Ennostar

2023 Sustainability Report

Ennostar

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Ennostar

About This Report

Ennostar Inc. was founded on January 6, 2021, and began issuing annual sustainability reports in 2022. This is the third sustainability report disclosing our efforts and achievements on environmental, social, and corporate governance sustainable development indicators. We hope this report allows the public and other stakeholders to gain a better understanding of the Ennostar Group.

This Ennostar Sustainability Report for 2023 (hereinafter referred to as “this Report”) is structured according to the GRI 2021 Sustainability Reporting Standards released by the Global Sustainability Standards Board. We referenced the content and quality principles of the GRI Sustainability Reporting Standards as well as the four major principles (materiality, inclusiveness, responsiveness, and impact) of the Accountability Principles AA1000 Assurance Standards while incorporating material issues of concern to our stakeholders and highlighting our corporate sustainability efforts. Our future long-term developments focus on and adhere to the principles of the Sustainability Accounting Standards Board, Task Force on Climate-Related Financial Disclosures, and ISO 26000 Guidance on Social Responsibility.

Report Duration

This Report spans the period from January 1 to December 31, 2023 and covers material topics of concern to our stakeholders, as well as our environmental, social, and corporate governance achievements. Please refer to the following sources for historical data and information:

Ennostar official website-ESG at Ennostar	Ennostar official website-ESG news	TCFD Reports	Facebook

Scope of this Report

The boundaries of this Report mainly encompass the sustainability achievements of Ennostar Inc. (hereinafter “Ennostar Group” or “the Group” when main subsidiaries are included, and “Ennostar” when referring to solely to the parent company) and our main

subsidiaries EPISTAR Corporation (hereinafter “EPISTAR,” including its Taiwanese factories in Hsinchu, Miaoli, Taichung, and Tainan); Chinese subsidiaries Epicrystal (Changzhou) Ltd. (hereinafter “Epicrystal”), Episky Corporation (Xiamen) Ltd. (hereinafter “Episky”), and Jiangsu Canyang Optoelectronics Ltd. (hereinafter “Can Yang”); Lextar Electronics Corporation (hereinafter “Lextar”); Chinese subsidiary Lextar Electronics (Chuzhou)(hereinafter “Lextar Electronics”); and Unikorn Semiconductor Corporation (hereinafter “Unikorn”).

Report Compilation Process

A sustainability editorial team composed of representatives appointed by functional units at Ennostar, EPISTAR, Lextar, and Unikorn compiled this Report based on stakeholder communications to disclose environmental, social, and corporate governance issues arising from our operational activities. The team operated in accordance with Plan-Do-Check-Action concepts, investigated topics of concern to stakeholders, and required various points-of-contact within the team to evaluate and review implementations and response measures to these issues. The team was responsible for overall planning, communication and compilation, and goal setting. Following confirmation of these procedures, editing processes for this Report were executed by the team convener. After compiling and editing relevant information, the team members reviewed and revised the content and data contained within a preliminary draft before submitting a final draft to the highest authority at each unit for approval. This Report was verified by a third-party institute (TUV Rheinland), reviewed by our president and chairman, and approved by our board of directors. Depending on materiality, discussions on relevant environmental, social, and corporate governance issues were reported periodically or non-periodically to our chairman or board, and related resolutions were recorded in meeting minutes for tracking by administrative units for subsequent reporting at the next board meeting. The currency used for all financial data was TWD, and the units for relevant statistical data adhere to internationally accepted standard indicators.

Reporting Principles and Guidelines

	Standards	Verification Institute

Non-financial data	GRI Universal Standards 2021 TCFD framework SASB Guidelines—Semiconductors Industry-Based Standards AA1000 Accountability Principles United Nations Sustainable Development Goals (SDGs)	TUV Rheinland performed Type 2 Moderate Level verification in accordance with the AA1000AS Assurance Standard (AA1000AS v3) Please refer to Appendix VI for the Independent Assurance Statement
Financial information	Financial data from annual reports	PwC Taiwan

Management Systems	
ISO 14001 Environmental Management System	EPISTAR, Lextar, Unikorn, Epicrystal, Episky, Can Yang, Lextar Electronics
ISO 14064-1 Greenhouse Gas Emissions at the Organizational Level	Ennostar, EPISTAR, Lextar, Unikorn, Epicrystal, Episky, Can Yang, Lextar Electronics
ISO 50001 Energy Management System	Lextar
ISO 45001 Occupational Health and Safety System	EPISTAR, Lextar, Unikorn, Epicrystal, Episky, Can Yang, Lextar Electronics
CNS 45001 Taiwan Occupational Health and Safety System	EPISTAR, Unikorn
ISO 27001 Information Security Management System	Ennostar, EPISTAR, Lextar, Unikorn
IATF 16949 Automotive Quality Management System	EPISTAR, Lextar, Epicrystal, Can Yang, Lextar Electronics
ISO 9001 Quality Management System	EPISTAR, Lextar, Unikorn, Epicrystal, Episky, Can Yang, Lextar Electronics

ISO 26262 ASIL B Automotive Functional Safety Certification	Lextar

Note: Ennostar is purely an office entity, and therefore some management systems were not applicable.

Issue Date

Ennostar regularly releases sustainability reports to promote the Group's sustainability implementations, which are also disclosed on our corporate website.

Previous issue: Released June 2023

Current issue: Released August 2024

Next issue: Released August 2025

Contact Information

If you have any suggestions regarding our sustainability reports, you can provide feedback to us via the following channels or the "Contact Us" section on our corporate website.

Ennostar Sustainable Development Department	Ennostar ESG Website
Contact number: +886-3-567-9000 #339075 Email: ESG@Ennostar.com ESG website: https://www.ennostar.com/ESG ESG unit: Ennostar Sustainable Development Department	富采 ESG 官網

A Message from our Chairman

2023 was the hottest global year on record, and there were increased frequencies of extreme climate events. Climate change is now the most important risk for global enterprises, and risk management has become a major challenge for corporate survival and development. Ennostar incorporated comprehensive corporate risk management mechanisms shortly after its establishment, using top-down and bottom-up approaches to identify risk focuses for the Group, and formulated specific action plans to effectively improve Ennostar's corporate resilience toward various risks.

Net zero transformations are accelerating worldwide. As a leader in integrated optoelectronics solutions, the Ennostar Group understands the urgent need to respond to international climate governance trends. In 2023, we officially signed the "Task Force on Climate-Related Financial Disclosures (TCFD)" and the "Science Based Targets initiative (SBTi)." We also implemented three major carbon reduction and sustainability actions: First, we installed fluorine gas local scrubbers in all factories to reduce more than 90% of fluorine gas emissions; second, we promoted energy conservation policies, replaced aged equipment, and improved energy efficiency; third, we not only self-generated green electricity in factory areas, but also actively procured green electricity in hopes of achieving 25% renewable energy usage across the Group by 2030 and net zero emissions across the Group by 2050, demonstrating our commitment to climate change mitigation and net zero progress. In 2023, the Group achieved carbon reductions of 17.9% (approximately 62,048 tons of carbon emissions). To drive sustainable growth of related suppliers, we further exerted our industrial influence in 2023 by leading all subsidiaries in hosting a supplier conference and building a low-carbon supply chain, using our sustainability experiences to lead suppliers in establishing carbon inventory capabilities. Currently, 59 suppliers have responded to our initiative and jointly pledged to achieve the sustainability goal of reducing absolute carbon emissions by 20% before 2030 to accelerate net zero emissions for our clients.

To improve corporate resilience and respond to all possible future challenges, the Ennostar Group actively implemented Group

changes and transformations in 2023 which encompassed organizational fusion and integration, business strategies, and talent cultivation. In terms of organizational fusion and integration, the Group reviewed production capacities for all factories to maximize resource utilization and assessed various reinvestment projects to realize asset activation. In terms of business strategies, we worked to create high-value technological products, leverage the advantages of III-V compound semiconductor optoelectronic products, and build core advantages by using smart cutting-edge optoelectronic technologies to develop applications for automobiles, advanced displays, smart sensors, and emerging market products and technologies while expanding the length and breadth of our technologies, products, and services through upstream and downstream integration to provide one-stop shop services encompassing epi, chip, packaging, and module solutions for our clients, effectively opening up new horizons, expanding revenue sources, and increasing profits. Additionally, to enable sustainable development of Group talent, we established the “Talent Development Committee” at the end of 2023 to cultivate talent and activate talent-related plans so our organizations could respond more flexibly to environmental changes.

2023 was an important and critical year for strategic transformations at the Ennostar Group. Thanks to the joint efforts of all employees, our corporate governance and sustainable development achievements received multiple recognitions. In terms of corporate governance, we were ranked among the top 5% of listed companies in the Corporate Governance Evaluations, and was selected as a constituent of the FTSE4Good Emerging Index and FTSE4Good All-World Index. In terms of Group sustainability promotions, we received a number of sustainability awards, including a Corporate Sustainability Assessment AA rating and the Taiwan Corporate Sustainability Award (TCSA) “Corporate Sustainability Report Gold Award,” “Circular Economy Leadership Award,” “Workplace Wellbeing Leadership Award,” as well as two “Human Rights Leadership Awards.” Furthermore, we ensured that Group operations complied with our sustainable management goals by linking the variable remuneration of senior executives with the three ESG (environmental, social, and corporate governance) performance aspects, regularly reviewing performance and achievement of all indicators, and actively responding to public interest and expectations.

Ennostar is a visionary leader in integrated optoelectronics solutions and continues to plan and implement transformations for all ESG aspects to maintain profits while working with all parties to create a better and sustainable future.

Ennostar

About Ennostar

Ennostar was founded on January 6, 2021 through a share swap involving two of the biggest LED corporate groups in Taiwan, EPISTAR and Lextar. The Ennostar Group focuses on technological development and manufacturing of compound semiconductors. Our products encompass epi, chip, packaging, and module materials, and we provide our clients with integrated supply chain services and solutions. Our products are used in displays, automobiles, sensors, professional lighting equipment, 5G communications, and power components. We accelerate integration of Group resources and platforms under the “One Ennostar” spirit to strengthen Group operational efficiency and maximize overall Group benefits.

In recent years, the Group has expanded into advanced displays, automotive applications, smart sensors, special lighting, next-generation compound semiconductors, and other high value-added markets, as well as actively invested in technological developments for Micro LEDs. Our subsidiaries EPISTAR, Lextar, and Unikorn work to exert their individual strengths by integrating supply chain resources and various technological solutions to fulfill client demands for Micro LED displays. Our Micro LED epi wafer and chip designs, process developments, and production processes pair our capabilities with driver technologies to manufacture packaging and module products through mass transfer to build an innovative and comprehensive display system. Ennostar subsidiaries have all established close ties with strategic upstream and downstream supply chain partners. Joint development by teams on all sides have moved our technological scope from traditional LED backlights to the increasingly popular Mini LED backlights, and now to the ultimate pinnacle in display technology represented by Micro LEDs. We and our strategic partners have formed a comprehensive and resilient supply chain in Taiwan that accelerates future integration of chips and panels through collaborations with upstream and downstream partners in our industry chain, and we hope to mass produce Micro LEDs

before 2025.

Group Overview

Date of listing	January 6, 2021; ticker code 3714
Total number of employees	9,119
Group headquarters	Registered address: 9F-1, No. 67, Ziyou Rd., East Dist., Hsinchu City Office location: No. 21, Lixing Rd., East Dist., Hsinchu City
Paid-in capital	NT$7,529,405,000
2023 revenues	NT$22,305,680,000

Ennostar Group Value Chain

Ennostar's three main subsidiaries, EPISTAR, Lextar, and Unikorn, focus on development and manufacturing of LEDs and next-generation compound semiconductors. We provide our clients with comprehensive products and services through vertical integration of resources.

Ennostar Inc.			
Product	Epi/chip (LED upstream supplier)	Packaging/modules (LED downstream supplier)	Compound semiconductors

Ennostar

Main business entity	EPISTAR	Lextar	Unikorn
Description of business entity	EPISTAR is a leading global LED chip supplier focused on development and manufacturing of upstream LED epi products and chips, with professional expertise in development and manufacturing capabilities as well as competitive advantages across all LED products. EPISTAR strives to fulfill all client needs and has expanded into Mini LEDs, next-generation display technologies, and Micro LEDs in recent years, as well as invested heavily in display, sensor, automotive, and metaverse applications.	As one of the few companies in the world with professional optical, mechanical, electrical, and thermal integration technologies and services, Lextar's abundant Group resources, professional technical expertise, and comprehensive product portfolios act as the best bridge for optoelectronic and semiconductor integration, providing customers both at home and abroad with the most professional integrated solutions and services. Lextar's main products encompass display backlights, Mini/Micro LED light sources, automotive lighting, 3D/2D sensors, UV sterilization and curing, professional ergonomic products and special lighting, which are widely used in home appliances, automobiles, and industrial applications.	Unikorn was spun off from EPISTAR's internal foundry business, and is a professional foundry for compound semiconductor components, with services encompassing front-end and back-end processing of epi and chip products, and applications encompassing sensors, 5G communications, displays, and power components that meet different client OEM requirements using the best process parameters and production platforms.

Ennostar

Main Operational Sites

Office	Location
Headquarters	Hsinchu Science Park
R&D Center	Hsinchu Science Park
Manufacturing Bases	-Hsinchu Science Park -Kuan-Yuan Science and Technology Park -Central Taiwan Science Park -Southern Taiwan Science Park

Overseas Factories

Area	Factory Locations
Jiangsu	Yangzhou Factory, Changzhou Factory, Suzhou Factory
Anhui	Chuzhou Factory
Fujian	Xiamen Factory
Guangdong Shenzhen	Shenzhen Epikylin Optoelectronics (Sales Center)

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2023 Sustainability Performance Highlights

Corporate Governance	Ranked at top **5%** in Corporate Governance Evaluations
	Taiwan Corporate Sustainability Award (TCSA) Corporate Sustainability Report **Gold Award**
	The number of independent directors **exceeded one-half** of all directors
	Zero information security incidents and leakages of customer privacy
	Zero legal proceedings associated with anticompetitive or antitrust behaviors
Innovative Growth	Registered **1,281** trade secrets
	6,003 patents approved worldwide
	Group end products reduced electricity usage by **375 million kWh**, equivalent to **186,000 tons** of carbon emissions
Green Operations	Completed **100%** of Group greenhouse gas inventories
	Achieved carbon reductions of **17.9%**, approximately **62,048 tons** of carbon emissions
	Submitted **SBTi Commitment Letter** and signed pledge aligned with the Paris Agreement and the recent United Nations Climate Conference **1.5°C** active carbon reduction commitment
	Reduced generated waste volumes by **23%** compared with 2022
Inclusiveness and Growth	Provided education and training to **57,272 people** with a total training budget of **NT$8.29 million**; average satisfaction scores for all courses exceeded **4.6 points**

	A total of **4,880 employees** in our Taiwanese factories received human rights education and training, achieving a training completion rate of **100%**
	Social participation and investment amounted to **NT$3,767,090**

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Achievements and Awards

FTSE4Good Emerging Index	FTSE4Good All-World Index	Taiwan Corporate Sustainability Assessment AA rating	Top 5% ranking in the 10th Corporate Governance Evaluation
Carbon Disclosure Project (CPD) questionnaire B ranking	Ennostar: 2023 Taiwan Corporate Sustainability Award (TCSA)—Corporate Sustainability Report Gold Award	EPISTAR: 2023 HangJia Aurora Award—RGB and Mini LED chip received Most Influential Supply Chain Enterprise Award	EPISTAR: 2023 HangJia Aurora Award—RGB and Mini LED chip received Most Influential Product Award
EPISTAR: 2023 Taiwan Corporate Sustainability Award (TCSA)—Circular Economy Leadership Award	EPISTAR: 2023 Taiwan Corporate Sustainability Award (TCSA)—Human Rights Leadership Awards	EPISTAR: 2023 Taiwan Corporate Sustainability Award (TCSA)—Workplace Wellbeing Leadership Award	EPISTAR: 1111 Happy Enterprise
Lextar: Ministry of Economic Affairs Industrial Development Administration Smart Display Industrial Alliance (SDIA) Silver Award	Lextar: 2023 Taiwan Corporate Sustainability Award (TCSA)—Human Rights Leadership Awards	Lextar: Taiwan Intellectual Property Management System Level A certification	Lextar: 1111 Happy Enterprise
Lextar: AUO Corporation Best Water Conservation Management Partner Award			

CH1 Commitment to Sustainability

1-1 Sustainable Development Strategies

2022 was the first year we began implementing sustainability and ESG actions within the Group. Our vision in business is to become the “best compound semiconductor investment platform” through our focus on four core concepts (Innovation, Integrity, Inclusiveness, and Sustainability) and extension of six major sustainable development aspects. Our parent company has established a dedicated sustainability department which continues to plan and execute Group sustainability transformations; coordinate short, medium, and long term plans; and gradually achieve the two main missions of our sustainability strategic blueprint. We hope our proactive management of climate risks, strengthening of sustainable development, and incorporation of investor ESG expectations and needs can reduce environmental impacts while enhancing quality of life and enabling continued generation of profits. We utilize the advantages and resources of our subsidiaries to expand our social influence and create a virtuous cycle of sustainability.

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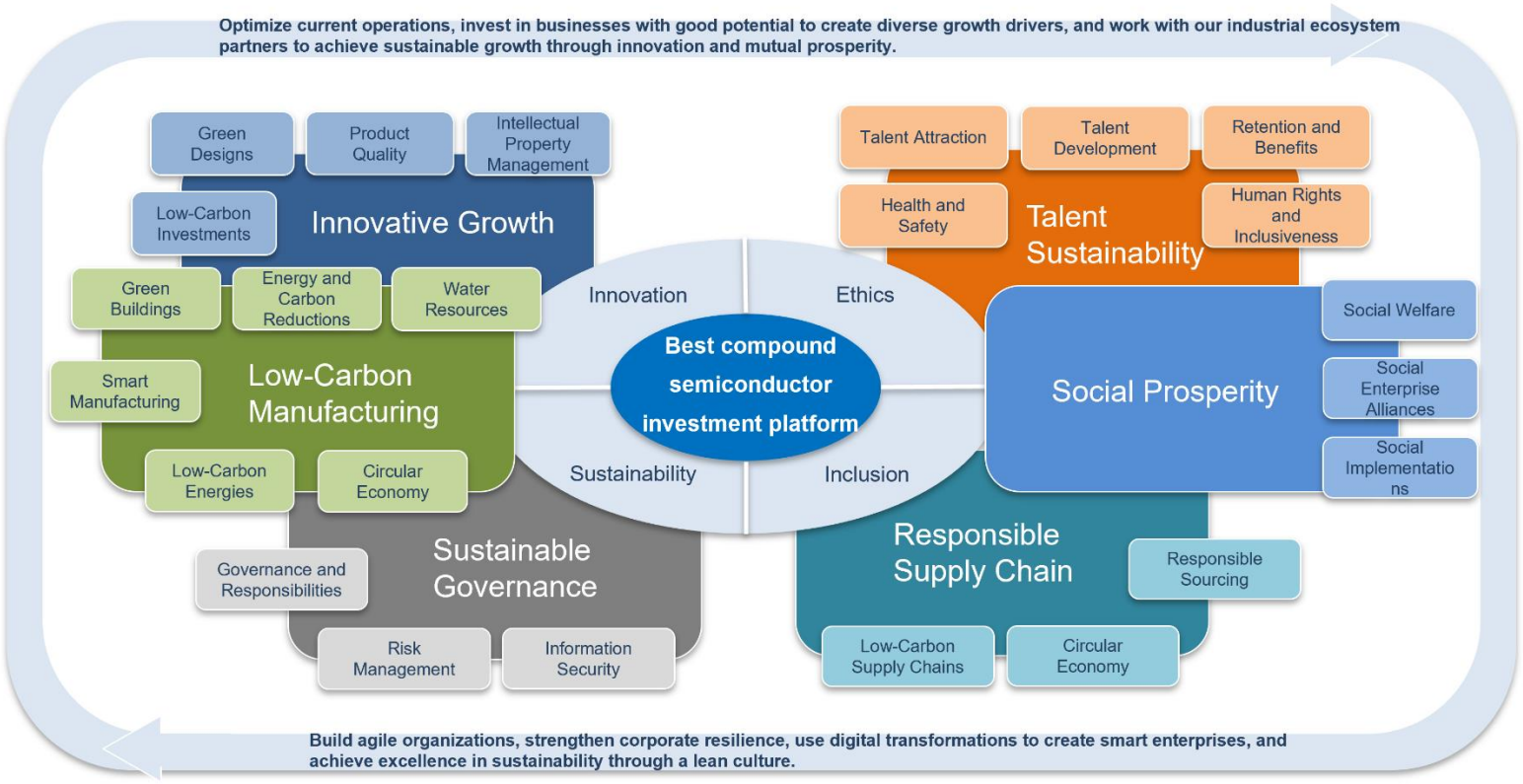
▼We adhere to six major sustainable development aspects (sustainable governance, innovation and growth, low-carbon production, talent sustainability, social prosperity, and responsible supply chain), which are extended to our short, medium, and long term goals as well as action plans.



Ennostar

Blueprint Strategies and Corresponding Short, Medium, and Long Term Goals

Aspect	Topic	Metrics and targets	Targets for 2023	Short-term targets (2024-2025)	Mid- to long-term targets (2026)	Corresponding sections
Sustainable Governance	Corporate Governance	Corporate Governance Evaluations	Rank in top 5% Achieved	Rank in top 5%	Rank in top 5%	CH2 Corporate Governance
		Recognition by MSCI/FTSE global sustainability indices	Respond to questionnaire Achieved	Respond to 2024 questionnaire Be selected as a constituent stock in 2025	Be selected as a constituent stock	
		Recognition by DJSI global sustainability index	Trial questionnaire response Achieved	Official questionnaire response	Be selected as a constituent stock	
	Ethical Management	Complete promotion, education, and training associated with ethical management, moral conduct, and anti-competition behaviors	100% Achieved	100%	100%	2-3 Ethical Management
		Number of substantiated anti-competition and corruption incidents	0 incidents Achieved	0 incidents	0 incidents	
		Continue to maintain our	0 violations Achieved	0 violations	0 violations	

		record of zero major violations				
	Risk Management	ERM Enterprise Risk Management mechanisms	Incorporate Achieved	Strengthen	Maintain	2-4 Risk Management
		Improve notification and response mechanisms for emergencies	Establish Achieved	Strengthen	Maintain	
		Smart early risk warning mechanisms	-	-	Formulate	
	Information Security	No major information security incidents	0 incidents Achieved	0 incidents	0 incidents	2-5 Information Security
		Pass ISO 27001 verifications each year	100% Achieved	100%	100%	

Aspect	Topic	Metrics and targets	Targets for 2023	Short-term targets (2024-2025)	Mid- to long-term targets (2026)	Corresponding sections
Responsible Supply Chain	Enhance Sustainability Awareness	Increase the number of key A+B grade suppliers who implement energy and carbon conservation measures	Survey Achieved	+4	+3	2-6 Responsible Supply Chain
		Increase the number of key A+B grade suppliers who use	Survey Achieved	+2	+5	

		renewable materials				
		Host supplier ESG exchange activities	≧3 activities Achieved	≧3 activities	≧3 activities	
	Evaluate and Assign Ratings	Increase the number of local suppliers	≧85% Achieved	≧85%	≧85%	
	Responsible Business Alliance	Pledge not to use conflict minerals	100% Achieved	100%	100%	

Aspect	Topic	Metrics and targets	Targets for 2023	Short-term targets (2024-2025)	Mid- to long-term targets (2026)	Corresponding sections
Innovative Growth	Innovation and R&D	Continue to invest in R&D	>More than 7% of revenues Achieved	>More than 7% of revenues	>More than 7% of revenues	3-1-1 Innovation and R&D
	Patent Strategies	Green intellectual property rights	Trial Achieved	Proportion of green patents: 30% Proportion of green trade secrets: 30%	Proportion of green patents: 40% Proportion of green trade secrets: 40%	3-1-2 Management of Intellectual Property Rights
		Number of approved patents	225 Achieved	230	200	

Aspect	Topic	Metrics and targets	Short-term Targets (2023-2024)	Mid-term targets (2025-2026)	long-term targets (2027)	Corresponding sections
Low-Carbon Manufacturing	International Initiatives	SBTi	Submitted Letter of Commitment in 2023 Review carbon reduction plan in 2024 Achieved	Pass review in 2025 Review carbon reduction plan in 2026	Review carbon reduction plan	4-1 Climate Actions
		RE100	Join initiative in 2024 Achieved	Review plans	Review plans	
	Domestic and International Carbon Fees/Carbon Tax Regulations	Introduction of internal carbon pricing	Model evaluation in 2023 Incorporation in 2024 Achieved	Establish internal digitalization system in 2025 Commence operations in 2026	Maintain operations	
	Smart Manufacturing	Establish digital energy platform	Established platform in 2023 Launch platform in 2024 Achieved	Operate and optimize platform	Operate and optimize platform	
	Green Electricity	Increase proportion of renewable energy in externally	-	1.52%	1.52%	

	(Renewable Energy)	procured electricity				
		Install solar energy devices in factories	Install solar energy devices in factories Achieved	Self-generate renewable energy for self-use	Self-generate renewable energy for self-use	
		Purchase green electricity (renewable energy)	-	Purchase green electricity	Purchase green electricity and wind power	
		Green electricity (renewable energy) usage	-	3.75 million kWh/year	3.75 million kWh/year	
	Energy and Carbon Reductions	All subsidiaries pass organizational greenhouse gas verifications	100% Achieved	100%	100%	
		Product carbon footprint	Complete verifications for 2 products in 2023 Complete verifications for 3 products in 2024 Achieved	Establish internal digitalization system	Generate reports using digitalization system	
		Annual electricity savings	3%	3%	3%	
		Absolute carbon reductions	-	4.2%	4.2%	
	Water Savings	EPISTAR annual recycled water volumes	>1% Achieved	>1%	>1%	4-2-1 Water Resource

		Lextar cumulative annual water savings	13% Achieved	19%	20%	Management
		Unikorn unit product water consumption volume reductions	40% Achieved	45%	50%	
	Reduction of Toxic Substances	Alternative materials for EU restricted hazardous substances (NMP)	Tests and assessments Achieved	Incorporate NMP alternatives	Incorporate NMP alternatives	4-2-2 Waste Management 4-2-3 Circular Economy
	Resource Recycling	Increase proportion of recycled waste each year	1% Achieved	1%	1%	

Aspect	Topic	Metrics and targets	Short-term Targets (2023-2024)	Mid-term targets (2025-2026)	long-term targets (2027)	Corresponding sections
Talent Sustainability	Talent Attraction	Diverse recruitment channels	8 Achieved	11	14	5-1-2 Talent Attraction and Retention
		Collaborations with key target schools and departments	19 Achieved	27	33	
	Talent Development	Increase total individual learning hours each year	Complete establishment and improvement of learning platform Achieved	Increase total learning hours by 10% each year	Increase total learning hours by 20% each year	5-1-3 Talent Development and Cultivation
		Key talent team	Complete talent	Establish 100%	Internal	

			inventories and identify 100% of key positions by 2024	of IDPs for key talent	replacement rate for key positions: 80%	
	Happy Workplace	Rate of closed employee feedback (complaint) cases	100% Achieved	100%	100%	5-2-2 Employee Communication
		Regularly participate in market salary surveys and ensure that total guaranteed compensation (TGC) and average annual salary adjustments exceed the P50 market level	100% Achieved	100%	100%	5-1-2 Talent Attraction and Retention
	Human Rights and Inclusiveness	Maintain proportion of female executives	22% Achieved	22%	22%	Appendix I. Data Overview Social Data
		Due diligence procedures for human rights issues	Establish procedures in 2023 Complete 80% of procedures in 2024 Achieved	100%	100%	5-2-1 Protection of Human Rights

Aspect	Topic	Metrics and targets	Targets for 2023	Short-term targets (2024-2025)	Mid- to long-term targets (2026)	Corresponding sections
Talent Sustainability	Health and Safety	No incidences of work-related ill health	0 incidents Achieved	0 incidents	0 incidents	5-3-1 Occupational Health and Safety Management
		Host health promotion activities	6 events Achieved	8 events	13 events	5-3-2 Health Promotion
		Obtain Accredited Healthy Workplace certificates	100% Achieved	100%	100%	

Note: As all subsidiaries have differing targets for disabling injury frequency rates and disabling injury severity rates, these targets are not disclosed herein.

For more information on Group data, please refer to 5-3-1 Occupational Health and Safety

Aspect	Topic	Metrics and targets	Short-term Targets (2023-2024)	Mid-term targets (2025-2026)	long-term targets (2027)	Corresponding sections
Social Prosperity	Public Welfare Activities and Implementation	Optoelectronic safety knowledge promotion activities	4 events Achieved	7 events	7 events	CH6 Social Prosperity
		Organize participation in	400 people	500 people	500 people	

	s	volunteer activities				
	Social Enterprise Alliances	Collaborations with social enterprises	Formulate plans in 2023 Implement in 2024 Achieved	Implement plans	Implement plans	

ESG Award

To promote ESG innovations within the Group, the Ennostar Group established the ESG Award competition and encouraged employees to promote projects based on ESG concepts. In 2023, all subsidiaries hosted their own ESG Award events, and outstanding teams participated in the Group's ESG Award competition in 2024. We hope that this competition cultivates sustainability thinking in our colleagues, realizes ESG concepts in all departments, and makes ESG a part of our Group DNA.

EPISTAR ESG Sustainability and ESG Awards

To incorporate ESG in the DNA of EPISTAR employees, the ESG Committee launched and designed incentive measures linked to the "ESG Award" so all employees could gather information for the company and discover opportunities for improvement. Proposed ideas did not always come from employees in relevant departments, and all colleagues were able to share their observations and suggestions from different perspectives without limitations; collected proposals were submitted to relevant departments for evaluation and project development. In 2023, we collected 125 proposals and subsequently incentivized selected proposals to promote specific implementations of these ideas. A total of 50 proposals were submitted and our managers selected and rewarded 20 creative and influential proposals. At the end of the year, teams with specific achievements made presentations at the ESG Award competition. A total of 13 teams made presentations and 6 teams received Best Contribution Awards. We encourage our colleagues to continue focusing on improvement actions with lasting benefits.

Continued Improvement Plan (CIP)-Lextar Award

Quality is not only about improving problems and achieving project goals, but also about incorporating the spirit of “striving to be better” in corporate culture. To integrate corporate resources, Lextar combined the Continued Improvement Plan (CIP), which had been executed for nine years, with the corporation-wide Lextar Award starting in 2023 to expand award scope, establish an all-encompassing quality culture at Lextar, and ensure that all personnel possess improvement and enhancement awareness, including improvement awareness associated with product quality, productivity, revenues, cost savings, and other aspects. We also encourage optimization and achievement of innovative research, management systems, marketing, environmental safety, and corporate interests to strengthen unit communication and cooperation as well as facilitate cross-departmental team collaborations, thereby incorporating the spirit of “striving to be better” in our employee culture. Lextar and Lextar Electronics selected 16 teams to participate in the finals of the 2023 Lextar Award following internal selection by each unit. Our financial unit verified the performance of submitted proposals and estimated that they could generate benefits amounting to NT$77 million. A total of 10 outstanding teams were ultimately selected.

