while playing. Finally, the children were guided to complete the coding class for the first semester of their first year in junior high in advance through problem-oriented computer programming learning course, Scratch.

07 Social Engagement

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7.3 Dream Walkers - Pursuing Educational Equality

In an effort to ensure that each department at Coretronic understands our company's ESG strategies and lead our employees to actively take part in related activities, we have launched the "Dream Walkers" program in 2018, aimed at encouraging each department at Coretronic to propose ESG plans with our company's core products and resources. This program consists of three subprograms, namely "Grab Your Bat," "Your Dream • Your Future," and "Earn Your Future." Due to the local COVID-19 outbreak in Taiwan, we only managed to carry out the "Grab Your Bat" and "Earn Your Future" subprograms in 2022.

Earn Your Future in 2022

- We organized the **4th** "Earn Your Future" scholarship selection event at Cheng Shiu University, with the aim of awarding a scholarship of **NT$200,000** per person to outstanding third-year students.
- **5** fourth-year students, who were recipients of the scholarship in 2020 and 2021, underwent a **one-year internship** at Coretronic. In addition to the **NT$100,000** scholarship they originally received, these interns can also enjoy free accommodation and a salary during internship.
- Since the launch of this scholarship program in 2019, **2** scholarship recipients have become **full-time engineers** at our company after completing their internship and continue to contribute what they have learned to our company.

Performance in "Dream Walkers" from 2018 to 2022

Investment Amount	Number of Beneficiaries	Number of Volunteers	Number of Volunteer Hours	NGOs Benefiting from Plans
NT$7.34 million	954 people	398 people	3,540 person-hours	10 units

Grab Your Bat in 2022

As a sports enterprise, we have been sponsoring the baseball teams of Shiou Lin Elementary School in Minxiong Township, Chiayi County **each year** since 2018. At the same time, we regularly post their outstanding performance and results on our company's FB page and electronic bulletin board to increase our employees' participation in these teams. In 2022, there were a total of 21 members in both the boys' and girls' baseball team (where 66% of them came from vulnerable families).

- Annual sponsorship: We provided the baseball team with an annual sponsorship of **NT$250,000**, which was primarily used for buying pitching machines and nutrition products for players, as well as paying for coaching fees and off-site training expenses.
- Honors: The baseball team came in 7th in the National Girls' Junior Softball Tournament in 2021 and ranked 5th in the Chiayi County Fall Baseball League in 2022.
- Annual friendly matches: We also organized annual matches this year, where not only were our company's softball team and the Shiou Lin Elementary School baseball team invited to play in these matches, but our **90** employees and family members also formed two teams to join these matches.

07 Social Engagement

7.1 Charity Care
7.2 Light Pioneer
7.3 Dream Walker
7.4 Elderly Smile
7.5 Coretronic Culture and Arts Foundation

7.4 Elderly Smile - Care for Solitary Seniors

With Taiwan becoming an aged society, the demand for care for the elderly has increased. However, resources have not caught up with the demand and taking care of the vulnerable elderly has become an urgent societal problem to be resolved. To that end, Coretronic focused on the resource, dietary and health needs of the elderly to devise three key Elderly Smile initiatives, namely, Warm Delivery, Warm Telehealth, and Warm Restaurant, in an effort to work with various social enterprises and NPOs to resolve the issues of elderly living alone, bridge the healthcare gap for rural areas through technology, and provide a remedy to lack of human and resources of welfare institutions. The elderly would thus have physical and psychological warmth and fulfilment, maintain a good state of health, and achieve the beautiful vision of aging in place.

Performance in "Elderly Smile" from 2019 to 2022

Investment Amount	Number of Beneficiaries	Number of Volunteers	Number of Volunteer Hours	NGOs Benefiting from Plans
NT$2.61 million	42,615 people	444 people	3,297 person-hours	51 units

Warm Delivery in 2022

We have sponsored the "Reunion with Love" program hosted by the Huashan Social Welfare Association for four consecutive years. In this program, we first surveyed the needs of seniors during regular visits led by the association before preparing customized supplies kit for seniors according to their needs. Then, the Firefly Volunteer Team was tasked with delivering the Lunar New Year dishes, warm quilts, and customized supplies kits to a total of **40** vulnerable seniors in Hengshan Township and Beipu Township, Hsinchu County before Lunar New Year. Moreover, the volunteers also helped seniors hang up Spring Couplets, measured their body temperature and blood pressure, and kept track of their medication status, so that each senior can receive substantial help and enjoy a warm Lunar New Year celebration.

Warm Telehealth in 2022 NEW

In an effort to increase the health care capacity for rural areas in Miaoli County and enhance the professional capabilities of nursing aides at culture and welfare stations, Coretronic, alongside the Digital Humanitarian Association, offered a one-year sponsorship of **NT$1.3 million** to provide customized online health courses and one-on-one or group medical consultation for seniors in remote Miaoli and conduct training programs for nursing aides in collaboration with various experts including doctors, nurses, nutritionists, psychologists, and physical therapies, in hopes of overcoming distance in reality with digital technology.

- We **exclusively sponsored** health promotion and medical consultation services at six culture and welfare stations in Miaoli County (i.e., the Miaoli Mountaintown Culture and Welfare Station, the P'nux Tribal Culture and Welfare Station, the Siang Bi Community Culture and Welfare Station, the B'anux Tribal Culture and Welfare Station, the Saisiyat Tribal Culture and Welfare Station, and the Maronagrong Tribal Culture and Welfare Station). The nursing aides at each station will also guide and assist seniors in explaining their health and medical problems so that professional doctors can help them address their concerns. In 2022, we conducted **245** health courses and medical consult ation sessions, benefiting **14,481** people in total.
- We also sponsored **34** public health promotion classes so that elderly welfare organizations in remote areas (e.g., Matsu, Taitung, Yilan, and Nantou) can raise health awareness among seniors through free online classes while our employees and family members can also have the flexibility to attend these health promotion classes to look after their health as well. These classes have benefited a total of **9,663** people.

Warm Restaurant in 2022 NEW

In order to overcome the shortage of manpower and resources for meal delivery to solitary seniors in Miaoli County and expand the service capacity of meal delivery units, we provided a one-year sponsorship of **NT$1.15 million** in collaboration with social enterprises "Silver Gate for Elders" and "Buy Nearby" to render stable meal delivery service for solitary seniors, guide meal delivery units through digital transformation, as well as purchase local white and brown rice and donate them to community elderly canteens in Hsinchu and Miaoli.

- Meal delivery service: We recruited **24** single mothers and job seekers on a part-time basis as meal delivery ambassadors to deliver **10,305** meal boxes that meet the health needs of the elderly based on nutritionists' assessment while showing care for the health and living conditions of the elderly and reporting them to the system for follow up in real time.
- Online meal delivery management system: We have built an online meal delivery management system for Lushui Village, Hsinchu City to increase the efficiency of meal delivery and the number of seniors served. Efforts to build such a system for other locations is currently ongoing.
- Rice donation. We donated **1,560 kg** of white and brown rice to **20** community elderly canteens in Hsinchu and Miaoli, benefiting **7,800** people in total. This initiative has successfully boosted the social influence of these canteens as it allows them to run sustainably without interrupting the supply of meals to the elderly.

Target achievement status under this program:

- Miaoli has become the **second largest** meal delivery service region in Taiwan.
- The number of people benefiting from this meal delivery service has reached **217%** of the initial target.
- The number of NPOs benefiting from the rice donation has reached **400%** of the initial target.

07 Social Engagement

7.1 Charity Care
7.2 Light Pioneer
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7.5 Coretronic Culture and Arts Foundation

7.5 Coretronic Culture and Arts Foundation

With joint promotion efforts from both the industrial sector and the arts and cultural scene, lighting, electricity, and technology are increasingly important elements in arts and cultural creations across domains. In an effort to continue our passion for "light," we established the Coretronic Culture and Arts Foundation (CCAF), whose objective is to promote the aesthetics of environment lighting from different aspects as well as in depth and breadth in collaboration with professionals in different fields and leading figures in the arts and cultural scene. With a longstanding mission of lighting up the arts and cultural scene in Taiwan, promoting the art of lighting, and enhancing the quality of life, the CCAF organizes a wide variety of arts and cultural events all over the country while connecting both culture and the environment using light as the medium so that light becomes a part of the aesthetics of life. With the Taiwan Environment Lighting Awards as the primary event to extend Coretronic's efforts to promote the aesthetics of environment lighting to government agencies, colleges and universities, and the general public in 2022, members of the jury committee for the Taiwan Environment Lighting Awards and award-winning designers were invited to plan promotional seminars and arts and cultural education activities, so as to disseminate environment lighting issues and spread the influence of environment lighting.

The 5th Taiwan Environment Lighting Award

Entering its fifth edition in 2022, the Taiwan Environment Lighting Award has not only seen an increasing number of entries and shortlisted entries coming from every corner of Taiwan, but also witnessed the hard work put in by the jury committee as they travel to various sites to evaluate each entry submitted to the awards event. The award ceremony kicked off with a select repertoire from "Send in a Cloud" performed by the Cloud Gate Dance Theater, which was choreographed by artistic director Cheng Chung-Lung. In this year's awards event, the Taiwan Environment Lighting Award was given to several projects, including the "1895 Yiwei Taiwan Protection Peace Memorial Park," "Hsinchu Environment Lighting Improvement Project," "Sparkling Market," and "Tainan Zhuxi Moon-Viewing Bridge," while the Special Jury Award was presented to "Lienchiang County Light Pollution Self-Government Ordinance" for demonstrating the determination to control light pollution and protect the environment on the Matsu Islands.

Environment Lighting Advocacy Seminars for the Public Sector

- Lienchiang County Government: We organized an environment lighting advocacy seminar in collaboration with local youth groups "N.P.O. Studio" and "Salty Island Studio" on the Matsu Islands, where we invited Wu Ma-Li (a member of the jury committee of the Taiwan Environment Lighting Award), Cheng Mei-Chun (designer at CMA Lighting Design), as well as Annie Chu and Liu Ping-Yi (designers at YI. ng Lighting Design Consultant) to share their experience with night landscape design planning for mountain town settlements and discuss the future blueprint for night landscape development on the Matsu Islands.
- Cultural Affairs Bureau, Kinmen County Government: We invited Hsueh Chin, a member of the jury committee of the Taiwan Environment Lighting Award, to talk about humanities, culture, history, and environment lighting in Kinmen County; designer Keisuke Toyoda and artist Kou Tak-Leong to share the relationship between art installations and the environment; as well as artistic director Lin Ching-Yu to share the process and examples of night lighting for art festivals.

Environment Lighting Advocacy Seminars for Colleges and Universities NEW

- National Yunlin University of Science and Technology: We invited Wang Ya-Yun, the architect in charge of architectural design for the award-winning project "Pingtung County Library" in the Taiwan Environment Lighting Award, to share the details of structural renovation for old buildings, as well as Hung Li-Han, the artistic director in charge of lighting design for "The Spring" in Tainan City to share his knowledge on lighting design planning for architectural remains, with the intention of bringing great environment lighting design works to the education scene to inspire students and enable them to learn about current industry trends.
- National Kaohsiung Normal University Yancheng Ginza Workshop: We collaborated with "House of Takao Ginza," an award-winning project at the Taiwan Environment Lighting Award, and invited designer Chiang Chi-Yang to conduct three workshop sessions, with the aim of leading students to walk through the International Mall district and guiding them to understand environment lighting, make related proposals, and engage in related practices while nurturing their perceptions of humanistic care and lighting in the locality and their creativity through the understanding of environment lighting and the history of spatial humanities, as well as the exploration of lighting and related creations.

The "Light & Modern Life" Book Exhibition and Advocacy Seminar NEW

- We organized this event in collaboration with TakaoBooks in Kaohsiung City. With light as its theme, this event encompassed a series of contents, including "Light x Design," "Light x Culture," and "Light x Environment," spanning a host of issues such as design aesthetics, environmental sustainability, and healthy living, aimed at promoting the concept of environment lighting to the general public.
- We invited Wu Ma-Li (a member of the jury committee of the Taiwan Environment Lighting Award), Lin Cheng-Hsiu (chairman of the Taiwan Dark-Sky Association), and Chiang Chi-Yang (creative director at We Do Group) to engage in a sharing session and come up with more ideas and imagination of "environment lighting" through discussions about different aspects of the environment and culture.

Light Lights Hsinchu: The Periscope Workshop

The CCAF and the Coretronic ESG Committee have been co-organizing "Light Lights Hsinchu," an exclusive lighting art workshop for our employees, on an annual basis since 2016. This event has seen the participation of **481 people** in total to date. In 2022, we joined forces with Club Bing Beng to conduct a DIY periscope course, which was attended by **59** employees and their dependents, so that the participants in this course can not only create their own unique periscopes based on a number of simple steps, but also have fun with their families when making the periscopes. The participants gave a satisfaction score of **96 points** for this course.