Unikorn Team Excellence Award

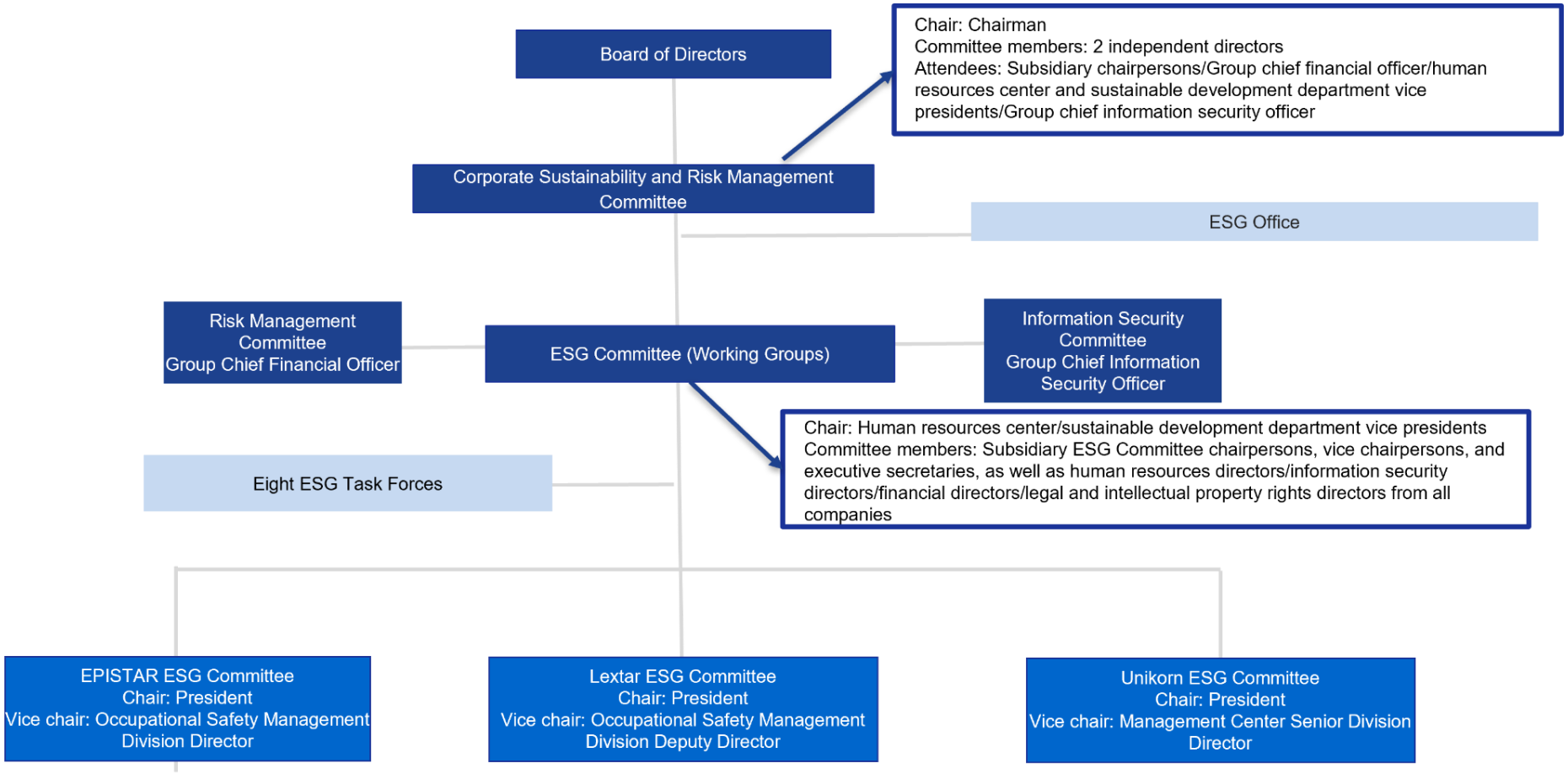
The Unikorn Team Excellence Award was hosted for the first time in 2023 to strengthen team collaborations within the organization (participating teams needed to include members from two or more departments), encourage teamwork, and improve operational efficiency.

We implemented environmental protection/social responsibility/corporate governance sustainability actions to meet our ESG sustainability goals and encouraged our teams to compete on moving toward sustainability goals. The judging committee selected four winning teams whose proposals involved Micro LED technological developments, power component process design models, automated frequency modulation filter processes, power conservation, waste reduction, and environmental protection. All teams performed outstandingly.

1-2 Organizational Structure

Corporate Sustainability and Risk Management Committee

The Group was established in 2021 and formed a Corporate Sustainability and Risk Management Committee under the Board at the end of the year. The Committee is composed of the Group chairman, independent directors, and senior managers from our main subsidiaries (EPISTAR, Lextar, and Unikorn). This Committee is a functional committee under the Board which convenes every quarter to coordinate and plan Group ESG policies, sustainability goals, and strategic blueprints; identify ESG risks and opportunities to determine relevant investment strategies; and monitor ESG performance goals and progress. In 2023, we expanded our scope to overseas factories. Our four subsidiaries in China established respective ESG Committees to formulate management guidelines and commence official operations; these committees were incorporated into the Ennostar ESG Committee.



Ennostar Group ESG operations

Committee Operations

The Group's Corporate Sustainability and Risk Management Committee operates on four levels, with the Board of Directors serving as the highest governance unit. We believe that ESG actions should be implemented not only through top-down directives, but also through encouragement of bottom-up proposals. Therefore, we have established an open bidirectional communication channel for joint achievement of goals and strive to achieve strategic sustainability targets in the Group. We focus on Group targets, identify important projects, formulate related measurement indicators, and horizontally integrate subsidiary resources to jointly promote sustainable transformations. We accumulated a total of 485 targets from 2021 to 2023.

Operations and Responsibilities for Committees at All Levels

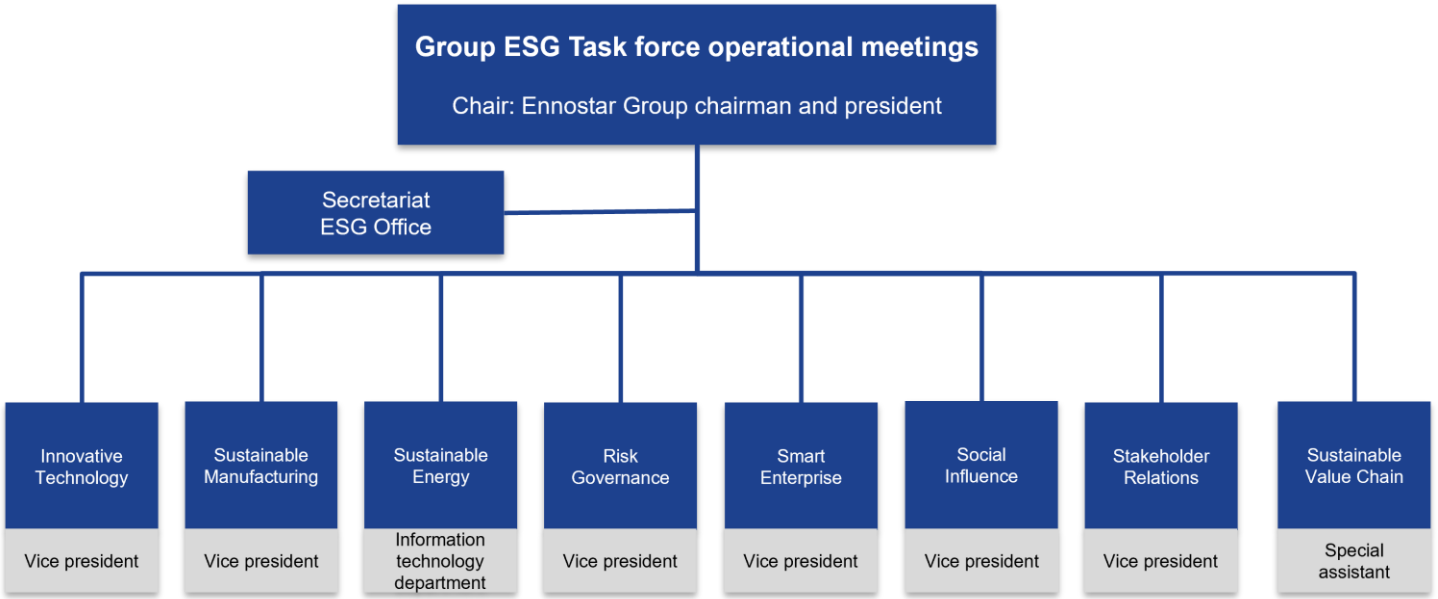
Levels (from top to bottom)	Responsibilities
Board of Directors	Responsible for making decisions on important ESG proposals: 1. Affirm ESG missions and visions 2. Decision-making on major ESG proposals 3. Evaluate ESG performance
Corporate Sustainability and Risk Management Committee	Responsible for determining the Group's ESG visions and monitoring ESG performance: 1. Formulate ESG missions, visions, policies, and targets

	2. Identify ESG risks and opportunities to determine investment strategies 3. Monitor ESG strategic plans and implementations 4. Monitor ESG performance and information disclosures
ESG Committee (working groups)	Responsible for formulating Group targets and implementing important Group projects: 1. Establish Group targets 2. Promote ESG plans 3. Present/track KPI performance 4. Periodic meetings 5. Disclose Group ESG performance
Eight ESG Task Forces	(Task-oriented) Responsible for formulating Group targets and implementing important Group projects: 1. Establish Group targets 2. Integrate and execute cross-corporation ESG plans 3. Present/track KPI performance 4. Periodic meetings 5. Disclose Group ESG performance

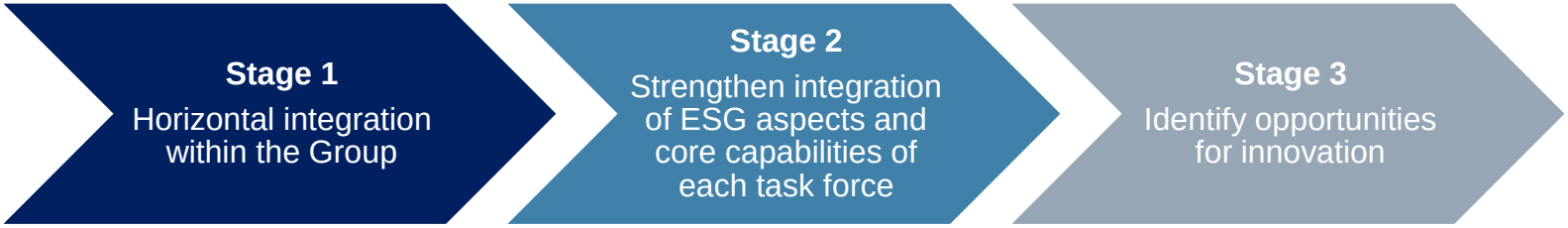
Important subsidiary committees	Responsible for formulating corporate targets and implementing relevant projects: 1. Formulate targets 2. Implement ESG plans 3. Present/track KPI performance 4. Periodic meetings 5. Compile ESG report sections related to each company 6. Respond to customer ESG requirements

Group Eight ESG Task Forces

To accelerate horizontal and cross-enterprise integration of various Group sustainability issues, the Group officially established the Eight ESG Task Forces in the third quarter of 2022 and the task forces officially commenced operations in 2023. The task forces are chaired by the Group chairman, and senior executives from our main subsidiaries (EPISTAR, Lextar, and Unikorn) lead each cross-enterprise task force in implementing Group projects. Starting in October, we began convening regular face-to-face meetings each quarter to report on Group project progress. Through these task forces, the Group leads all subsidiaries in making strides toward our low-carbon production, innovation and growth, sustainability governance, talent sustainability, social prosperity, and sustainable supply chain goals. We have also formulated strategic blueprints aligned with international net zero trends to further ensure that our ESG strategies are fully implemented in the Group’s routine operations.



Task force targets for each stage



Related Issues

Task Force	Innovative Technology Task Force	Sustainable Manufacturing Task Force	Sustainable Energy Task Force	Sustainable Value Chain Task Force
Mission	● Low-carbon and innovative technologies	● Energy and carbon reductions ● Circular economy	● Renewable energy ● Energy and carbon reductions	● Mutual benefits for the supply chain
Corresponding section	3-1-1 Innovation and R&D	CH4 Green Operations	4-1 Climate Actions	2-6 Responsible Supply Chain
Task Force	Smart Enterprise Task Force	Risk Governance Task Force	Social Influence Task Force	Stakeholder Relations Task Force
Mission	● Information security ● ESG digitalization	● Corporate governance ● Risk management	● Diversity, equity, and inclusion ● Mutual prosperity	● Stakeholder management
Corresponding section	2-5 Information Security	2-4 Risk Management	CH5 Talent Sustainability CH6 Social Prosperity	1-3-3 Stakeholder Communication and Engagement

Group Sustainability Promotions and Expectations[1]

Innovative Technology Task Force	Sustainable Manufacturing Task Force	Sustainable Energy Task Force	Risk Governance Task Force
As an important member of the III-V compound optoelectronic semiconductor industry, Ennostar combines the Group's innovative technologies and multidimensional resources, working with upstream/downstream supply chain partners to help our clients achieve their energy conservation and carbon reduction	Establish KPIs for energy conservation, water conservation, fluorine gas reduction, waste processing, and carbon reduction; integrate these KPIs into routine work tasks; implement constant reviews and improvements, and hope that all colleagues view ESG as their mission and an effective way to enhance corporate competitiveness for	Energy and carbon reduction achievements demonstrate Group competitiveness and allow us to actively seek our various opportunities to achieve our green energy goals.	Governance of corporate risks involves not only occupational safety and industrial safety risks, but also encompasses possible impacts to corporate operations from internal and external environmental uncertainties. Over the past year, Ennostar has invested resources in building ERM management systems, and have expended full efforts in risk identification, assessment, response, and tracking for implemented projects. We have made a good start and continue to move forward. We thank all parties for their efforts and hope to do even better in future.

[1] Due to personnel adjustments in 2024, some team leaders were changed; information on promotions and expectations were provided by current team leaders.

goals.	continued progress.		
CN Huang	CC Lai	Edward Lin	Jerry Liu
Social Influence Task Force	Stakeholder Relations Task Force	Smart Enterprise Task Force	Sustainable Value Chain Task Force
We hope to combine resources from the Group, employees, and social enterprises to achieve our talent sustainability, social prosperity, and other sustainability targets. Apart from establishing a suitable environment for talent development, we also work with social organizations to fulfill our corporate social responsibilities and realize our vision of social prosperity.	We utilize communication channels to respond appropriately to all stakeholder issues of concern while continuing to improve corporate sustainable resilience to actively respond to stakeholder ESG expectations and achieve corporate sustainable management goals.	We continue to improve the information security defense capabilities of the Ennostar Group, promptly repair system vulnerabilities, build all-encompassing information security protection networks, grasp external information security trends, implement internal reviews, and comprehensively strengthen the information security	We expand our influence on our supply chain by being mission-oriented and passionate, working with our supply chain partners to make progress on our energy conservation, carbon reduction, and sustainable development goals.

		awareness of all employees.	
Dale Yang	Dale Yang	Wayne Shi	Edward Lin

1-3 Materiality Analysis and Stakeholder Communication

1-3-1 Identification of Material Topics

Process for Assessing Material Topics

The Ennostar Group compiled this Report in accordance with the 2021 GRI Sustainability Reporting Standards. A “sustainability editorial team” composed of representatives from all functional units, including our corporate promotion office and human resources, auditing, R&D, manufacturing, shareholder affairs, environmental health and safety, quality assurance, factory affairs, and materials departments. All units considered business characteristics and referenced industrial practices and principles. We collected information on industry-related issues and communicated with internal and external stakeholders. Key internal managers assessed the corporate impacts from corporate governance, social, and environmental aspects, following which the 12 material topics for the year were determined through internal discussion; these issues were submitted to and confirmed by the Corporate Sustainability and Risk Management Committee before publication.

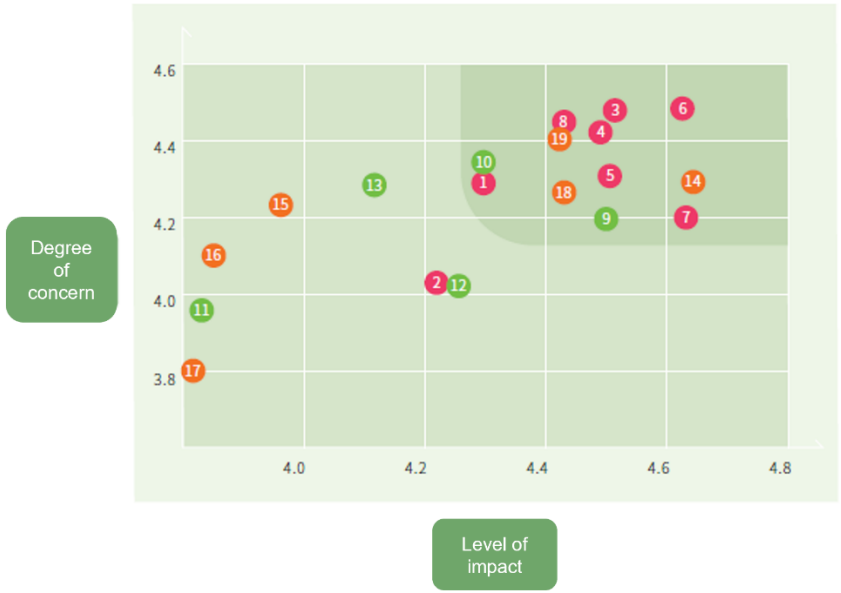
Stage 1 Collection and Identification		
1 Identify stakeholders	**8 stakeholder categories**	We identified 8 main stakeholders based on the AA1000SES Stakeholder Engagement Standard and associated aspects (Dependency, Responsibility, Influence, Diverse Perspectives, and Tension): Employees, shareholders/investors, clients, suppliers/contractors, government institutes, the media, insurance companies, and banks.

2 Identify sustainability issues	**20 sustainability issues of concern**	We referenced global sustainability standards and related reports, including ISO 26000 Guidance on social responsibility, GRI specific topics, Sustainability Accounting Standards Board (SASB) standards, international trends, cases from industry benchmarks, issues of concern in international sustainability evaluations (including the DJSI Dow Jones Sustainability Index and MSCI ESG Index), the Ennostar Group's five-year plan, and our Sustainability Report for the previous year to survey and confirm organizational contexts, then compiled 20 sustainability issues of concern.
Stage 2 Survey and Analysis		
3 Survey external degrees of concern	**1,400 surveys**	We distributed online and physical questionnaires to various stakeholders and collected 1,400 questionnaires which were used to determine stakeholder degrees of concern on the 20 sustainability topics of concern.
4 Survey levels of impact on corporate operations	**33 senior executives**	The sustainability editorial team distributed "Questionnaire assessing levels of impact from ESG issues" to senior executives of related units to assess the levels of impact on the Group's corporate operations from the 20 sustainability issues.
5 Analyze results and value chain associations	**12 material topics**	Following comprehensive internal assessments, the sustainability editorial team referenced suggestions from the management team to define issue materiality. The lowest combined average score for degree of concern and level of impact was 4.3 points. We then generated a materiality matrix for

		12 material topics.
Stage 3 Confirmation and Disclosure		
6 Confirm material topics	**11 GRI topics**	Referenced specific GRI disclosures: We matched our 12 material topics to 11 GRI specific topics and used these to define the value chain information disclosure boundaries that served as the foundation for this Report. Confirmation by senior management and information disclosures: Following confirmation by the Corporate Sustainability and Risk Management Committee/Board of Directors, we collected related information for disclosure. Continued review and improvement: We continue to collect suggestions from all stakeholders and external experts, review actions related to material topics over the previous reporting period, and use these as a reference for disclosures for the next reporting period.

Ennostar

Materiality Matrix



Corporate Governance Aspect	Environmental Aspect	Social Aspect
1. Risk Management 2. Sustainable Supply Chain 3. Information Security and Privacy Protection 4. Customer Relationship Management 5. Economic Performance 6. Corporate Governance and Ethical Management 7. Innovation Management and Smart Transformation 8. Product Quality	9. Energy Management 10. Air Pollution Management 11. Biodiversity 12. Climate Change 13. Waste Management and Circular Economy	14. Talent Attraction and Retention 15. Diversity, Equality, and Inclusion 16. Human Rights Protection 17. Social Prosperity 18. Talent Cultivation 19. Occupational Health and Safety

1-3-2 Management of Material Topics

Discrepancies with Material Topics for Previous Year and Associated Reasons

Compared to the previous year, five new topics were added for this year: “Talent Attraction and Retention,” “Customer Relationship Management,” “Economic Performance,” “Innovation Management and Smart Transformation,” and “Energy Management,” demonstrating that the Group is gradually increasing emphasis on these aspects and striving to become a leading enterprise in all aspects of sustainable development.

Material topics for 2023	**Ranking for 2023**	**Changes compared with previous year** (Material topics for 2022)
Corporate Governance and Ethical Management	1	Material topic for 2022 (Corporate Governance and Risk Management)
Information Security and Privacy Protection	2	Material topic for 2022
Talent Attraction and Retention	3	New topic for 2023
Customer Relationship Management	4	New topic for 2023
Product Quality	5	Material topic for 2022
Occupational Health and Safety	6	Material topic for 2022
Economic Performance	7	New topic for 2023
Innovation Management and Smart Transformation	8	New topic for 2023

Talent Cultivation	9	Material topic for 2022 (Happy Workplace)
Risk Management	10	Material topic for 2022 (Corporate Governance and Risk Management)
Energy Management	11	New topic for 2023
Air Pollution Management	12	Material topic for 2022

Impacts of Material Topics and Associations with Value Chain

Issues	Importance and Significance to the Ennostar Group	Actual/Potential and Positive/Negative Economic, Environmental, and Social (Human Rights) Impacts on the Group	Impact Boundaries on Value Chain						GRI Standard Topic-Specific Disclosures	Management Approach Corresponding Sections[2]
			Direct Impacts	Business Relations	Indirect Impacts					
			The Group	Suppliers/ contractors	Clients	Shareholders/investors	Local communities	Government		

[2] Apart from these sections, more information can also be found in 1-1 Sustainable Development Strategies "Blueprint Strategies and Corresponding Short, Medium, and Long Term Goals"

Corporate Governance and Ethical Management	A sound corporate governance structure, compliance with all regulations, and adherence to ethical management, anti-corruption, and anti-competitive behaviors	Identify all laws and regulations with major impacts on corporate operations and finances, and establish internal policies, processes, and execution plans. Implement regulation tracking, training, and promotion; provide reporting channels; avoid possible impacts from failure to comply with regulations; strengthen employee, client, and investor confidence in stable corporate operations; and reduce negative economic impacts from legal penalties.	V	V		V		V	206 Anti-Competitive Behavior	CH2 Corporate Governance

Information Security and Privacy Protection	Maintain information confidentiality and protect customer privacy as well as internal and external privacy information	The Group's protection of valuable information not only helps to maintain the trust of our clients and business partners, but also enhances our economic benefits. Sound information security management prevents leakages of private and confidential information, maintains the Group's competitive advantages, and avoids negative impacts on human rights.	V		V				418 Customer Privacy	2-3 Ethical Management 2-5 Information Security

Talent Attraction and Retention	Establish diverse and comprehensive recruiting and retention mechanisms, competitive remuneration, benefits, and employee care measures	Lack of sufficient talent may affect the Group's development and production efficiency, making it impossible for us to create products that meet market opportunities, negatively impacting the Group's business and economic aspects.	V					V	401 Employment 405 Diversity and Equal Opportunity	2-4-2 Risk Items and Response Measures 5-1-2 Talent Attraction and Retention

Customer Relationship Management	Actively maintain customer satisfaction toward products/services, as well as responses and countermeasures to product abnormalities	Monitor client needs and understand client expectations to meet market expectations and enhance corporate competitiveness. Failure to appropriately handle client needs not only affects satisfaction levels, but also makes it impossible to understand product quality performance from a client perspective, generating negative economic impacts.	V	V	V	V			418 Customer Privacy	3-2-2 Customer Relationship Management

Product Quality	Complete monitoring and management of product quality and raw materials to ensure compliance with health and safety standards	Abnormal product quality or low yield rates may cause losses for the Group and our clients. Violations of laws and regulations, failure to meet client requirements, penalties, product elimination after products are rejected by the market.	V	V	V				416 Customer Health and Safety	3-2 Products and Services

Occupational Health and Safety	Implement occupational health and safety management, conduct risk assessments and incident investigations, and provide education and training	Regulatory violations, incurred fines, and increased regulatory intervention may cause distrust among investors/shareholders and clients, causing negative economic impacts. Sound occupational safety management prevents productivity losses due to occupational injuries or occupational diseases which cause personnel to leave the workplace, thereby generating positive impacts on human rights	V	V				V	403 Occupational Health and Safety	5-3 Occupational Health and Safety

		and society.								
Economic Performance	Commitment to sustainable management practices, promotion of organizational revenue, and profitability performance	We strive to maintain good financial performance to realize our corporate sustainable management goals. We generate long-term and stable value through continued increases in revenues, profitability, and R&D investments. We continue to make good use of profits as well as actively participate in environmental protection, employee welfare, and social contribution to generate positive social impacts.	V	V	V	V			201 Economic Performance	2-1 Economic Performance 2-4-2 Risk Items and Response Measures

Innovation Management and Smart Transformation	Drive innovation management within the organization, develop sustainable and energy-saving products and services, and promote smart factories and digital transformation	1. Continuous innovation management improves product performance. Incorporating eco-friendly concepts into product designs not only provides our clients with protected products, but also has positive environmental impacts. 2. Lack of innovation decreases product competitiveness, and failure to meet the needs of our client and new application markets generate negative economic impacts.	V						302 Energy	2-4-2 Risk Items and Response Measures 3-1 Innovation Management and Smart Transformation CH4 Green Operations

Talent Cultivation	Establish a complete employee cultivation system that includes training, performance management, functional management, and career development	The Group attaches great importance to talent reserves and strives to establish talent teams to support stable corporate developments. We also improve employee capabilities to reduce function gaps and to generate positive social and economic impacts.	V					V	404 Training and Education	2-4-2 Risk Items and Response Measures 5-1-3 Talent Development and Cultivation

Risk Management	Risk identification, risk controls, and countermeasures	The Board of Directors is our highest supervisory unit, and is responsible for identifying major risks to management and internal control. We actively prevent and manage major risks to protect the interests of our employees, shareholders, and collaborating partners, as well as reduce negative economic impacts on the Group from emergency incidents.	V			V		V	-	2-4 Risk Management

Energy Management	Formulate energy usage policies as well as reduction plans and measures	The Group strives to meet client needs, comply with regulatory goals, improve energy efficiency, and actively invest in green electricity, which not only reduces carbon taxes, carbon fees, and additional operational costs from green energy transformations, but also reduces negative environmental and economic impacts.	V			V	V	V	302 Energy	2-4-2 Risk Items and Response Measures CH4 Green Operations

Air Pollution Management	We monitor, test, and control emission gases, and ensure that production processes for all products adhere to the requirements of air pollution regulations.	1. Monitor emission gases to ensure regulatory compliance, prevent factories from incurring violations, and adhere to stakeholder expectations so we not only maintain good collaborating relations with our clients, but also generate positive environmental impacts. 2. Violations of laws and regulations incur fines, deviate from stakeholder expectations, impact corporate reputations, and generate negative economic impacts.	V				V	V	305 Emissions	4-2-4 Air Pollution Prevention

1-3-3 Stakeholder Communication and Engagement

The Group attaches great importance to stakeholder interests and strives to establish two-way communication channels through a variety of communication methods to ensure that we can obtain an accurate understanding on issues of stakeholder concern. We review these issues in a timely manner and prioritize responses. Apart from the following channels, we also continue to communicate with internal and external stakeholders through social media platforms and our corporate website. In 2023, Ennostar's social media platforms posted 40 ESG-related articles and we posted 26 ESG updates on our official website.

Stakeholders	Significance to the Group	Method of Communication and Communication Frequency	Major Issues Of Concern	Engagement Results Corresponding Sections	Communication Results
Employees	Employees are the Group's most important assets and our most important business partners. We continue to provide generous salaries and benefits, ensure safe workplace environments,	● ESG questionnaires [Annual] ● Internal network messaging system [Real time] ● Strategic planning meetings [Annual] ● Bidirectional communications	● Corporate Governance and Ethical Management ● Product Quality ● Information Security	● 2-3 Ethical Management ● 2-5 Information Security ● 3-2 Products and Services ● 5-2-2 Employee	● In 2023, we received 82 employee suggestions through anonymous feedback channels such as our reporting system for professional ethics violations

	attract outstanding talent, and work to grow together.	with executives [Monthly] ● Grievance channels [Real time] ● Labor-management meetings and employee welfare committee meetings [Quarterly] ● Employee suggestions and feedback [Real time] ● President's mailbox [Real time]	and Privacy Protection	Communication	and the president's mailbox; 5 of these suggestions were complaints. ● We initiated investigation procedures for all complaints, planned relevant training and promotion, and also provided counseling, medical aid, and other required assistance to concerned parties. We responded to received suggestions, tracked improvements, and conducted

					one-on-one meetings with 148 employees. ● In 2023, we hosted 6 seminars with our president to enable two-way labor-management communications associated with our operational status and strategic blueprints. ● In 2023, we hosted 56 labor-management meetings for two-way communication and collective negotiations.

Shareholders/investors	Shareholders/investors are important pillars who support sustainable operations of the Group. We disclose information in an open and transparent manner to ensure that all information and communication channels remain smooth and impartial.	• ESG questionnaires [Annual] • Shareholders' general meeting [Annual] • Investor conferences [Quarterly] • Public financial reports and quarterly reports [Quarterly, annually] • Investor section [Real time]	• Corporate Governance and Ethical Management • Economic Performance • Product Quality	• 2-1 Economic Performance • 2-2 Governance Organizations • 2-3 Ethical Management • 3-2 Products and Services	• Hosted 1 shareholders' general meeting • Hosted 5 investor conferences • Published monthly operational overviews before the tenth of each month and released quarterly reports
Clients	Transactions with clients are an important source of revenue for the Group. We continue to provide high-quality	• ESG questionnaires [Annual] • Customer satisfaction surveys [Annual]	• Innovation Management and Smart Transformation	• 2-2 Governance Organizations	• Participated in external industrial and technological activities such as 2023 Touch Taiwan and 2023

	products and services to meet client expectations.	• Online customer service mailbox [Real time] • Regular meetings with clients [Weekly/quarterly/ every six months] • Participation in product exhibitions [Non-periodic] • Client visits initiated by colleagues from business departments [Non-periodic] 1. Emails/grievance channels on corporate website 2. Satisfaction surveys 3. Supplier conferences 4. Client surveys	• Customer Relationship Management • Protection of Human Rights • Occupational Health and Safety	• 2-3 Ethical Management • 2-4 Risk Management • 2-5 Information Security • 3-1 Innovation and Growth • 3-2 Products and Services • 5-3-1 Occupational Health and Safety Management	SEMICON Taiwan Forum • Participated in 2 sustainability meetings with important clients • Weekly/quarterly/semi-annual video/physical conferences with important clients and non-periodic client visits.

		5. Technical exchange meetings with clients 6. Weekly meetings/monthly meetings/quarterly evaluation meetings 7. Periodic/non-periodic audits ● 8. Customer service platform			
Suppliers/contractors	Suppliers/contractors are important Group partners. Maintaining sound collaborative relations helps us enhance customer satisfaction and enables us to make timely responses when impacted by major incidents.	● ESG questionnaires [Annual] ● Supplier audits and interviews [Annual, non-periodic] ● Contractor agreements and organizational meetings [Non-periodic]	● Corporate Governance and Ethical Management ● Product Quality ● Occupational Health and Safety	● 2-2 Governance Organizations ● 2-3 Ethical Management ● 2-4 Risk Management ● 2-6 Responsible	● Formulated surveys associated with financial risks of important suppliers, extent of local production and use of recycled materials, and carbon reductions, and collected 100% of

		● Correspondence with procurement departments [Non-periodic]		Supply Chain ● 3-2 Product Quality and Liability ● 5-3-1 Occupational Health and Safety Management	distributed surveys ● Conducted on-site and written audits of 186 suppliers and scored each supplier
Government institutes	As a listed company with multiple factories located in science parks around Taiwan, we are required to adhere to and keep abreast of the laws and regulations of local competent authorities.	● ESG questionnaires [Annual] ● Public hearings [Non-periodic] ● Official correspondence [Non-periodic]	● Corporate Governance and Ethical Management ● Diversity, Equity, and Inclusion ● Waste Management and	● 2-2 Governance Organizations ● 2-3 Ethical Management ● 2-4 Risk Management	● Attended all competent authority meetings on environmental issues relating to Group factory operations ● Immediately responded to queries from competent authorities

			Circular Economy	● 4-2 Environmental Management ● 5-1-1 Talent Structure ● 5-2 Diversity, Equity, and Inclusion	● Actively participated in related meetings and courses ● Participated in 4 public hearings
Media	The media provides an important channel for bidirectional and timely communication between the Group and stakeholders.	● ESG questionnaires [Annual] ● Online customer service mailbox ● Spokesperson and deputy spokesperson [Real time]	● Corporate Governance and Ethical Management ● Economic Performance ● Product Quality	● 2-1 Economic Performance ● 2-2 Governance Organizations ● 2-3 Ethical Management	● Hosted 1 press conference and several media interviews ● Increased Group website users by 228,975 people. ● The Group's social media received 139,939 views

				• 2-4 Risk Management • 3-2 Products and Services	
Insurance companies	The services provided by insurance companies offer additional protection for factory equipment and personnel.	• ESG questionnaires [Annual] • Meetings, phone calls, and emails [Real time]	• Corporate Governance and Ethical Management • Risk Management • Information Security and Privacy Protection • Occupational Health and Safety	• 2-2 Governance Organizations • 2-3 Ethical Management • 2-4 Risk Management • 2-5 Information Security • 5-3 Occupation	• Communicated with insurance companies through 36 meetings.

				al Health and Safety	
Banks	Sound interactions with banks enable us to establish better capital utilization plans and continue to grow corporate operations through investments or financing.	• ESG questionnaires [Annual] • Online customer service mailbox [Real time]	• Corporate Governance and Ethical Management • Occupational Health and Safety • Air Pollution Management • Energy Management	• 2-2 Governance Organizations • 2-3 Ethical Management • 2-4 Risk Management • 2-5 Information Security • 4-1 Climate Actions • 4-2-4 Air Pollution Prevention • 5-3 Occupation	• We have relations with more than 22 banks and maintain fixed communications around once a month to receive updates on market conditions/regulatory compliance and discuss future collaborations.

				al Health and Safety	

CH2 Corporate Governance

Material Topic: Corporate Governance and Ethical Management | Base year: 2021			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
Director diversity and continued management	Achieved	Continue to maintain director diversity and management	Strengthen director diversity and management
Ranked at top 5% in Corporate Governance Evaluations	Achieved	Rank at top 5% in Corporate Governance Evaluations	Rank at top 5% in Corporate Governance Evaluations
TCSA Gold Corporate Sustainability Report Award	Achieved	Participate in TCSA Corporate Sustainability Report Awards	Participate in TCSA Corporate Sustainability Report Awards
Build Enterprise Risk Management (ERM) capabilities	Achieved	Adopt the Dow Jones Sustainability Index (DJSI) evaluation framework for external disclosures	Inclusion in Dow Jones Sustainability Index (DJSI)
Subsidiaries in Taiwan (Lextar and Unikorn) obtained ISO 27001 information security certification	Achieved	All subsidiaries in Taiwan obtain ISO 27001:2022 certification	Maintain ISO 27001:2022 certification
Passed Taiwan Intellectual Property Management System (TIPS) verification	Achieved	Subsidiary Lextar will maintain TIPS certification	Subsidiary EPISTAR will apply for TIPS certification
Improved ethical management systems and procedures—Established an ethical	Achieved	Improve ethical management systems and procedures—Establish ethics and morals self-review questionnaire and	Improve ethical management systems and procedures—Implement ethics and morals self-review questionnaire and

management task force and completed formulation of “Regulations for Ethical Management and Moral Conduct”		survey systems for employees and suppliers	survey systems for employees and suppliers
Our grievance mechanisms received no substantiated reports of fraud	Achieved	Receive no substantiated reports of fraud through our grievance mechanisms	Receive no substantiated reports of fraud through our grievance mechanisms
No major abnormalities or deficiencies in internal control and accounting system audits	Achieved	No major abnormalities or deficiencies in internal control and accounting system audits	No major abnormalities or deficiencies in internal control and accounting system audits
100% of employees in Taiwan underwent “Procedures for Ethical Management and Guidelines for Conduct” education and training	Achieved	100% of employees in Taiwan will undergo “Procedures for Ethical Management and Guidelines for Conduct” education and training	100% of employees in Taiwan will undergo “Procedures for Ethical Management and Guidelines for Conduct” education and training
Responsible unit	Finance Center		

Corporate governance is the core foundation of any enterprise. We implement management along six main aspects: Strengthen corporate governance culture, sustainable Group developments, strengthen risk management, implement board responsibilities and supervisory management, respect for stakeholder rights, and information quality and transparency. We have established an investor section on our corporate website which provides annual reports, financial reports, investor conference reports, and regular monthly revenue reports for download by shareholders and stakeholders, facilitating open and transparent sharing of corporate information.

2-1 Economic Performance

Create Value for Shareholders

Sustainable management is the Group's core mission. We hope to generate long-term and stable value for us and our stakeholders through continued R&D investments, deployment of upstream and downstream resources, and increased profitability. We continue to increase our investments in Mini/Micro-LED displays, smart sensors, and microelectronic components for III-V compound semiconductors as well as other advanced technologies to stabilize our financial structure, build our R&D capabilities, and optimize resource utilization, thereby consolidating our value chain and industrial positioning, strengthening competitive advantages within our supply chain, and establishing a competitive ecosystem.

Our revenues for 2023 declined compared with 2022, mainly due to macroeconomic impacts, but there were no overall risks associated with sales concentration.

Please refer to the Ennostar website (Investors section) to view the Group's consolidated and individual financial reports for 2023.

Condensed and Consolidated Income Statement for 2023

Unit: Thousand TWD

Indicator	Amounts
Revenues	22,305,680
Gross operating profit (retained economic value)	1,167,729
Operating profit and/or loss	-4,001,278

Net profit (loss)	-7,322,732
Payment made to investors	0
Earnings per share (TWD)	-9.02
Employee compensation and benefits	7,764,975
Payments made to the government (taxes)	58,885

Global Sales

Unit: Thousand TWD

Country	Sales	Ratio
Taiwan	2,007,077	9.00%
China	12,403,340	55.61%
Hong Kong	1,188,906	5.33%
South Korea	1,159,552	5.20%
Malaysia	2,203,157	9.88%
Japan	1,865,326	8.36%
Singapore	503,012	2.26%
Other	975,310	4.36%
Total	22,305,680	100.00%

Business Proportions

Unit: Thousand TWD

Product	Revenues	Ratio
Chips/wafers	14,556,865	65.26%
Assembly and modules	6,674,594	29.92%
Other	1,074,221	4.82%
Total	22,305,680	100.00%

Product Manufacturing and Sales

Units: Thousand pieces for chips, thousand pieces for package and module products, thousand TWD for output values

Product	Output volume	Output values
Chips/wafers	1,580,467,923	14,107,050
Assembly and modules	4,776,906	6,020,077

Tax Policies and Management

In response to international trends in tax governance and sustainability taxation, Ennostar implements rigorous management of tax proceedings in accordance with internal tax policies and pays all taxes in accordance with law. We conduct annual reviews of our tax policies to effectively control tax risks and ensure sustainable development. We have established a dedicated tax management unit staffed with professional and experienced tax managers as well as personnel who execute routine

administrative and management tasks related to tax affairs and assist the head of the accounting division in planning and fulfilling tax duties. The chief financial officer assumes all ultimate responsibilities for tax management. Additionally, the Group's main operational sites are located in Taiwan and China, so we are faced with rapid changes in domestic and foreign tax regulations. We are attentive of changes in tax-related policies, adopt appropriate responses and strategic adjustments, and strengthen our knowledge through professional services provided by external tax consulting agencies.

The Group's tax policies are as follows:

- All operations are handled in accordance with relevant tax regulations
- Transactions between affiliated enterprises are handled in accordance with conventional transaction principles
- Enhance information transparency of financial reports and ensure that tax disclosures adhere to regulations and announced policies
- Avoid use of tax havens and tax planning measures for tax avoidance purposes
- Avoid transferring corporate profits to countries with low tax rates
- Build mutual trust and respect with tax authorities
- Consider impacts from taxes when making all important corporate decisions
- Analyze operational environments and use management mechanisms to assess tax risks

Sustainable Investment Strategies

Our investment strategic blueprint adopts a dual-investment strategy which optimizes existing operations and invests in high-potential businesses. We hope to build diverse drivers of growth over the long term, and have invested in the three aspects of sustainable environmental sustainability, smart health, and meaningful living, utilizing technology in continued investments and developments that improve public convenience and connections, enhance health and safety, reduce environmental impacts, and realize environmental sustainability.

Our market positioning is focused on next-generation displays, automobiles, sensors, special lighting, and other high value-added applications. We have also extended our capabilities to III-V compound semiconductor epi wafers and manufacturing processes. Our industry investments are linked to sustainable development through environmental, social, and corporate governance aspects, and we achieve efficient manufacturing and effective component development through smart transformations that lower environmental and social impacts from our production processes to implement digital transformation and smart manufacturing while focusing on future developments and building long-term growth drivers for Ennostar to achieve our vision of sustainable development.

We reference changes to the United Nations Principles for Responsible Investment when formulating investment strategies, actively consider ESG issues when making investment decisions, and disclose ESG implementations and results achieved through current investments as appropriate. We continue to be attentive of sustainable investment standards formulated within the industry and related implementations as we gradually establish sustainable investment strategies and standards. We also incorporate sustainable investment and ESG concepts in our policies and assessment standards to ensure that we adhere to related principles.

Short and Long Term Business Development Plans

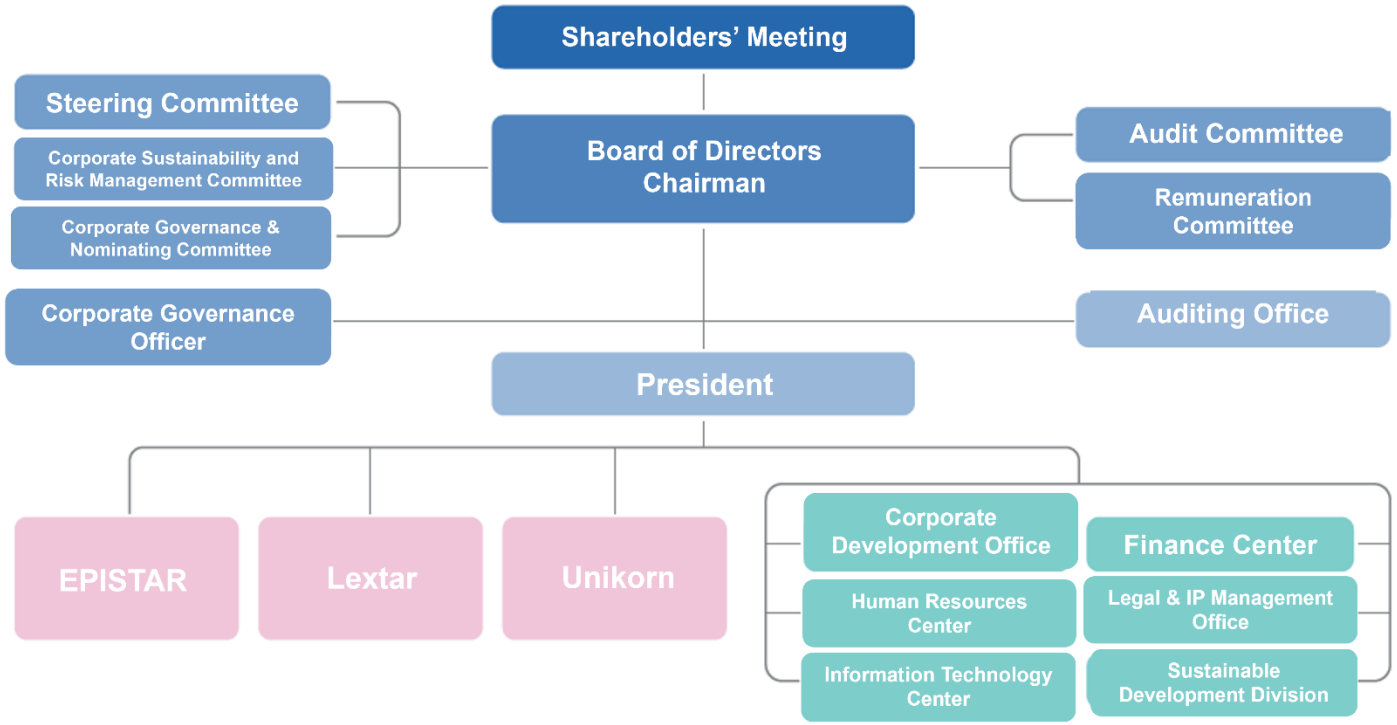
Short-term plans	Mid- to long-term plans
(1) Focus on technological development of visible light and infrared LED epi wafers and chips to improve product performance and increase profits. (2) Provide high-lumen LED products with cost advantages and use cost-effective products that meet customer needs with high core competitiveness in terms of price per lumen. (3) Expand marketing channels in Europe, the US, Japan, and Korea to increase export sales proportions and international market share. (4) Quickly respond to customer needs and adjust product portfolios to meet the requirements of rapidly changing markets. (5) Closely work with LED industry end customers and related supply chains to accelerate introduction of high-value products such as Mini LED backlight solutions and mass-produced Micro LED solutions. (6) Move toward niche lighting markets and develop outdoor, smart, and health-oriented lighting products. (7) Develop status indicator light product technologies to increase market share of indicator lights for laptops, gaming products, smart home appliances, and network appliances. (8) Continue to develop various package dimensions and pixel pitch modules for RGB display applications to accelerate marketing positioning. (9) Establish market positions in sensor businesses associated	(1) Improve corporate self-development capabilities, establish technological collaborations with domestic and international research institutes and clients, and invest large amounts of R&D resources to enhance corporate long-term international competitiveness. (2) Develop long-wave infrared and short-wave ultraviolet light technologies to provide complete product lines across the entire spectrum. (3) Strive to become a leading global LED company, continue to develop new products, and improve LED efficiency to realize unlimited possibilities for LED applications. (4) Continue to build technical design capabilities and obtain global patents. (5) Continue to optimize production technologies to reduce production costs and build more efficient production capabilities. (6) Optimize production capacity and improve quality verification systems so we can continue to improve product quality, reduce product delivery times, and provide services that satisfy our clients. (7) Strengthen marketing channels in international markets and establish strategic collaborations with international clients. (8) Establish cross-industry collaborations and platforms to improve international competitiveness and added product

with automobiles, industrial control, wearable devices, facial recognition, and home security. (10) Develop technologies and obtain patents to improve industrial competitiveness. (11) Improve production efficiency and actively develop intelligent manufacturing applications to increase use of automation technologies and reduce production costs. (12) Improve management systems and continue to cultivate key technical talents. (13) Strengthen information security management in line with Group policies and comprehensively improve protection capabilities for all software and hardware.	value for the entire LED industry. (9) Establish multiple business collaborations with LED upstream and downstream suppliers to expand technological and production capacity growth. (10) Improve LED product efficiency to reduce heat generation and conserve energy. (11) Leverage the Group's production advantages as a one-stop shop in LED epi wafers, chips, packages, SMTs, and modules, and establish factory-in-factory production models in LED supply chains to reduce production costs and increase profits.

For detailed information on the Group's operations and plans, please refer to our 2023 Annual Report.

2-2 Governance Organizations

The Group's Board of Directors is headed by Ennostar Chairman and President Paul Peng. The Board implements and supervises corporate matters, formulates various business plans, and facilitates coordination and collaboration between subsidiaries in accordance with market trends and competitive conditions.



Board Operations

The Board is Ennostar's highest governance unit. Board directors actively participate in internal and external training courses, and each director is required to undergo more than six hours of continued training per year. Directors exercise their duties in accordance with law, our Articles of Incorporation, and the directives of shareholders' meetings; are responsible for establishing sound Board

governance systems; implement supervision, designation, and guidance for Group executives; strengthen management functions; monitor overall economic, social, and governance operations; and work to maximize stakeholder interests.

Ennostar's "Corporate Governance Best Practice Principles" stipulate that Board composition should be diverse and the Board should be composed of industrial and academic experts who have the ability to formulate practical management targets. On May 31, 2023, we elected our second Board of Directors, which is composed of 9 members, 5 of whom are independent directors, accounting for more than half of all directors. We added female directors and independent directors with legal backgrounds in accordance with the diverse management goals established by the Board.

In 2023, the Group convened 5 Board meetings and the average director attendance rate was 100%.

Please refer to Appendix I [Governance Data] for a list of Board members, academic backgrounds, work experiences, terms of office, and meeting attendance rates.

Board Diversity Policy

Our second Board of Directors includes two female directors, one with legal expertise. Specific management goals under our diversity policy and expected achievements are as follows:

Management Goals	Second Board of Directors
Independent directors make up more than half of Board members	Achieved
More than half of independent directors have not served for more than three consecutive terms	Achieved

All independent directors have not served for more than three consecutive terms	Achieved
The number of directors who concurrently serve as company managers do not exceed one-third of all directors	Achieved
Include at least one director of a different gender	Achieved
The number of seats for directors of each gender should exceed one-third of all directors	Included in future plans
Directors with legal expertise	Achieved
6 hours of retraining each year	Achieved

Director Nomination and Election Process

Director (and independent director) candidates are nominated according to our “Articles of Incorporation” and “Rules for Elections of Directors and Supervisors.” Shareholders holding more than 1% of publicly issued Ennostar stock can submit documents containing nominee names, education levels, work experiences, letters of commitment to serve as a director if elected, written statements guaranteeing no violations of Article 30 of the Company Act, and other relevant documents to the Ennostar Finance Center, following which a list of director candidates are proposed for shareholder election.

The Board considers corporate operations and development needs as well as whether directors (and independent directors) possess necessary professional qualifications and other capabilities (including diversity and independence), future corporate development needs, and management goals such as professional ESG knowledge and experience, participation in corporate operations, and sustainable corporate management, thereby ensuring that director candidates adhere to industry needs, possess core capabilities, and can effectively shoulder responsibilities which include establishment of a sound board governance system; supervision, appointment, and guidance of corporate executives; and strengthening of management functions so we can exert our

corporate influence and achieve corporate sustainability.

Functional Committees

To ensure that the Board can effectively perform its duties, the following five functional committees were established under the Board: the Audit Committee, Remuneration Committee, Corporate Governance and Nominating Committee, Steering Committee, and Corporate Sustainability and Risk Management Committee, which are respectively governed by the “Rules for the Procedures of the Board of Directors’ Meeting,” “Audit Committee Charter,” “Remuneration Committee Charter,” “Corporate Governance and Nominating Committee Charter,” and “Rules for the Procedures of Steering Committee Meetings,” as well as the operational plans for the “Corporate Sustainability and Risk Management Committee” submitted to the Board.

Audit Committee	Remuneration Committee	Corporate Governance and Nominating Committee	Steering Committee	Corporate Sustainability and Risk Management Committee
1. Responsible for supervising effective implementation of internal controls, fair presentation of corporation financial statements, selection and dismissal of CPAs,	1. Assists the Board in evaluating director and manager remuneration and links with business performance, recommends	1. Establish diversity and independence standards for Board members. 2. Formulate organizational structures and performance	1. Oversees long-term training plans and related implementations for management successors, and organizes talent rotation and management	1. Responsible for formulating ESG missions, visions, policies, and goals; identifying ESG risks and opportunities; determining

assessment of CPA independence and performance, compliance with laws and regulations, management of existing or potential risks, and exercising supervisor duties. 2. Composed of five independent directors, with Independent Director Wei-Min Sheng serving as convener. 3. Convened a total of 4 times in 2023 and achieved an average attendance rate of 100%.	allocation ratios for employee remuneration, provides suggestions on remuneration for individual managers and corporate remuneration policies, and establishes corporate level remuneration strategies based on industrial competitive environments, business performance, and benchmark market conditions. 2. Starting from the second Board,	evaluations for the Board and all functional committees, and ensure the independence of independent directors. 3. Review succession plans for senior managers 4. Composed of the chairman and all independent directors (a total of 5 Committee members), with the chairman serving as convener. 5. The Committee was established on August 3,	successor changes at key subsidiaries. 2. Composed of four directors, with our chairman serving as convener. 3. Convened a total of 14 times in 2023 and achieved an average attendance rate of 90.5%.	investment strategies; overseeing ESG strategic plans and implementations; and supervising ESG performance and information disclosures. 2. Composed of 1 director and 2 independent directors, with our chairman serving as convener. 3. Convened a total of 4 times in 2023 and achieved an average attendance rate of 100%.

	the number of Committee members were adjusted from 4 independent directors to 3 independent directors, with Independent Director Hsien-He Sheng serving as convener. 3. Convened a total of three times in 2023 and achieved an average attendance rate of 100%.	2023. As of December 31, the Committee has convened once and achieved an attendance rate of 100%.		

Performance Evaluations of the Board and Functional Committees

In order to implement corporate governance and enhance the functions of our Board and functional committees, we have established performance targets to strengthen operational efficiency. We conduct performance evaluations of the Board and related functional committees in accordance with our “Regulations for Performance Evaluations of the Board and Functional Committees,” which

stipulates that internal Board performance evaluations should be conducted annually, and external evaluations implemented by independent institutes or expert teams should be conducted at least once every three years. Evaluation results for 2023 were reported to the Board during the first quarter of 2024 and have also been published on our corporate website.

For more information on the results of self-evaluation surveys for the Board and all functional committees, please refer to Appendix I. [Governance Data].

Board Independence and Managing Conflicts of Interest

Our Rules for the Procedures of the Board of Directors' Meeting and Audit Committee Charter both contain provisions related to avoidance of conflicts of interest. If directors themselves or the juristic persons they represent hold interests in agenda matters, they should summarize said interests during associated Board meetings, must recuse themselves from discussion or voting on said item, and may not exercise voting rights as proxy for another director. The names of associated directors, descriptions of director interests, and recusals should be recorded in meeting minutes.

The Group has established the Ethical Corporate Management Best Practice Principles, Codes of Ethical Conduct, and Rules Governing Transactions Between the Group and its Affiliated Enterprises, which all contain provisions regarding recusals due to conflicts of interest. Additionally, the stakeholder section of our corporate website contains detailed disclosures of relevant regulations and information, serving as a channel for stakeholder communication. We have also established a spokesperson and a mailbox staffed with dedicated personnel responsible for responding to stakeholder queries and suggestions. We report human rights, ethical management, and stakeholder communication implementations to the Board on an annual basis.

Board Remuneration Policies

In terms of Board remuneration, the Board, individual directors, and functional committee members conduct annual self-evaluations,

and individual remuneration also considers performance evaluation results. Independent directors should possess professional expertise in related fields or industries as well as professional experience in corporate governance or ESG which further development of business strategies. The Group provides fixed remuneration to each director/independent director, referencing standards adopted by industry peers and benchmark companies as well as individual involvement in and contribution to corporate operations. Variable director compensation is based on long-term business performance and shareholder benefits, and allocation ratios adhere to our Articles of Incorporation. Due to weak global demand for consumer products, our revenues and capital utilization declined in 2023, and idle capacity increased, resulting in losses. Therefore, no director compensation was distributed for 2023. Additionally, the Group does not provide retirement benefits or pensions to former directors. The Board approved the establishment of standards for calculating compensatory pension payments for senior managers who also served as directors to compensate these employees for losses in retirement benefits during periods when they concurrently served as chairpersons or presidents.

In accordance with our personnel affairs regulations, adjustments in fixed salaries for senior managers are based on budgetary considerations that reference personal performance, department operational performance, business strategies and capabilities, and corporate operations. The Remuneration Committee provides remuneration suggestions based on peer and market salary standards to the Board for deliberation. Bonuses for senior managers mainly encompass two categories, the first which references business and profitability performance, level of involvement in corporate operations, and corporate profits; the second category references achievement of related KPIs. Bonuses are determined following review of performance indicator achievements, stipulations on activation or cancellation of clawback mechanisms in reward regulations, and links with business performance and ESG implementation results, which are used as a basis for Corporate Sustainability and Risk Management Committee promotions. In terms of employee retirement benefits, our regulations for employee retirement benefits were based on the Labor Standards Act/Labor Pension Act, and employees can apply to receive pensions based on these regulations.

Internal Audits and Internal Controls

Audit units are responsible for evaluating internal control systems as well as reviewing system designs and implementation

effectiveness to ensure compliance with corporate policies and government laws and regulations. The Group established internal control systems in accordance with the “Regulations Governing Establishment of Internal Control Systems by Public Companies.” Audit units adhere to internal control systems (including internal audit implementation rules, self-evaluation procedures, and methodologies) approved by the Board to implement and measure the effectiveness and compliance of current control systems and procedures.

The Group prompts all units and subsidiaries to conduct at least one self-evaluation each year. Internal audit units review self-evaluation reports from all units and subsidiaries, as well as improvements of internal control deficiencies and abnormalities discovered by audit units, to evaluate the effectiveness of and risks associated with internal control systems based on industry transaction practices and possibilities of fraud and corruption to provide a reference for the Board and our president when evaluating the effectiveness of internal control systems, issuing statements on internal control, and reporting annual audit results.

Internal audit units conduct various audits in accordance with annual audit plans approved by the Board and regularly reports audit results and subsequent corrections to the Board to realize audit benefits. The Group’s audit units conduct evaluations of internal control system effectiveness and risks each year based on transaction practices of main operating locations and possibilities of fraud and corruption, formulate annual audit plans and implement related audits according to said plans, and report Group audit results to the Ennostar Board and Audit Committee each year. In 2023, the Group conducted audits based on risk evaluation results and did not discover any major corruption incidents.

To strengthen Ennostar sustainability report quality and adherence to TWSE regulations, the “Sustainability Report Compilation and Verification Procedures” were approved by the Board in May 2023 and were used to incorporate Sustainability Report

compilation and verification procedures in our internal controls.

For more information on corporate governance, please refer to our 2023 Annual Report.

2-3 Ethical Management

2-3-1 Ethical Governance

Establishing an Ethical Policy and Culture

We abide by business principles of honesty, transparency, and responsibility. The Group has formulated the “Ethical Corporate Management Best Practice Principles” and “Ennostar Procedures for Ethical Management and Guidelines for Conduct” to establish sound business operations, and we prohibit all forms of corruption and fraud.

Substantiated violations of the Group’s corporate bylaws and ethical management policies are punished in accordance with relevant regulations, and we also disclose relevant information in the form of case studies on our internal websites or bulletin boards. We take necessary legal proceedings for serious violations, and also dismiss and blacklist associated violators.

We also formulated other prevention plans including operational procedures, codes of conduct, and training procedures. We communicate our ethical management policies to stakeholders through our internal bylaws, corporate website, and public

documents, and assess the legality and past unethical behaviors of our distributors, suppliers, customers, and other business partners before conducting business transactions to avoid dealing with parties that have a record of unethical behaviors.

Grievances and Reporting Systems

To strengthen corporate governance and implement ethical management and codes of ethical conduct, we provide channels for reporting ethical and moral violations, and have formulated related regulations such as Ennostar's "Whistle-Blowing Channel and Protection System" and Unikorn's "Whistleblower System and Whistleblower Protection." The Group has established a "Reporting System for Professional Ethics Violations" on our corporate website and intranet, which serve as grievance reporting channels for internal and external stakeholders (such as suppliers, clients, employees, and shareholders); the Audit Office is responsible for accepting reports and conducting audits. Whistleblowers can make anonymous reports, and whistleblower identities and reports are protected and kept confidential.

Internal/External	Grievance Channels
Internal	The chairman appoints audit supervisors to handle reported grievances
	Internal reporting system for professional ethics violations
	Employee feedback hotline
	Exclusive employee suggestion box staffed by dedicated personnel from the human resources department
	Periodic hosting of labor-management meetings
	President's mailbox with all letters personally read and handled by the president
	Grievances directly reported to audit units
External	"Reporting System for Professional Ethics Violations" on corporate website
	Contact numbers and mailboxes on corporate website

Our chairman has assigned report handling responsibilities to the head of the audit unit, and external experts (such as lawyers and CPAs) can be invited to assist investigations as necessary. Investigation results are reported to the chairman, who can convene the

highest-ranking managers of related units if necessary. Reports are compiled immediately for investigations that uncover major violations or severe damage to the company, and written notifications are submitted to the Audit Committee and supervisors. Incidents involving directors or senior executives are reported to the Audit Committee or supervisors before reports are made to the Board. In 2023, the Audit Office did not receive any reports related to anti-competition incidents, corruption incidents, violations of customer privacy, or leakages of customer information.

Report Handling Process	
1	Reporting system for professional ethics violations
2	Audit supervisors accept reported grievances and initiate investigations
3	Report investigation results and penalty regulations to the chairman or the highest authority of relevant units
4	Report to the Audit Committee or supervisors: 1. Major violations or major damages 2. Reports involving the chairman or senior executives

Anti-Corruption Education and Training

The Group strictly prohibits all acts of corruption, bribery, and extortion. To guide our employees in complying with ethical standards, we require all colleagues to be prudent in their actions, maintain ethical conduct, and avoid taking advantage of their positions to engage in malpractice or accept favors. We continue to provide relevant training for employees through online and in-person classes, and also publish non-periodic newsletters throughout the year.

We and our directors, managers, employees, appointees, and substantive controllers are not allowed to directly or indirectly offer, promise, demand, or accept improper benefits in any form when conducting business. External donations and sponsorships are handled in accordance with relevant laws and internal regulations to prevent provision and acceptance of bribes, as well as other

illegal political contributions.

Ennostar did not lobby for any public policies or provide any political contributions in 2023.

No incidents of corruption occurred within the Group in 2023. The Group provides relevant education and dissemination during training for new employees, and requires employees to participate in anti-corruption education and training each year. A total of 4,880 employees in Taiwan participated in anti-corruption training over a total of 4,880 hours and achieved a training completion rate of 100%. We are currently building an online education and training system for employees in China, and will arrange for said employees to participate in anti-corruption education and training alongside their counterparts in Taiwan in 2024.

2-3-2 Legal Compliance

The Ennostar Group upholds core values of “Integrity, Inclusion, Innovation, and Sustainability.” We build appropriate legal compliance systems (including but not limited to anti-corruption and fair competition laws) and internal control mechanisms through management regulations, regulation identification, internal promotion and education, smooth grievance channels, and audits to protect consumer rights, fulfill corporate social responsibilities, and move toward corporate sustainable management goals.

Legal Compliance Management Systems and Regulations

Systems and Regulations	Management Systems
Board of Directors	The Ennostar Group and all major subsidiaries have established Ethical Corporate Management Best Practice Principles, Codes of Conduct, and Sustainable Development Best Practice Principles, as well as pledged to implement ethical management and adhere to ethical regulations.
Legal Compliance	The Ennostar Group and all major subsidiaries have formulated legal compliance procedures and require all departments to comply with related regulations and policies in their daily operations, as well as truthfully disclose all imposed penalties related to violations of economic and social regulations.
Legal Affairs Office	The Ennostar Group headquarters has established a Legal Affairs Office to provide legal training for employees, legal consultation, and review of stakeholder contracts, thereby preventing corporate risks and enhancing our business performance.
Grievance System	The Ennostar Group has established the “Whistle-Blowing Channel and Protection System” to ensure that illegal behaviors are reported and handled, whistleblower identities are protected, and acts of retaliation are prevented.
Management Regulations/Education and Training	Established the Ennostar Group Procedures for Ethical Management and Guidelines for Conduct, encompassing management of conflicts of interest, gifts, hospitality, prohibition of bribe giving and taking, prevention of illegal political donations, intellectual property rights, trade secrets, information security protection, compliance with the Fair Trade Act and competition laws, business activities complying with ethical management, and compliance with privacy and protection regulations for personal information. Annual education and training associated with ethical and conduct guidelines are mandatory for all employees.
Internal Control and Management	We implement audits of internal control systems and accounting systems in accordance with law. Relevant reports that have been verified by the Audit Office are used for reviewing related internal control systems and operational procedures as well as proposal of improvement measures to

	prevent similar incidents from reoccurring.

We ensure that we comply with the social and economic regulatory requirements of our operating locations. For example, Ennostar subsidiary EPISTAR has established Social Responsibility Policies, RBA Code of Conduct, and the Management Manual for Business Alliance Activities to serve as specific references for managing, reviewing, and improving social responsibilities. In 2023, many of our important clients passed RBA audits and risk identification, and were verified to be in compliance with the RBA Code of Conduct.

Enhance Legal Compliance Awareness

Category	Topic	Management Systems
Education and Training	Fair Trade Act and Competition Laws	All major Ennostar Group subsidiaries have established regulations related to compliance with the Fair Trade Act and competition laws as well as internal control and management systems. All employees undergo comprehensive education and training, and also receive information in the form of case studies. We identify and review anti-competition laws once or twice each year, and have established an open anti-trust reporting system to effectively prevent violations of anti-competition laws by our subsidiaries.
	Anti-Trust Laws	Ennostar legal affairs and intellectual property management project director Bo-Ru Chen organized a course on “Establishing Legal Compliance Awareness for Anti-Trust Laws” in all factories across Taiwan to introduce relevant provisions of anti-trust laws, discuss phrases that should be avoided in emails and instant messages, and talk about what corporations should

		and should not do according to legal compliance guidelines. This course was mandatory for designated Group procurement, sales, legal affairs, and intellectual property personnel, and received a satisfaction score of 4.51 out of 5 points.
	Anti-Corruption	In compliance with the instructions of the Group's Ethical Management and Anti-Corruption Promotion Team and in cooperation with anti-corruption promotions, all major subsidiaries have formulated anti-corruption compliance regulations and provided education and training to employees.
Newsletter	Social and Economic Regulations	Our Legal Affairs Department delivers legal compliance newsletters to all Group employees each year to strengthen employee legal compliance and awareness of social and economic regulations. In 2023, we delivered three newsletters associated with anti-corruption, anti-competition, and protection of customer privacy to all Group employees.