08

Subsidiary Insights

8.1 Optoma

8.2 Champ Vision Display

8.3 Coretronic Intelligent Cloud Service

8.4 Coretronic Intelligent Robotics

08 Social Engagement

8.1 Optoma
8.2 Champ Vision Display
8.3 Coretronic Intelligent Cloud Service
8.4 Coretronic Intelligent Robotics

8.1 Optoma

Basic Information

- Name of Organization: Optoma Corporation
- Founded in 2021 (formerly known as Optoma Technology Corporation, founded in 2002)
- Chairman: SY Chen
- Headquarters: 12F, No. 213, Section 3, Beixin Rd., Xindian Dist., New Taipei City 23143, Taiwan, R.O.C.
- Number of Employees: 190, including 113 males (59%) and 77 females (41%)
- Capital: NT$30 million
- Operational Headquarters: Taiwan (New Taipei)
- Global Locations: Taiwan (New Taipei), USA, Europe (UK, Netherlands, France, Germany, Norway, and Spain), and China (Beijing, Shanghai, Guangzhou, Chengdu, Chongqing, and Xi'an)
- Main products/services: Optoma is a visual solutions provider that serves enterprise, education, consumer, retail, and large-venue markets. Its products combine superior image processing technologies with exceptional engineering and innovation to deliver stunning crystal-clear images with ultimate reliability. In addition to a full line-up of projectors, including 4K UHD, Portable, and Laser, Optoma also offers Interactive Flat Panel Displays, Professional Displays, AIO LED displays, and Large Venue projectors. Powered by OSS Optoma Solution Suite and OMS display management solution, they provide customers and users with innovative ways to connect, share and collaborate.
- Award-Winning Products and Solutions in 2022

Optoma ZU2200

- ✓ 2022 Innovative Products Winner, Ultra Bright Series, Sound and Video Contractor
- ✓ Hot Products of the Year 2022, Religious Product News

Optoma Creative IFP 5-series

- ✓ 2022 Top Products of the Year Award, Christian
- ✓ 2022 New Product Awards, the Journal School Products
- ✓ 2022 New Product Award, Campus Technology
- ✓ Best of Show, Integrated Systems Europe 2022 - Tech & Learning, AVNetwork

ZU920TST

- ✓ 2022 InfoComm Best of Show Winner, Digital Signage, AVNetwork

Optoma CinemaX D2 Smart

- ✓ Projector of the Year Gadget Award 2022
- ✓ Projector Central Best of the Year Awards
- ✓ Best Projector of the Year 2022, Gadget Bridge

Customer Service

With the goal of putting clients first and providing thoughtful products and solutions, we have established various customer service platforms and services. These allow clients to contact customer service personnel in a fast and real-time manner to assist them in solving problems or providing services. Our services include product technical consultation, repair, on-site maintenance, repair quotations, progress checking, spare parts purchase, and distributor referrals.

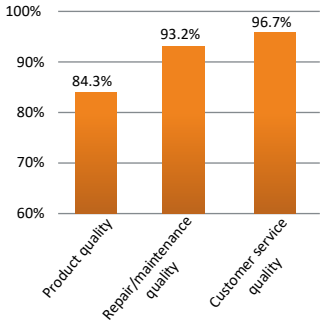
Customer Service Platform

- Toll-free Hotline (886-800-880-876): Our toll-free hotline is staffed with personnel on weekdays (excluding national holidays and weekends) to provide real-time communication with clients, address their concerns, and respond to and follow up on relevant issues.
- Customer Service Email (services@optoma.com.tw) and fax (886-2-8911-6550): Clients may submit relevant requirements and attachments via email or fax. Our customer service team reviews all incoming emails and faxes on a daily basis and will provide a response within 48 hours.
- Online Consultation: Clients can submit their relevant requirements in real-time through the "Contact Us" and "Online Repair" sections on the official website. Our customer service personnel will then accept and respond to the request.
- On-site acceptance: Clients can receive repair services by visiting any of Optoma's direct repair/maintenance centers in person. On-site customer service personnel will be available to accept cases and provide relevant consultation services.

Customer Satisfaction Survey

- Since 2020, we have been utilizing a Global Service System (GSS) as a call center case management tool in Taiwan. This system has been integrated with our RMA back-end repair and maintenance system, as well as our warranty system, to ensure efficient tracking and monitoring of repair and maintenance progress. As a result, we have taken a leading role in adopting this system within our industry.
- In 2022, we conducted a phone-based survey in Taiwan to measure the satisfaction of clients who received repaired products within the past month. The survey focused on three key indicators: product quality, repair/maintenance quality, and customer service quality. Based on the results of the phone interviews, customer satisfaction with the quality of our customer service reached 96.7%. This indicates that our clients provided positive feedback regarding the overall quality of service.
- As a result of the pandemic-induced shortage of raw materials, timely supply of spare parts for certain models was not possible, leading to a decrease in satisfaction with product quality to 84.3%. Once the supply chain stabilizes, Optoma will improve spare parts management, expedite client issue resolution, and offer immediate services.
- Our customer service team responded to the shortage of raw materials and unstable supply of chips, motherboards, and optical devices by implementing flexible countermeasures. These included cross-region material supply, warranty extensions, thoughtful gifts, discounts for parts not under warranty, and old machine replacement discounts. By doing so, the team was able to shorten the material waiting time for repair and maintenance cases, while keeping clients informed of progress through regular reports. As a result, most cases were completed within seven working days, meeting the guaranteed timeframe. This led to a high level of satisfaction with the repair and maintenance quality, reaching 93.2%.
- In 2022, the overall satisfaction with our after-sales service quality remained at 91.4%, as determined by averaging scores from three key indicators.

Taiwan Customer Satisfaction Survey in 2022



Environmental Sustainability

With "A Brighter Future Together" as our sustainability vision, we offer a range of eco-friendly products and solutions. We have implemented green product design (Green Promise), conducted an ISO 14067 product carbon footprint inventory, and established an ISO 14001 environmental management system to encourage environmentally conscious practices. Our ultimate goal is to achieve net zero emissions by 2050.

▶ Green Product Design and Green Promise: We have incorporated four strategies into our product design and manufacturing processes to minimize the environmental impact of our products. We intend to designate specific eco-friendly models as "Green Promise" products.

- Improvement to use efficiency: We utilize laser technology to enhance energy efficiency and minimize carbon emissions, resulting in energy conservation.
- Use of recycled materials: We utilize environmentally friendly PCR materials in the production of projector casings.
- Reduction of carbon emissions from transportation: We optimize product volume through design and maximize container load capacity by optimizing product size and packaging. This reduces carbon emissions from product transportation.
- Eco-friendly packaging: We use FSC-certified cartons or recyclable or reusable materials to package products.

Designed for Sustainability

▶ ISO 14067 Product Carbon Footprint

Our objective is to assess the carbon footprint across the entire product life cycle, including raw material acquisition, manufacturing, distribution and sales, consumption and use, and disposal. Our aim is to identify and manage carbon emissions during the product life cycle, with the goal of reducing operating costs and minimizing the product's environmental impact. This approach will enhance production efficiency and competitiveness, and we will use the inventory results to inform the design of green, eco-friendly products. We conducted a carbon footprint inventory and audit of the ZH350, ZW350e, and ZX350e models, assuming their use for five years starting in 2022. The inventory covered the entire lifecycle of the products, from acquisition to disposal. As a result, we obtained the ISO 14067:2018 certificate.

Based on the inventory results, the B2B stage of "raw material acquisition" and the B2C stage of "consumer use" are the most significant contributors to our carbon footprint. Moving forward, we will prioritize increasing energy efficiency and utilizing a higher percentage of recycled materials in order to decrease the carbon footprint of our products.

▶ ISO 14001 Environmental Management System

In 2022, we successfully adopted and obtained the ISO 14001:2018 environmental management system certificate. Our objective is to minimize the Company's environmental footprint by utilizing materials and services that have a lower impact on the environment, and by encouraging stakeholders to join us in our eco-friendly initiatives. Additionally, we have developed strategies and objectives for six key areas:

- Workplace: Reducing waste, promoting reuse and recycling, minimizing energy consumption and carbon emissions, and effectively managing electricity and paper consumption.
- Supply Chain: We collaborate with both upstream and downstream suppliers to mitigate the environmental impact of our product life cycle. Our efforts include establishing goals for the acquisition of eco-friendly office supplies and progressively substituting conventional office supplies with those bearing environmental certifications.
- Products: Adopting green design to reduce product carbon footprint, and increasing products labeled with Green Promise each year.
- Compliance: Fully complying with the laws and regulations on business operations in the market.
- Participation: Raising employees' awareness of environmental protection through awareness-raising materials and activities.
- Continuous Improvement: Continuously assessing various environmental risks posed to products and business operations to plan improvement measures.

▶ Green Actions

- Turning off the Lights for One Hour: Turning off the lights for one hour at noon every day and reminding employees to turn off the lights through electronic communications, reducing energy consumption.
- Vegetarian Meals Day: Providing vegetarian meals to employees, disseminating electronic information to educate them on the environmental benefits of a plant-based diet, and encouraging them to adopt sustainable eating habits that prioritize the environment, animal welfare, and personal health.

Supply Chain

▶ Number of Suppliers: 43 in total (26 domestic and 17 overseas)

▶ Local Procurement Practices: 94% in Taiwan; 6% outside of Taiwan.

Information Security

We have implemented the NIST CSF framework to guide the development direction of "identify, protect, detect, respond, and recover." Through closed-loop management of personnel and assets, we have strengthened the Company's information security. In 2022, we have taken comprehensive measures to inspect and optimize information security, including:

▶ AWS Measures

- AWS Partners Certification: The Company has AWS-related skills and experience, can ensure that the operating process is in compliance with the regulations, and can effectively manage and protect the AWS environment.
- Establishment of the First AWS Well-Architected Framework: On the basis of the best practices and framework of AWS, we have established the Company's first AWS Well-Architected Framework to ensure the reliability, efficiency, and security of AWS resources.

▶ Security Incident Detection and Protection Measures

- Fully Enabled MDR Service: Through the Managed Detection and Response (MDR) service provided by CyCraft, we can quickly respond to threats, enhance threat monitoring and management, and protect the Company's information security.
- Adoption of Security Scorecard for Evaluation: We have adopted Security Scorecard to evaluate and control the Company's information security risks and identify the items that can be optimized and improved; the evaluation score has increased from 76 points to 90 points.
- Enabling of the MDO P2 Mechanism: We have adopted the MDO P2 mechanism to detect and isolate any suspicious or malicious behavior to prevent damage to our system or confidential or sensitive data.
- Establishment of a Blackbox Vulnerability Scanning Platform: We have adopted Nessus to conduct six vulnerability scans of the Company's intranet and services and patched and reinforced all significant and large-scale risks in 2022.
- Establishment of an App Vulnerability Scanning Mechanism: We have established an app vulnerability scanning platform (Mobile Security Framework (MobSF)), to test the security of the Company's app and find potential security vulnerabilities.

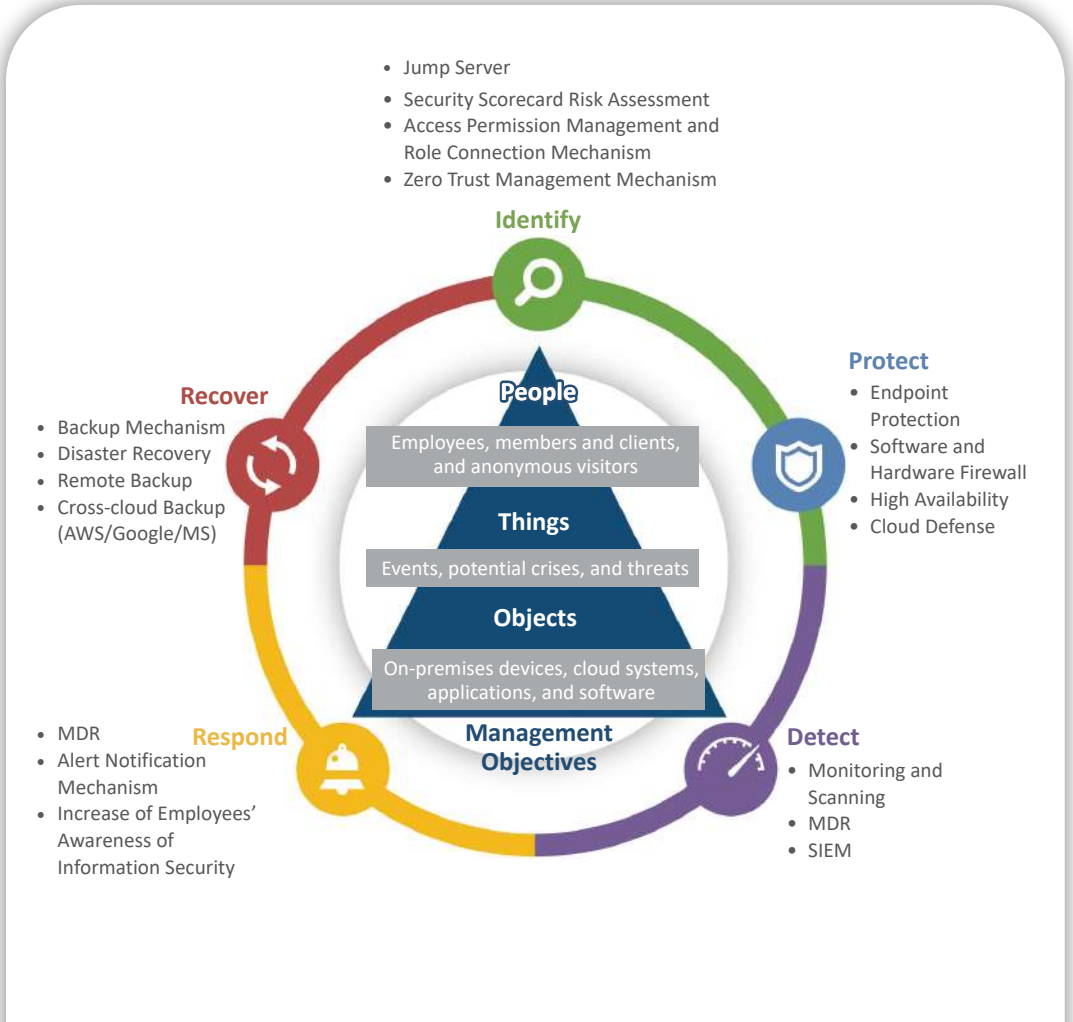
▶ Measures for Event Management: We have established a Security Information and Event Management (SIEM) platform and integrated different event data into the platform to effectively improve the efficiency of response to any events.

▶ Measures for Remote Access

- Creation of Virtual Desktops: We have created virtual desktops through TSPLUS to provide employees with a safe remote work environment.
- Establishment of a Zero-trust Authentication Mechanism: With the Zero Trust model in place, we established a strict identity authentication mechanism for VPNs and virtual desktops to ensure the security of the Company's information.

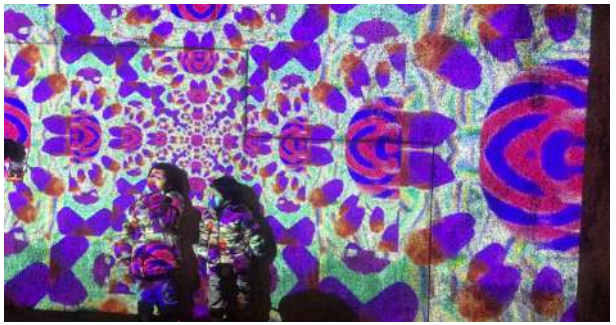
▶ Education and Training

- Information Security Training: We conducted seminars on information security to provide employees with a comprehensive understanding of information security knowledge and technologies. A total of 121 individuals participated in the training.
- Information Security Announcements: We made a total of five announcements to employees regarding important information security incidents.
- Social Engineering Exercises: We sent two phishing email tests as exercises to increase employees' alertness to such threats.



Social

- Non-discrimination: We adhere to the commitments of the RBA Code of Conduct and explicitly declare our commitment to treating workers fairly and equally, as well as complying with all relevant government laws and regulations. This includes prohibiting the use of child labor and implementing regulations to prevent it. When selecting personnel, we adhere to the principles of fairness, impartiality, transparency, and rationality. We do not engage in discriminatory practices against job seekers or employees based on age, gender, race, ethnicity, political affiliation, or pregnancy in any aspect of recruitment, selection, employment, arrangement, evaluation, promotion, education and training, benefit measures, and retirement.
- No child labor
- No forced labor
- No violation of environmental, labor, economic, or human rights laws and regulations occurred.
- Social Engagement: We have been a longstanding supporter of artistic and cultural endeavors in Taiwan, providing sponsorship for major art exhibitions and musicals by supplying high-end projectors and video systems.
  - Art sponsorship: We have been a longstanding supporter of Taiwan's art and cultural activities, having sponsored high-end projection systems for major art exhibitions and musicals since 2010. To date, we have sponsored 588 high-end projectors for 103 art exhibitions featuring video systems. In 2022, we sponsored 25 high-end projectors for six exhibitions: "Ocean and Interpreter," "Homesickness Woven into a Flying Flag," "Matters of Scale," "Where Have You Been? A Distance of Imagination," "Challenging Times - Taiwan-Thailand Online Artist-in-Residence Achievement Exhibition," and "Ocean and Interpreter - A Mysterious Island." In order to aid digital artists in producing a truly immersive experience, our company has implemented cutting-edge image display technology.
  - Interactive installations at the 2022 Taiwan Lantern Festival entitled "Lights on the Spot": We worked with Amus Art Tech Studio, a Taiwanese art team, to interpret good memories of the Lunar New Year through outdoor projection mapping shows. We used kaleidoscopes to turn whispers into visual images to enable people to view the projected works through the kaleidoscopes and be surprised, taking the audience members back to those good old days.
  - "Avec Plaisir" by Circus P.S.: We worked with the Amus Art Tech Studio and Circus P.S., a group of stunt performers, to create Taiwan's first contemporary circus work interwoven with poetry, space, time, music, and images.
  - The Future Exhibition Hall at the National Taiwan University: We collaborated with the National Taiwan University to create the Future Exhibition Hall, featuring Metaverse display technology. This initiative supports the College of Bio-Resources and Agriculture's agritourism digital transformation experiment. Through the use of MR doors, visitors can quickly travel to Kavalan and partake in an immersive future sightseeing tour. Additionally, they can view a three-dimensional agricultural product projection mapping show and sample fragrant agricultural products. This immersive promotional experience provides a multi-sensory feast for visitors, engaging their visual, olfactory, auditory, and gustatory senses.



Material Topics

Material Topic	Strategy	Performance in 2022	2023 Goals
Economic Performance	Same as Coretronic Corporation; please refer to Chapter 1.2.		
Salary and Benefits	• We assess the market salary level by conducting a salary survey and offer a competitive salary accordingly. • A Benefit Policy Superior to Statutory Requirements • We arrange remote work flexibly based on the attributes of each unit and their respective tasks.	• Starting salary for first-line employees is NT$31,000, 23% higher than the legal minimum wage in Taiwan. • A Benefit Policy Superior to Statutory Requirements ✓ Employee bonus/operating performance bonus ✓ Flexible working hours, with clock-in between 8:00 and 10:00 and clock-out between 17:00 and 19:00 ✓ Gift certificates on four major holidays and birthday/wedding/funeral allowances ✓ Annual health checks ✓ Fully paid five-day golden week leave	• Planning long-term rewards for employees and enabling them to share the Company's business achievements • Having a diverse flexible working system in place to meet the needs of employees in different types of positions.
Occupational Health and Safety	• Establishing a health service platform in the workplace • Providing workplace health solutions • Executing health promotion activity plans	• Number of workplace health services: 42 nurse visits; 3 doctor visits • Potential work environment hazards improved: 7 • Health promotion sessions in the workplace: 4 • We implemented the four major programs: Anthropogenic Hazard Prevention Program, Maternal Health Protection in the Workplace Program, Prevention of Unlawful Infringement of Duties Program, and Abnormal Workload-Induced Disease Prevention Program. • Number of employees receiving health consultations: 107 • Anti-Pandemic Measures ✓ Employees were permitted to work from home if they felt uncomfortable, regardless of whether or not they were infected with the virus. ✓ We distributed a total of 146 anti-pandemic kits to employees during home isolation. • Disaster prevention and response training: Self-defense firefighting exercises were held twice a year for a total of eight hours, with a total of 38 trainees. • Number of fatalities as a result of work-related injuries: 0 • High-consequence work-related injuries (excluding fatalities): 0 • Recordable work-related injuries: 0 • Occupational disease incidence rate: 0 • The target of occupational injury is 0, and the actual number is 0.	• Facilitating health management, special protection, health promotion, and work-life balance • Established an emergency response mechanism • Formulated hazard prevention and control measures
Information Security	• Inspected and optimized information security management system based on NIST CSF • Offered information security education and training	• Certified as AWS Partner • Established AWS Well-Architected Framework • Enabled the MDR service and the MDO P2 protection mechanism • Established an SIEM solution, a blackbox vulnerability scanning platform (Nessus), and an app vulnerability scanning mechanism (MobSF) • Security Scorecard: 90 points • Held two social engineering phishing exercises • Offered the online Network Awareness and Safety course, with a total of 106 participants	• Conducted NAC network access management • Offered internal information security education and training • Expanded the scope of the Zero Trust mechanism

Material Topic	Strategy	Performance in 2022	2023 Goals
Labor and Management Relations	• Occasional labor-management meetings • Occasional meetings with all employees • Policy advocacy meetings • Labor-management and Employee Welfare Committee meetings	• Email: optw.hr@optoma.com • Labor-management meeting: 2 • Employee Welfare Committee meeting: 4 • Labor and human rights complaints: 0	Improving employees' identification with the Company to create win-win situations
Climate Change	• Adopted ISO 14001 • Promoted the green movement	• Obtained ISO 14001 certificate • Launched an activity to turn off the lights for one hour and the Vegetarian Meals Day • Environmental policy advocacy	• Set electricity and paper consumption targets • Set targets for procurement of green office supplies • Planned diverse green actions
Green Solutions	• Adopted ISO 14067 • Adopted green design and Green Promise	• Obtained ISO 14067 certificate • Formulated Green Promise goals and regulations	• Conducted product carbon footprint inventory • Increased the number of products with Green Promise
Training and Education	• Capability development programs linked to organizational strategies • Potential talent cultivation program • A Career Development Pathway That Keeps Pace with the Times	• ISO 14000:2018 training: 6 times • Appointed external experts for themed management and key personnel training, with a total of 73 participants • Offered the General Data Protection Regulation (GDPR) online course, with a total of 359 people participants • Average employee training hours: 2 hours • Percentage of employees receiving performance evaluations: 98%	• Satisfaction with the annual training plan was higher than 4 points (out of 5) • Launched the potential talent development program • Built a career learning map
Friendly Workplace	• Smooth communication channels • Properly managed and recorded employee opinions • Valuing female employees • Friendly at work, in daily life, and during interaction	• New hire rate: 24%. • Turnover rate: 16%. • Established an annual employee suggestion platform and an employee sexual harassment complaint and handling system • Reinstatement rate after parental leave: 100% • Retention rate after parental leave: No employee applied for parental leave in 2021, and, therefore, no retention rate data is available. • Responded to International Women's Day • Replaced employees’ chairs to optimize the work environment	• Enhancing workplace friendliness to reinforce employees' teamwork and confidence at work • Assigning reasonable, adaptive, and motivating tasks • Providing satisfactory, competitive, and supportive rewards • Treating employees with respect, kindness, and empathy

08 Social Engagement

8.1 Optoma
8.2 Champ Vision Display
8.3 Coretronic Intelligent Cloud Service
8.4 Coretronic Intelligent Robotics

8.2 Champ Vision Display

Basic Information

- Name of Company: Champ Vision Display Inc.
- Founded in 2017
- Chairman: Sarah Lin
- Headquarters: 3F., No. 2, Kebei 5th Rd., Chunan Science Park, Miaoli County 350401, Taiwan, R.O.C.
- Number of Employees: 126, including 73 males (58%) and 53 females (42%)
- Capital: NT$180 million
- Global Locations: Taiwan (Miaoli) and China (Kunshan)
- Main Products/Services: Providing one-stop services and display solutions for industrial, medical, and commercial applications

Innovative Products and Technologies

NEW 31.5-inch 4K OLED Creator Professional Display

- The device is outfitted with a 31.5-inch 4K (3840 x 2160) OLED panel that boasts millions of self-illuminating pixels and a 10-bit color system. It is capable of delivering a 99% DCI-P3 color gamut and boasts a 1,000,000:1 contrast ratio, resulting in a more vivid and brighter white color and a more authentic dark black color, with details in shadows or bright highlights. Additionally, it features a response time of only 0.1 milliseconds, achieving zero visual lag.
- The color sensor's design includes an electric micro-drive motor and an internally developed color correction algorithm. Color calibration is performed automatically using the original manufacturer's pre-calibration to ensure professional-grade color accuracy. After color calibration, the parameter configuration file is directly written into the display MCU IC rather than the PC. When the user connects the display to a video device, there is no need for readjustment. The display's hotkeys can be used to quickly apply the previously saved color configuration file.
- Equipped with light source and human body sensors, this de vice can detect environmental conditions and adjust brightness and color temperature accordingly. Additionally, it has the capability to automatically turn off the display.
- The VESA Display HDR 400 True Black certification enables support for various HDR image formats (HDR10, HLG, and Dolby Vision) while adhering to the DICOM standard for medical applications. This ensures precise representation of color, brightness, and contrast.
- The device boasts several I/O ports, including one USB-C, one DisplayPort 1.4, and three HDMI 2.0 ports, as well as a headphone jack and USB hub. This enables users to effortlessly connect with a wide range of devices.

► Professional Dental Medical Integrated Display AIO

- A 21.5-inch all-in-one (AIO) medical diagnostic display has been developed for dental treatment. The device's computing core is based on the ARM architecture, specifically the RK3399 system-on-chip (SoC), which replaces the previous Intel x86 CPU model. The operating system is Android 10. The ARM-based platform facilitates internet connectivity, enabling internet-based cross-platform management software for AIO devices. This software includes a frontend human-machine interface, device agent, and backend management software.
- The device boasts a 21.5-inch FHD 16:9 multi-touch screen that can be transformed into a 180-degree drawing workstation. This feature enables medical professionals to execute tasks by directly tapping the screen, leading to notable enhancements in chair-side CAD.