Personnel who violate corporate ethical management policies may incur the following punishments based on the severity of the circumstances: written admonishment, termination of employment, economic loss, or compensation claims. If said incident violates local laws, the Ennostar Group will also reserve the right to take legal actions. Additionally, if violators of ethical management policies received improper benefits due to their violations, the money or benefits received should be returned to associated individuals or companies. Apart from personnel who violate ethical management policies, if the company confirms that said violation involves concealment, inappropriate supervision, or insufficient supervision, relevant personnel and direct supervisors will also be punished. In 2023, the Group was not involved in any government sanctions, civil cases, or criminal proceedings related to major violations associated with illegal social and economic regulations, anti-competition behaviors, or anti-trust and anti-monopoly laws.[3]

[3] In accordance with the Regulations Governing Material Information Verification and Disclosures by Listed Companies, major violations are defined as single incidents

Legal compliance is the cornerstone of corporate social responsibilities and corporate governance. Looking to 2024 and 2025, we will not only continue to review legalities and implementations of related regulations within the company, but will also regularly post announcements and organize training courses related to compliance with anti-corruption and fair competition regulations to help our employees understand applicable laws and regulations. We implement audits of internal control systems and accounting systems in accordance with law. Relevant reports that have been verified are used for reviewing related internal control systems and operational procedures as well as proposal of improvement measures to prevent similar incidents from reoccurring, and we truthfully disclose all major violations and penalties. Adherence to anti-corruption and fair competition regulations help us to build sound corporate governance and risk management systems, fulfill corporate social responsibilities, and create business environments conducive to sustainable development.

which incur cumulative fines of more than NT$1 million.

2-4 Risk Management

Material Topic: Risk Management | Base year: 2021			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
Introduction of ERM Enterprise Risk Management methodologies	Achieved	Maintain ERM enterprise risk management	Maintain ERM enterprise risk management
Responsible unit	Finance Center		

2-4-1 Risk Management Systems

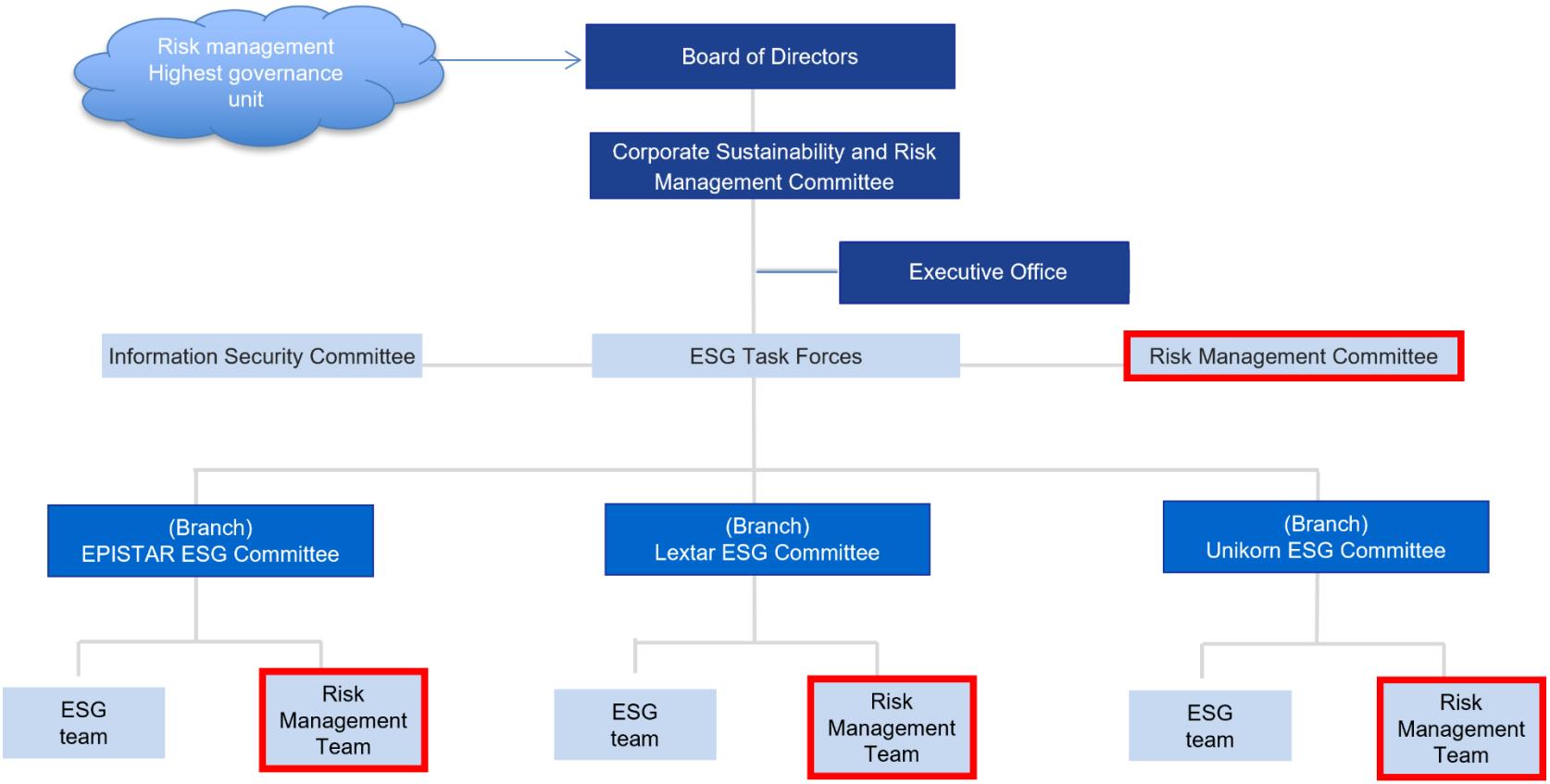
In order to protect the interests of stakeholders such as employees, shareholders, collaborating partners, and clients, the Group established the “Risk Management Policies & Procedures” to define various risks in accordance with overall corporate operational guidelines, and to formulate advanced identification, accurate measurement, effective monitoring, and rigorous control risk management mechanisms to prevent possible losses within the scope of manageable risks. We continue to adjust and improve optimal risk management practices in accordance with internal and external environmental changes to enhance corporate sustainability values and optimize allocation of corporate resources.

Risk Management Organizational Structure and Responsibilities

Our senior executives identify key and emerging risks at least once a year, and discovered risks are communicated to all important

subsidiaries. Additionally, the business units of all important subsidiaries conduct risk identification activities to provide transparent disclosures of risk identification results and management. Identification of risks at the corporate level are conducted by compiling past experiences and assessing possible risks in future business. Following risk identification and measurement, all business units adopt appropriate responses to relevant risks and establish prevention, warning, response, crisis management, and business continuity plans that mitigate, transfer, or avoid risks. These processes are recorded and compiled every six months by the Risk Management Team, and are reported to the Corporate Sustainability and Risk Management Committee to enhance operational decision-making.

Risk Management Committee Organizational Chart



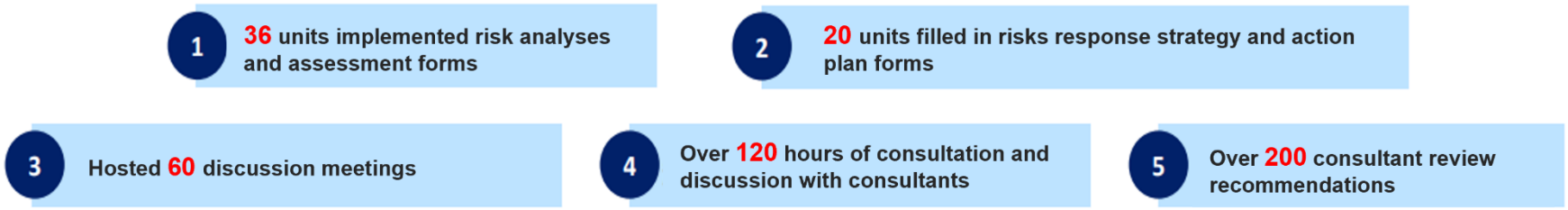
Risk Management Processes

Our risk management processes are based on corporate strategic goals and risk management policies, and encompass risk

identification, analysis, measurement, response, supervision, and review. We conduct comprehensive risk identification processes at least once a year and use various analysis tools to assess potential impacts from risk events. We then formulate risk response strategies to avoid, transfer, control, or assume risks based on risk assessment results. Finally, we confirm risk supervision and review mechanisms to ensure that our risk management procedures operate effectively, and include achieved results in performance measurements and reports for continued improvement of risk management measures.

2-4-2 Risk Items and Response Measures

In 2023, we comprehensively incorporated Enterprise Risk Management (ERM) systems within the Ennostar Group. Risk management implementations are jointly completed by 36 units within Ennostar and its subsidiaries (EPISTAR, Lextar, and Unikorn), and risk identification, analysis, measurement, and response processes were executed in 2022-2023.



Risk Map

The Group combined Top-Down and Bottom-Up risk items to generate risk maps for Ennostar and all subsidiaries. The Group risk map for 2023 was completed following calibrations by Group senior managers.

(1) Top-down: Senior managers within the Ennostar Group identified 6 risk scenarios which were incorporated into all Ennostar and subsidiary risk maps.

(2) Bottom-up: A total of 36 units within the Ennostar Group participated in risk identification, analysis, measurement, and response procedures to identify 323 risk scenarios. Following evaluations, all units selected the Top 3 risks of concern for the year, and the remaining risks with scores exceeding 8 points were categorized as high level risks.

The Top 5 risks for the Ennostar Group in 2023 were “technology development, supply chain (raw materials/production equipment), talent shortages, geopolitical conditions, and climate change (water shortages/power shortages)”; our short, medium, and long term response measures were as follows:

Technology development		
Description of risk and related impacts		
Inadequate technological or innovation capabilities during continued product R&D make it difficult to meet client/market needs and improve product and design quality, thus affecting corporate profitability, implementations of transformation plans, and future market competitiveness.		
Response measures		
Short-term	Mid-term	Long-term
1. R&D personnel regularly visit clients and potential clients along with business/product managers to directly and quickly understand market needs and future developments. 2. Compile global expectations for cutting-edge technologies, analyze competitor and market trends, and assess the feasibility and necessity of developing new technologies and new materials based on industry dynamics. 3. Establish book club for R&D personnel to enhance innovation capabilities through reading and sharing.	1. Integrate new technologies through technical collaborations and technology licensing between industry, academic, and research institutes, and cultivate academic talents from related research units through industry-academia collaborations to bring in new perspectives. 2. R&D personnel convene regular meetings with sales and intellectual property personnel, obtain patents for new products in advance to improve market competitiveness, and discuss future prospects and applicability of current cutting-edge technologies to jointly develop new-generation products and further monitor the patent trends of benchmark competitors.	1. Regular participation in local and international technology and equipment exhibitions and seminars. 2. Align with national policies, participate in government plans, and utilize government subsidies to develop innovative technologies. 3. Collaborate with suppliers to develop new materials, new technologies, and new equipment for new-generation products.

	3. Discover new suppliers and periodically invite equipment vendors and material suppliers to participate in exchange meetings to better understand their development trends and capabilities.	

Supply chain (raw materials)			
Description of risk and related impacts			
Most of our materials are procured from China and have no alternatives; this is particularly true of our key materials. If problems occur with local suppliers, this will directly impact production.			
Response measures			
Company	Short-term	Mid-term	Long-term
EPISTAR	1. Control proportions of raw materials from China and focus on high-proportion materials. 2. Arrange third-country transshipments for high-proportion materials to reduce risks.	1. Establish external procurement channels for quaternary chips in China to ensure that production and local client needs are met. 2. Seek out and verify quaternary chip suppliers that meet our requirements	1. Regularly monitor effectiveness and actual conditions for third-country transshipments, particularly for high-proportion materials. 2. Continue to monitor verification information for alternate materials, including verifications of second sources
Lextar	1. Establish safety stock to meet customer orders 2. Arrange diverse	1. Establish second suppliers outside of China to facilitate deployment of production capacities.	1. Establish evaluation measures for long-term strategic partners and implement HUB/VMI management

	transshipment methods, including cross-border transshipments, to reduce risks.	2. Establish outsourcing strategies to avoid material shortage problems	2. Continuously collect market information for early understanding of supply chain sector changes and to facilitate strategic collaborations.
Unikorn	Establish safety stock to meet customer orders and predictions	Review and reduce usage of key materials from China	1. Optimize supply chain management through joint procurement and establishment of shared stock 2. Seek out materials not produced in China for process testing

Supply chain (production equipment)			
Description of risk and related impacts			
Difficulty finding production equipment vendors which offer reasonable prices affect corporate expansion plans and equipment upgrades.			
Response measures			
Company	Short-term	Mid-term	Long-term
Unikorn	Optimize parameters/modify hardware in accordance with current equipment processes to align with the needs of OEM products.	1. Find/cultivate second-hand equipment vendors to buy and modify equipment, and adjust quotations from original vendors 2. Evaluate second-hand equipment vendors in the market and assess suitability 3. Improve equipment repair and modification capabilities of factory engineers	1. Work with equipment vendors/module engineers to jointly develop equipment that adhere to process needs 2. Find equipment vendors with market potential as well as process and price competitiveness to replace unsuitable equipment vendors.

Talent shortages			
Description of risk and related impacts			
All Group business development strategies require large amounts of professional technical talent, but there is currently a talent shortage in domestic markets; we have many competitors and need to compete with major technological companies for talent. Inadequate amounts of professional technical talents will affect overall operational developments and future competitiveness.			
Response measures			
Company	Short-term	Mid-term	Long-term
Ennostar	Add new recruitment channels such as headhunters	Establish internal recommendation mechanisms and job transfer incentives, increase recommendation bonuses, and promote a culture of internal transfers	Establish a system that promotes internal talent mobility to achieve mutual benefits for organizational needs and employee career developments
EPISTAR	Collaborate with school campuses to cultivate outstanding talents, expand into southbound talent markets, and cultivate migrant workers so they can become administrative and technical personnel	Optimize recruitment processes, promote core functions 2.0, and improve employee stability	Establish internal talent mobility systems to achieve mutual benefits for organizational needs and employee developments
Lextar	1. Expand recruitment channels ● Participate in exhibitions	1. Execute internal talent rotation plans and make flexible adjustments based on actual implementations to ensure	1. Strengthen ties with school campuses, cultivate student talents, and aim to cultivate 20 emerging R&D personnel

	and work with headhunters to find appropriate key corporate talents ● Launch industry-academia classes/corporate visits/rising talent programs to recruit new academic talents 2. Formulate internal talent rotation plans	stability of key talent 2. Cultivate student talents early on through corporate internships and continue to develop and discover campus talents	2. Establish Group talent mobility systems to achieve mutual benefits for organizational needs and employee developments
Unikorn	/	Strengthen talent cultivation and establish internal lecturer systems to pass on technical expertise	1. Expand talent sources through corporate visits and campus lectures 2. Enhance our corporate image and strengthen recruitment advertisements, academic exposure, and social media 3. Strengthen talent cultivation: Promote independent learning goals and add digital courses

Geopolitical conditions
Description of risk and related impacts

The Group's production and manufacturing is currently focused in Taiwan and China, and some key materials are controlled by suppliers in China. Unstable and tense cross-strait relations have major operational impacts and make it difficult for us to obtain orders from international clients, but moving production lines to locations outside of China will significantly increase construction, manufacturing, and management costs.			
Response measures			
Company	Short-term	Mid-term	Long-term
Ennostar	1. All subsidiaries report management measures for key materials to ensure that we can cover production needs for three months and respond to risks. 2. Establish backup supplier mechanisms for high-risk suppliers.	1. Establish regular review mechanisms to increase local and third-country supply proportions and reduce impacts from cross-strait restrictions. 2. Conduct scenario simulation drills associated with embargoes of key materials from China to improve BCPs.	Analyze solutions that outsource some production businesses to third-country suppliers or transfer production sites to third countries.
EPISTAR	1. Monitor local production and delivery risk dispersion conditions 2. Evaluate the impacts of third-country distributors on embargo risks	Find local clients and sales channels in Taiwan, particularly for new products such as Micro LEDs	/
Lextar	1. Re-examine client contracts and seek exemptions from possible	1. Improve cross-border operational management, utilize the Group's import and export platforms, and form strategic	Establish common self-production capacities and backups for products from Taiwan and Chuzhou.

	impacts caused by force majeure factors such as flight suspensions. 2. Develop more than two suppliers for each supply chain position, establish common goals, and build a verification team. 3. Integrate and standardize specifications to reduce costs from switching suppliers and organize product training courses.	collaborations. 2. Evaluate budgets and manpower channels for factories established in third countries, and request supplemental assessments from our supply chains.	
Unikorn	Inventory raw materials and equipment components from China, as well as revenue proportions from Chinese clients.	Find and evaluate third-country production plans and obtain customer consent	1. Expand customer locations and product diversity. 2. Localize production of raw materials and equipment components in Taiwan, and decentralize production bases. 3. Establish raw material supply chain tracking mechanisms to strengthen legal compliance, management, and adjustments.

Climate change

Description of risk and related impacts			
Responding to water shortage and power shortage issues caused by climate change and limitations on natural resources in Taiwan affects normal production, operations, and sustainable management of all Group subsidiaries.			
Response measures			
Company	Short-term	Mid-term	Long-term
Ennostar	2023 green electricity procurement plan: -Continue to track progress on supplier electricity purchase contracts -Continue to contact amenable green electricity suppliers	1. Promote construction of self-built solar power generation systems in factories 2. Apply for T-RECs and initiate self-generation and self-use starting from 2024	1. Gradually introduce use of renewable energy across the whole Group 2. Continue to assess renewable energy sources and renewable energy needs at all stages
EPISTAR	1. Centralize operations and reduce factory power consumption 2. Factories in China: Replace pumps in chillers to reduce an estimated 640,000 kWh of electricity a year	1. Optimize controls and integrations of iCool system 2. Factories in China: Assess possibility of constructing solar power generation systems and improve cooling tower fans to conserve energy	1. Build new solar power generation systems for self-generation and self-use in our factories 2. Utilize offshore wind power and aim to purchase 100 million kWh/year by 2030 3. Upgrade power-consuming equipment and implement energy-saving measures: Change mixed-bed systems to electro-deionization systems to conserve 2,442 tons of water each year 4. Utilize desalinated sea water and

			reclaimed water supplies in some factories
Lextar	Improve energy conservation of factory equipment: -Factory: Improve CDA/Oven energy savings -Factory management: Upgrade air compressors, cooling tower fans, and oil seal PVs	1. Establish contingency measures for power outages announcements issued by Taiwan Power Company 2. Assess and establish UPS systems: Factory management upgrade key equipment such as IT machine rooms, factory control systems, specialty gas distribution and monitoring systems, and localized emergency lighting	Establish solar power/offshore wind power procurement plans and discuss ways to increase green electricity usage proportions at Zhunan Factory.
Unikorn	1. Water shortages: Factories prepare contingency plans which include sharing tap water suppliers and having water tankers on standby 2. Power shortages: Handle Taiwan Power Company issues (such as voltage drops and power outages) based on EPISTAR facility standards	1. Water shortages: Reduce domestic and process water consumption by installing water-saving devices and adjusting water consumption 2. Power shortages: Prioritize shutdowns of high-temperature equipment and implement rolling blackouts	1. Water shortages: Assess reclaimed water and recycled water solutions to reduce water consumption risks 2. Power shortages: Invest in equipment with voltage protection, install backup generators, and consider use of solar power generation facilities.

2-4-3 Establishing a Risk Management Culture

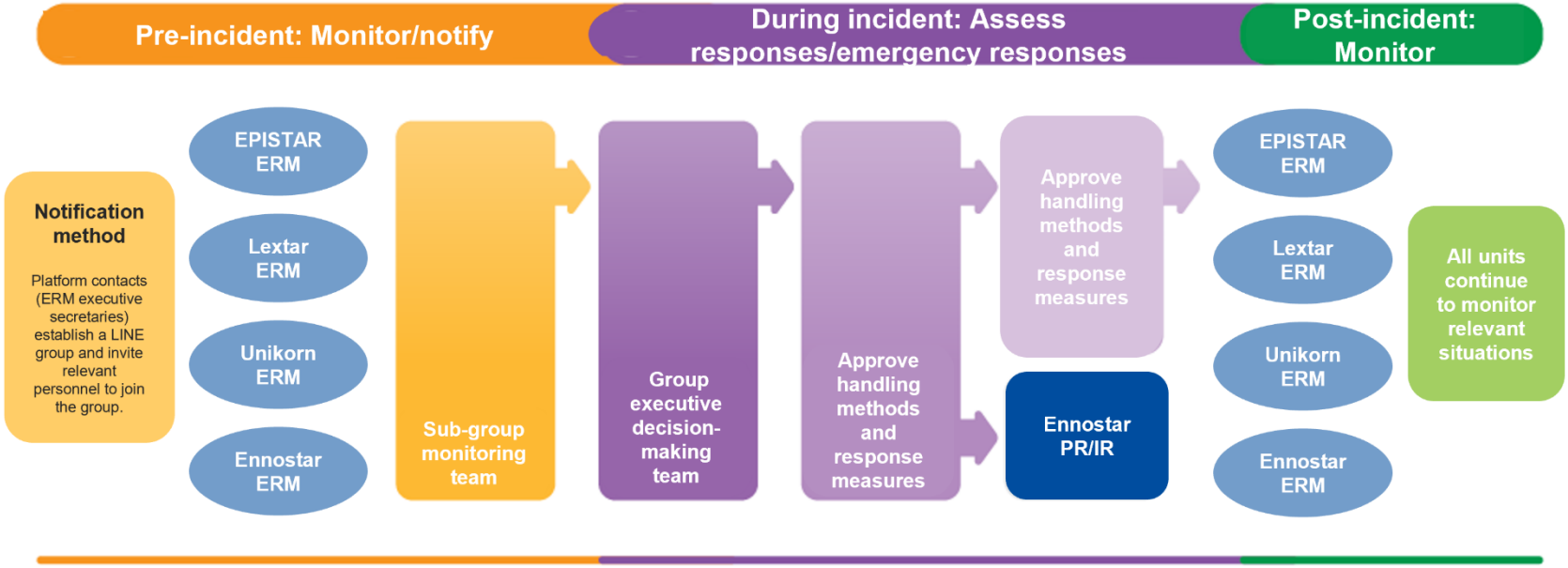
Risk Management Education and Training

The Group hosted 5 risk management education and training courses to share more than 66 practical examples of risk with our employees, encompassing human resources, marketing and market communications, compliance, reporting, information, corporate governance, sustainability, legal, and supply chain risk aspects to enhance risk awareness in our colleagues.

Introduction to corporate risk concepts	Risk management processes and implementation measures
Governance and strategic plans	Risk management standard operating procedures (SOP) training
Fundamental operational frameworks, compliance, and reporting risks	

Ennostar

Reporting Mechanism for Major Emergency Incidents



Apart from regularly reviewing our five major business risks, which include technology development, supply chain (raw materials/production equipment), talent shortages, geopolitical conditions, and climate change (water shortages/power shortages), the Ennostar Group has also established reporting mechanisms for major emergency incidents to ensure rapid and accurate responses to emergency incidents and to reduce impacts from risk incidents. We have established risk incident scope and impact standards for local and international emergency incidents, information security incidents, and abnormal environmental safety incidents, and have also established a Group senior management decision-making team as well as subsidiary reporting and

monitoring teams for timely notification and monitoring of major emergency incidents, enabling assessment of incident handling procedures and response measures for approval by senior management decision-making teams. We have formulated notification, response, and monitoring standard operating procedures, and all departments implement subsequent handling in accordance with their scope of responsibilities while continuing to monitor and report on major emergency incidents to keep informed of and reduce impacts on the Group from major emergency incidents. Additionally, when major emergency risk incidents occur, we immediately initiate emergency risk evaluation procedures in accordance with our risk management processes, and evaluation results are included in our risk knowledge database to prevent future risk incidents.

Risk management systems help organizations identify, assess, control, and mitigate various risks. Our risk management development plans for the next 1-5 years are as follows:

2-5 Information Security

Information security and privacy controls have become an essential part of business. Ennostar and all subsidiaries have formulated information security policies to protect client privacy as part of our responsibilities and to prevent unauthorized use of computer systems in accordance with the “Regulations for Protection and Management of Personal Information.” Users of all departments are required to apply for user codes and applications, and can only obtain formal access to computer systems following approval by unit supervisors and information technology office managers. Personnel not involved in operations are unable to obtain customer information.

Material Topic: Information Security and Privacy Protection | Base Year: 2021			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
1. 100% of all factories in Taiwan completed ISO 27001 verifications	Achieved	1. Maintain ISO 27001 verification 2. Comply with new ISO 27001 requirements 3. Zero information security incidents resulting in property damages across the Group 4. Zero intrusions by hackers due to unpatched vulnerabilities in external websites 5. Ensure that ransomware attacks do not affect core	1. Maintain ISO 27001 verification 2. Zero information security incidents resulting in property damages across the Group 3. Zero intrusions by hackers due to unpatched vulnerabilities in external websites 4. Ensure that ransomware attacks do not affect core systems and computers, and affect fewer than three users
1. Completed one information security risk assessment every six months	Achieved		
2. Completed one information security internal audit every six months	Achieved		
3. Zero information security incidents resulting in	Achieved		

property damages across the Group		systems and computers, and affect fewer than ten users	
4. Conducted at least three social engineering and phishing email drills for all employees each year	Achieved		
5. Conducted at least one business continuity drill each year	Achieved		
Responsible unit	Smart enterprise team and information technology department		

Our parent company has established a dedicated information security management department responsible for information security maintenance, information security frameworks, information security policies, and other information security projects and review procedures to lead our subsidiaries in joint realization of Ennostar information security goals.

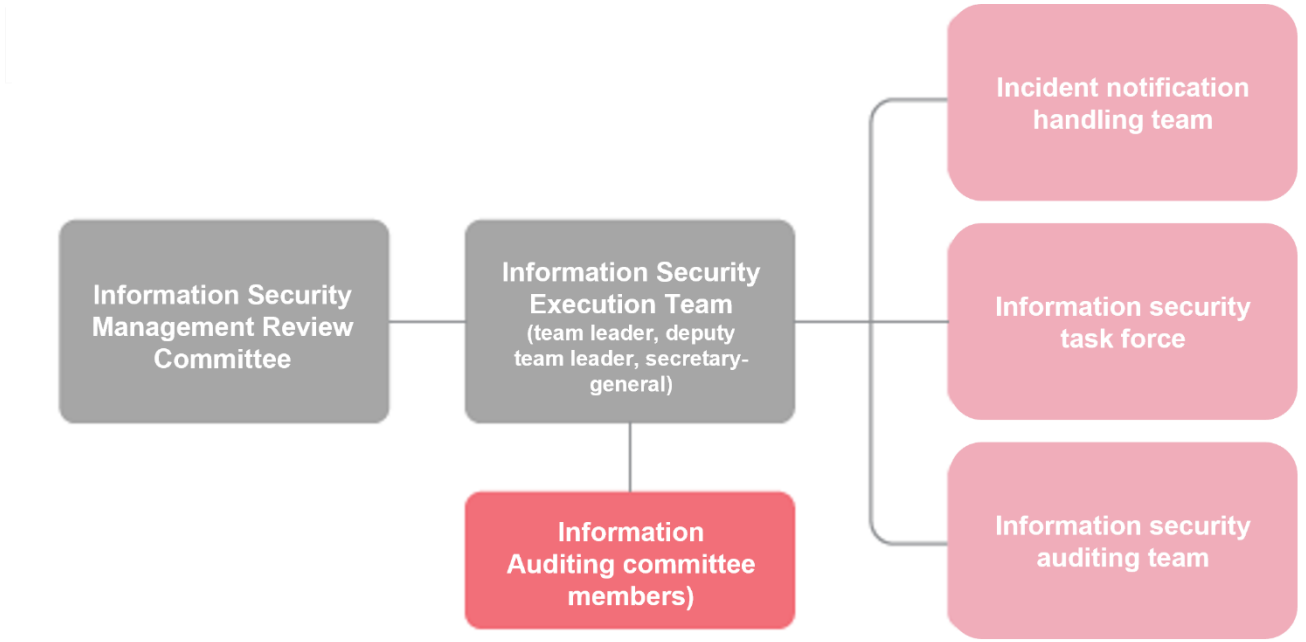
For more information on the Group's information security policies, please refer to the official Ennostar website.

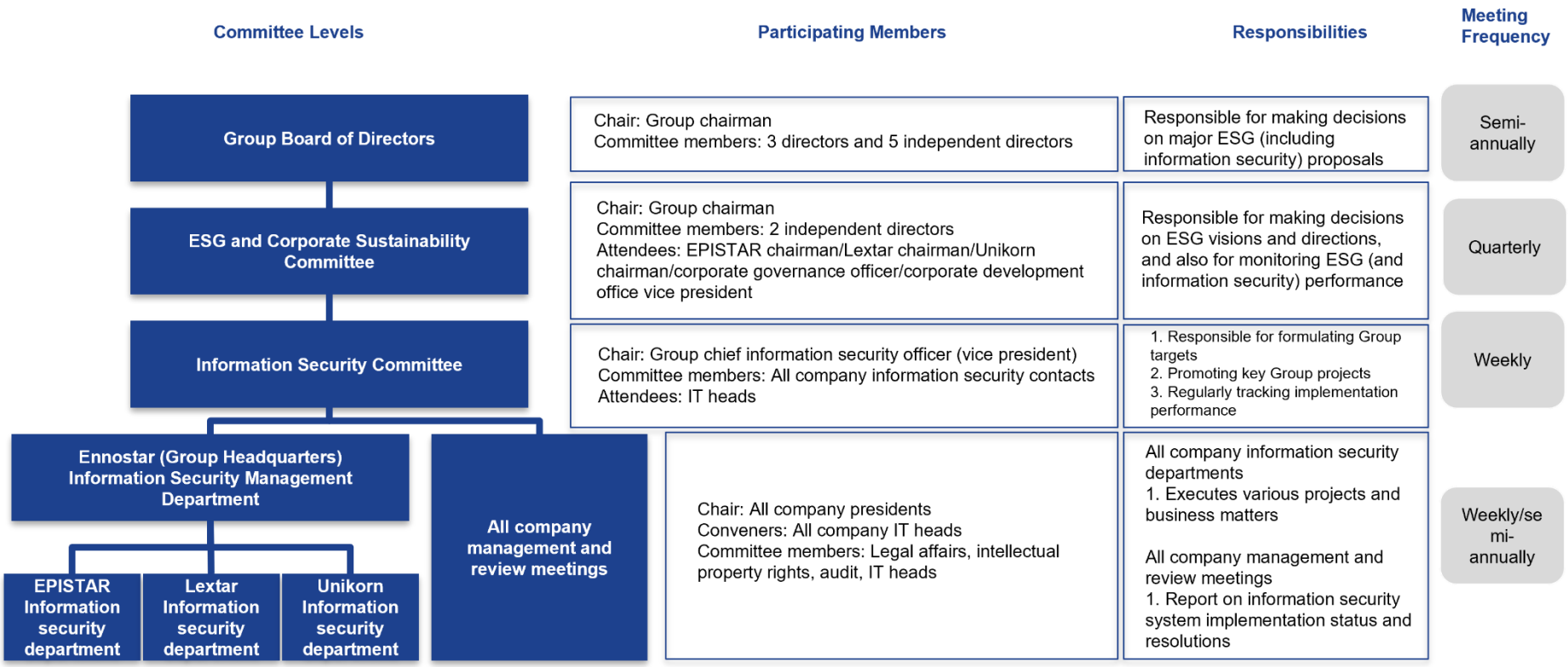
Information Security Management Framework

The Group established the "Information Security Committee" to facilitate review of information security implementation strategies, goals, and performance. The Board makes up the first level of our information security framework and is responsible for making decisions on major information security proposals. The Corporate Sustainability and Risk Management Committee (chaired by the Group chairman) makes up the second level of our information security framework and is responsible for determining the Group's information security directions and goals. The Information Security Committee (chaired by the chief information security officer) makes up the third level of our information security framework and is responsible for promoting Group goals and key projects. The information security departments of each subsidiary make up the fourth level of our information security framework and are responsible for

implementing various targets and projects. We convene information security management and review meetings twice every year, and report information security implementations and resolutions to the presidents of each subsidiary.
We have also established an “Information Security Execution Team” to disseminate information security concepts throughout the Group, and to implement regular drills and information classification systems for incident management. We conduct annual drills for ransomware scenarios to strengthen employee understanding of incident responses and to speed decision-making and notification procedures during incidents.