NEW E-Paper and Solar Smart Bus Stop Sign Solution

- Combining the principles of "energy saving" and "green energy and environmental protection," this 31.2-inch black and white e-paper display possesses paper-like qualities, ensuring clear visibility even in direct sunlight. Additionally, the bistable feature enables the display to consume power solely during the display of images, carousels, or information updates. Notably, the e-paper display can continue to exhibit information on the screen without a power supply.
- The smart bus stop sign's power-saving feature enables it to operate solely on solar power. Even in the absence of sunlight, the solar cell can provide power for up to two weeks, eliminating the necessity for extensive public construction projects. This eco-friendly solution is highly advantageous.

► Switchable Display Privacy Solution

- The privacy module comprises a light guide plate and a separate light source that can be positioned between the display module and the viewer. By emitting light, the privacy module effectively reduces visibility on both sides of the display and limits the viewing angle. When viewed from certain angles, strong light can block the image, resulting in a privacy effect.
- Compared to traditional privacy display technology, this technology allows for seamless switching between normal (public) mode and privacy mode.
- The privacy module is an add-on component that can be installed externally to the display without altering its original structure.
- It boasts high light transmittance and does not affect display brightness or uniformity in either the normal (public) or privacy mode. The brightness can be adjusted to optimize privacy performance in privacy mode, depending on the ambient light.

► Weather Resistant Outdoor LCD Display

- With its high brightness and a range of protective features including being waterproof, dust-proof, rust-proof, anti-rust, anti-corrosion, and explosion-proof, this product is also designed to be anti-static, anti-magnetic, wear-resistant, and rugged.
- The product boasts a streamlined structural design and an integrated fan heat dissipation control module. Additional fans can be easily incorporated into the module to accommodate clients operating in a wide range of temperatures.
- This technology can be applied to both gas stations and electric vehicle chargers, offering an information index, guide and introduction, ticket sales and value-added services, as well as real-time push notification capabilities.

► LED Light Guide Decoration Plate

- The LED Light Guide Decoration Plate has been specifically designed for e-sports, featuring a customized optical design, new LGP dot patterns, and advanced lighting effects achieved through cutting-edge processes.
- The LGP utilizes a unique microstructure design to create directional lighting and dynamic light and shadow effects. This is made possible through the use of an independent control IC LED light bar, which allows for a level of dynamism that is not achievable with traditional LED Light Guide Decoration Plate.
- Microstructures are created by means of exposure and development. Subsequently, molds are produced via electroplating to enhance the machine program and expand the range and variety of microstructures that can be employed.
- Thinner materials are utilized based on the product size. Furthermore, we have successfully developed the PC verification and PC plate die cutting processes in addition to PMMA, which has significantly improved our product competitiveness. Clients have approved these developments and we have commenced mass production as planned.

Customer Service Platform

We have established customer service communication channels, regularly administer customer satisfaction surveys, and engage in two-way communication to gather customer feedback. These efforts are aimed at enhancing our products and services, meeting customer needs, and fostering mutual growth.

Customer service email: sales.cvd@champvision.com.tw

The sales team frequently engages with clients to discuss pricing benefits, sales assistance, and shipping logistics either in person or over the phone. Additionally, a customer service department located in the backend office is responsible for managing returns and addressing client grievances, as well as monitoring progress and shipping updates.

We have an official website and an official LinkedIn page in place, so that clients to express their opinions or provide feedback at any time.

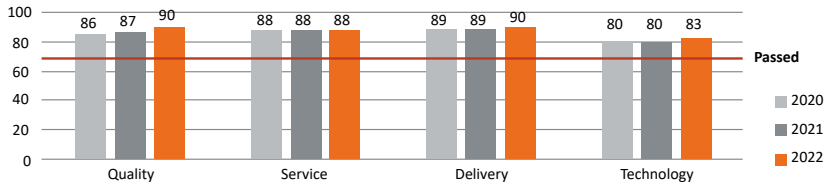
Strategies for Customer Satisfaction Improvement

- Our objective is to enhance customer satisfaction by maintaining a high level of quality and ensuring that our defect rate aligns with our clients' expectations.
- In light of a shift in our business model, we have progressively installed sensors in our office hardware. These sensors are capable of promptly alerting us when a product malfunctions, thereby minimizing our clients' operating losses in the event of a screen failure. Additionally, we are currently developing a failure warning function to enhance our product's value proposition and improve customer satisfaction.
- Our sales team frequently receives numerous inquiries regarding our products through our official website. The majority of these inquiries pertain to the production of a diverse range of products in small quantities. To address this, we offer standard products that have already been produced for clients to choose from. This approach reduces their R&D costs and development time. Additionally, we have updated the product selection page on our official website with a product matching function. This function enables clients to select and match suitable products based on various criteria, such as type, application, size, brightness, and temperature.
- We have developed a comprehensive solution that integrates color correction hardware, firmware, and testing software. This solution can be seamlessly incorporated into our clients' models, serving as a new product line for our company.
- In light of the intricate global political and economic landscape and the potential for supply chain disruptions stemming from the COVID-19 pandemic, we have decided to collaborate with Coretronic Corporation's upcoming 2023 plant initiative in Vietnam. Our aim is to establish and organize a new production line that will mitigate production risks and enhance our service offerings.

Customer Satisfaction Survey

Each year, we administer a customer satisfaction survey to clients who have conducted transactions with us throughout the year. The survey assesses four key areas: quality, service, delivery, and technology. The total score is 100 points, with a minimum passing score of 70 points.

In 2022, the average customer satisfaction score has increased by 1.75 points compared to the previous year, reaching a score of 87.75 points. This improvement can be attributed to the slowdown of the pandemic and the stable shipment of products to major clients. In the future, we will maintain our practice of disclosing the Company's sustainable development results and future development direction to clients during QBR meetings, in order to achieve mutually beneficial outcomes.



Customer Service Cases NEW

New Digital Display Integration Solution for Kaohsiung Port Cruise Terminal

Before submitting a proposal to the client, we conducted on-site assessments to understand their specific needs. We then collaborated with relevant hardware partners and resources to create a proposal that aligns with the client's budget and intended use scenario. We facilitated communication between the client and other project contractors to ensure a seamless project execution. As a result, we successfully constructed two 3x3 video walls with accompanying multimedia display software and hardware. These installations are located in the building's lobby and pathways, providing a comprehensive multimedia audio-visual and information solution.

Digital Signage Solution for Taichung Bus Terminal

We provided software and hardware solutions tailored to the client's needs for a public digital signage and bus information guide. We installed nine 1x3 digital signage walls in the station's pathways and provided relevant operation and maintenance services. Our commitment to continuous improvement ensures that we add value to our products and services, resulting in higher customer satisfaction.

Multimedia Display Solution for Taichung Bus Terminal

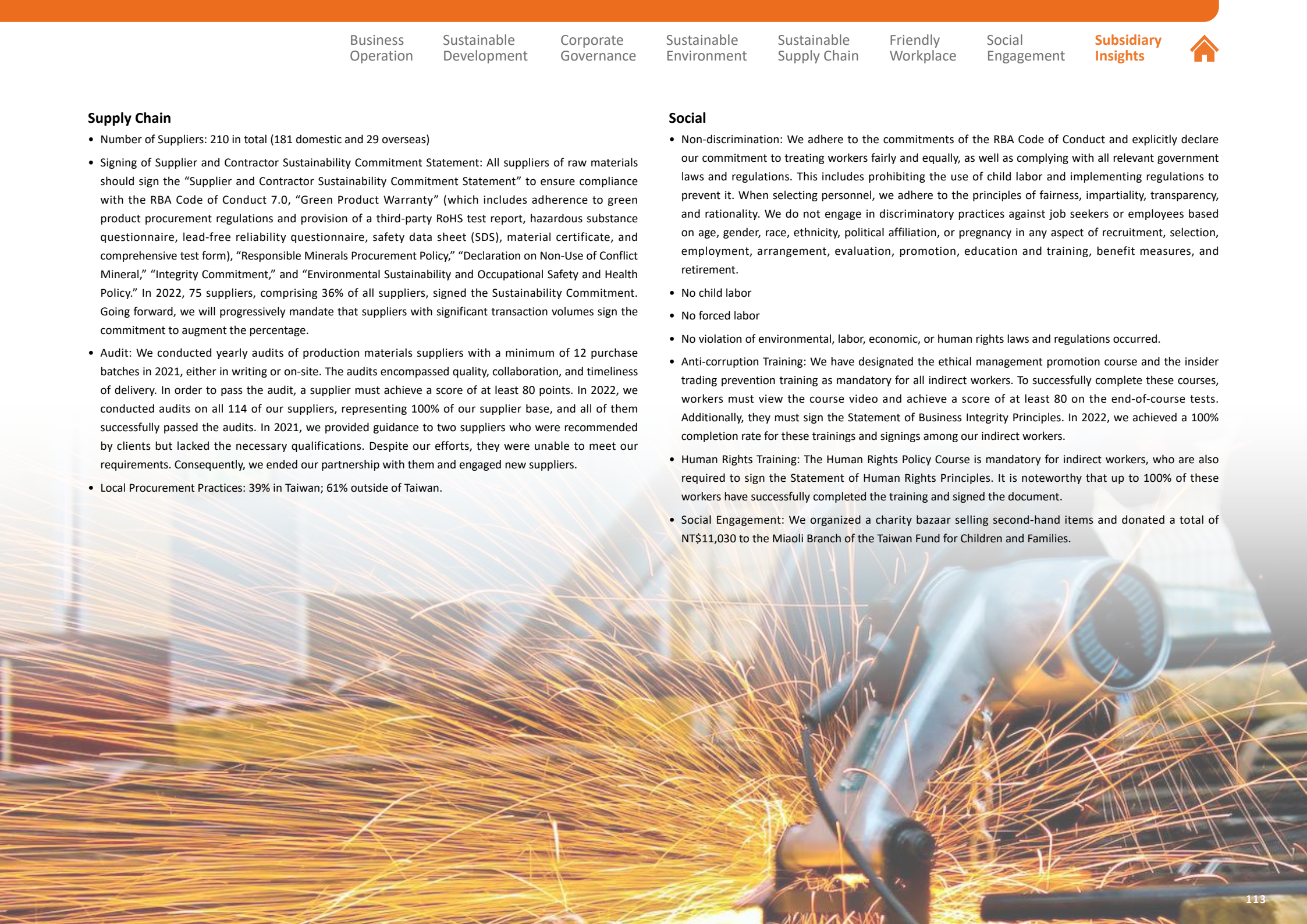
Integration Solution for Kaohsiung Port Cruise Terminal

Supply Chain

- Number of Suppliers: 210 in total (181 domestic and 29 overseas)
- Signing of Supplier and Contractor Sustainability Commitment Statement: All suppliers of raw materials should sign the “Supplier and Contractor Sustainability Commitment Statement” to ensure compliance with the RBA Code of Conduct 7.0, “Green Product Warranty” (which includes adherence to green product procurement regulations and provision of a third-party RoHS test report, hazardous substance questionnaire, lead-free reliability questionnaire, safety data sheet (SDS), material certificate, and comprehensive test form), “Responsible Minerals Procurement Policy,” “Declaration on Non-Use of Conflict Mineral,” “Integrity Commitment,” and “Environmental Sustainability and Occupational Safety and Health Policy.” In 2022, 75 suppliers, comprising 36% of all suppliers, signed the Sustainability Commitment. Going forward, we will progressively mandate that suppliers with significant transaction volumes sign the commitment to augment the percentage.
- Audit: We conducted yearly audits of production materials suppliers with a minimum of 12 purchase batches in 2021, either in writing or on-site. The audits encompassed quality, collaboration, and timeliness of delivery. In order to pass the audit, a supplier must achieve a score of at least 80 points. In 2022, we conducted audits on all 114 of our suppliers, representing 100% of our supplier base, and all of them successfully passed the audits. In 2021, we provided guidance to two suppliers who were recommended by clients but lacked the necessary qualifications. Despite our efforts, they were unable to meet our requirements. Consequently, we ended our partnership with them and engaged new suppliers.
- Local Procurement Practices: 39% in Taiwan; 61% outside of Taiwan.

Social

- Non-discrimination: We adhere to the commitments of the RBA Code of Conduct and explicitly declare our commitment to treating workers fairly and equally, as well as complying with all relevant government laws and regulations. This includes prohibiting the use of child labor and implementing regulations to prevent it. When selecting personnel, we adhere to the principles of fairness, impartiality, transparency, and rationality. We do not engage in discriminatory practices against job seekers or employees based on age, gender, race, ethnicity, political affiliation, or pregnancy in any aspect of recruitment, selection, employment, arrangement, evaluation, promotion, education and training, benefit measures, and retirement.
- No child labor
- No forced labor
- No violation of environmental, labor, economic, or human rights laws and regulations occurred.
- Anti-corruption Training: We have designated the ethical management promotion course and the insider trading prevention training as mandatory for all indirect workers. To successfully complete these courses, workers must view the course video and achieve a score of at least 80 on the end-of-course tests. Additionally, they must sign the Statement of Business Integrity Principles. In 2022, we achieved a 100% completion rate for these trainings and signings among our indirect workers.
- Human Rights Training: The Human Rights Policy Course is mandatory for indirect workers, who are also required to sign the Statement of Human Rights Principles. It is noteworthy that up to 100% of these workers have successfully completed the training and signed the document.
- Social Engagement: We organized a charity bazaar selling second-hand items and donated a total of NT$11,030 to the Miaoli Branch of the Taiwan Fund for Children and Families.