Information Security Organizational Structure





Information Protection Processes and Verifications

To ensure information security, achieve the quality expected by our customers, and protect customer privacy, the Group adhered to ISO 27001 requirements in formulating corporate information protection and management processes. In 2023, the Ennostar Group obtained ISO 27001 Information Security System verification for all factories in Taiwan and established information security procedures which comply with international standards. We hope that these international verifications can reduce corporate information

security threats, establish the highest standards for protection of confidential information, and protect customer intellectual property rights, process parameters, and other confidential information.
To reduce possibilities and impacts of risk incidents, the Group actively implements management systems and risk response measures. We not only incorporate third-party information security risk assessments, but also conduct routine inventories of information assets, account checks, and internal audits each year, as well as convene information security management and review meetings attended by our president and managers from relevant units. Ennostar and all subsidiaries in Taiwan also conduct business continuity drills once every year. At present, all Group subsidiaries have received A ratings on third-party risk assessments, exceeding average industry ratings.

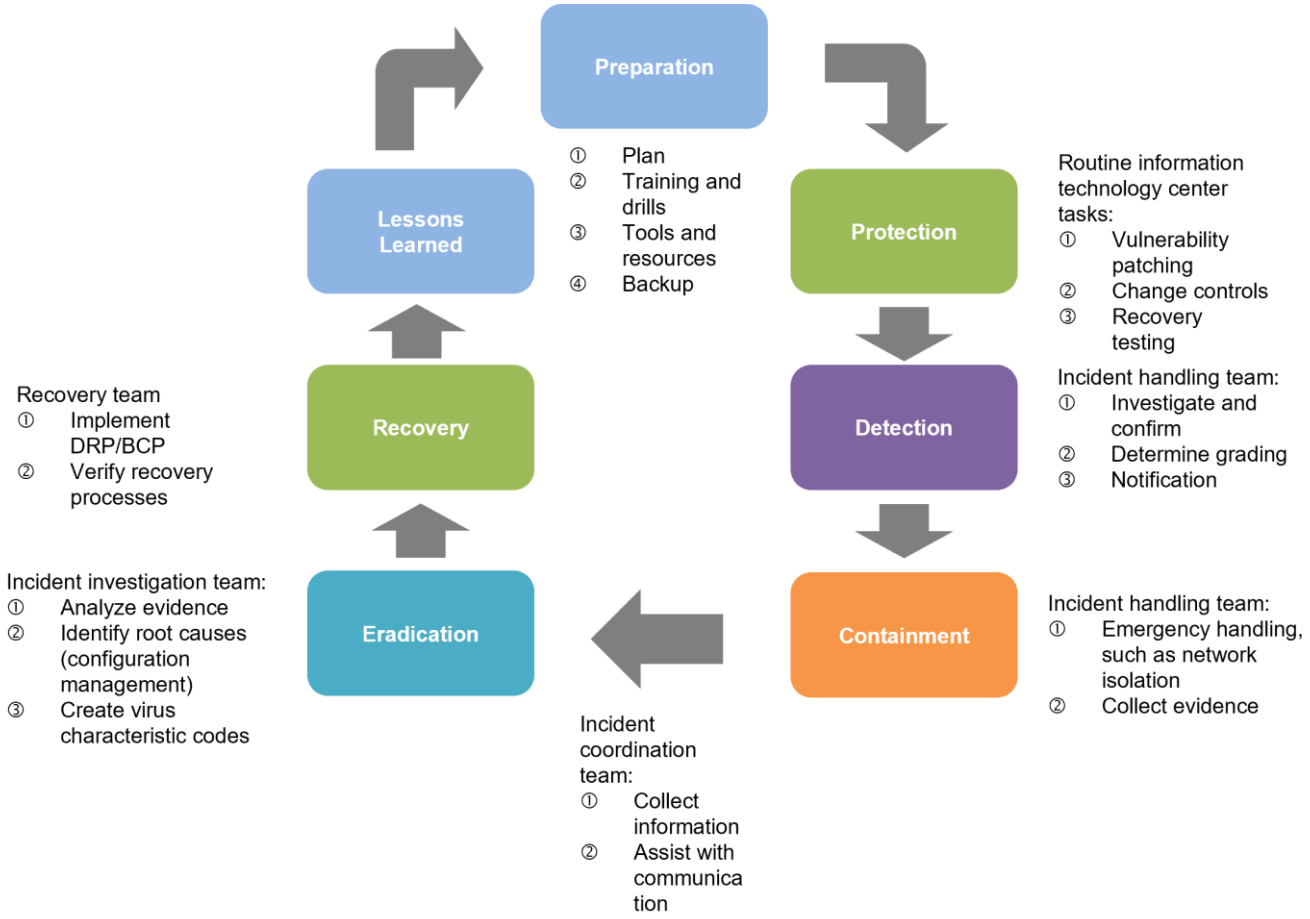
Project title	Ennostar Group information security risk assessment platform Security Scorecard
Project description and quantitative performance	Collected public information to measure and evaluate current information security risk levels, and calculated a quantitative score. We implemented improvements based on the information provided by the platform; Group subsidiary scores rose to 90 points from 70 points. Currently, all scores remain between 99-100 points.

Information Security Incident Reports and Incident Management

Ennostar has formulated an incident response mechanism which encompasses seven processes: prepare, protect, detect, contain, eradicate, recovery, and review. At the prepare level, we comprehensively integrated endpoint detection and response (EDR) tools and third-party monitoring mechanisms for real-time monitoring and response. Apart from routine backups and storage of offline backups, we also implement incident response drills each year in accordance with our response plans. At the protect level, we use vulnerability scanning and third-party risk monitoring platforms to keep informed of vulnerability risks, and report on vulnerability patching progress at weekly meetings. Managers can also conduct restore testing using backups. When information security incidents are detected, we assess incident levels and report said incident, setting containment as our primary goal. We disconnect networks and use other isolation measures to reduce incident impacts, and collect and appropriately store digital evidence to prevent

reoccurrence of said incident after investigation of root causes and eradication of said threat.

Incident Response Process (Cyberattacks)

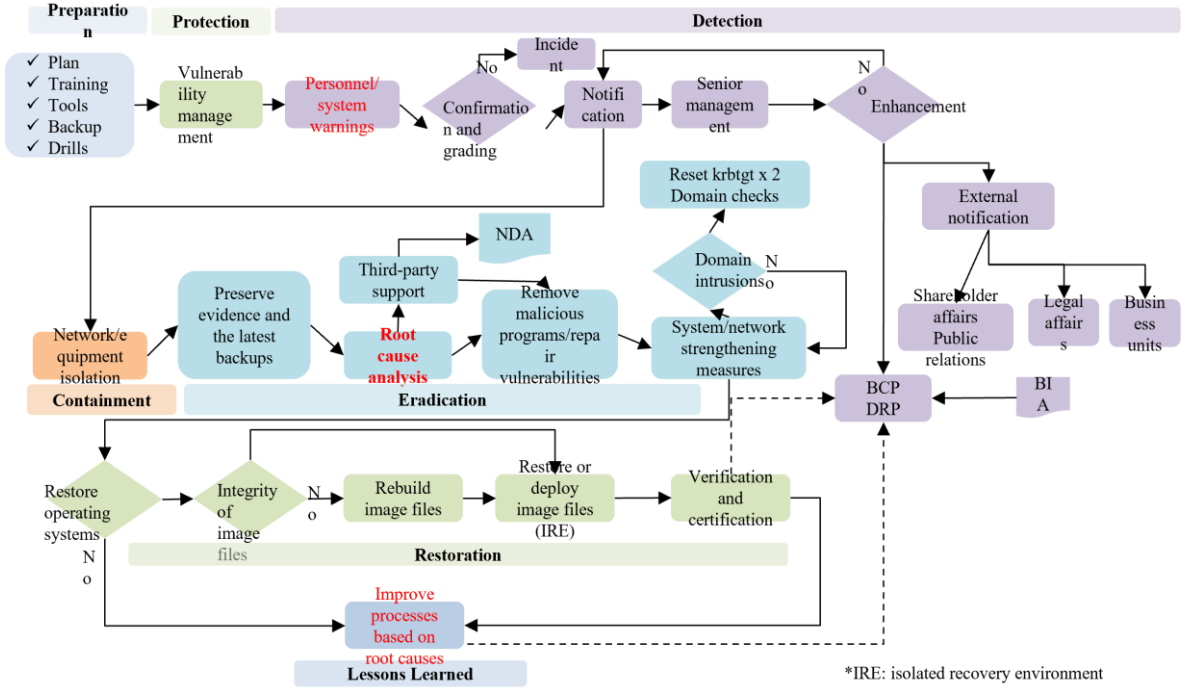


Ennostar

Incident Response Mechanisms

1. Incident occurrence
2. Confirmation and classification
3. Reporting, emergency measures, and restorations
4. Process improvement

Cyberattack Incident Response Procedures



Protection of Customer Privacy

The Group strives to protect customer privacy and confidential information. We regularly review our corporate management mechanisms for privacy rights, issue relevant announcements, and organize training courses to enhance our corporate sustainability competitiveness and demonstrate our commitment to sustainable management.

To protect customer privacy, the Group uses codes instead of names to prevent unintentional disclosures of customer information. Customer codes must be marked on letters sent to customers, and our system checks files to ensure consistency with email content to avoid discrepancies between attachments and recipients, and to prevent competing customers from obtaining information due to human negligence. The system also ensures that competing customers do not appear in the same email to prevent erroneous deliveries. No important customer data is stored at endpoints. If there are specific reasons why data should be stored, these reasons must be reviewed by project managers. Information communicated with clients are transmitted through encrypted channels that can only be accessed by designated IPs.

Those who have business dealings with the Group involving integrity and confidentiality of information assets are required to sign confidentiality statements and non-disclosure agreements regarding client information to ensure they understand all information obtained during the course of their dealings with us are corporate assets which cannot be used for other purposes without authorization, thereby maintaining protection of customer privacy. The Group received no complaints relating to infringements of client privacy rights or client information losses in 2023.

2-6 Responsible Supply Chain

Supplier Overview

The Group mainly procures raw materials, components, equipment, and engineering services. In 2023, we worked with more than 3,616 suppliers around the globe. To ensure that suppliers adhere to our sustainability requirements, all of our suppliers across all procurement categories have to sign a Commitment to Supplier Social Responsibilities and undergo related risk evaluation mechanisms.

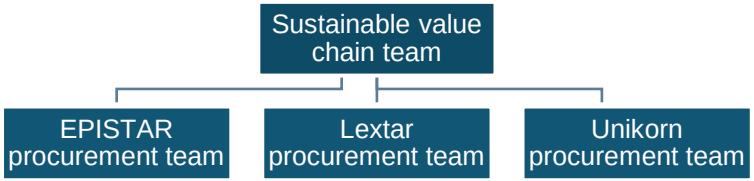
The Group is a professional OEM manufacturer with products encompassing epi wafers, chips, packaging, SMT, and compound semiconductors. Our main raw materials and components include sapphire substrates, gallium arsenide substrates, special gases, metals, brackets, and LED motherboards. All key materials and components are purchased from more than two suppliers to maintain procurement flexibility and reduce risks from over-concentration of raw materials.

Number of suppliers

Domestic	3,382
Overseas	234

Supply Chain Management

Management Organization



Procurement teams at all subsidiaries are headed by division managers and above. In 2024, we expanded our management measures to our factories in China.

Management Strategies

#	Aspect	Management Approach
1	Improve supplier sustainability influence	● We require all suppliers to sign a “Commitment to Supplier Social Responsibilities” and adhere to Responsible Business Alliance (RBA) guidelines related to labor, health and safety, environmental protection, ethical regulations, and management systems to strengthen understanding of our rules and implementations ● We implement a supplier ranking system and regularly evaluate supplier grades (A, B, C, D, E) in accordance with the supplier management procedures of our subsidiaries. We guide suppliers who received rankings of C, D, or below in implementing improvements. We also conduct irregular RBA and EHS audits on key suppliers
2	Continuous risk management	● We continue to diversify supplier sources and obtain verification for key materials, as well as keep informed of geographical distributions for supplier production lines to reduce variability in material supplies and prevent future supply shortage risks caused by extreme weather or major natural disasters.

		● We established emergency response processes for supply risks caused by abnormal supplier incidents so the most appropriate measures can be used to reduce impacts and prevent major operational hazards from affecting stakeholder interests.
3	Avoid conflict minerals	● We declare and pledge not to use metals sourced from regions or smelters associated with conflict minerals, require suppliers not to use conflict minerals and sign guarantees committing to no use of conflict minerals, and use the Conflict Minerals Reporting Template (CMRT) released by the Responsible Minerals Initiative (RMI) to ensure that we do not use conflict minerals.
4	Increase proportion of local procurement	● We actively establish collaborative relations with local suppliers to build long-term strategic relationships and stable supplies, reduce risks of material shortages, accelerate supply chain efficiency, speed development of new products, and reduce additional expenditures.
5	Build green supply chains	● We continue to work with our supply chain partners to develop carbon reduction technologies, achieve carbon reduction benefits, strengthen green supply chain developments, and improve supply chain resilience.

Supplier Management

Commitment to Social Responsibilities

The Group's two main subsidiaries (EPISTAR and Lextar) have taken the lead in implementing the RBA Code of Conduct in recent years. Apart from establishing corresponding factory regulations, we also implement these practices on related departments, all suppliers, and contractors. All RBA-verified raw material suppliers and contractors, including staffing agencies, waste disposal companies, cleaning companies, and other contractors, are required to sign relevant documents required by the RBA; 100% of all our suppliers/outsourcing vendors/contractors have signed our Commitment to Social Responsibilities. Additionally, to help suppliers improve their sustainability performance, we integrated ISO 9001 and IATF 16949 international standards in our supplier management procedures in accordance with RBA and HSF requirements to facilitate assessment of supplier requirements, supplier management, review, audits, evaluation, guided improvements, and continuous supply chain management. We also surveyed supplier ISO 14000,

ISO 45001, and ISO 14064 integrations in our self-evaluation forms, and included these indicators in supplier evaluations. The Group established supplier/contractor codes of conduct in 2024 and will continue to implement management, reviews, and improvements to ensure comprehensive management of sustainability responsibilities in our supply chain.

Sustainability Assessment for New Suppliers

Scope of implementation	Assessment	Assessment results
Key material suppliers	1. Assess whether procurement, quality, and finances comply with requirements using supplier evaluation requirement forms. 2. Require suppliers to conduct risk self-assessments on quality system regulations and requirements, and conduct on-site/written audits based on self-assessment results.	Vendors can only be included in the Group's list of qualified suppliers after assessment results show they adhere to our standards, and we require our suppliers to sign a Commitment to Supplier Social Responsibilities.

Sustainability Assessment for Existing Suppliers

Implementation guidelines	Survey	Assess	Guide and track improvements
All suppliers are required to sign our Commitment to Supplier Social Responsibilities	Sustainability assessment items are surveyed using questionnaires (self-assessment forms)	Written audits On-site audits	During audit processes, we offer guidance to suppliers and suggest improvements.

Management of Supplier Risks

To prevent sudden supplier closures from affecting material supplies and to reduce supply shortage risks from extreme climate and major natural disasters, we conduct periodic and non-periodic checks on supplier operations and finances, diversify material sources,

and keep informed of geographical distributions of supplier production lines to keep abreast of supply chain conditions. We have also established an emergency response team and emergency response processes for handling of abnormal supplier incidents. We conduct regular situational drills to ensure that we are adopting the most appropriate prevention measures for supply chain risk management, thereby protecting stakeholder interests from operational hazards.

In terms of supplier risk assessments, the Group has established different risk assessment processes and assessment items based on the different business models adopted by new suppliers, existing suppliers, and our subsidiaries. All collaborating companies are required to sign an “Integrity Commitment Statement.” All Group subsidiaries will gradually incorporate sustainability concepts in risk assessment items.

Supplier Risk Assessment Processes and Items

Target	Risk Assessment Process	Risk Assessment Indicators
New suppliers	Conducted in accordance with supplier audit evaluation charts, new supplier risk assessment forms, and supplier management procedures. Supporting documents, if any, should be provided prior to official transactions.	Organizations, financial conditions, environmental management systems, material risk control capabilities, production control systems, material management systems, transportation, and quality
Existing suppliers	Questionnaires related to assessed sustainability risk items	Supplier financial risks, supply shortages, level of local production, and use of renewable materials

None of our suppliers were faced with major human rights risks related to freedom of association, collective bargaining, use of child labor, or forced or compulsory labor in 2023.

Supplier Audits and Evaluations

To ensure that our suppliers clearly understand our procurement requirements, we conduct annual audits on key supplier quality systems, production processes, and labor ethics systems, encompassing management of hazardous substances and conflict

minerals. Suppliers are asked to fill out surveys in advance and our audit team conducts on-site audits and provides guidance.

After completing audits, our audit team compiles supplier self-assessment scores and the results of on-site audits, analyzes supplier management strengths and weaknesses, and provides reports to procurement units to serve as an annual supplier evaluation indicator. Our audit team provides guidance for major defects and non-conformities on supplier audit items, fully communicates with suppliers to determine implementation difficulties, and assists suppliers in implementing improvements. If suppliers are not willing to implement improvements, the team may decide to remove said supplier from the list of qualified suppliers. In 2023, supplier quality and RBA audits were conducted by cross-unit teams composed of personnel who had passed RBA VAP training, and audits encompassed labor, ethics, health and safety, environment, and management system aspects. All subsidiaries in Taiwan conducted on-site RBA audits in 2023 and did not discover any major deficiencies. Suppliers have proposed corresponding corrective measures and completed improvements for all identified non-conformities and risk items. None of our suppliers were involved in major incidents related to freedom of association, collective bargaining, use of child labor, or forced or compulsory labor in 2023.

Supplier Evaluations

The Group has formulated “Supplier Management Processes” and “Supplier Evaluation Procedures.” Our procurement, quality management, and other related departments conduct annual and quarterly evaluations of supplier quality, price, services and technologies, delivery dates, and restrictions on hazardous substances. Our subsidiaries rank suppliers using 5 grades (A~E) or 3 grades (A~C). We prioritize negotiations and transactions with suppliers with A or B rankings. Regarding suppliers with ranked C or below, suppliers who have quality issues are required to implement continued improvements in accordance with our correction procedures, and suppliers who have delivery time issues are required to provide BCP information. We also provide consultations to these suppliers or require immediate improvements.[4]

In 2023, we completed evaluations for 2,527 suppliers; 160 were found to be excellent A-grade suppliers, 92 were found to be qualified B-grade suppliers, and 0 were found to be C-grade suppliers. No suppliers were found to have major potential/actual

[4] Ennostar’s different business units adopt different supplier ranking systems.

negative impacts on the Group.

Level	A	B	C	D	E
Total number of suppliers	160	92	0	0	0

EHS Evaluations and Audits

To ensure appropriate management of EHS implementations and service capabilities, we formulated EHS evaluation systems which include general health and safety, emergency response, chemical management, contractor management, environmental management, fire safety, and health management. We screen suppliers based on the results of EHS supplier self-assessments; if results fail to meet qualification standards or if a supplier has incurred a major industrial safety incident within the past year or is determined to be high-risk based on the results of our EHS evaluation form, said supplier will be listed as a target for on-site or mandatory audits.

Depending on their different business models, our subsidiaries include specific raw material suppliers or waste disposal companies in annual supplier EHS audits. For example, EPISTAR considers gas and chemical suppliers to have higher safety and environmental risks, while Lextar is focused on appropriate handling of waste. Specific suppliers and contractors are included in factory audits in accordance with relevant regulations.

In 2023, EHS audits were carried out on 108 suppliers and contractors. No major defects were discovered and suggested improvements were tracked until completion. During audits, Unikorn discovered that confidentiality agreements did not contain signing times and necessary signing conditions, so procurement personnel recommended that suppliers establish related guidelines for confidentiality agreements, and related revisions were completed within a month to prevent confidential information from leaking and to enhance confidentiality.

Conflict Mineral Management

Prohibit Use of Conflict Minerals

We ensure that all Group products do not use or contain conflict minerals (including gold, tantalum, tungsten, or tin) from the Democratic Republic of Congo (DRC) or surrounding regions controlled by military groups or non-governmental/illegal military factions.

All Group subsidiaries implement responsible procurement and we established and publicly posted the Group “Conflict Minerals Management Declaration” in 2023. We conduct reasonable due diligence on suppliers and all qualified suppliers are required to sign the “Commitment of Suppliers to Prohibit Use of Conflict Minerals.” We completed surveys of 100% commitment to non-use of conflict minerals in accordance with OECD RMI organizational requirements, and work with our supplier partners to fulfill our social and environmental sustainability commitments.

All suppliers of metal plating used in our production processes follow the spirit of the OECD and RMI organizational procedures. Each year, we complete due diligence procedures and conflict mineral surveys; collect CMRT, EMRT, and PRT reports; and also provide CMRT, EMRT, and PRT reports in accordance with customer requirements to ensure that 100% of products used by our customers do not contain conflict minerals.

Local Procurement

We uphold sustainable management concepts, and supplier localization is an important consideration for Group subsidiaries when seeking out supplier partners. In terms of procurement policies, when all other conditions are equal, we prioritize local suppliers to support local economies and to advance local supplier technologies and quality.

In 2023, the total number of domestic raw material/component/equipment suppliers for all our subsidiaries amounted to 1,280 suppliers, accounting for more than 85% of all suppliers; local procurement amounts exceeded 85% of total company-wide procurements. In future, we will gradually increase local procurement amounts and reduce the carbon footprints from procurement to achieve our overall sustainable procurement goals.

Build Green Supply Chains

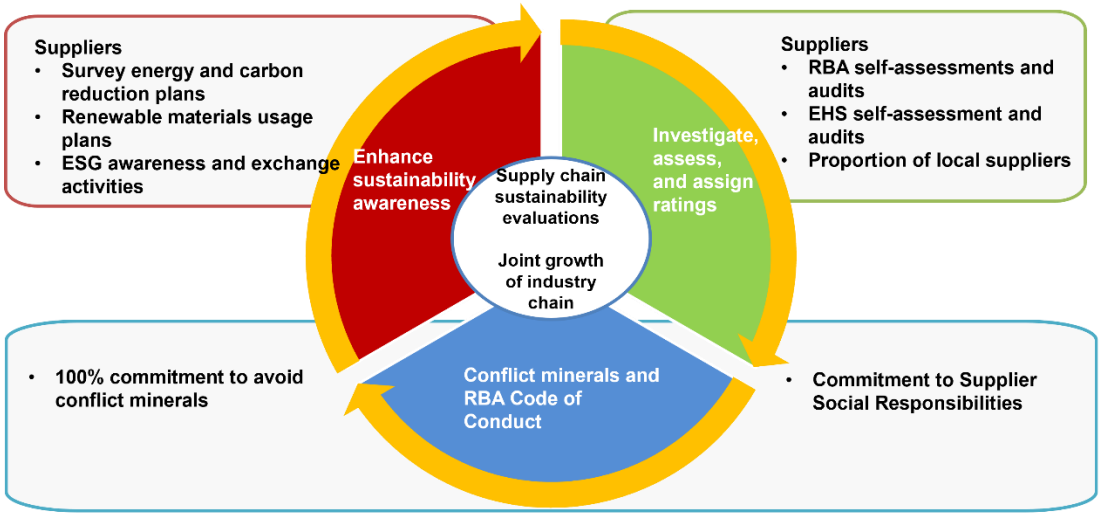
In future, we hope to continue working with our supply chain partners to develop carbon reduction technologies, achieve carbon reduction benefits, strengthen green supply chain developments, and enhance supply chain resilience. We continue to improve our social responsibilities associated with procurement to ensure that we do not provide any products using conflict minerals, to improve carbon reduction capabilities associated with our SBTi commitments, and to become an industrial sustainability value chain

benchmark. The sustainability value chain team adhered to these strategies when planning our three main axes and five-year plan:

- Three main axes

Sustainability awareness: Ensure that suppliers adhere to government environmental protection laws and EHS requirements
Supplier rankings: Prompt suppliers to conduct carbon inventories and implement carbon reduction plans
RBA: Require suppliers to comply with regulations and policies for conflict minerals, as well as RBA guidelines

- Five-year plan



Supplier Classification

Category	Definition	Number of suppliers
First-tier suppliers	Raw material and component suppliers	1,140
First-tier key suppliers	Raw material suppliers incurring the top 70% of transaction amounts (41 suppliers) and component suppliers incurring the top 70% of transaction amounts (55 suppliers).	96

Sustainability Capability Levels

In 2023, we distributed ESG questionnaire surveys to first-tier key suppliers and ranked suppliers from A to E based on their energy conservation/carbon reduction/renewable material usage/local procurement proportions. Starting from 2024, we plan to collaborate with suppliers and guide them through improvement implementations, then evaluate and identify key suppliers through this process. In 2024, we plan to add a new water resource and biodiversity awareness survey, and also include Chinese suppliers in our surveys.

	Energy conservation and carbon reduction evaluations	Renewable material usage evaluations	Guidance measures
Number of A+B suppliers	8	13	Require suppliers to provide solutions for continued improvement
Number of C+D suppliers	40	4	Require suppliers to provide solutions for continued improvement, or engage in discussions and provide coaching for suppliers to improve their rankings

Note: In 2024, we plan to clarify information on and provide coaching to E grade suppliers; these suppliers will also be disclosed in 2024.

Supplier Exchanges and Sustainability Awareness Improvements

(1) Energy and carbon reduction/renewable material plans

Key supplier carbon reduction policy survey

Number of participating suppliers	96 key suppliers

We used questionnaires and surveys to understand supplier carbon emissions/product carbon footprints/use of green energies/TCFD disclosures/participation in SBTi initiatives and other carbon reduction policies, as well as carbon emissions data and benchmarks. This information was used for continued improvements in management of Scope 3 emissions, as well as subsequent supplier coaching plans.

(2) ESG awareness and exchange activities

Education and training for sustainable value chain members

To improve sustainability awareness and capabilities, we provided comprehensive education and training to procurement personnel at all subsidiaries. In 2023, we provided education and training to 286 people over a total of 185 hours.

Theme	Course Titles
ESG awareness	ESG awareness; Carbon reduction guides; International net zero trends; Future developments in Taiwan
Sustainable value chain developments	Sustainable value chain development trends; Supplier sustainability and mutual benefits (including local procurement)
Carbon knowledge	International carbon emissions and carbon footprint inventory standards; Internal training for ISO14064 greenhouse gas inventory verification personnel; Carbon Disclosure Project (CDP) training; How to reduce carbon footprints
Other	Task Force on Climate-Related Financial Disclosures (TCFD)

2023 Supplier Conference

Number of participating	59 key suppliers

suppliers	

The Group invited key suppliers to learn about the Ennostar Group's ESG strategies, carbon reduction pathways, and net zero emissions goals, as well as supplier coaching plans. During the conference, we also announced the Ennostar Group's determination to join the SBTi initiative and the Group's supply chain carbon reduction goals. We aim to achieve carbon reductions of 20% in our target year (2030) compared to our base year (2022), and we hope to work with our suppliers in creating a better future.

Ennostar Group Supplier 2030 Carbon Reduction Stages and Goals		
Stage 1	2023~2024	Complete ISO 14064-1 greenhouse gas inventories
Stage 2	2024~2025	1. Set carbon reduction base year and targets 2. Formulate energy and carbon reduction plans
Stage 3	2025~2029	1. Reduce carbon emissions year by year in accordance with carbon reduction targets 2. Implement energy and carbon reduction plans
Stage 4	2030	Achieve 20% carbon emissions compared to base year

CH3 Innovation and Growth

3-1 Innovation Management and Smart Transformation

Material Topic: Innovation Management and Smart Transformation | Base year: 2021			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
R&D expense/revenue ratio for factories in Taiwan > 7%	Achieved	R&D expense/revenue ratio for factories in Taiwan > 7%	R&D expense/revenue ratio for factories in Taiwan > 7%
Factories in Taiwan applied for 317 patents	Achieved	285 patents/year	300 patents/year
Factories in Taiwan applied for 1,152 trade secrets	Achieved	920 trade secrets/year	920 trade secrets/year
Responsible unit	Smart enterprise team, innovative technology team, R&D and intellectual property rights department		

3-1-1 Innovation and R&D

Innovation Visions and Strategies

Enhancing corporate competitiveness and advancing industrial technological innovations are the core driving forces for sustainable management at the Group. Ennostar has incorporated “innovation” in all stages of product and service production from development to manufacturing, fully investing resources and implementing rigorous quality management. We formulated visions and long-term goals based on various technologies, starting with “market positioning,” “professional innovation,” and “innovation benefits,” using the two perspectives of “professionalism” and “innovation” to find innovative management strategies that solve customer pain points.

Technology	Vision
LED upstream epi wafers and chips	Improve performance, lower carbon emissions, low-carbon production, replace mercury lamps, social care, and sustainable management are EPISTAR's six main visions, and the company has set innovation as its corporate mission, adhering to the core concept of "using energy-saving, eco-friendly materials and processes to provide customers with the most efficient integrated solutions."
LED downstream packages and modules	As one of the few companies in the world with professional optical, mechanical, electrical, and thermal integration technologies and services, Lextar's abundant Group resources, professional technical expertise, and comprehensive product portfolios act as the best bridge for integration of optoelectronics and semiconductors. We combine our optical, mechanical, electrical, and thermal integration advantages with energy-saving and eco-friendly materials and processes to provide customers both at home and abroad with the most professional integrated solutions and services.
Foundry services for compound semiconductors	Unikorn's foundry services include front-end and back-end processing of epi wafers and chips, as well as applications encompassing sensors, 5G communications, displays, and power components, meeting the different OEM demands of our clients by providing the best process parameters and production platform to fulfill the delivery times, yield rates, and customized design requirements of our clients.

Focusing R&D on Prospective Key Products

In response to market needs and multidimensional developments, we have formulated prospective plans for new products and invested in R&D for new products related to backlights, lighting products, automobiles, grow lights, sensors, UVC products, and Micro LEDs:

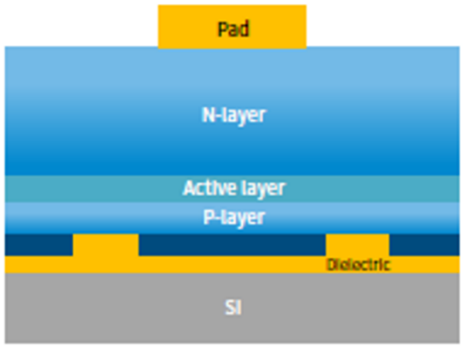
EPISTAR	
Mini LED wafer backlight applications	Green-light wafer sensor applications
Short-wave infrared (SWIR) wafers	InGaAs light sensor wafers
Flip-chip wafer automotive lighting applications	UV-C wafers
Lextar	
Backlight applications	Special lighting applications
Sensor applications	Invisible UV light products
Automotive lighting products	RGB display applications
Unikorn	
Microwave communication products	Power component application products
Display component application products	Sensor component application products

Key Innovative and R&D Actions in 2023

Epi wafers and chips

Technology	Actions and achievements
Improved WPE for plant lighting products to reduce energy consumption	EPISTAR's original 660nm products had a WPE of around 76%, and already surpassed similar peer products, but our R&D department continued to optimize our plant lighting applications and adjust epitaxial structures to improve quantum well luminous efficacy and current dispersion capacities at high current densities, while also incorporating new technical platforms on the chip production side to improve external luminous efficacy. In the second quarter of 2023, we developed the world's first 660nm LED product with WPE≈79% (BRPN55F), further improving product performance. Our WPE≈79% product has an ultra-low VF (<1.95V @700mA), so can significantly reduce energy consumption in plant lighting products.