Material Topics

Material Topic	Strategy	Performance in 2022	2023 Goals
Economic Performance	Same as Coretronic Corporation; please refer to Chapter 1.2.		
Salary and Benefits	• A competitive salary structure has been established based on market salary analysis. • Personal incentive remuneration is determined depending on the performance.	• Starting salary for first-line male/female employees (direct labor) is NT$27,250, nearly **8% higher** than the legal minimum wage in Taiwan. • Average salary increase: 3.93%	The Company's regulations are promptly updated in accordance with the revised Labor Standards Act, while also conducting awareness-raising events simultaneously.
Innovation Management	• We have integrated our core products with an AI platform, a cloud management platform, and application software to offer a comprehensive range of solutions for smart retail, smart living, smart transportation, Industry 4.0, and medical displays. • We utilize cutting-edge display technology to improve product design, implement a software management platform, and seamlessly integrate software and hardware technologies to create products that align with AIoT trends and strengthen the competitiveness of our current offerings.	• Creator professional display: We have implemented the use of OLED panels for the first time. These panels possess unique ultra-high contrast and fast response characteristics, which, when combined with our exclusive electric micro-drive motor and color correction algorithm, ensure color accuracy. Users need not readjust the display when connecting it to another image device; instead, they can quickly adopt the color configuration file previously saved using the hotkey on the display. Additionally, the display is equipped with light source and human body sensors, allowing it to detect environmental conditions and automatically adjust the brightness and color temperature, as well as turn off the display when necessary. • We aid dental device clients in meeting the digital transformation requirements of the medical industry by enhancing the screen interface of their devices and integrating them with clinic devices to enable data uploading to the cloud. This facilitates the provision of personalized treatment plans to patients through an AI system. • Weather resistant outdoor LCD display: We launched chargers in line with clients' design needs. • We have created optical kits that are utilized in the e-sports industry. We have also expanded this technology to the automotive sector, offering our automotive clients energy-efficient, cost-effective, personalized, and user-friendly lighting effects and indication functions based on specific scenarios. • Switchable Smart Privacy Display Solution • There are 49 R&D personnel, accounting for 39% of the total number of employees. • R&D investment accounted for 44% of the operating expenses. • We applied for 14 patents and have been granted 14 patents.	• We strive to enhance the core technologies of displays by increasing and optimizing AIoT smart sensing applications. Additionally, we are actively developing professional and multi-functional display products, including All-In-One PCs for computer-aided design and smart medical services. • We have integrated our software management platform and AI image recognition platform with our existing hardware technology, software development, and system integration capabilities to launch a smart solution that seamlessly integrates software and hardware.
Occupational Health and Safety	We have implemented an international safety and health management system to promote health, prevent occupational accidents, increase employee awareness of safety and health, and establish a safe and healthy work environment.	• We passed ISO 45001 verification. • Number of contractor accidents: 0. • Percentage of all employees passing the traffic safety course test: 100%. • Occupational safety and health training for new full-time and non-full-time employees: 20 persons were trained for a total of 60 person-hours. • Dangerous and hazardous substance general training for new full-time and non-full-time as well as in-service employees: 22 persons were trained for a total of 66 person-hours. • Occupational safety and health education and training for in-service employees: 43 persons were trained for a total of 129 person-hours. • Annual firefighting/civil defense training: 22 persons were trained for a total of 88 person-hours. • Fatalities as a result of work-related injuries: 0%. • High-consequence work-related injuries (excluding fatalities): 0%. • Recordable work-related injuries: 0%. • Occupational disease incidence rate: 0%.	• We passed ISO 45001 verification. • Zero occupational accidents. • Zero contractor accidents. • We have identified high-risk groups for hazard identification and assessment by analyzing the annual health check report and the four major types of occupational safety plan questionnaires. We will continue to monitor and track the health of these groups, regularly review any potential hazards, and make necessary improvements to prevent work hazards and occupational diseases.

Material Topic	Strategy	Performance in 2022	2023 Goals
Information Security	We have implemented an internal information security management system that adheres to ISO 27001 and NIST standards. This system allows us to plan, execute, and review internal information security activities, as well as verify the results to identify potential defects in our information security. We promptly correct, track, confirm, and continuously improve these activities to ensure the highest level of information security.	• We adopted the ISO 27001 system. • We have strengthened our AI information security protection framework, implemented 24/7 emergency response measures, and integrated an analysis platform to guarantee complete protection against any vulnerabilities in our information security. • We held one social engineering drill. • Up to 11 new employees took the confidential information security and computer network use regulations course. • We have improved the protection of information security for our hosts by implementing a centralized jump server login structure and adopting two-factor authentication. • We conducted three business continuity exercises to verify the accuracy of our response processes and procedures. • A vulnerability scan was conducted for the platform. • There were no instances of customer privacy violations or major information security incidents.	• We passed ISO 270001 verification. • We expanded the vulnerability scan to cover all the Company's host systems and service platforms. • We regularly hold social engineering drills and offer cyber security training.
Labor and Management Relations	We hold a labor-management meeting each quarter. We hold an Appointment with the President each quarter.	• 8585 Email: 8585@champvision.com • Quarterly labor-management meetings: 4 • Quarterly Appointments with the President: 4 • Quarterly Employee Welfare Committee meetings: 4 • Labor and human rights complaints: 0	Labor disputes: 0
Climate Change	Same as Coretronic Corporation; please refer to Chapter 4.1.		
Green Solutions	• Material Selection and Control for Green Products • Optimizing Product Energy-Saving Design • Improving Product Energy Efficiency	• The highly efficient LGP design of the 27-inch LCMt graphics tablet module can reduce the backlight's power consumption from 30W to 27W, resulting in a power savings of approximately 3W (including 0.9W thermal loss) per module. This translates to an annual reduction of approximately 11.2 tonCO_2e. • The power consumption of the 10.1-inch POS Open-frame display can be reduced by 10-15% through the implementation of a highly efficient LGP (IML) design and optimization of the photoelectric conversion efficiency of LED.	• We have developed environmentally-friendly products that align with green design principles and meet the needs of our existing clients. We have successfully marketed these products to at least one new client. • At least 40% of our products meet the energy consumption standards of Energy Star and ErP. • We adopted new technologies and processors (from high-end processes) to improve product energy efficiency by more than 20%.
Waste Management	• We properly dispose of hazardous/general waste. • We enhance waste recycling and reduction rates and conduct regular follow-ups.	• We obtained ISO 14001 environmental management system certification. • We improved the circular economic benefits of wooden pallets. In 2022, a total of 12 tons of wooden pallets were recycled, reducing 24.7 tonCO_2e. • We audited waste disposal companies and the audit completion rate is 100%.	• We passed ISO 14001 verification. • We offered waste recycling courses to strengthen employees' awareness of resource recycling. • We increased the types of recyclable packaging materials to reduce and recycle waste. • We appointed legitimate companies to collect waste and audited them. The audit completion rate is 100%.
Training and Education	• We have implemented various channels and platforms to improve the professional skills of our employees. • We underwent systematic training courses in collaboration with the training system of our parent company. • We enhanced employees' soft power in the workplace, encouraged them to participate in job rotation, and trained them to have diverse skills.	• Average employee training hours: 21.3 hours. • Percentage of employees receiving performance evaluation: 98.4%.	• At least 90% of the annual plan was completed. • Average employee training hours: 8 hours.
Friendly Workplace	• We comply with the Labor Standards Act and the new labor pension scheme by making timely monthly contributions to employee pensions. • We contribute full amounts to employees under the old scheme according to law to ensure their right to a pension. • We invited senior retired employees with excellent work performance to serve as advisors. • We provide a nine-day golden week (including five-day paid leave) and travel subsidy to employees. • We remain active participants in the Ministry of Labor's Work-Life Balance subsidy program.	• New hire rate: 11.5%. • Turnover rate: 9.2%. • Reinstatement rate and retention rate after parental leave: 100%.	• We organize a variety of activities and encourage employees to take breaks as needed. • We comply with government laws and regulations and adopt measures to promote a friendly workplace.

08 Social Engagement

8.1 Optoma
8.2 Champ Vision Display
8.3 Coretronic Intelligent Cloud Service
8.4 Coretronic Intelligent Robotics

8.3 Coretronic Intelligent Cloud Service

Basic Information

- Name of Organization: Coretronic Intelligent Cloud Service Corporation
- Founded in 2017
- Chairman: Yunu Lin
- Headquarters: 6F, No. 11, Lixing Rd., Hsinchu Science Park, Hsinchu City 300094, Taiwan, R.O.C.
- Number of Employees: 89, including 66 males (74%) and 23 females (26%).
- Capital: NT$250 million
- Global Locations: Taiwan (Hsinchu)
- Main Products/services: Our company offers “platform service solutions” such as smart retail, cloud public broadcasting, and advertisement matchmaking. Additionally, we provide “cloud-based digital transformation solutions”, which include cloud applications, cloud infrastructure, and cloud maintenance and operations.

Innovative Products and Technologies

We offer clients comprehensive platform service solutions in a service-oriented business model, utilizing cutting-edge technologies such as artificial intelligence (AI), deep learning, computer vision, big data science, and cloud computing as our foundation. Furthermore, we have implemented AI and big data technologies to accurately identify target demographics. As a result, we have successfully launched the first AI-powered digital out-of-home (DOOH) advertising platform, known as tagOOH. This platform enables advertisers to precisely target their desired audience while providing advertising companies with a comprehensive AI cloud-based broadcasting and advertising matchmaking platform. Currently, our platform service solution has been implemented by renowned chain stores both domestically and internationally, ranging from convenience stores and tea shops to large-scale shopping centers.

Our cloud-based digital transformation solutions have been implemented by prominent clients in the upstream and downstream of the IC industry, technology/manufacturing, game/e-commerce, and financial industries, as well as public sectors. Additionally, we are currently working on developing digital transformation consulting services for the retailers. This involves collecting, analyzing, and applying data from the offline retail fields to add value to our services. Our software R&D team has successfully developed an AI cloud-based platform for public broadcasting and advertising management. Through collaboration with the sales unit, the platform has been adopted by well-known domestic bookstores, glasses chain stores, retail shops, and MRT. Our goal is to create a new business model and expand more opportunities for growth.

Customer Service

Customer Service Email: cics.service@coretronic-cics.com.tw

Our sales team consistently engages with clients to ensure their satisfaction with our services through various means such as face-to-face meetings and phone calls. We are committed to enhancing the quality of our services to further improve client satisfaction.

We have an official website and a Facebook page in place, so that customers can express opinions or provide feedbacks at any time.

Supply Chain

- Number of Suppliers: 156 in total (145 domestic and 11 overseas; none of them is a production material supplier)
- Local Procurement Practices: 100% in Taiwan.

Social

- Non-discrimination: We adhere to the commitments of the RBA Code of Conduct and explicitly declare our commitment to treating workers fairly and equally, as well as complying with all relevant government laws and regulations. This includes prohibiting the use of child labor and implementing regulations to prevent it. When selecting personnel, we adhere to the principles of fairness, impartiality, transparency, and rationality. We do not engage in discriminatory practices against job seekers or employees based on age, gender, race, ethnicity, political affiliation, or pregnancy in any aspect of recruitment, selection, employment, arrangement, evaluation, promotion, education and training, benefit measures, and retirement.
- No child labor
- No forced labor
- No violation of environmental, labor, economic, or human rights laws and regulations occurred.
- Anti-corruption Training: We have designated the ethical management promotion course and the insider trading prevention training as mandatory for all employees. To successfully complete the courses, employees must view the course video and achieve a score of at least 80 on the end-of-course tests. Additionally, they must sign the Statement of Business Integrity Principles. In 2022, 90% of all employees completed the training, representing a 2% increase from 2021.
- Human Rights Training: The Human Rights Policy Course is mandatory for all employees, who are also required to sign the Statement of Human Rights Principles. As of now, up to 90% of all employees have successfully completed the training and signed the document.

Material Topics

Material Topic	Strategy	Performance in 2022	2023 Goals
Economic Performance	Same as Coretronic Corporation; please refer to Chapter 1.2.		
Salary and Benefits	• We have established a competitive salary structure by analyzing market salaries • Personal incentive remuneration is determined based on individual performance.	Average salary of new employees: • The initial salary for individuals possessing a bachelor's degree and lacking work experience is approximately 64% greater than the legally mandated minimum wage. • The starting salary for individuals with a master's degree and no work experience is approximately 92% higher than the legally mandated minimum wage. • The starting salary for individuals with a doctoral degree and no work experience is approximately 125% higher than the legally mandated minimum wage. This information is relevant to our company's operations in the technology industry.	The Company's regulations are promptly updated in accordance with the revised Labor Standards Act, and awareness-raising events are concurrently conducted.
Innovation Management	• Innovative technology: We utilize machine vision as the foundation and incorporate machine learning for posture and facial recognition to develop applications for the smart retail and health industries. • Innovative operations: By making AI IoT equipment operation service our core, we can establish a comprehensive business model that offers clients a complete solution, including procurement, installation, and after-sales services.	• We have successfully developed a range of solutions for the smart retail sector, including a recommendation system, virtual shelf, regular customer system, skin quality inspection, and electronic tags solutions. As a result, we have secured orders from several prominent clients in Taiwan's retail industry. • Our intelligent health solutions, utilizing immersive platform technology, have been effectively implemented by chain gyms throughout the Asia-Pacific region. • We have implemented AI and big data technologies to accurately identify target demographics, successfully launching our first AI DOOH advertising platform, tagOOH, and significantly improving advertising effectiveness. • Cloud-based digital transformation solutions with corporate digital transformation at the core have also been adopted by well-known clients in the upstream and downstream of the IC, technology/ manufacturing, gaming/e-commerce, and financial industries, as well as public sectors. • There are 63 R&D personnel, accounting for 71% of the total number of employees • R&D investment accounted for 30% of the operating expenses • Applied for 9 patents, with 5 patents granted	• Enhance the development of smart retail solutions • Launch turnkey cloud public broadcasting and advertising matchmaking platform service solutions • Promote cloud-based digital transformation solutions, including cloud applications, cloud infrastructure, and cloud maintenance and operations.
Occupational Health and Safety	• Established an occupational safety and health management unit in compliance with ISO 45001. This unit is responsible for planning, supervising, and implementing occupational safety and health initiatives. • Regular annual training sessions are held to implement the concept of disaster prevention and enhance emergency response skills in the company. This includes firefighting and civil defense training.	• Disaster prevention training: 2 persons were trained for a total of 16 person-hours. • Number of fatalities as a result of work-related injuries: 0. • High-consequence work-related injuries (excluding fatalities): 0. • Recordable work-related injuries: 0. • Occupational disease incidence rate: 0. • The target for occupational injuries is fewer than 3, and the actual number is 0.	• Occupational injuries are fewer than 3. • Contractor occupational accidents: 0.
Information Security	Same as Coretronic Corporation; please refer to Chapter 3.3.		
Labor and Management Relations	• We conduct quarterly labor-management and Employment Welfare Committee meetings • We have established diverse and effective two-way communication channels • Employees were notified of significant changes in business operations at least four weeks prior.	• Quarterly labor-management meetings: 4 • Quarterly Employee Welfare Committee meetings: 7 • Labor and human rights complaints: 0	We hold a labor-management meeting per quarter to enhance labor-management relations.
Climate Change	Same as Coretronic Corporation; please refer to Chapter 4.1.		
Waste Management	Same as Coretronic Corporation; please refer to Chapter 4.2.		
Training and Education	Combined theory and practice depending on operational needs, unleashed employee potential, and cultivated high-quality talents	• Average employee training hours: 0.13 hours (the average training hours were diluted due to personnel transferred from the group at the end of the year) • Percentage of employees receiving performance evaluations: 100%	• Integrated group resources and diverse learning methods to provide employees with digital and physical learning resources • 100% of our full-time employees undergo regular performance evaluations and are promoted based on their results
Friendly Workplace	Maintaining the physical and psychological health of employees, enhancing their sense of identity with the company, and shaping the employer brand	• New hire rate: 19.3%. • Turnover rate: 15.9% • Reinstatement rate and retention rate after parental leave: None (no one applied during the data period)	Creating a work environment based on gender equality and diversity, free from discrimination and harassment.

08 Social Engagement

8.1 Optoma
8.2 Champ Vision Display
8.3 Coretronic Intelligent Cloud Service
8.4 Coretronic Intelligent Robotics

8.4 Coretronic Intelligent Robotics

Basic Information

- Name of Organization: Coretronic Intelligent Robotics Corporation
- Founded in 2017
- Chairman: Robert Hsueh
- Headquarters: 4F, No. 11, Lixing Rd., Hsinchu Science Park, Hsinchu City 300094, Taiwan, R.O.C.
- Number of Employees: 79, including 66 males (84%) and 13 females (16%)
- Capital: NT$180 million
- Global Locations: Taiwan (Hsinchu and Tainan), Japan, and the UK
- Main Products/Services: Development, manufacturing, and sales of intelligent drones, and service thereof
- Awards: Won the Gold Award for Best Drone Application and the Audience Voting Gold Award at the 2022 Japan Drone Show

Innovative Products and Technologies

Our drones are equipped with high-performance computing and a sensing control platform, as well as automation and application field technologies, thanks to our core technologies, including drone airframe design, flight control, AI, and system integration. As a result, we have developed an AI autonomous security control drone solution, an alpine logistics drone solution, and a long-range VTOL logistics drone solution, all of which enhance the commercial application value of drones.

AI Autonomous Security Control Drone Solution

The system boasts autonomous and AI capabilities that support a range of tasks, including automatic inspection tours, threat response, and irregularity monitoring. Equipped with a high-performance computing and sensing control platform, the system enables fully automatic flight, precise landing, and automatic charging. Additionally, the system allows for the identification and tracking of people and vehicles during image capture while performing tasks. Users can access the monitoring center to establish a comprehensive land and air protection and security control network, thereby achieving the objective of AI-based security monitoring.

Alpine Logistics Drone Solution

The product boasts high-altitude airworthiness for load-bearing flights and automatic three-dimensional path planning. It can rapidly ascend to an altitude of 3,000m while carrying a maximum load of 7kg, and offers RTK precise positioning at the centimeter level. Additionally, it can automatically land and unload with precision while in flight. Through the drone management system of the monitoring center, users can accurately track the delivery route and flight progress.

Long-Range VTOL Logistics Drone Solution

The product boasts a VTOL drone, eliminating the need for a runway, and a compact cargo unit capable of carrying up to 7kg. It offers fully automated medium- and long-range logistics services, covering a radius of 30km, for both hub-to-door and hub-to-facility deliveries. The system is equipped with high-performance computing, AI landing detection, rapid unloading during flight, backup power, and a parachute design to ensure safe flight and delivery.

Innovative Sustainable Solutions

NEW Smart drone delivery solution by Coretronic Intelligent Robotics X Chunghwa Post

In order to establish fixed flight routes, provide emergency supply services, and conduct the initial drone safety inspection, we collaborated with Chunghwa Post to conduct a successful drone trial flight verification in Jianshi Township, Hsinchu County. The flight covered a distance of 21.2km at an altitude of 1,580m and lasted for a minimum of 65 hours. During this time, the drone completed 700 take-offs and landings and made 54 trips to ensure that its performance was suitable for delivery purposes. Additionally, at the Remote Control Drone Delivery Trial Flight Launch Ceremony in Jianshi Township, we successfully transported mail, medical supplies in masks and rapid test kits, from Jianshi Township Office to Xinguang Elementary School in Jianshi Township, Hsinchu County. Due to the drone service, the delivery time was reduced from 2 hours to just 45 minutes, with a significant safety improvement.

NEW Coretronic Intelligent Robotics X Kaohsiung Smart Urban and Rural Project

We collaborated with Taiwan International Ports Corporation to validate a drone's shore-to-ship delivery service at the Port of Kaohsiung. The drone effectively transported supplies from the shore to a vessel located 30m away from the shore. The test was conducted at sea, where the ship was in motion due to the current, making the delivery more challenging than a stationary drop-off. Notably, this marks the first instance in Taiwan of a drone being utilized for a ship supply delivery in an anchorage.

Customer Service

- Customer Service Email: service.circ@coretronic-robotics.com and service.drone@coretronic-robotics.com
- Overseas Market Customer Service Email: Japan (jp.circ@coretronic-robotics.com) and Europe (eu.circ@coretronic-robotics.com)
- Our sales team consistently engages with clients to ensure their satisfaction with our services through various means such as face-to-face meetings and phone calls. We are committed to enhancing the quality of our services to further improve client satisfaction.
- We have an official website, a Linkedin page, and a YouTube Channel in place, so that clients can express opinions or provide feedback at any time.

Supply Chain

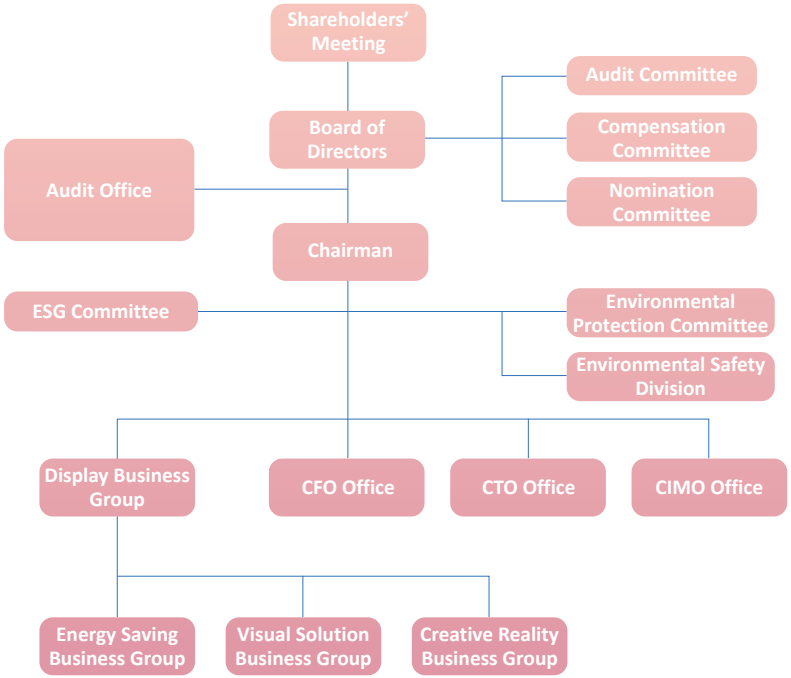
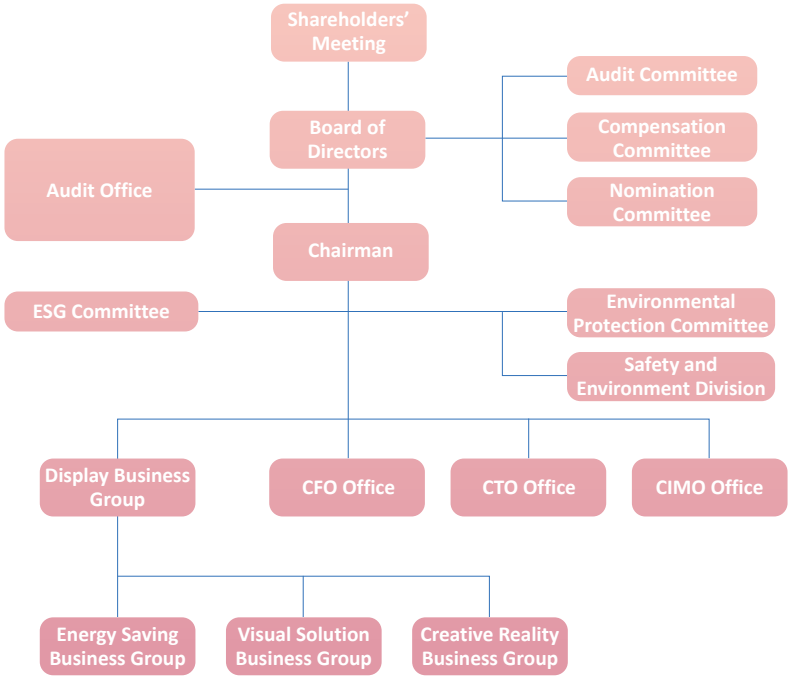
- Number of Suppliers: 287 in total (239 domestic and 48 overseas)
- Supplier Audit: The procurement, engineering, and quality assurance departments conduct joint audits of suppliers during the mass production phase, evaluating delivery, R&D technology, and quality control. A passing score of 70 points is required. Out of the 41 companies scheduled for audit, all were audited and achieved a passing score.
- Local Procurement Practices: 95.9% in Taiwan; 4.1% outside of Taiwan.

Social

- Non-discrimination: We adhere to the commitments of the RBA Code of Conduct and explicitly declare our commitment to treating workers fairly and equally, as well as complying with all relevant government laws and regulations. This includes prohibiting the use of child labor and implementing regulations to prevent it. When selecting personnel, we adhere to the principles of fairness, impartiality, transparency, and rationality. We do not engage in discriminatory practices against job seekers or employees based on age, gender, race, ethnicity, political affiliation, or pregnancy in any aspect of recruitment, selection, employment, arrangement, evaluation, promotion, education and training, benefit measures or retirement.
- No child labor
- No forced labor
- No violation of environmental, labor, economic, or human rights laws and regulations occurred.
- Anti-corruption Training: We have designated the ethical management promotion course and the insider trading prevention training as mandatory for all employees. To complete the courses, employees must watch the course video and achieve a score of at least 80 on the end-of-course tests. Additionally, they must sign the Statement of Business Integrity Principles. In 2022, 99% of all employees completed both the training and the signing.
- Human Rights Training: The Human Rights Policy Course is mandatory for all employees, who are also required to sign the Statement of Human Rights Principles. An impressive 99% of all employees have completed the training and signed the document.