Ennostar

Developed high-efficiency SWIR LED products	To meet customer needs and improve development efficiency, our epi wafer team reduced the size of 4” epi wafers to 2” and increased production numbers, producing more epi wafer numbers under the same amount of resources and providing more process design opportunities for the process manufacturing team. We used combo layouts on the same epi wafer to obtain more experiment results, reduced manufacturing process times to 2 weeks, achieved rapid verifications, and reduced development costs. We optimized epitaxial structures and improved process abnormalities after every trial production, and conducted reproducibility assessments on effective results for further improvements. We strengthened product integrity by adjusting structural details and increased brightness to 13.8mW. EQE reached 14.86% (an increase of 3.9%) and passed client verification and product reviews; mass production is scheduled to commence in the second quarter of 2024. Actions:  Enhanced electrostatic discharge (ESD) capabilities ESD fail rate: 7.2% -> 0.6% Adjusted epitaxial film n-layer thickness N-layer 8.5 um -> 6um, and maintained Po to reduce epitaxial costs Adjusted active layer Optimized active layer, Po +3.5%, Vf2 -0.12V

<table>
<tr>
<td>Reduced run time of high-brightness blue light epi wafers</td>
<td>Blue light epi wafers are currently one of EPISTAR’s main products. Production cycle times for high-brightness epi wafers are around 5.5-6.0 hours, so reducing production times to 5.0-5.5 hours (or even to less than 5.0 hours) while maintaining blue light epi wafer performance and quality can reduce production costs and the amount of carbon emissions generated for each epi wafer, creating mutual benefits.
Actions:
● Took stock of production times for each recipe and set target times for each recipe.
● Gradually reduced production times while maintaining product competitiveness.
● Adjusted recipes to reduce process times and increase III-V element efficiency, thereby balancing quality and customer needs.
Benefits:
<table>
<tr><th>Model</th><th>Production capacity and cost</th><th>Electricity cost for single unit</th></tr>
<tr><td>A7</td><td>If production capacity was increased by 8.7%↑, total epi wafer costs would be reduced by 1.6% ↓</td><td>↓11%</td></tr>
<tr><td>K7</td><td>If production capacity was increased by 10.5%↑, total epi wafer costs would be reduced by 2.0% ↓</td><td>↓12%</td></tr>
<tr><td>C4</td><td>If production capacity was increased by 3.4%↑, total epi wafer costs would be reduced by 0.4% ↓</td><td>↓2.5%</td></tr>
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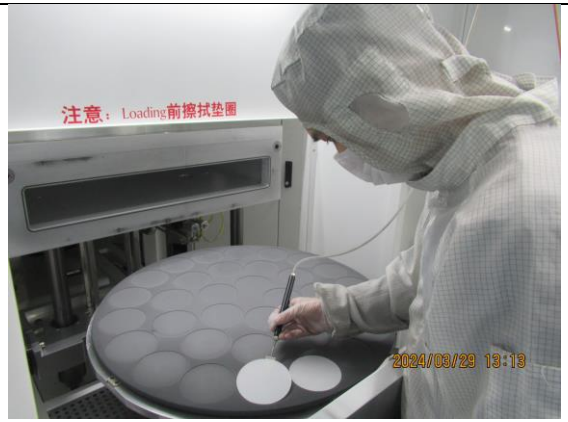
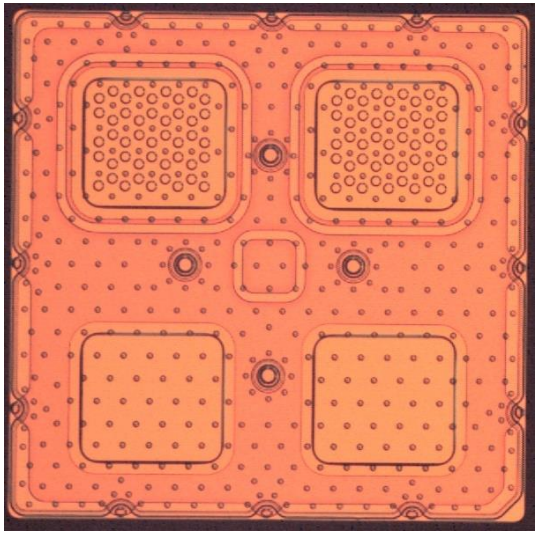
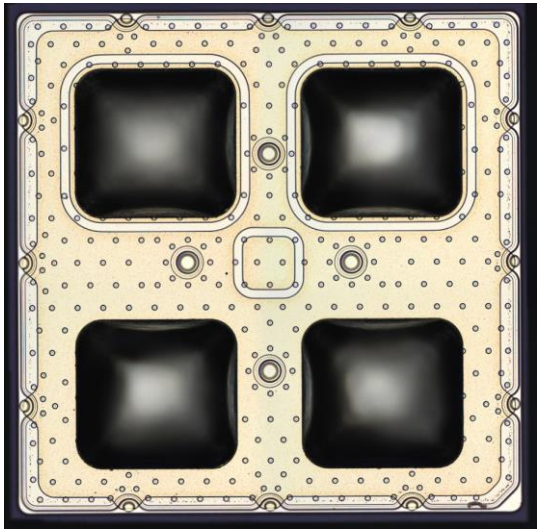
	
Simplified PEC manufacturing processes and reticles	To reduce reticle usage, EPISTAR integrated pre-exposure reticles and reduced the number of PEC processes from 11 to 9; the number of reticles used was reduced from 13 to 11. We also reduced reticle usage by adjusting the manufacturing processes of PEC products. This optimized solution effectively increased reticle resource efficiency, reduced production costs, increased production efficiency, and strengthened our competitive advantages.

Reduce reticle usage



Original chip appearance-AuPAD

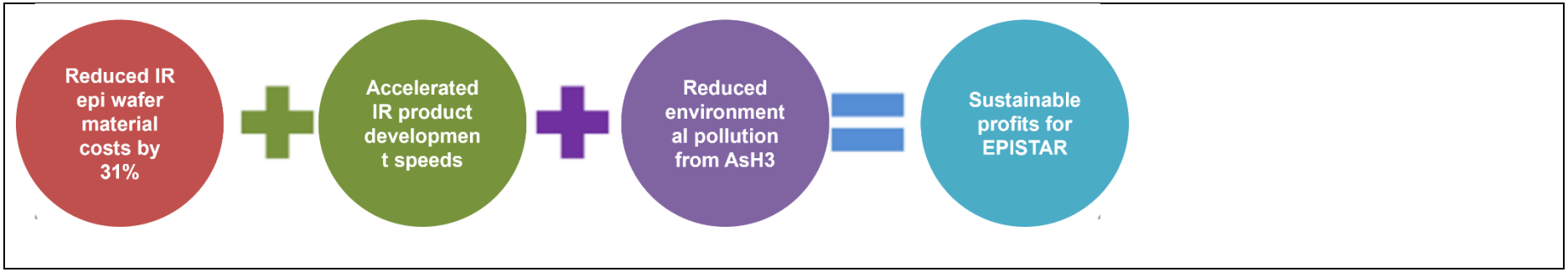


Simplified chip appearance-Sn Bump

Featured Highlight

Reduced the amount of AsH3 used when growing short-wave infrared LED epi wafers

Short-wave infrared LED epi wafers are mainly composed of aluminum gallium arsenide, and arsine is used as the main arsenic component between epi layers during epitaxy. To ensure epi layer quality, MOCVD epitaxy uses higher V/III ratios ([AsH3]/[TMGa+TMAl]). As arsine is expensive and arsenic is a hazardous substance, reducing arsine usage not only lowers costs, but also decreases the amount of waste arsenic, resulting in positive environmental impacts. We hope to incorporate this process in all IR LED products in future.



Packaging and modules

Category	Product	Actions and achievements
Backlights	The most energy-saving display backlight	■ Equipped with 4014 backlight module ■ Increased brightness ■ Saves 10% of electricity ■ Energy and carbon conservation: Carbon reductions are equivalent to the annual carbon absorption of 1,875,500 trees[5] ■ Provides a low-power backlight solution and enhances the ability to comply with energy-saving regulations or to validate solutions
Professional lighting	**Yellow teardrop lighting**	■ The best solution for replacing lighting in yellow zones or maintenance aisles of yellow zones, providing comfortable lighting and

[5] Calculated based on annual shipment volumes of 1 million units.

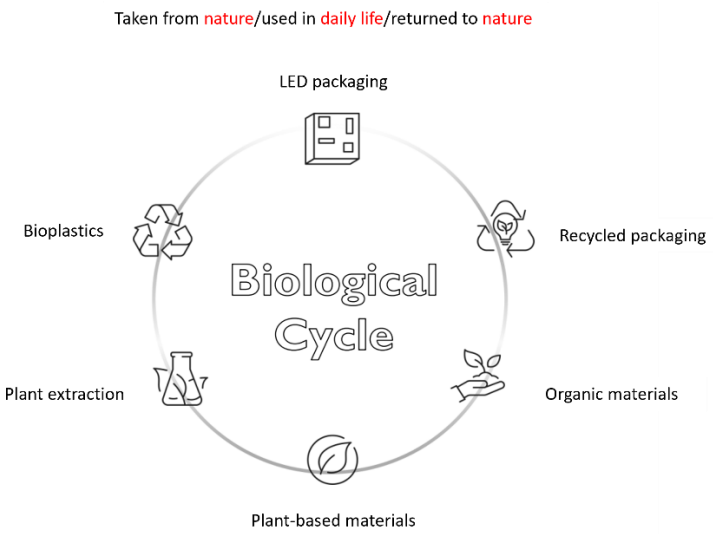
<table>
<tr>
<td></td>
<td> </td>
<td>reducing energy consumption by 50%
■ Assists clients in achieving ESG synergies (each light reduces 90 kgCO2e per year, equivalent to the effects of planting 6 trees)
■ Filters out wavelengths under 520nm (surpassing the industrial standard of 500nm)
■ Customized packaging solutions can be provided according to different customer applications and needs</td>
</tr>
<tr>
<td></td>
<td>UVA nail curing machine
<table>
<tr><td>封装形式</td><td>UVA molding lens</td></tr>
<tr><td>可視角度 (度)</td><td>120</td></tr>
<tr><td>封装尺寸</td><td>3535</td></tr>
<tr><td>波長 (奈米)</td><td>365/ 395</td></tr>
<tr><td>輻射功率 (毫瓦)</td><td>>600 @ 350毫安</td></tr>
</table></td>
<td>■ Lights instantly without need for pre-heating
■ Eco-friendly and does not contain mercury
■ Low power consumption and good energy-saving properties
■ Low thermal resistance and no thermal radiation; no obvious heat when used on nails
■ Does not produce ozone
■ High-intensity UVA LEDs which rapidly and effectively cure nail polish, with a service life of up to 50,000 hours</td>
</tr>
<tr>
<td></td>
<td>Eye protection desk lamp
 </td>
<td>■ Dual-color temperature modules offer adjustable color temperatures from 2700-5700K, incorporating ergonomic lighting concepts to provide multiple circadian-friendly color temperatures, regulating the effects of light on human hormones</td>
</tr>
</table>

		■ High color rendering CRI97 and solar-like spectrum, with good reproduction of natural-light colors ■ No blue light hazards and has passed IEC66778 RG0 blue light certification ■ Cutting-edge efficiency and reliability
RGB light	**Most power-saving side-entry-light keyboard module** 	■ We offer a full range of keyboard backlight products and assist customers in developing module solutions ■ Energy and carbon conservation: Carbon reductions are equivalent to the annual carbon absorption of 308,333 trees[6]

[6] Calculated based on annual shipment volumes of 10 million units.

Ennostar

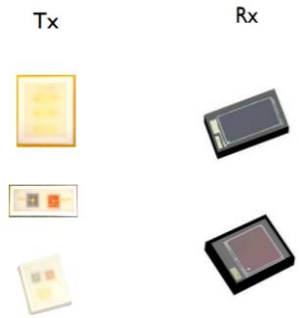
A new era in green sustainability -Bioxtar



- World-first green LED packaging using Lextar's exclusive technology
- Uses bio-materials made from plants (biomass content≧75%) to replace chemical materials extracted from traditional petrochemical materials, reducing 75% of carbon emissions and achieving environmental sustainability
- Provides the same function as traditional LED adhesives with ≈80% permeability

Lextar's bioplastics function similarly to petrochemical plastics and reduced 75% of carbon emissions

Lextar bioplastics	Products	Petrochemical plastics
9060	Material carbon footprint (kg CO2e)	36240
≈80%	Permeability	≈80%
D30-D80	Material hardness	D30-D80

Sensors and wearables	**Light sensors-Wearable health monitoring devices** 	■ Exceeds industry brightness levels by 10% and provides LEDs with diverse wavelengths ■ Ultra-high sensitivity PD with power-saving benefits that exceed industry standards by 10% ■ PD sensing wavelength from 400-1700nm; sensing spectrum can be adjusted as needed ■ Energy and carbon conservation: Carbon reductions are equivalent to the annual carbon absorption of 2,345 trees[7]
	AR smart glasses 	■ Eye tracking feature ■ Uses infrared fill lights with a wide field of view to improve eye tracking resolution ■ Low red-dot exposure which greatly enhances user experiences ■ Energy and carbon conservation: Carbon reductions are equivalent to the annual carbon absorption of 73,273 trees[8]

[7] Calculated based on annual shipment volumes of 128 million units.

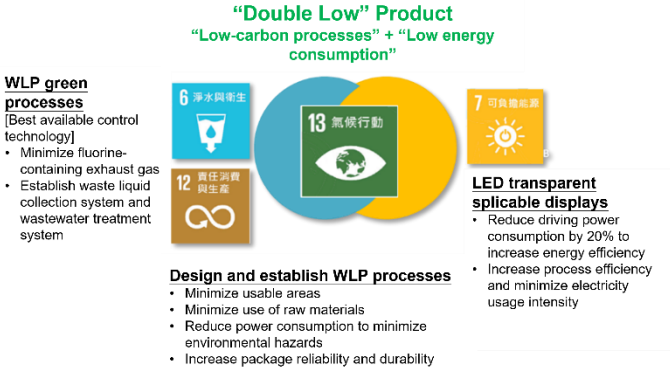
[8] Calculated based on annual shipment volumes of 99 million units.

Ennostar

Featured Highlight

Low-carbon and low-energy-consuming active-driven Micro LED spliced transparent screen received a second SDIA Advanced Displays Award

In 2023, Lextar's AM Micro LED Transparent Display made using our exclusive patented i-Pixel^{+TM} technology received an Advanced Displays Award. This year, we improved our i-Pixel^{+TM} technology and produced a "low-carbon and low-energy-consuming active-driven Micro LED spliced transparent screen," another industry-first innovation. Our pioneer "low-carbon process" wafer-level packaging technology evolved i-Pixel® driving modes from passive to active (i-Pixel^{+TM}), reducing driving energy consumption by 20%, enhancing energy efficiency, and achieving low power consumption. This "low-carbon and low-energy-consuming" Micro LED transparent screen complies with sustainability trends and SDGs, and can be used for multiple applications relating to commercial billboards, transportation, medical institutes, automobiles, and consumer products.



The Group plays an indispensable role in Micro LEDs and provides solutions associated with key Micro LED epitaxy technology, COC, and wafer-level packaging combined with semiconductor processes (i-Pixel®) to meet different application needs and stages for different technologies and products. Our subsidiaries Lextar and Yenrich Technology were recently recognized by the Ministry of Economic Affairs Industrial Development Administration Smart Display Industrial Alliance (SDIA) Advanced Displays Award and received two silver awards, fully demonstrating our R&D achievements in Micro LEDs.

Ennostar

Featured Highlight

Lextar was invited to produce the Science Park Emerging Technology Application Program promotional video for 2023

Lextar began implementing Science Park Administration R&D Piloting Cooperation Projects Between Industries and Academia beginning in 2011 and received 6 grants. Lextar also successfully completed an Emerging Technology Application project in 2021, so was invited by the Science Park Administration to work with National Yang Ming Chiao Tung University in producing a promotional video.

Promotional video

Foundry services for compound semiconductors

Project	Actions and achievements
SMART technology platform development and optimization	The SMART project developed BAW filter products for communication applications, including mobile and aviation communications. We aimed to optimize process platforms to improve product characteristics and efficiency, create high-frequency applications exceeding 5GHz, realize energy and carbon reduction benefits for environmental protection, and achieve competitive production costs. Developments encompassed accurate simulations of new product structures, R&D of new product materials, design and verification of

	advanced process conditions, miniaturization of new product sizes, automated key processes, and patent strategies, which enabled us to optimize product performance, increase transmission speeds of high-frequency signals, reduce signal transmission times, reduce energy resource usage, and reduce carbon emissions.
Emode technology platform development and optimization	Introduction of wide-bandgap (WBG) semiconductors to the power electronics field has become a mandatory requirement for improving device and module energy efficiency, and for reducing overall power consumption worldwide. Due to their outstanding performance characteristics, gallium nitride (GaN) and other alloys (such as AlxGa1−xN) will form the basis of promising semiconductors for next-generation, high-power, and high-frequency devices. The normally-off characteristics of Emode components are consistent with MOS switching components and offer a more convenient circuit design compared to normally-on Dmode components, making Emode and MOS circuit integrations more convenient and preferred by designers.

Green Designs

The Group is fully aware that the road from product innovation to sustainability is lengthy. In future, we will continue to work toward our dual goals of “innovation application” and “efficiency improvement” to enhance product applications and strengthen product carbon reductions and energy efficiency.

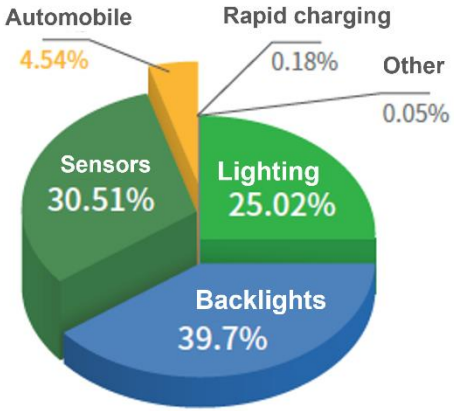
Company	Product	Description of actions
Unikorn	Micro LED	Micro LED products used in display devices lower energy consumption, achieve energy savings, and reduce carbon emissions
Unikorn	VCSEL	VCSEL products used in smartphones (3D sensors) enhance component performance, lower power consumption, achieve energy savings, and reduce carbon emissions

Unikorn	Power GaN	Power GaN products are used in rapid chargers for consumer products, enhancing charging efficiency, shortening charging times, achieving energy savings, and reducing carbon emissions
Unikorn	BAW	BAW products are used in electronic communication products to enhance signal transmission speeds, shorten transmission times, achieve energy savings, and reduce carbon emissions
Lextar	PKG	Used in consumer displays, home security, freezer lights, and other products to improve light extraction rates, packaging efficiency, phosphor quantum efficiency, secondary optics and simulation designs, and beam angles. Use of Mini POB/COB technologies and QD technologies improve PKG brightness, reducing power consumption and lowering carbon emissions of end products
EPISTAR	Chip	LED chips are mainly used for lighting, display backlights, automotive lighting, sensors, and security monitors. We continue to adjust semiconductor film characteristics, optimize process structures and designs to improve performance, achieve energy savings, and reduce carbon emissions

The Group incorporates concepts related to low energy consumption in product designs and strives to reduce carbon emissions generated by products. In 2023, our applications in lighting, backlights, automobiles, sensors, and rapid-charging end products reduced average annual power consumption by 375 million kWh and carbon emissions by 185,500 tons. In future, we will continue to develop quantum dot materials and green processes, formulate comprehensive patent strategies, and participate in industry-academia collaborations to develop eco-friendly LED products with the highest resource utilization and the lowest energy consumption, thereby enhancing quality of life.

Carbon reductions from end applications and products in 2023:

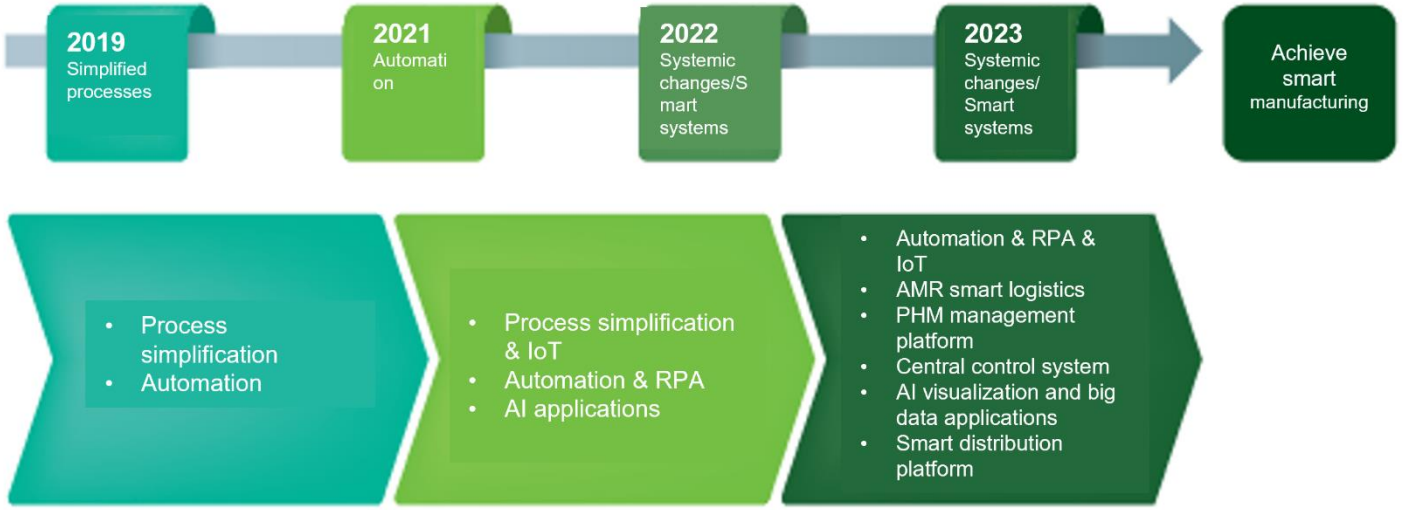
End applications and products	Energy savings from end products (million kWh/year)				Energy unit	Carbon reductions
	EPISTAR	Lextar	Unikorn	Total energy savings across the Group	(MJ)	(tCO2e)
Lighting	81.14	12.63	-	93.77	337,564,474	46,415
Backlights	44.87	103.92	-	148.79	535,653,160	73,652
Automobiles	17.00	-	-	17.00	61,211,018	8,417
Sensors	-	0.34	114.00	114.34	411,632,690	56,599
Rapid charging	-	-	0.66	0.66	2,382,912	328
Other	-	-	0.20	0.20	717,988	99
Total	143.02	116.89	114.86	374.77	1,349,162,242	185,510



[1] Annual energy savings were estimated based on actual shipment volumes and number of end products on the market in 2023. Formula for calculation: Energy savings (kWh) = Power savings (kW/pcs) * Number of products (pcs) * Hours of usage per year (H).
EPISTAR and Lextar used product volumes in 2022 as a basis for determining energy savings in 2023; Unikorn compared products made using existing technologies with products developed in 2023.
[2] Calculated using the electricity coefficient of 0.495 kg CO2e/kWh released by the Bureau of Energy, Ministry of Economic Affairs in 2022.
[3] The Ennostar Group adopts a one-stop shop production model where Lextar used chips made by EPISTAR; purchases from Lextar accounted for 45% of total chip purchases. Lextar's total energy savings in 2023 amounted to 191.63 million kWh. To avoid double counting, we deducted EPISTAR's energy savings, resulting in total energy savings of 116.86 million kWh).

Smart Manufacturing

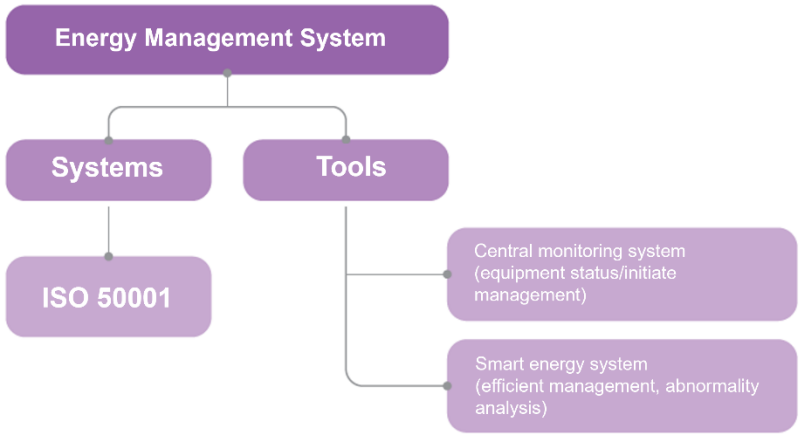
Lextar initiated smart manufacturing processes in 2019 starting with “simplified processes” and “automation,” then gradually moving toward “systematic” and “smart” applications.



Sustainability manufacturing is divided into two aspects: smart energy management and low-carbon transformation.

Smart Energy Consumption Management

Apart from obtaining ISO 50001 Energy Management System certification, we managed high-energy-consuming equipment by replacing high-power-consumption equipment in factories or implementing power controls. Lextar's IT department also developed a digital factory system for real-time monitoring of electricity usage by each unit and for timely handling of abnormalities. Lextar incorporated the latest energy-saving and water-saving measures and equipment when constructing its new factory in 2019, and also included solar power generation solutions when building the factory. The solar power generation can also be monitoring in real time on the digital factory system.

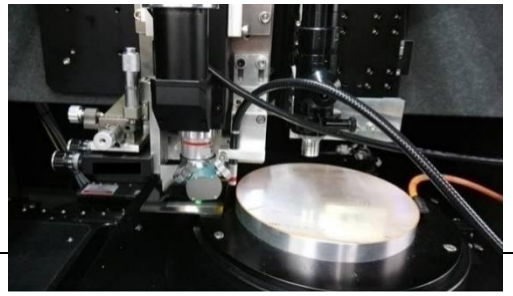


Industry, Government, and Academia Innovation Collaborations

The Group firmly believes that industrial innovation and sustainability requires collaboration between three parties (industry, government, and academia) to fuel innovation through mutual encouragement. Over the years, we have worked with the government and many universities on a number of projects to drive industrial technological innovations and cultivate industrial talent.

Industry-government-academia collaborations

- **EPISTAR**

Mode of industry-academia collaboration	Partner schools	Description
Prepared sub-micron patterns using AAO masks to improve light extraction efficiency of nitride LEDs	National Taiwan University of Science and Technology 2023/1~2023/12	1. Used AAO (Anodic Aluminum Oxide) technology to prepare composite sub-micron/micron patterns on sapphires 2. Applied composite sub-micron/micron patterns on the backs of flip chips to break total internal reflection and improve the light extraction efficiency of flip chips.
Technical consulting	Southern Taiwan University of Science and Technology 2023/1~2023/12	EPISTAR provided industrial technical consulting, guidance, and development, and shared academic/industrial information
High-speed horizontal electrode micro-LED wafer testing project	Industrial Technology Research Institute 2022/6~2024/6	1. Development of non-contact μ-LED electrical measurement platform 2. Establishment of photovoltaic, non-contact, sensor film process technologies 

- **Lextar**

Mode of industry-academia collaboration	Partner schools	Description

Research on next-generation, ultra-high resolution LED display color compensation algorithms	National Yang-Ming Chiao-Tung University 2023/1~2023/12	1. Development of SPR algorithms with different pixel arrangements 2. Suppression of color deviations caused by SPR algorithms
Development of cadmium-free QD materials and LED applications	National Tsing Hua University 2023/5~2024/4	1. Synthesis and development of cadmium-free quantum dot materials and polymer adhesive materials 2. Application of cadmium-free quantum dot materials in LED light conversion packaging materials
Development of novel short-wave NIR II sulfide phosphors and wearable physiological sensor applications (1/2)	National Taipei University of Technology 2023/6~2024/5	1. Development of stabilizing technology for novel broad-spectrum infrared phosphors. 2. Mass production and synthesis technologies for phosphors.
PPG bio-sensing prototype development and research	National Yang-Ming Chiao-Tung University 2023/9~2024/8	1. PPG measurement technology and signal processing research platform. 2. Establishment of quality tests for deep-learning PPG.

- **Unikorn**

Mode of industry-academia collaboration	Partner schools	Description
GaN wafer-level and package-level component failure linkage analysis	National Yang-Ming Chiao-Tung University 2022/3-2023/2	1. Research and development of GaN heterostructure III-V composite material transistors 2. Research of defect and failure mechanisms 3. Component reliability analysis and assessments 4. Design and optimization of novel GaN transistor structures

		5. Packaging component reliability verification

Innovative Technology Forum

In May 2023, the ESG Task Force Innovative Technology Team hosted the “Net-Zero Carbon Transformations” innovative technology forum and invited experts and academics from the National Science and Technology Council, National Taiwan University, National Yang Ming Chiao Tung University, National Taiwan University of Science and Technology, and Chung Yuan Christian University to share net zero technology policy trends and the latest low-carbon technologies in academia. The forum also provided an opportunity for our colleagues to interact with experts, ask academics and experts questions about net zero technologies, and conduct in-depth discussions. This forum encouraged our colleagues to understand developments in process technologies and emerging energies while pursuing innovation in product development to grasp future net zero trends.

3-1-2 Management of Intellectual Property Rights

The Group believes that protection of patents and trade secrets is a key corporate strategy. Protection of intangible assets not only helps to maintain our rights, but is also necessary for enhancing corporate competitiveness. To establish comprehensive protections for intellectual property rights, the Group formed a dedicated unit which assists all subsidiaries in refining management mechanisms for intellectual property rights and adjusting intellectual property portfolios in line with Group operational plans while considering reasonable maintenance costs and utilization of new technologies. We have also established risk-avoidance measures to effectively respond to risks associated with intellectual property rights. Lextar obtained A-level Taiwan Intellectual Property Management System (TIPS) certification in 2023 and will continue to lead all subsidiaries in strengthening protections for intellectual property rights.

Policies	● Form appropriate plans for intellectual properties ● Strengthen protection awareness for intellectual property rights ● Closely align with corporate R&D strategies and business strategies to achieve operational goals
Targets	● Maintain R&D and innovation capacity to ensure the brand leadership of our technology products ● Protect intangible corporate assets to effectively control operational risks ● Implement corporate governance and legal compliance to ensure sustainable management

The Group expends full efforts in protecting trade secrets, patents, trademarks, information security, and other intellectual properties to ensure that the R&D and production achievements of our colleagues are appropriately protected, to maintain corporate competitiveness, and to prevent leakages of important Group and company information. The Group's specific intellectual property management systems and practices are as follows:

Plan	1. Formulate intellectual property policies and goals 2. Establish dedicated department

	3. Formulate annual applications target
Do	1. Formulate patent review, management, and incentive regulations 2. Formulate regulations for protecting trade secrets 3. Establish related committees
Action	1. Assist all units in submitting proposals based on actual implementation progress 2. Promote case studies through non-periodic newsletters
Check	1. Provide all units with periodic reports to track implementation progress 2. Periodically review protections for trade secrets

Protection of intellectual property rights	R&D outputs are protected using patents, trade secrets, trademarks, and other intellectual property rights based on their characteristics; we also inventory our various intellectual property rights to keep stock of our intangible assets and regularly implement assessments and maintenance, using appropriate resources to maintain the effectiveness of our corporate intangible assets.
Management and registration of trade secrets	Our major subsidiaries have gradually completed their trade secret management systems, which enable our colleagues to register the trade secrets generated through their work. EPISTAR R&D personnel are all provided with engineering logs so R&D processes and time points can be fully preserved, and can be used as evidence when defending against intellectual property disputes.
Due diligence	Search relevant technologies to keep abreast of technological development trends and formulate innovative designs or design-around strategies during the product design stage.
Technological collaborations	Outsourced development and manufacturing processes, if any, are protected using contracts, confidentiality agreements, and ownership clauses for intellectual property rights. Contract content is checked by our legal department or external lawyers to ensure full protection of Group rights.

Management of confidential information	IT/administration departments are required to comply with management processes for confidential information, strengthen management of information security and access mechanisms, and prevent leaks of R&D information or trade secrets. The Group also continues to strengthen employee awareness of confidentiality management through training to ensure protection of confidential information.
Management of marketing materials	When designing promotional copy, the corporate promotion department checks whether said materials inadvertently reveal trade secrets or infringe upon the copyrights and trademarks of others.

The Group combined highly integrated Group resources to continue upgrading Micro LED technologies and worked with supply chain partners to jointly popularize Micro LEDs and secure a leading position in the Micro LED industry for supply chains in Taiwan. The Ennostar Group attaches great importance to intellectual property rights and actively develops innovative technologies. We have also established complete positioning of Micro LED patents around the globe. Since 2004, we have accumulated nearly 500 patents associated with Micro LEDs, including mass transfer technologies (such as stamp, laser, and fluid transfer technologies), Micro LED chip and package structures/processes/tests, and display module calibration and repair capabilities. Our products encompass Cannon Bump™ structures which improve Micro LED mass transfer yield rates, COW (Chip on Wafer), COC (Chip on Carrier), i-Pixel®, and other exclusive Group products. We are a global leader of Micro LED patent applications and have laid a stable foundation for future developments.