Material Topics

Material Topic	Strategy	Performance in 2022	2023 Goals
Economic Performance	Same as Coretronic Corporation; please refer to Chapter 1.2.		
Salary and Benefits	• A competitive salary structure has been established based on market salary analysis. • Personal incentive remuneration is determined depending on performance.	• The starting salary for R&D personnel holding a master's degree exceeds the industry average in the technology sector. • Average salary increase: 3-5%	The Company's regulations are promptly updated in accordance with the revised Labor Standards Act, and awareness-raising events are concurrently conducted.
Innovation Management	We are leveraging cutting-edge technologies, such as computer vision, AI, and high-performance computing and control, in conjunction with our parent company's expertise in optics, mechanism, heat conduction, and electronics, to develop core robot technologies. These include human-computer interaction, motion control, AI identification, sensor fusion, and navigation, which enable us to offer comprehensive AI commercial robot solutions.	**AI and Automated Drones** • Military: We submitted a project for an AI drone with a dual-EO/IR payload to entity C. Two of our drone models were subsequently chosen for a military project that requires commercial specifications. • Commercial: Teledyne FLIR drones for publ ic safety and inspection tours are now available in the US. • Logistics: We are pleased to report that our collaboration with Rakuten on the Chichibu-shi Rural Logistics project remains ongoing. We are proud to note that this project has been recognized as a key initiative by the Ministry of Land, Infrastructure, Transport, and Tourism in Japan. • The product, Roadmap, is currently under development for drones, payloads, and remote controls, with a specific emphasis on the non-DJI market in the United States. The primary focus of this development is to cater to inspection tours. • Our fully autonomous drone solution was awarded the Gold Award for Best Drone Application and the Audience Voting Gold Award at the Japan Drone Show for its successful application in Japanese tunnel engineering and construction inspection tours, as well as three-dimensional surveying and mapping services. **R&D Investment** • There are 61 R&D personnel, accounting for 77% of the total number of employees. • R&D investments accounted for 58% of the operating expenses. • Applied for 7 patents and have been granted 10 patents.	**Market Development** • Military: Continuing to develop and explore business opportunities in both commercial and military sectors for the domestic military industry. The military procurement project was won by our EO/IR/LD payload and two drone models after successfully passing the test. • Commercial: Mass-produced and shipped out FLIR drones in the United States; launched the second phase of the project; established a remote control ODM project. • Logistics: Worked with leading retailers for VTOL logistics drones. • European Market Expansion **Technology Development and Certification Application** • Developed a RB5 computing platform and new technologies for intelligent obstacle avoidance and AI navigation. • Our drones passed CE and EU ESEA Level 2 certification.
Occupational Health and Safety	• Established an occupational safety and health management unit in compliance with ISO 45001. This unit is responsible for planning, supervising, and implementing occupational safety and health initiatives. • Regular annual training sessions are held to implement the concept of disaster prevention and enhance emergency response skills in the company. This includes firefighting and civil defense training.	• Disaster prevention training: 6 persons were trained for a total of 24 person-hours. • Number of fatalities as a result of work-related injuries: 0. • High-consequence work-related injuries (excluding fatalities): 0 • Recordable work-related injuries: 6.4 • Occupational disease incidence rate: 0 • The target number of occupational injuries is fewer than 3, and the actual number is 1.	• Occupational injuries at the plants are lower than 3. • Contractor occupational accidents: 0. • The promotion of workplace safety serves as a reminder to employees to prioritize safety in the workplace prior to engaging in any operations, thereby mitigating the risk of injury.
Information Security	Same as Coretronic Corporation; please refer to Chapter 3.3.		
Labor and Management Relations	We hold a labor-management meeting each quarter to enhance labor-management relations.	• Quarterly labor-management meetings: 4 • Quarterly Employee Welfare Committee meetings: 7 • Labor and human rights complaints: 0	Our strategy involves fostering consensus through regular labor-management meetings and continuously improving the work environment and quality based on employee feedback.
Climate Change	Same as Coretronic Corporation; please refer to Chapter 4.1.		
Waste Management	Same as Coretronic Corporation; please refer to Chapter 4.2.		
Training and Education	We combined theory and practice to meet operational needs, unlock employee potential, and cultivate high-quality talent.	• Average employee training hours: 2.5 hours • Percentage of employees receiving performance evaluation: 87%	• Cultivating Innovation and R&D, Engineering, and Manufacturing Talents • Enhancing Coaching and Leadership, Critical Thinking, and Communication Skills
Friendly Workplace	Maintaining employees' physical and psychological health, improving their identity with the Company, and then shaping the employer brand	• New hire rate: 41%. • Turnover rate: 28%. • Reinstatement rate and retention rate after parental leave: None (no one applied during the data period)	Improving the process of scheduling family vacations through our annual leave system and promoting employee awareness of health and fitness.

Page No.	Chapter	Before Correction	After Correction	Reason for Correction
3	Sustainable Performance Highlights	Environmental—Reduce Waste Output • With circular economy programs, the waste output intensity of plants in Taiwan was **reduced by 47%** compared with 2020.	Environmental—Reduce Waste Output • With circular economy programs, the waste output intensity of plants in Taiwan was **reduced by 50%** compared with 2020.	Data range correction
28	3.1			Typo
41	4.1	Performance in 2021 • The waste pollution intensity of the plants in Taiwan was reduced by 47% compared with 2020 (by 61% compared with 2019).	Performance in 2021 • The waste pollution intensity of the plants in Taiwan was reduced by 50% compared with 2020 (by 64% compared with 2019).	Data range correction

<table>
<tr><th>Page No.</th><th>Chapter</th><th>Before Correction</th><th>After Correction</th><th>Reason for Correction</th></tr>
<tr><td>49</td><td>4.2</td><td>
<table>
<tr><th>Category</th><th>Description</th><th>Disposal</th><th colspan="3">Taiwan</th></tr>
<tr><th></th><th></th><th></th><th>2019</th><th>2020</th><th>2021</th></tr>
<tr><td>Domestic Waste</td><td>Domestic waste</td><td>Transported to the incineration plants designated by the government for incineration by local qualified contractors.</td><td>189.0</td><td>154.5</td><td>127.1</td></tr>
<tr><td>Recyclable Waste</td><td>Waste plastics, waste paper, waste metals, and announced recyclable waste</td><td>Recycled by local qualified recycling contractors.</td><td>618.0</td><td>365.3</td><td>243.5</td></tr>
<tr><td>General Industrial Waste</td><td>Unclassified inflammable waste</td><td>Transported to disposal plants by qualified contractors by way of disposal.</td><td>37.5</td><td>37.3</td><td>87.8</td></tr>
<tr><td>Hazardous Industrial Waste</td><td>Mercury lamps, empty bottles, waste liquid, electronic waste, and hazardous waste at disposal regulated by local environmental protection authorities</td><td>Sorted and gathered by hazard properties and disposed of by qualified contractors.</td><td>16.5</td><td>12.4</td><td>4.2</td></tr>
<tr><td colspan="3">Total Waste Output (ton)</td><td>861.0</td><td>569.5</td><td>462.6</td></tr>
<tr><td colspan="3">Waste Output Intensity (ton/ NTD 100m)¹</td><td>4.3</td><td>3.2</td><td>1.7</td></tr>
</table>
1: Scope of annual revenue
2019-2020: Coretronic, Young Green Energy, uCare Medical Electronics, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, InnoSpectra, Coretronic MEMS, and Coretronic Reality.
2021: The plants in Taiwan include Coretronic, Young Green Energy, uCare Medical Electronics, Champ Vision Display, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, InnoSpectra, Coretronic MEMS, Coretronic Reality, and Coretronic Intelligent Logistics Solutions; the plants in China include Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan).</td><td>
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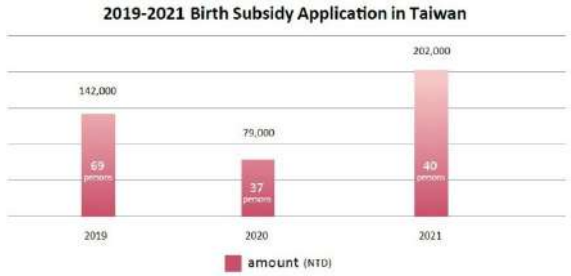
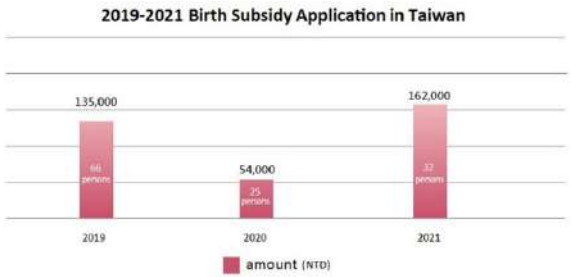
<tr><td>Recyclable Waste</td><td>Waste plastics, waste paper, waste metals, and announced recyclable waste</td><td>Recycled by local qualified recycling contractors.</td><td>617.8</td><td>359.2</td><td>222.9</td></tr>
<tr><td>General Industrial Waste</td><td>Unclassified inflammable waste</td><td>Transported to disposal plants by qualified contractors by way of disposal.</td><td>36.5</td><td>35.2</td><td>82.4</td></tr>
<tr><td>Hazardous Industrial Waste</td><td>Mercury lamps, empty bottles, waste liquid, electronic waste, and hazardous waste at disposal regulated by local environmental protection authorities</td><td>Sorted and gathered by hazard properties and disposed of by qualified contractors.</td><td>13.8</td><td>9.9</td><td>4.1</td></tr>
<tr><td colspan="3">Total Waste Output (ton)</td><td>857.1</td><td>558.8</td><td>436.5</td></tr>
<tr><td colspan="3">Waste Output Intensity (ton/ NTD 100m)²</td><td>4.7</td><td>3.4</td><td>1.7</td></tr>
</table>
1: Scope of annual revenue
2019-2020: Coretronic, Young Green Energy, uCare Medical Electronics, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, InnoSpectra, Coretronic MEMS, and Coretronic Reality.
2021: The plants in Taiwan include Coretronic, Young Green Energy, uCare Medical Electronics, Coretronic Intelligent Cloud Service, Coretronic Intelligent Robotics, InnoSpectra, Coretronic MEMS, Coretronic Reality, and Coretronic Intelligent Logistics Solutions; the plants in China include Coretronic Display (Suzhou), Coretronic Optotech (Suzhou), Coretronic Optics (Suzhou), Coretronic Projection (Kunshan), and Coretronic Optics (Kunshan).</td><td>Data range correction</td></tr>
<tr><td>67</td><td>6</td><td>Operations mechanism
• The occupational safety unit sets and draws up annual targets, budgets, and plans, and submits them to the Occupational Safety and Health Committee for review, to pass the verification of the ISO 45001 occupational safety and health management system so as to implement relevant strategies.</td><td>Operations mechanism
• The safety and environment unit sets and draws up annual targets, budgets, and plans, and submits them to the Occupational Safety and Health Committee for review, to pass the verification of the ISO 45001 occupational safety and health management system so as to implement relevant strategies.</td><td>Typo</td></tr>
<tr><td>72</td><td>6.3</td><td> 
</td><td> 
</td><td>Data range correction</td></tr>
</table>

SGS

ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE CORETRONIC CORPORATION'S ESG REPORT FOR 2022

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION
SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by CORETRONIC CORPORATION. (hereinafter referred to as Coretronic) to conduct an independent assurance of the ESG Report for 2022. The scope of assurance is based on the SGS Sustainability Report Assurance methodology and AA1000 Assurance Standardv3 Type 2 High level to assess whether the text and data in accompanying tables contained in the report and complies with the GRI Universal Standard (2021) and AA1000 Accountability Principles (2018) during on-site verification (2023/02/01~2023/06/07) in Coretronic headquarter. The boundary of this report includes Coretronic Taiwan and oversea operational and production or service sites' specific performance data included the sampled text, and data in accompanying tables, contained in the report presented. The assurance process did not include the evaluation of specific performance information outside the scope, such as climate-related financial disclosures (TCFD).
SGS reserves the right to update the assurance statement from time to time depending on the level of report content discrepancy of the published version from the agreed standards requirements.

INTENDED USERS OF THIS ASSURANCE STATEMENT
This Assurance Statement is provided with the intention of informing all Coretronic's Stakeholders.

RESPONSIBILITIES
The information in the Coretronic's ESG Report of 2022 and its presentation are the responsibility of the directors or governing body (as applicable) and management of Coretronic. SGS has not been involved in the preparation of any of the material included in the ESG Report.

Our responsibility is to express an opinion on the report content within the scope of verification with the intention to inform all Coretronic's stakeholders.

ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognized assurance guidance and standards including the principles of reporting process contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) GRI 1: Foundation 2021 for report quality, GRI 2 General Disclosure 2021 for organisation's reporting practices and other organizational detail, GRI 3 2021 for organisation's process of determining material topics, its list of material topics and how to manages each topic, and the guidance on levels of assurance contained within the AA1000 series of standards.