In 2023, we received approval for a total of 238 patents from various regions around the world. As of year-end 2023, the Group has received approval for a cumulative total of 6,003 patents.

In order to protect the valuable efforts of all Group employees and maintain our corporate competitiveness, all Ennostar subsidiaries have formulated stringent regulations for protection of trade secrets and established self-developed “trade secrets management systems.” The Group has also established a “Trade Secrets Committee” which is composed of our president and the highest-ranking managers from our information technology, audit, human resources, intellectual property, legal affairs, and R&D units; the Committee is responsible for supervising management of trade secrets and also convenes regular meetings with representatives from all subsidiaries.

As of year-end 2023, the Group has cumulatively registered 1,281 trade secrets. The number of trade secrets registered by each subsidiary are as follows:

EPISTAR	Lextar	Unikorn	Lextar Electronics
413	396	343	129

Additionally, we also provide all employees with education and training related to protections for trade secrets through trade secret competitions, internal newsletters, and online courses, thus bringing attention to our protections for intellectual property rights and trade secrets. We organized 9 trade secret training courses in 2023:

Course title	Online/in-person event
New employee orientation training: Trade secrets	Online
Understanding intellectual property rights	In-person
Discussions on patent practices	In-person
Basic intellectual property concepts and management policies, goals, and related regulations for intellectual property rights	Online
Promotion of trade secret laws and regulations	Online
Legal compliance and awareness of anti-trust laws	Online

Green Patents and Green Trade Secrets

The Group introduced green patents and trade secrets in 2023 based on product life cycle (LCT) concepts. We hope to adjust the classifications of our online patent and trade secret system in 2024 to develop more energy and carbon reduction patents and trade secrets.

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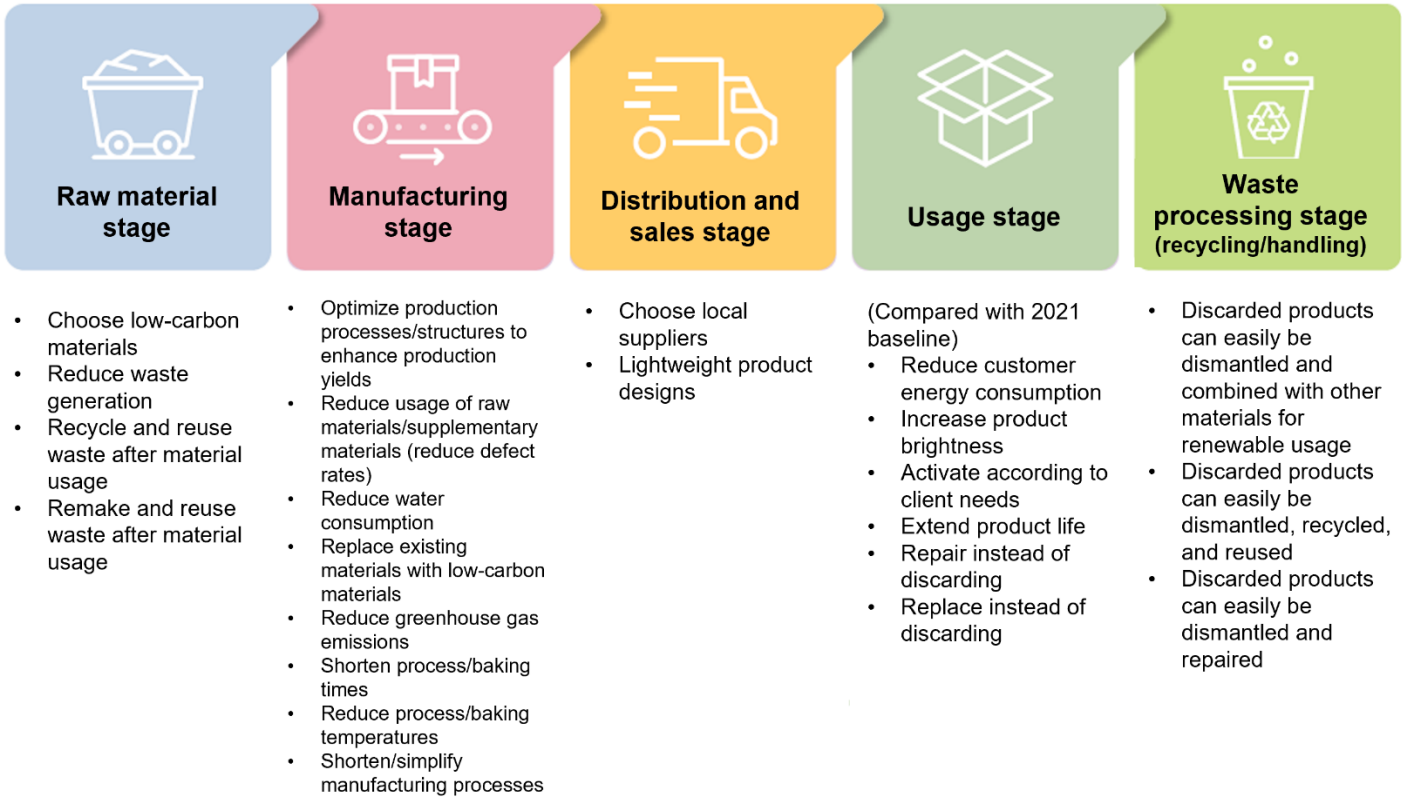
1. Definition and benchmarking: Recognition principles were classified by life cycle assessment (LCA)



2. Benchmarking alignment: Determined by the chairman after inventor reports at patent review meetings
3. Promotion and strengthening: Online lesson plans, employee training, and weight adjustments

3-2 Products and Services

3-2-1 Product Quality and Safety

The Group adheres to quality management responsibilities during product development and manufacturing processes. We have established rigorous quality management mechanisms to ensure that all products and services comply with relevant laws and regulations. All Ennostar subsidiaries have implemented the ISO 9001 Quality Management System. Our main subsidiaries EPISTAR and Lextar, and our Chinese factories Epicrystal, Can Yang, and Lextar Electronics have further implemented the IATF 16949 Automotive Quality Management System to incorporate advance quality management concepts into automotive product design and manufacturing. Each year, we review our products using stringent management and review procedures to ensure that they comply with domestic and foreign product health and safety regulations. We incurred no penalties related to violations of health and safety laws relating to our products and services in 2023.

Material Topic: Product Quality | Base year: 2021			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
1. Hazardous substance inspections for all product series	Achieved	Hazardous substance inspections for all product series	Hazardous substance inspections for all product series
2. Product compliance with international environmental regulations	Achieved	Ensure that 100% of manufactured products comply with RoHS, REACH, Green Product, and other international environmental protection regulations[9]	Ensure that 100% of manufactured products comply with RoHS, REACH, Green Product, and other international environmental protection regulations

[9] EPISTAR's management guidelines currently encompass RoHS and REACH regulations

3. No products were recalled by customers due to hazardous substance violations and associated management factors.[10]	Achieved	Maintain our record of having no products recalled by customers due to hazardous substance violations and associated management factors	Maintain our record of having no products recalled by customers due to hazardous substance violations and associated management factors
Responsible unit	Quality assurance units at all Group subsidiaries.		

Strengthening Quality Culture

Continued improvement is a fundamental value upheld by the Group. Our long-term goal is to establish a quality culture involving all employees to ensure that our products and services can continually improve. We constantly seek out opportunities, identify problems, and seek innovative solutions through continual improvement activities. We believe that everyone is a guardian of quality and therefore encourage all employees to enhance their quality awareness and actively participate in continuous improvement processes. We review customer complaints through monthly quality meetings, track incorporation of improvement measures, and check whether issues reoccur to ensure the effectiveness of our improvement measures. Additionally, we audit our internal management procedures each year to ensure that our quality management systems are working effectively. We strive to optimize our quality verification processes to strengthen innate product properties and reliability. We have comprehensively optimized test coverage rates and test detection capabilities to curb the production and outflow of defective products, and also strengthened process capabilities to enhance process stability and precision. These efforts aim to ensure that our products and services meet the highest quality standards and continue to meet the needs and expectations of our customers.

Implementations in 2023

Project	Description

[10] Applicable for Lextar and Unikorn

Updated Unikorn Statistical Process Control (SPC) system	Unikorn completed and launched the Chart View Web interface, which increases search speeds by 70% and improves abnormality control efficiency by 50%. We completely revised SPC core programs at the end of 2023 so measurement data could be converted into unified formats after calculation, effectively reducing the volume of the original SPC database by 65%, making it more accurate, and speeding establishment of SPC in factories.
Optimization of design quality verification processes	In terms of Lextar's product design, development planning, and mass production processes, Design Quality Assurance (DQA) processes and the LEXQP-04-019 automotive new product project management program were modified in accordance with the Advanced Product Quality Program (APQP). We optimized and defined review focuses for each stage, raised review levels to ensure adherence with standards and customer requirements, and strengthened innate product characteristics and stability. Product return rates have declined over the past three years.

Hazardous Substances Management

Ensuring product and service health and safety is necessary to comply with laws and regulations, and is also part of our commitment to clients, the environment, and society. Ennostar uses rigorous quality management processes to ensure that all products and services adhere to regulations on prohibited and restricted environmentally hazardous substances (including but not limited to RoHS and REACH) as well as client Hazardous Substance Free (HSF) requirements. All Group products have obtained verifications for RoHS 10 restricted substances and REACH Substances of Very High Concern, and all products produced by subsidiaries Lextar, Lextar Electronics, Unikorn, and Can Yang have obtained halogen-free certifications. No Group products were recalled by customers due to hazardous substance violations and associated management factors in 2023.

EPISTAR personnel manually review RoHS and REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) SVHC (Substances of Very High Concern) laws and regulatory requirements on ECHA (European Chemicals Agency) and laboratory qualification websites to compare compliance of product content. RoHS controlled substances in our product lines are annually verified by commissioned laboratories with ISO 17025 certification. We survey the material compliance of suppliers one month after official announcement of RoHS and REACH SVC laws and regulations.

We have established “Regulations for Management of Prohibited and Restricted Substances” for prohibited and restricted hazardous substances of customer concern. All units involved in product processes, including R&D, manufacturing, production, storage, shipment, and even raw material suppliers, must control hazardous substances to comply with related regulations such as RoHS, REACH SVHC international environmental laws, and customer regulatory requirements.

The Group’s management highlights for hazardous substances are as follows:

Supplier Management

- The procurement department reviews raw materials in accordance with supplier management procedures and raw material specification regulations. We require our suppliers to provide third-party HSF test results that comply with ISO 17025 requirements and sign a "Zero Restricted Subtance Content Guarantee." We also require all direct material suppliers and package material suppliers to provide hazardous substances test reports each year.

Chemical Management Procedures

- Includes registration and management procedures for new chemicals, risk assessment and management, operational environment tests, and exposure tests

Third-Party Testing

- Perodically/non-periodically deliver products to ISO 17025 certified laboratories to undergo third-party testing, ensuring that our products comply with RoHS, REACH SVHC, and halogen-free international regulations and client requirements

Information Updates

- Continue to update and expand our list of restricted chemicals each year based on the latest environmental regulations and restricted substance requirements set by international brands

New Product Verification

New product series need to complete all hazardous substances verifications (including the 10 RoHS Restriction of Hazardous Substances in Electrical and Electronic Equipment controlled substances), and comply with laws and regulations relating to

hazardous restricted substances as well as client Hazardous Substance Free (HSF) requirements before mass production. In 2023, we added 656 products (5 products for EPISTAR, 104 products for Lextar, and 547 products for Lextar Electronics), which all completed hazardous substances verifications.

Product Labeling Regulations

Products sold by EPISTAR and Lextar to different regions undergo testing and are labeled in accordance with the requirements of their destination countries and client requirements. We ensure that product information and labels adhere to electrical/optical/appearance/reliability property specifications, as well as relevant regulations and standards. The Group's requirements for product information and labeling mainly include:

a. Product name, model, part number, batch number, quantity, production date, and production location

b. Green product labels such as RoHS, Green Product, and HSF (text or graphics)

c. Safety precautions, including textual or graphical instructions to keep away from moisture, handle with care, do not invert, avoid rough handling, and so on

Our products and services did not violate any regulations relating to product information or labeling in 2023, and none of our products were banned, recalled, or violated regulations relating to product marketing and communications (including advertisements, promotions, or sponsorships).

3-2-2 Customer Relationship Management

All Group subsidiaries provide upstream and downstream LED products and integrated services to meet the different product design needs of our clients. We adopt an attitude of mutual assistance and advancement, and use our rich knowledge of the industry, accurate insights, and innovative production technologies to support the diverse needs of our many collaboration partners. We provide the most appropriate collaborative plans based on different client needs, continue to enhance client satisfaction, and strengthen client partnerships.

To ensure effective communication and information exchanges between us and our clients, we have established internal "Client Communication Management Procedures," "Client Satisfaction Survey Procedures," "Client Complaint Handling Procedures," and other related regulations. We use systemic and unified communication modules and processes to enhance client services and serve as a reference for formulating production and marketing plans, product development and improvement, and promotion strategies.

Material Topic: Customer Relationship Management | Base Year: 2021			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
EPISTAR satisfaction rate: 78.24%	Not achieved Target: 80%	81%	82%
Lextar customer satisfaction rate: 90%	Not achieved Target: 92%	92%	93%
Lextar Electronics customer satisfaction rate: 90%	Not achieved Target: 92%	94%	96%
Unikorn customer satisfaction rate: 69%	Not achieved Target: 70%	75%	80%
Unikorn customer complaint response timeliness compliance rate: 100%	Achieved	100%	100%

Responsible unit	Quality assurance and business units at all Group subsidiaries.

Our customer service units track progress through meetings prior to annual customer satisfaction surveys; after annual customer satisfaction surveys have been conducted, senior managers report survey results and propose solutions for continued improvement. We continue to optimize customer service processes, adjust resources, and improve management to enhance customer satisfaction.

Client Satisfaction Surveys

To better understand client needs and problems for enhancement of service quality, we conduct annual client satisfaction surveys to understand customer perceptions, expectations, and suggestions associated with Group technologies, delivery dates, services, and product quality. We also analyze survey data for follow-up and proposal of improvement plans from various internal units, following which the results of customer satisfaction surveys are used as a reference for corporate strategic plans.[11]

Client Satisfaction Survey Processes

[11] Satisfaction surveys at EPISTAR, Lextar, and Lextar Electronics were mainly distributed to major clients; satisfaction surveys at Unikorn encompassed 75% of clients

Customer satisfaction survey results are compiled by customer service units and made into analysis reports which are submitted to the managers of related units (such as the president's office as well as business, process, integration, and quality units) for review. Following review, if other internal units propose suggestions related to prevention and correction measures, these are also included in customer satisfaction survey reports by customer service units. Survey results are reported at internal supervisor and senior executive meetings, and are submitted to the president for review and discussion of improvement directions and strategies. Related units implement respective improvements or adjustments based on meeting resolutions.
Customer satisfaction survey results are used as a reference for corporate strategic plans and continued improvements to meet actual customer needs and to improve corporate competitiveness.

Customer Complaints and Return Policies

We continue to promote quality improvements and innovative actions in accordance with our quality policies to meet client needs and enhance client satisfaction. Our business units immediately initiate internal processes after receiving client communications related to abnormal product quality. We confirm issues with our customers at the first instance to clarify details, immediately report to internal responsible units, and retrieve said products for further analysis. Following internal analysis to confirm the true cause of problems, preliminary information is provided to customers to help them understand current analysis and progress. Internal responsible units formulate countermeasures based on the true causes of customer complaints, and customer service units respond to customers while internal responsible units implement countermeasures and execute horizontal extensions based on said issues and countermeasures. We also assist customers with subsequent product returns and exchanges, delivery, and provision of analysis reports, with our highest priority being to prevent reoccurrences.

We provided timely responses and countermeasures to all product-related customer complaints received in 2023. The effectiveness of all countermeasures for customer complaints were confirmed.

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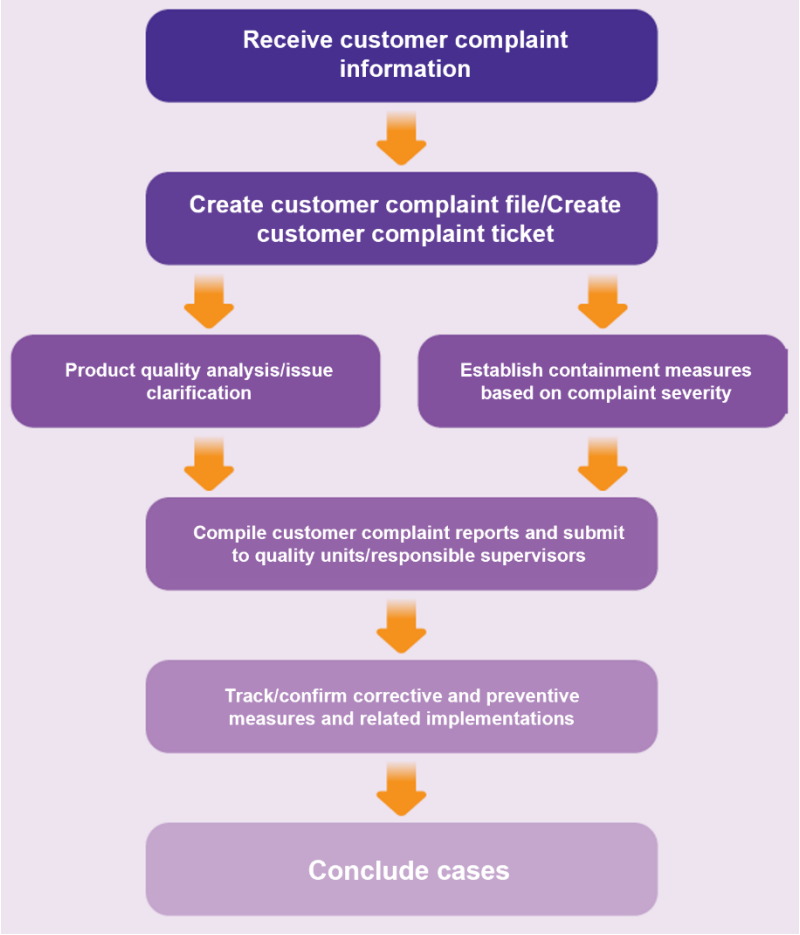
Client Complaint Handling Process Diagram



Product Recall Management

Product quality abnormalities cause significant losses to customers and raise customer concerns associated with validity of product life. Therefore, suspect products have to be recalled. Following product recall incidents, improvements are implemented in accordance with correction and prevention mechanisms, and we track improvements and countermeasures to confirm they have been completed effectively. Through continued improvement of quality systems as well as routine monitoring, detection, and prevention measures, the Group is able to discover abnormalities in advance and reduce customer impacts from quality abnormalities. No product recalls due to major abnormalities occurred at the Group in 2023.

At EPISTAR, units which issue recall orders (integration/engineering units) identify risk batches based on abnormality correction and prevention forms or analysis results of customer complaint forms, and submit recall requests for risk batches that have been shipped. Business personnel review customer impacts caused by recalls and assess whether to implement recalls or track recalls based on actual conditions.

At Lextar, recall incident severity is divided into 4 levels (1-4). Quality management representatives must be notified within 2 hours for customer factory recalls caused by market return risks of Level 2 and above. The president must be notified within 2 hours for regional market recalls caused by market return risks of Level 3 and above. The chairman must be notified within 2 hours for global market recalls caused by market return risks of Level 4 and above.

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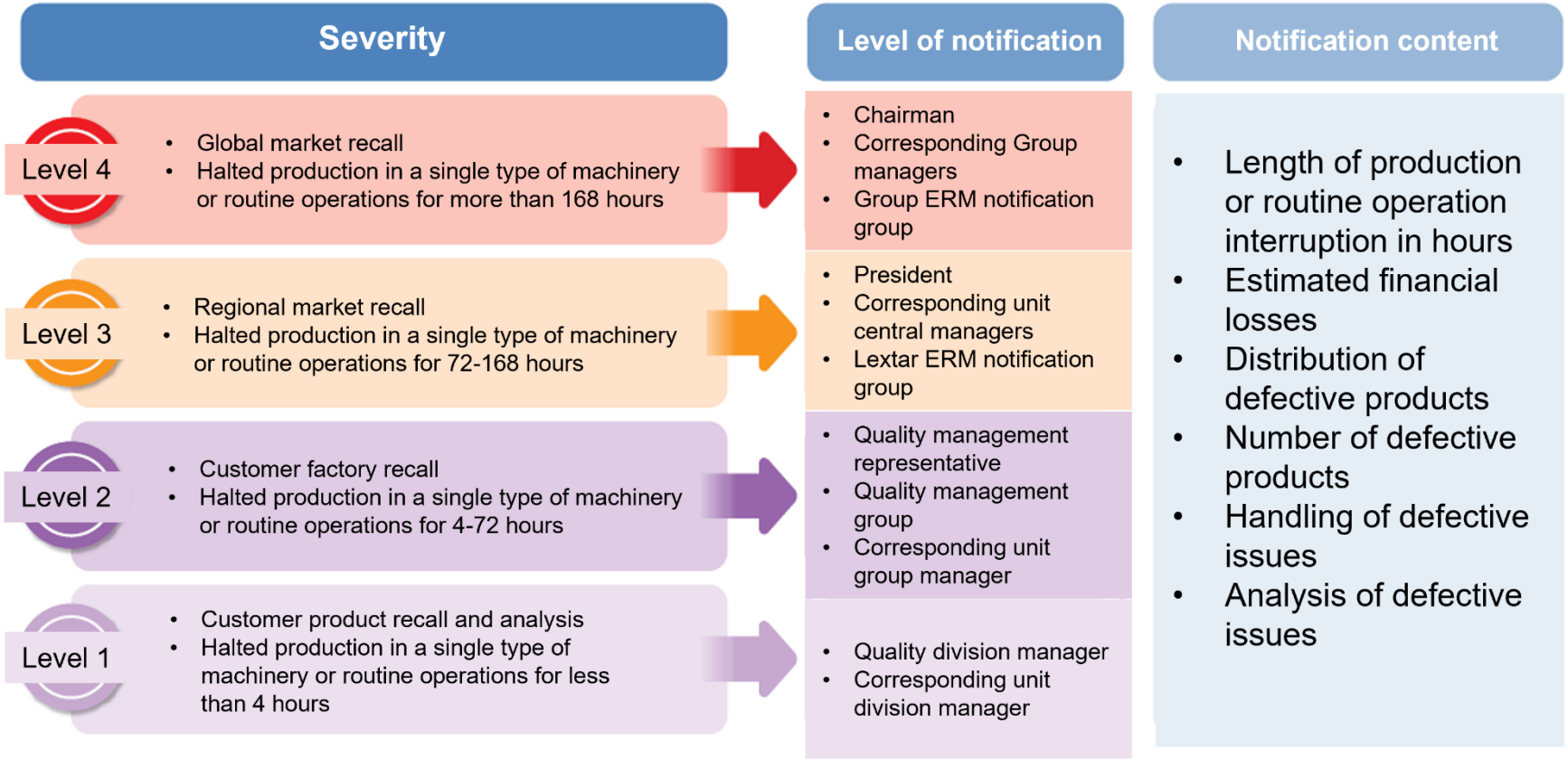
Severity
Level of notification
Notification content
Level 4
Global market recall
Halted production in a single type of machinery or routine operations for more than 168 hours
Chairman
Corresponding Group managers
Group ERM notification group
Level 3
Regional market recall
Halted production in a single type of machinery or routine operations for 72-168 hours
President
Corresponding unit central managers
Lextar ERM notification group
Level 2
Customer factory recall
Halted production in a single type of machinery or routine operations for 4-72 hours
Quality management representative
Quality management group
Corresponding unit group manager
Level 1
Customer product recall and analysis
Halted production in a single type of machinery or routine operations for less than 4 hours
Quality division manager
Corresponding unit division manager
Length of production or routine operation interruption in hours
Estimated financial losses
Distribution of defective products
Number of defective products
Handling of defective issues
Analysis of defective issues

CH4 Green Operations

The Group is fully aware that corporate operations are intertwined with environmental considerations. We have therefore listed climate actions and environmental management as core concerns and established a low-carbon transformation blueprint for the entire Group, aiming to achieve RE100 in non-production areas by 2030 and RE100 renewable energy goals across the entire Group by 2050. We also implement comprehensive management of water resources, waste, air pollutants, and biodiversity to demonstrate our environmental focus and commitment.

4-1 Climate Actions

4-1-1 Low-Carbon Transformation Blueprint

The effects of global climate change and global warming are becoming more apparent day by day. In response to international net zero trends, Ennostar has established a stable net zero pathway and strategic blueprint which adheres to related laws and regulations as well as client requirements. We actively adopt climate actions to fulfill our corporate social responsibilities and contribute to environmental sustainability.

Climate Actions

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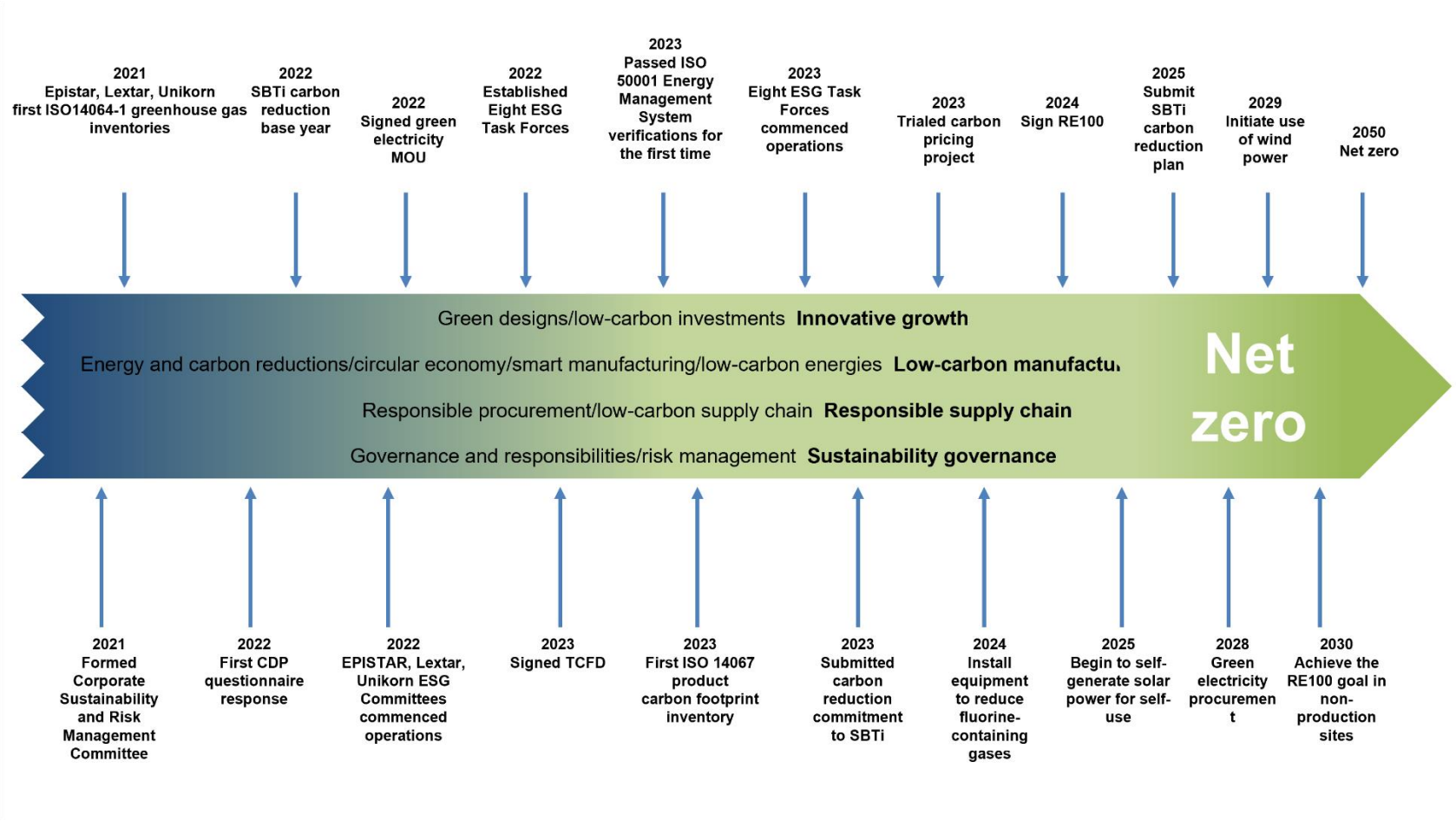


Pathway to net zero emissions

Looking at the recent resolutions of the United Nations Framework Convention on Climate Change Conferences of the Parties, we understand the seriousness of climate change issues, and are accelerating our promotion of net zero goals. The Group also actively participates in international initiatives and strengthens internal carbon reduction actions in accordance with our plans and pathways. Our achievements in 2023 were as follows:

Endorsed TCFD

In February 2023, we officially endorsed the TCFD (Task Force on Climate-Related Financial Disclosures) and were approved as a Supporter by the official website following review.

Company	Sector	Industry	Location	Region	Date
Ennostar Inc.	Information Technology	Technology Hardware & Equipment	Taiwan	Asia Pacific	January 2023
HTC Corporation	Information Technology	Technology Hardware & Equipment	Taiwan	Asia Pacific	November 2022
SIMPLO TECHOLOGY CO LTD	Information Technology	Technology Hardware & Equipment	Taiwan	Asia Pacific	November 2022
Acer Inc.	Information Technology	Technology Hardware & Equipment	Taiwan	Asia Pacific	September 2022
innodisk corporation	Information Technology	Technology Hardware & Equipment	Taiwan	Asia Pacific	March 2022

Organizational Greenhouse Gas Inventories

In 2023, we expanded ISO 14064-1 greenhouse gas inventory scope to all main Group subsidiaries in Taiwan and China; all subsidiaries have passed external third-party verifications.

Product Carbon Inventories

In 2023, our subsidiary Lextar completed product carbon footprint inventories for its packaging product series, and EPISTAR and Unikorn each completed carbon footprint inventories for one product. EPISTAR and Lextar products have also passed external third-party verifications. Inventory results were as follows:

Product		Automotive backlight chip	3014 package product series
System boundary		Business-to-business (B2B)	
Declared unit		1 kea	1 package
Raw material acquisition stage	Carbon emissions (kg CO2eq)	0.60	0.0053
	Emissions ratio	16.3%	19.58%
Manufacturing and production stage	Carbon emissions (kg CO2eq)	3.08	0.0217
	Emissions ratio	83.7%	80.42%
Carbon emissions per functional unit (kg CO2eq)		3.68	0.0270

ISO 50001 Energy Management System Incorporation

Lextar's Zhunan Factory completed incorporation of ISO 50001 in 2023 and passed external third-party ISO 50001 verification.