The assurance of this report has been conducted according to the following Assurance Standards:

Assurance Standard Options	Level of Assurance
A	SGS ESG & SRA Assurance Protocols (based on GRI Principles and guidance in AA1000)
B	AA1000ASv3 Type 2 High Level (AA1000AP Evaluation plus evaluation of Specified Performance Information)

SCOPE OF ASSURANCE AND REPORTING CRITERIA
The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

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Reporting Criteria Options
1 GRI Universal Standard (2021) (In Accordance with)
2 AA1000 Accountability Principles (2018)
3 SASB (HARDWARE)

- evaluation of content veracity of the sustainability performance information in relation to the determined material topics at a high level of scrutiny for Coretronic and moderate level of scrutiny for subsidiaries, joint ventures, and applicable aspect boundaries outside of the organization covered by this report;
- AA1000 Assurance Standard v3 Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2018);
- evaluation of the report against the requirements of Global Reporting Initiative Universal Standard 2021 (GRI 2, GRI 3, 200, 300 and 400 series) claimed in the GRI content index as material and in accordance with; and
- evaluation of the report against the SASB Disclosures and Metrics included in the HARDWARE Sustainability Accounting Standard (VERSION 2018-10) and conducted alongside an evaluation of accuracy assurance at moderate level of scrutiny.

ASSURANCE METHODOLOGY
The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, Sustainability committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant.

LIMITATIONS AND MITIGATION
Financial data drawn directly from independently audited financial accounts and Task Force on Climate-related Financial Disclosures (TCFD) has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE
The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from Coretronic, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, RBA, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

VERIFICATION/ ASSURANCE OPINION
On the basis of the methodology described and the verification work performed, we are satisfied that the specified performance information included in the scope of assurance is accurate, reliable, has been fairly stated and has been prepared, in all material respects, in accordance with the reporting criteria.

We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting.

AA1000 ACCOUNTABILITY PRINCIPLES (2018) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity
Coretronic has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, sustainability experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns. For future reporting, For future reporting, Coretronic could undertake to allow full and balanced involvement by stakeholders in its varied decision-making processes related to sustainability.
Materiality
Coretronic has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.

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Responsiveness
The report includes coverage given to stakeholder engagement and channels for stakeholder feedback. Coretronic has responded in a way that addressed the needs, concerns and expectations of stakeholders.
Impact
Coretronic has demonstrated a process on identifying fairly encompass a range of environmental, social and governance topics from wide range of sources, such as activities, policies, programs, decisions and products and services, as well as any related performance. Impacts related to material topics were in place at target setting with qualitative and quantitative measurements and evaluation.

GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, Coretronic's ESG Report of 2022, is adequately in accordance with the GRI Universal Standards 2021and complies with the requirements set out in section 3 of GRI 1 Foundation 2021, where the significant impacts on the economy, environment, and people, including impacts on their human rights are assessed and disclosed following the guidance defined in GRI 3: Material Topic 2021, and the relevant 200/300/400 series Topic Standard related to Material Topic have been disclosed. It is considered a good practice for the highest governance body to actively engage in the review and approval of material issues. Their dedicated participation in the internal process demonstrates their commitment to ensuring the accuracy and integrity of the information presented. For future reporting, it is recommended to have more descriptions on how the organization has applied due diligence as a method for the identification and the evaluation of its impacts on the economy, environment, and people, including impacts on their human rights. When assessing impacts, Coretronic should consider sustainable challenges at local, regional, and global levels related to sectors and the geographic location of its activities and business relationships. It is strongly encouraged that Coretronic to provide more detailed disclosures of remuneration information, in alignment with GRI Indicator 2-21. Such disclosures enhance transparency and accountability, allowing stakeholders to gain a comprehensive understanding of the organization's remuneration policies, practices, and ratios.

SASB CONCLUSIONS, FINDINGS AND RECOMMENDATIONS
Coretronic has referenced with SASB's Standard, HARDWARE, VERSION 2018-10 to disclose information of material topics that are vital for enterprise value creation. The reporting boundaries of the disclosed information correspond to Coretronic's ESG Report of 2022 audited. Coretronic used SASB accounting and activity metrics to assess and manage the topic-related risks and opportunities, where relevant quantitative information was assessed for its accuracy and completeness to support the comparability of the data reported. Process to identify, assess, and manage topic-related risks and opportunities were integrated into Coretronic's overall management process. It is recommended that Coretronic adopts a practice of regular monitoring of peer disclosures to better understand evolving expectations among investors and other stakeholders. By staying abreast of peer disclosures, Coretronic can gain insights into industry trends, benchmarks, and evolving reporting practices. This monitoring process facilitates the identification of areas for improvement and ensures that Coretronic provides comparable information in its own reporting.

Signed:
For and on behalf of SGS Taiwan Ltd.

AA1000
Licensed Report
000-8/V3-JKTKP

Stephen Pao
Knowledge Deputy General Manager
Taipei, Taiwan
19 June, 2023
WWW.SGS.COM

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GRI Content Index

Statement of Use	Coretronic Corporation has reported in accordance with the GRI Standards for the period from January 1, 2022 to December 31, 2022.
GRI 1 Used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	The Company has no GRI Sector Standards to follow.

GRI Standard	Disclosure		Chapter	Page Number	Omission/Description
General Disclosures					
GRI 2: General Disclosures 2021	2-1	Organizational details	1.1	9, 11	
	2-2	Entities included in the organization's sustainability reporting	About the Report, 2.3	1, 26	
	2-3	Reporting period, frequency and contact point	About the Report	1	
	2-4	Restatements of information	Errata of Coretronic 2021 ESG Report	122-123	
	2-5	External assurance	About the Report, Assurance Statement	1, 124	
	2-6	Activities, value chain, and other business relationships	1.1-1.3, 2.3, 5.1	9, 11, 13, 26, 61	
	2-7	Employees	6.1	68	
	2-8	Workers who are not employees	6.1	68	
	2-9	Governance structure and composition	2.2, 3.1	20, 31-32, 34	
	2-10	Nomination and selection of the highest governance body	3.1	32	
	2-11	Chair of the highest governance body	3.1	32	
	2-12	Role of the highest governance body in overseeing the management of impacts	2.2, 3.1	21, 24, 31	
	2-13	Delegation of responsibility for managing impacts	2.2	20	
	2-14	Role of the highest governance body in sustainability reporting	2.2, 2.3	20, 24	
	2-15	Conflicts of interest	3.1	32	
	2-16	Communication of critical concerns	3.1	31	
	2-17	Collective knowledge of the highest governance body	3.1	33	
	2-18	Evaluation of the performance of the highest governance body	3.1	33	
	2-19	Remuneration policies	The Company has not yet incorporated the ESG performance into the consideration for the remuneration to the board of directors and senior executives.		
	2-20	Process to determine remuneration	3.1	34	
	2-21	Annual total compensation ratio	Omitted		Remuneration is confidential information of the organization.
	2-22	Statement on sustainable development strategy	Letter from the Chairman	2	
	2-23	Policy commitments	3.2, 3.3, 4.1, 4.4, 6.2, 6.6	35, 37, 43, 55-57, 69, 89	
	2-24	Embedding policy commitments	1.1, 3.2-3.4, 6.2	9, 35, 39-40, 69	
	2-25	Processes to remediate negative impacts	3.4, 6.2, 6.4	40, 70, 77-79	
	2-26	Mechanisms for seeking advice and raising concerns	3.4, 5.1, 6.2, 6.4	40, 61, 70, 77-79	
	2-27	Compliance with laws and regulations	Coretronic Corpation did not violate laws and regulations in 2022.		
	2-28	Membership associations	Coretronic Corpation is a member of the Hsinchu City Human Resource Management Association, the Allied Association for Science Park Industries, and the Human Resources Committee of the Allied Association for Science Park Industries and joined the Taiwan Climate Partnership in 2022 to join hands with stakeholders to combat climate change and increase the organization's climate resilience to achieve the goal of net zero emissions.		
	2-29	Approach to stakeholder engagement	1.5, 2.3, 5.1-5.3, 6.4	17, 22-23, 61-66, 77-79	
	2-30	Collective bargaining agreements	6.3	73	

GRI Content Index

Material Topics					
GRI 3: Material Topics 2021	3-1	Process to determine material topics	2.3	21-24	
	3-2	List of material topics		25	
★ Economic Performance					
GRI 3: Material Topics 2021	3-3	Management of material topics	1.2, 2.3	12, 29	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	1.2	13	
	201-2	Financial implications and other risks and opportunities due to climate change	4.1	45-46	
	201-3	Defined benefit plan obligations and other retirement plans	6.3	75	
	201-4	Financial assistance received from government	1.2	13	
★ Innovation Management					
GRI 3: Material Topics 2021	3-3	Management of material topics	1.3, 1.4, 2.3	14, 16, 29	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	1.2	13	
	201-4	Financial assistance received from government	1.2	13	
Core PR1: Innovation Management	PR1-1	Key technologies and innovative products	1.3	15	
★ Salary and Benefits					
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 6.3	28, 71	
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	6.3	73	
GRI 405: Diversity and Equal Opportunity 2016	405-2	Ratio of basic salary and remuneration of women to men			
★ Climate Change					
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 4.1	27, 42	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	4.1	48	
	302-3	Energy intensity			
	302-4	Reduction of energy consumption			
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	4.1	47	
	305-2	Energy indirect (Scope 2) GHG emissions			
	305-3	Other indirect (Scope 3) GHG emissions			
	305-4	GHG emissions intensity			
	305-5	Reduction of GHG emissions			
★ Green Solutions					
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 4.4	27, 54	
GRI 302: Energy 2016	302-5	Reductions in energy requirements of products and services	4.4	56	
GRI 305: Emissions 2016	305-5	Reduction of GHG emissions	4.4	55-56	
★ Waste Management					
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 4.2	27, 50	
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	4.2	51	
	306-2	Management of significant waste-related impacts		51	
	306-3	Waste generated		52	
	306-4	Waste diverted from disposal		52	
	306-5	Waste directed to disposal		52	

★ Friendly Workplace				
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 6.3	29, 72
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	6.1	68
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.3	74-75
	401-3	Parental leave	6.3	75
★ Labor and Management Relations				
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 6.4	29, 77
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	6.4	77
★ Occupational Health and Safety				
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 6.6	28, 86
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	6.7	90
	403-2	Hazard identification, risk assessment, and incident investigation	6.7	90, 92
	403-3	Occupational health services	6.6	87
	403-4	Worker participation, consultation, and communication on occupational health and safety	6.7	90-91
	403-5	Worker training on occupational health and safety	6.7	91
	403-6	Promotion of worker health	6.6	88
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6.7	90-92
	403-8	Workers covered by an occupational health and safety management system	6.7	90
	403-9	Work-related injuries	6.7	92
	403-10	Work-related ill health	6.6	87
★ Training and Education				
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 6.5	29, 80
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	6.5	81
	404-2	Programs for upgrading employee skills and transition assistance programs		81
	404-3	Percentage of employees receiving regular performance and career development reviews		85
★ Information Security				
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3, 3.3	28, 37
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.3	37

Industry: Hardware

Code	Accounting Metrics	Summary / Reference Chapter	Page
Sustainability Disclosure Topics & Accounting Metrics			
TC-HW-230a.1	Description of approach to identifying and addressing data security risks in products	3.3 Information Security Management	37-39
TC-HW-330a.1	Percentage of gender representation for (1) management, (2) technical staff, and (3) all other employees	<table><tr><th>Category / Gender</th><th>Male</th><th>Female</th></tr><tr><td>Management</td><td>70%</td><td>30%</td></tr><tr><td>Technical staff (R&D and production personnel)</td><td>62%</td><td>38%</td></tr><tr><td>All other employees (Sales and administrative personnel)</td><td>27%</td><td>73%</td></tr></table>	128
TC-HW-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	The Company's primary offerings consist of projectors and backlight modules. Among these, all projectors and a select few backlight module models contain IEC 62474 declarable substances. It is worth noting that all such substances are in compliance with declaration regulations and account for 26% of the company's annual revenue.	128
TC-HW-410a.2	Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	The majority of the Company's products fall under the B2B category, and as such, we have not pursued EPEAT or similar certifications. Therefore, this metric is not applicable to our products.	-
TC-HW-410a.3	Percentage of eligible products, by revenue, meeting ENERGY STAR® criteria	According to the "Energy Star 8.0 specifications" published in 2019, projectors and incomplete products have been excluded from the metric. Consequently, this metric is not applicable to our Company.	-
TC-HW-410a.4	Weight of end-of-life products and e-waste recovered, percentage recycled	1. End-of-life products recovered: The majority of the Company's products fall under the B2B category, thus there are no products that have reached their end-of-life and require recovery. 2. E-waste recovered: Most of the Company's products fall under the B2B category; we only recycled and did not reuse end-of-life products. The combined weight of e-waste recycled at our facilities in Taiwan and China is 14.5 tons.	128
TC-HW-430a.1	Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities	The Company has not yet conducted audits of Tier 1 supplier facilities in the RBA VAP. As a result, there is no pertinent information to disclose at this time. However, the Company intends to gradually plan and execute such audits in the future.	-
TC-HW-430a.2	Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances		-
TC-HW-440a.1	Description of the management of risks associated with the use of critical materials	5.2 Responsible Supply Chain Management	62
Activity Metrics			
TC-HW-000.A	Number of units produced by product category	1.2 Economic Performance	13
TC-HW-000.B	Area of manufacturing facilities	This is a trade secret and will not be disclosed.	-
TC-HW-000.C	Percentage of production from owned facilities	The Company develops and produces major products independently, so the production from owned facilities accounted for 100%.	-

ESG Report

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