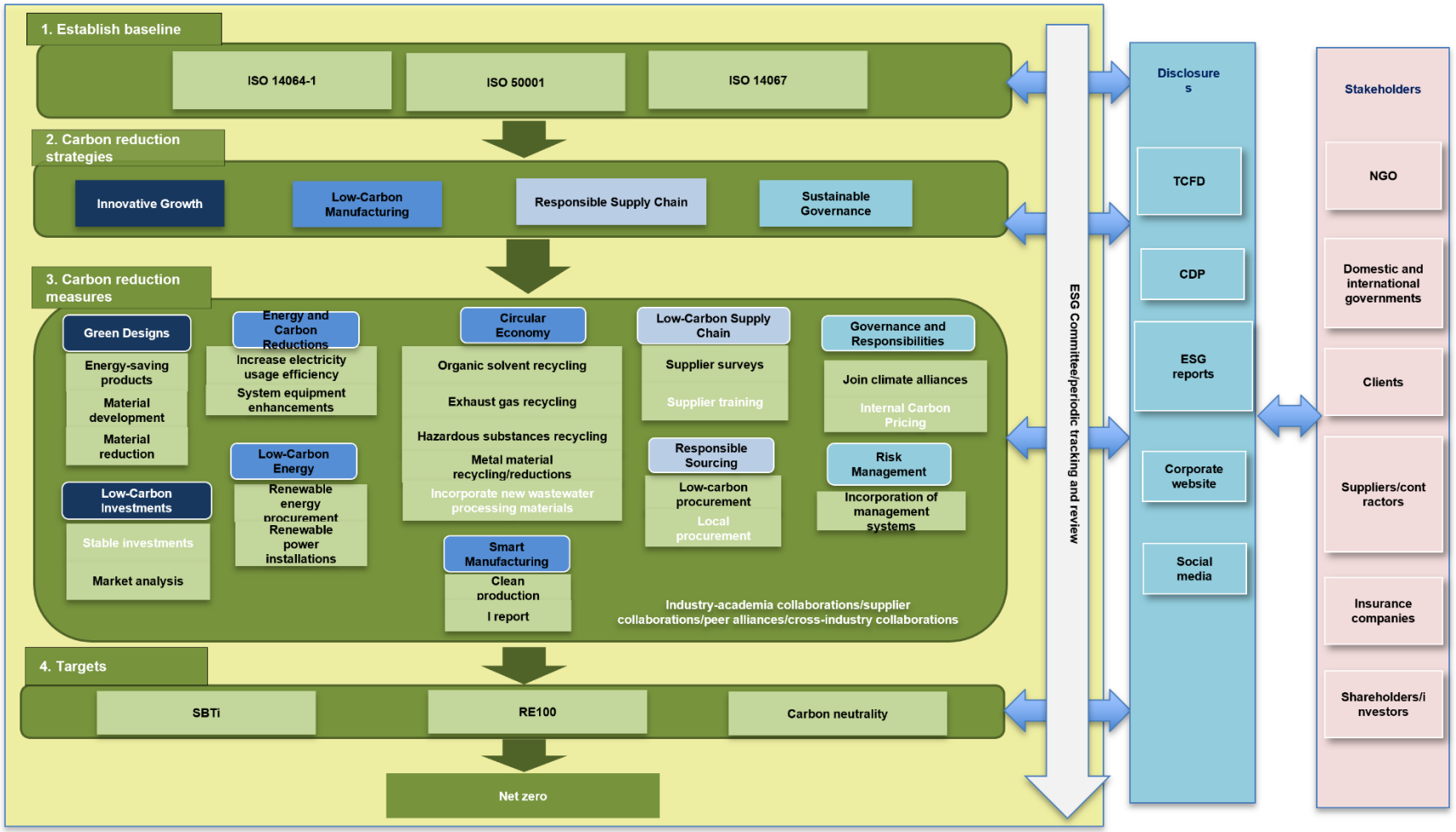
EPISTAR and Lextar Electronics also plan to incorporate ISO 50001 in 2024 to strengthen their motivation and commitment to energy savings and carbon reductions, and also to meet the low-carbon requirements of customers

SBTi Commitment

We officially submitted our Letter of Commitment to the Science Based Targets initiative (SBTi) in November 2023 and signed a pledge aligned with the Paris Agreement and the recent United Nations Climate Conference 1.5°C active carbon reduction commitment. Carbon reductions will be implemented across the Group in accordance with SBTi requirements as we make strides toward our 2050 net zero emissions targets.

COMPANY	NEAR-TERM TARGET	NET-ZERO TARGET	ORGANIZATION TYPE	
Ennostar Inc. Taiwan, Province of China, Asia	COMMITTED	–	Company	View more

Ennostar



Carbon blueprint strategy

The Group inventoried carbon emissions from organizational and production processes through incorporation of ISO 14064-1, ISO 50001, and ISO 14067 systems, and gained a better understanding of the main carbon emission sources in Group organizations and product life cycles. This information was used as a baseline for identifying carbon hotspots, and for assessing and planning related energy and carbon reduction measures.

We have formulated carbon reduction strategies that encompass innovative growth, low-carbon manufacturing, responsible supply chains, and sustainable governance so energy and carbon reductions can be internalized within all Group processes. We have also established corresponding carbon reduction measures in combination with industrial, government, academic, supplier, and other external resources to facilitate our path toward net zero.

We ensure that we stand at the cutting edge of technology through green designs that continue to improve and enhance the efficiency, quality, and lifespan of developed products so that our products can better adhere to energy and carbon reduction requirements. We also protect our corporate intellectual properties and maintain high levels of competitiveness through management of patents and trade secrets that strengthen our resilience for innovative corporate growth.

We continue to be attentive of external low-carbon technologies and evaluate the impacts of investments on future Group developments. For example, green electricity purchases are one of the Group’s main focuses.

We know that electricity usage is one of our main carbon emission sources. After Lextar successfully obtained external third-party ISO 50001 verification of its Zhunan Factory, we shared their experiences with other factories and gradually incorporated related systems according to plan in tandem with PDCA management cycles to enhance energy efficiency, reduce energy costs, and improve energy performance while lowering overall product carbon footprints.

To achieve circular economy aims and ensure appropriate and eco-friendly handling of waste, we recover organic solvents and waste ammonia for use by downstream suppliers, and recycle and reduce waste metals and hazardous substances, which greatly

decreases the amount of waste discharged into the atmosphere, water, and soil, reducing negative impacts on human health and the environment. We work with suppliers to assess the feasibility of recycling and reusing waste materials, wastewater, and exhaust gas to raise the proportion of reused waste and to reduce waste volumes. Ennostar works with ecosystem partners to achieve mutual prosperity and sustainable growth.

To lower carbon footprints, we incorporated low-carbon and local procurement measures into our procurement strategies to increase local supplier proportions. In 2023, we hosted a supplier conference to gather our supplier partners for ESG education and training to enhance their ESG awareness, help them understand the Group's carbon reduction goals, and invite them to jointly achieve carbon reductions in our supply chain. This not only strengthened communications between us and our partners, but also promoted sustainable developments within our entire value chain.

Supplier conference

In terms of smart manufacturing, to help the Group collect data on internal activities and operations, as well as track and assess operations more efficiently, we planned and built a digital system which is scheduled to be launched over several stages in 2024. This system will help us understand which activities and processes generate carbon emissions, and the platform can be used to conduct data analysis, assess carbon emission hotspots, and identify carbon reduction opportunities and strategies. In future, we

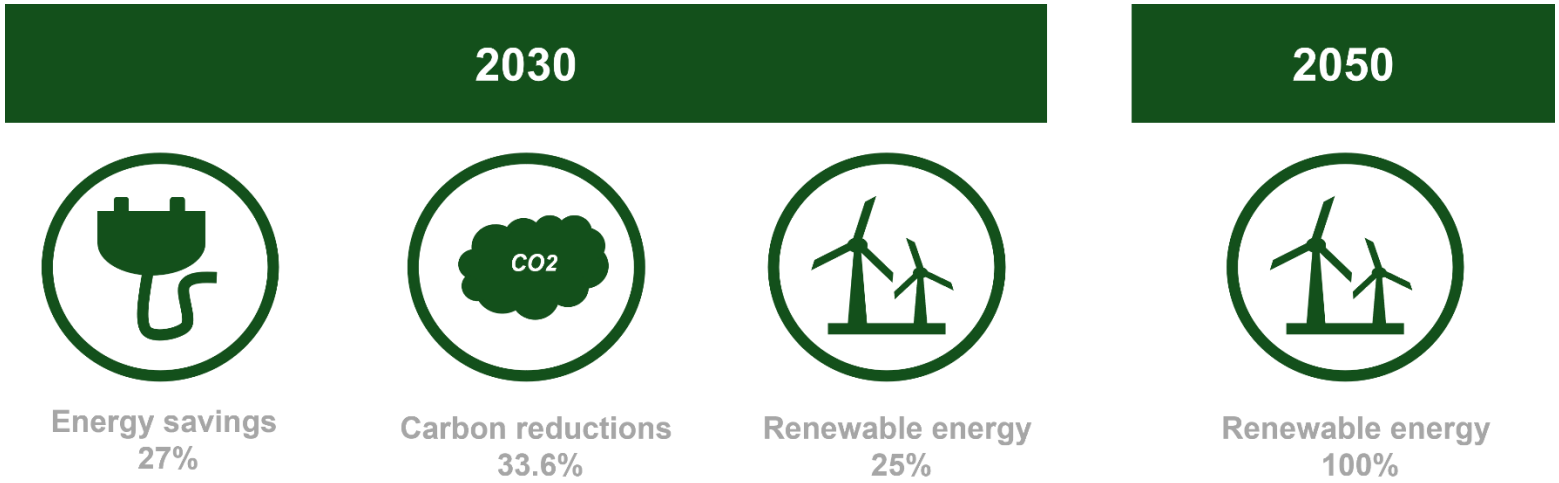
will continue to optimize our carbon management system in response to new laws and technological developments to ensure system functionality and adaptability.

We actively work to achieve carbon reduction goals. The Group plans to incorporate internal carbon pricing (ICP) carbon reduction methods in response to domestic and international regulations associated with carbon fees/carbon taxes. We pilot-tested a project in 2023, using shadow prices to assess and formulate plans related to installations of carbon reduction equipment, and used internal carbon pricing for additional evaluation. Installation timelines were reduced from 4 years to 2 years. For this project, carbon costs were incorporated into our business processes to promote full internal assessment and management.

Various countries around the world and international enterprises have launched carbon reduction measures in response to corresponding laws and regulations. The Group has established Group-wide short, medium, and long term greenhouse gas reduction and management guidelines to gradually increase renewable energy usage and mitigate global warming impacts from greenhouse gas emissions. We have incorporated the I report system in our manufacturing processes to enable real-time analysis and data comparisons; timely management of raw materials, electricity usage, and water consumption to prevent waste; and achievement of smart manufacturing goals. We also evaluate use of renewable energies and procurement of composite renewable energies to fulfill our sustainable energy transformation goals. We plan to achieve 25% renewable energy usage by 2030, join international initiatives such as RE100 in 2024, and achieve RE100 requirements by 2050 as part of our contribution to global warming mitigation.

We use monthly ESG Committee meetings to track and review progress, confirm carbon reduction measure indicators and achievements of all Group subsidiaries, and understand carbon reduction progress for all projects. In the face of international net zero trends, we have signed a pledge aligned with the Paris Agreement and the recent United Nations Climate Conference 1.5°C active carbon reduction commitment, and continue to make strides toward our 2050 net zero emissions targets. The Group pledged to achieve absolute reductions of 33.6% in Scope 1 and Scope 2 greenhouse gas emissions by 2030 compared to the base year of 2022. Therefore, we began installing local scrubbers (LS) in 2024 to break down fluorine gas and reduce carbon emissions, and we estimate we can reduce fluorine gas emissions by more than 90%. In 2023, we installed rooftop solar power generation systems

in Group factories (EPISTAR H1/S1/S3); generated power will be applied for self-use in 2025. We also actively purchase green electricity contracts and renewable energy certificates to increase renewable energy usage. Apart from installing local scrubbers and using renewable energy, we have also formulated various projects to enable energy and carbon reduction as well as improve energy efficiency, ensuring that the Group can effectively reduce greenhouse gas emissions, demonstrating our commitment to climate change mitigation and protection of natural environments as we make strides toward net zero emissions.



Ennostar Group Carbon Reduction Goals

We disclose Ennostar's climate actions through ESG reports, TCFD reports, our corporate website, and social media so that NGOs, domestic and international government departments, customers, suppliers, insurance companies, investors, and other stakeholders can clearly understand Ennostar's net zero pathways. Internationally, global investment institutes have begun basing investment decisions on CDP scores. In 2023, the Group's questionnaire responses and achievement of climate response actions received a B rating on the "Climate Change" questionnaire. We will continue to expand our scope of influence in future. In 2024,

we will host the Group's first sustainability conference to increase employee participation while working with supply chain partners to achieve environmental sustainability.

4-1-2 Task Force on Climate-Related Financial Disclosures (TCFD)

The Group's Corporate Sustainability and Risk Management Committee operates under the Board and is responsible for tracking and managing corporate sustainability issues, as well as effectively implementing projects associated with climate change. We used the TCFD framework to formulate response measures for identified Group risks and opportunities, and have established solar power generation systems, signed renewable energy MOUs to increase renewable energy consumption and reduce risks from power shortages, and established diverse water resource plans to reduce production and operational impacts. We continue to take advantage of market share opportunities in low-energy LED products and work with multiple parties to create new business models while applying governance on climate change risks and opportunities associated with corporate operations and information asset management. Our complete independent TCFD report can be found on our corporate website.

Climate Risk Scenario Analysis

We identified transition risks under the base scenario of "a 1.5°C increase in global temperatures." Timelines of reference for material risk items were based on the year set for achievement of internal goals, the year set for achieving external initiatives, and the year set for achieving stakeholder requirements, following which future climate scenarios were established for all transition risks (only applied to material issues), as shown in the following table. Due to the differing characteristics of different transition risk issues, quantitative risk analyses were conducted either qualitatively or quantitatively. Ennostar's material transition risk issues and related scenarios are shown as follows:

Transition risk issue	Transition risk incident	Results under future scenarios

Carbon fees/taxes	Carbon fee levies	1. Assuming that carbon fee policies are initiated in 2024, each ton of carbon emissions would incur fees of NT$300. 2. Under the IEA WEO 2022 APS scenario, each ton of carbon emissions would incur US$135 in carbon fees by 2030.
Renewable energy laws	Mandatory use of renewable energies	Companies with contract capacities exceeding 5,000 kW are required to establish 10% renewable energy contract capacities by 2025
Low-carbon technology transformations	Failure to meet the absolute carbon reduction targets of customers would result in a decreased number of orders	Failure to meet the absolute carbon reduction targets of customers would result in a 10% decrease in the number of orders
Changes in raw material prices	Suppliers may raise raw material prices due to carbon taxes	Assuming that carbon fees are fully levied in 2030, raw material prices would rise by 1-7%
Stability of power supplies	Climate disasters may cause power rationing and blackouts	Under the worst-case IPCC AR5 RCP8.5 scenario, the proportions of strong typhoons would increase by 100% from 2040-2065. Therefore, we assume that typhoons would damage overhead power lines, resulting in a higher frequency of interrupted power supplies.
Stability of water supplies	Climate disasters and droughts may cause water rationing and outages	Under the worst-case IPCC AR6 SSP5-8.5 scenario, we estimate that Taiwan is likely to see an increased amount of days with no rainfall, and we therefore assume that water supplies would be reduced by 20% for 20 consecutive days.

Analysis of Financial Impacts from Climate Change (Risks)

Aspect	Indicator	Challenges and risks	Current conditions	Transition risk adaptation action plans
Transition Risks				
Policy and Legal	Carbon taxes/fees	Domestic carbon fee levies	1. Total carbon emissions for the Group's factories in Taiwan (Scope 1 and Scope 2) amounted to 254,076 tCO2e 2. In 2022, EPISTAR's five factories (S3, S1, H1, N2, N5) each generated more than 25,000 tCO2e, amounting to a total of 187,167.7 tCO2e 3. Without taking into account maximum possible carbon reductions and assuming that carbon taxes are only levied on Category 1 and Category 2 emissions, factories in Taiwan generating carbon emissions of more than 25,000 tCO2e would incur carbon taxes, and 25,000	1. Group-wide ISO 14064 greenhouse gas inventories must be conducted to identify carbon emission sources 2. Implement plans related to energy management and green energy purchases 3. Plan to install local scrubbers to reduce fluorine gases and implement other carbon reduction measures

Aspect	Indicator	Challenges and risks	Current conditions	Transition risk adaptation action plans
			tCO2e would be set as a threshold value	
Policy and Legal	Voluntary agreements	Join international carbon reduction initiatives	In response to corporate carbon reduction trends, we aim to gradually promote and endorse SBTi starting in 2023, and set science-based carbon reduction targets to meet possible future market carbon reduction requirements and to prevent orders from being affected due to ineffective carbon reduction achievements.	1. Group-wide ISO 14064 greenhouse gas inventories must be conducted to identify carbon emission sources 2. Implement plans related to energy management and green energy purchases 3. Plan to install local scrubbers to reduce fluorine gases and implement other carbon reduction measures
Policy and Legal	Voluntary agreements	Join international renewable energy usage initiatives	●Renewable energy usage should account for 25% of the Group's total purchased electricity usage by 2030 ●Renewable energy usage	Implement plans related to energy management and green energy purchases

Aspect	Indicator	Challenges and risks	Current conditions	Transition risk adaptation action plans
			should account for 100% of the Group's total purchased electricity usage by 2050 ●Currently, no customers have made requests associated with renewable energy usage ratios, so there are no clear impacts on orders	
Reputation	Negative feedback	Increased stakeholder backlash against the Group due to unsustainable actions	Failure to comply with international standards may lead to increased backlash and cause stakeholders to lose trust in the Group, affecting a wide range of aspects, including loss of investor trust resulting in stock price declines, reduced government incentives, negative media coverage, talent recruitment difficulties, difficulty obtaining insurance, declines in revenues, reduced collaboration	Improve sustainable development information promotion channels to help stakeholders obtain timely information on the Group's latest sustainable developments.

Aspect	Indicator	Challenges and risks	Current conditions	Transition risk adaptation action plans
			opportunities with supply chains, and capital withdrawals, all of which impact the Group from different aspects.	
Market	Changes in customer behavior	Customers request provision of product carbon emissions	If products fail to meet customer requirements, some customers may transfer orders to other suppliers	In terms of energy-saving technologies, we work with factory management and continue to reduce energy consumed during production, implement energy-saving measures, reduce factory energy consumption, upgrade equipment, incorporate energy management systems, improve energy efficiency, and optimize production processes; lowering energy consumption not only helps to reduce carbon emissions, but also lowers costs and increases benefits.

Aspect	Indicator	Challenges and risks	Current conditions	Transition risk adaptation action plans
Market	Changes in raw material prices	Suppliers may raise raw material prices due to carbon taxes	Possible increases in procurement costs range from 1-7% under different scenarios	1. Develop alternative low-carbon and renewable low-carbon materials 2. Invest in low-carbon equipment 3. Change product designs to reduce demand for specific raw materials 4. Require suppliers to reduce carbon emissions
Technology	Low-carbon technology transformations	Increased technological costs due to reduction of product carbon emissions	In response to market carbon reduction requirements, we are working to reduce product carbon emissions, which increases related investment costs	In terms of energy-saving technologies, we work with factory management and continue to reduce energy consumed during production, implement energy-saving measures, reduce factory energy consumption, upgrade equipment, incorporate energy management systems, improve energy efficiency, and optimize production processes; lowering energy consumption not only helps to reduce carbon emissions, but also lowers costs and increases benefits.
Physical Risks				

Aspect	Indicator	Challenges and risks	Current conditions	Transition risk adaptation action plans
Acute	Stability of water supplies	Climate change reduces rainfall volumes, causing droughts and lowering or interrupting water supplies.	Insufficient water resources in reservoirs may result in water rationing measures, affecting production in some factory areas.	1. Formulate and continue to implement water conservation goals 2. Develop technologies for recycling process water 3. Prepare and manage contracts for water trucks

Analysis of Financial Impacts from Climate Change (Opportunities)

Aspect	Indicator	Challenges and risks	Current conditions	Financial impacts
Products and Services	Develop and/or increase low-carbon products and services	Market trends have made consumers pay more attention to energy conservation issues and prioritize purchases of high-efficiency products, increasing revenues of related products	We focus R&D for LED products on high-performance products and emphasize end customer product needs to develop related high-performance components	Providing high-performance LED products that meet customer requirements helps to maintain order volumes, but does not impact revenues.

Aspect	Indicator	Challenges and risks	Current conditions	Financial impacts
Resource Efficiency	Adopt more efficient transportation methods	Promote Materials Requirements Planning (MRP) system to clearly quantify demand and reduce the number of import/distribution trips for manufacturers	Provide estimated production plans each quarter based on production management/engineering needs to plan raw material procurements/preparations	-
Resource Efficiency	Adopt more efficient transportation methods	Localize material production	1. Some raw materials are imported from overseas. 2. Raw materials are expensive and importing them from overseas requires high transportation costs. Using raw materials produced domestically is cheaper and transportation costs are also lower	1. Localize production to reduce carbon emissions 2. Reduce import transportation costs
Resource Efficiency	Reduce water usage and water consumption	Increase water recycling rates and reduce water consumption volumes	Included in corporate water-saving targets which are reviewed each month; we saved 20,000 cubic meters of water per year and reduced costs of around NT$250,000 per year	Reduced costs of around NT$250,000 per year

Aspect	Indicator	Challenges and risks	Current conditions	Financial impacts
Resource Efficiency	Recycling and reuse	Waste solvents are recycled and reused, or are used as secondary industrial materials	1. We have established an independent system to collect isopropyl alcohol for conversion to secondary industrial materials by qualified waste handling companies. (Converted into raw materials for other companies.) 2. We are currently planning to establish an independent system to collect NMP conversion to secondary industrial materials by qualified waste handling companies.	Increased waste recycling and reuse rates, but had no financial impacts on the Group.
Markets	Enter new markets	Use business models to obtain new technologies and enter new markets	Actively work with subsidiary and business unit supervisors to obtain consensus and officially incorporate processes and systems into corporate development strategies	Use business models to help all business units achieve their operational targets.

4-1-3 Domestic and International Climate Initiatives

Initiative	Description
Taiwan Climate Partnership	In 2022, we became a member of the Taiwan Climate Partnership, demonstrating our energy and carbon reduction commitments. We work with our industry supply chain to achieve

	mutual growth as we work toward RE100 and EV100 goals
Task Force on Climate-Related Financial Disclosures	Ennostar senior executives signed Task Force on Climate-Related Financial Disclosures and the Group became a TCFD supporter
SBTi	Officially submitted Letter of Commitment in November 2023 to make strides toward net zero emissions in 2050

4-1-4 Greenhouse Gas Management

The Group's greenhouse gas emissions include direct emissions, indirect emissions associated with energy usage, and other indirect emissions. Sources of direct emissions include gases used during production processes (PFCs, N2O, CH4, CO2); equipment for preventing volatile organic compound pollution; emergency generators; natural gas, liquefied petroleum gas, petroleum, diesel, and other fuels used by other facilities; and fugitive emissions from septic tanks, fire drills, and associated equipment. Indirect emissions associated with energy usage mainly stem from purchased electricity. Other emissions stem from product and material transportation, supplier production, employee travel, waste treatment, and employee commutes.

The Group's total greenhouse gas emissions for 2023 amounted to 646,989.20 tCO2e. Total Category 1 and Category 2 emissions amounted to 284,454.56 tCO2e. Category 1 direct emissions amounted to 37,478.27 tCO2e, 5.79% of total Group emissions; Category 2 indirect emissions from energy used mainly stemmed from externally purchased electricity and amounted to 246,976.29 tCO2e, 38.17% of total Group emissions. Total Category 3 and Category 4 indirect greenhouse gas emissions amounted to 362,534.64 tCO2e, 56.03% of total Group emissions. The scope of Category 4 emissions from purchased goods was expanded from the top 10 suppliers to the top 70% of suppliers (total procurement amounts ranked in the top 70% in 2023), and therefore

carbon emissions increased. We gained a comprehensive understanding of Ennostar emissions in all categories through ISO 14064-1 inventories, and set reduction targets accordingly.

Greenhouse Gas Emissions and Management

Greenhouse Gas Source	Carbon Emissions (tCO2e)	Boundaries	Reduction Measures
Category 1: Direct greenhouse gas emissions	37,478.27	All factories included in this Report	■ Gradually installed local scrubbers containing equipment to reduce fluorine gases to achieve carbon reduction benefits ■ Adjust process recipes with fluorine gas to implement source reduction
Category 2: Indirect greenhouse gas emissions	246,976.29		■ Established a smart electricity usage management platform to monitor energy efficiency and prevent unnecessary energy wastage ■ Centralized production plants; reduced machinery loads to conserve energy; and adjusted chillers, temperatures, humidity levels, and dew points in accordance with machine loads

			■ Machinery unit adjustments, RA scheduling optimization, energy conservation lighting, and performance enhancements ■ Planned procurement of renewable energies, including solar power, wind power, and other renewable energies
Category 3: Indirect greenhouse gas emissions from transportation	20,003.96		-
Category 4: Indirect emissions from products used	342,530.68		■ Reduced raw materials usage ■ Invited suppliers to implement joint carbon reductions
Greenhouse gas emission intensity (tCO2e/thousand TWD)		0.0128	(Category 1+Category 2) Annual carbon emissions/annual revenues

Note: All Group figures were calculated using the GWP value in the United Nations Intergovernmental Panel on Climate Change Sixth Assessment Report (AR6) released in 2022.

Please refer to Appendix I [Environmental Data] for more information on the Group's greenhouse gas emissions in 2023.

4-1-5 Energy Management

Ennostar Renewable Energy Blueprint

In response to the government's 2050 net zero emissions goal and to exert corporate influence, the Group has gradually procured renewable energy contracts and other renewable energy certificates, formulated renewable energy policies, and aims to achieve RE100 in non-production sites by 2030 and across the entire Group by 2050.

We plan to focus on solar energy/onshore wind power in 2023–2027, adopt solar power/onshore wind power/offshore wind power and other renewable energies in 2027–2050, and use comprehensive renewable energy procurement plans to lead the Group in achieving RE100 goals.

The Group's Renewable Energy Investment Plan for 2030

Year	Targets	Invested Resources [12]	Expected Benefits

2021	Completed rooftop solar photovoltaic system installations in factories	We expect to invest a total of NT$886 million from 2021-2030 (Note 2)	2023
	EPISTAR: 464.35 KWp (N5/H1/S1/S3)		Power generated by solar photovoltaic systems in EPISTAR factories: 757,769 kWh (wholesale)
	Lextar: 262.89 KWp (Zhunan)		Power generated by solar photovoltaic systems in Lextar factories: 339,468 kWh (wholesale)
	Lextar Electronics: 3648KWp (Chuzhou)(Note 1)		Power generated by solar photovoltaic systems in Lextar Electronics (Chuzhou) factories: 3,683,195 kWh (wholesale)(Note 3)
			Total: 941,984 kWh (wholesale) and 4,521,000 kWh used in factories
2022	Signed MOU to generate 105 million kWh in offshore wind power each year		
2023	Installed 633 KWp rooftop solar power generation systems in factories (Epistar H1/S1/S3)		2023-2024 Generate NT$3.1 million in revenues by selling factory rooftop solar power to Taiwan Power Company
2024	Total capacity from installed solar power generation systems in factories:		
	1360.29 KWp wholesale transferred for self-use		
	(EPISTAR: 1097.35KWp/Lextar: 262.89 KWp)		
2025	External purchases of 2.5 million kWh per year in renewable energies (2 MWp of solar power)		2021~2030 (Estimated)

2027~2030	~2030 Generate 105 million kWh in offshore wind power each year (and achieve RE100 in non-production sites)		Total cumulative renewable energy usage: 350 million kWh (Note 4)
			Total cumulative carbon reductions from renewable energy usage: 178,432 tCO2e (Note 5)

Note 1: Lextar Electronics (Chuzhou) rooftops were leased to third parties for installations and generated power was sold back to the factory for self-use

Note 2: 1. Not including construction costs for 149.35KWp already installed in 2021

2. External procurements were calculated using differences between green and gray power prices

Note 3: Our Chuzhou factory purchased renewable energy generated from third-party installations for factory self-use

Note 4:

1. Actual total consumption within factories for 2021-2022

2. Self-installed capacities within our Taiwan factories are scheduled for self-use starting from 2025 and are expected to decrease by 1% each year. Capacities for new installations in 2023 were calculated using the Bureau of Energy's standard of 1,250 KWk/KWp * Annual decreases of 1%

3. External purchases for solar power are scheduled for 2025-2027 and are expected to commence in 2027 for offshore wind power

Note 5: Electricity carbon emissions coefficients in Taiwan were 0.509 kg CO2e in 2022 (this coefficient was used to calculate emissions for 2023-2030)

Note 6: Two electricity carbon emissions coefficients were used for the China region (Lextar Electronics):

1. Electricity purchased from city power grid: 0.581 kg CO2e

2. Photovoltaic generated power: 0.079kg CO2e=0.502 kg CO2e

Energy Usage

The Group's energy consumption is mainly composed of purchased electricity, which accounts for 96.3% of all energy usage. Renewable energy accounts for 0.7%, and diesel and natural gas make up the remainder. Therefore, our energy conservation strategies are mainly concentrated on lowering electricity consumption. Ennostar's total energy consumption for 2023 amounted

to 1,817,239 (GJ), a 7% decrease compared to 2022. In future, Ennostar will continue to strengthen energy management to meet our RE100 renewable energy goals.

Please refer to Appendix I [Environmental Data] for information on the Group's energy consumption figures for 2023.

Energy Management and Conservation Actions

The Group implements energy management and conservation through four major actions, including lighting management, air-conditioning management, equipment and system improvements, and process efficiency improvements. In 2023, we reduced electricity consumption by 10.58 million kWh and reduced carbon emissions by 5,492 tCO2e.

Aspect	Achievements in 2023	Improvements implemented in 2023
Lighting management	Reduced power consumption by 480,000 kWh and 251 tCO2e of carbon emissions	● Reduced lighting equipment and replaced existing lights with LED lights ● Installed segmented light controls in production areas
Air-conditioning management	Reduced power consumption by 5.47 million kWh and 2,842 tCO2e of carbon emissions	● Controlled air-conditioning times and temperatures in public areas ● Shut down non-essential air-conditioners in production areas

Equipment and system improvements	Reduced power consumption by 2.98 million kWh and 1,546 tCO2e of carbon emissions	● Optimized factory systems, standby equipment, and management of equipment shutdowns ● Replaced aged equipment and improved operational efficiency
Process efficiency improvements	Reduced power consumption by 1.64 million kWh and 853 tCO2e of carbon emissions	● Optimized production and reduced energy consumption per unit ● Reduced electricity consumption

Looking to 2023-2025, we have formulated four action plans and continue to invest in energy-saving improvements, improve energy efficiency, implement integrated management measures, and reduce carbon emissions from operations.

Action Plan	Description of Actions
1. Achieve annual energy-saving rate of 3%	● Formulate energy-saving plans during the first quarter of each year ● Formulate five-year plans for replacing major energy-consuming equipment and conduct annual reviews and

	adjustments based on equipment efficiency/service life/operational risk and operational demands ● Assess benefits of new technologies/equipment
2. Implement ISO 50001 Energy Management System	● In 2023, Lextar's Zhunan Factory completed incorporation of the ISO 50001 system, passed ISO 50001 external third-party verification, and established factory system baselines and unit energy consumption levels to identify energy-saving opportunities; Lextar's Chuzhou Factory (Lextar Electronics) plans to incorporate energy management systems in 2024, and we plan to incorporate energy management systems in all factories in Taiwan by 2025
3. Establish digital energy platform	● Launched a factory digital platform in 2023 to compile energy information, and plan to expand implementation to all factories in Taiwan in 2025 ● In 2023, Lextar's Chuzhou Factory (Lextar Electronics) planned and established a visualization system which officially commenced operations in 2024.
4. Renewable energy usage and planning	● Our factories have established solar power generation systems. We plan to sell generated power in the short term and initiate self-use starting in 2025. All plans are formulated in accordance with Ennostar's renewable

	energy blueprints.

4-2 Environmental Management

To improve resource recycling rates, realize waste reduction benefits, reduce environmental impacts from operational and manufacturing processes, and implement environmental management, Ennostar actively implemented ISO 14001, ISO 14064-1, and other environmental management systems to ensure that routine operations and products adhere to environmental standards and laws. We seek to balance economic growth and environmental protection as we work to fulfill our corporate social responsibilities.

4-2-1 Water Resource Management

We re-assessed and adjusted our diverse water resource goals in response to changes in factory production plans and the 10 year/term limit on contracts.

Starting in 2024, EPISTAR will no longer make public commitments regarding water recycling (conservation) volumes and we will disclose total factory water recycling rates in future.

The Group's water conservation achievements are shown in the following table:

Water Conservation Solution	Achievements in 2023	Improvements Implemented in 2023
Water recovery and water cycles	Reduced annual water	● Recovery methods included ROR wastewater recovery, QDR wastewater recovery, polishing wastewater recovery,

	consumption volumes by 87.28 million liters	air-conditioner condensate recovery, RO filter water recovery, and low-concentration drainage recovery ● Heavy metals in wastewater are absorbed using nanoporous glass materials: As heavy metals in wastewater are easily absorbed, water resources can be recycled and absorbed metals can be recycled and reused. Currently in development with the Industrial Technology Research Institute.

Management of Water Resource Risks and Responses

Water resources are an important resource for semiconductor manufacturing. In recent years, water management and efficiency have become a topic of concern for internal and external stakeholders due to climate change. We have clearly stipulated water contingency plans and measures in our standard operating procedure documents.

To strengthen management of water resource risks, the Group began to compile information on alternative water sources and formulated a stable water supply plan in 2022. We implement risk management using four steps as shown in the figure below.

We have also listed management of diverse water resources as one of our three water resource management principles. Relevant actions include (1) Building tanks for industrial and domestic water use at all factories with backup capacities of 3-10 days; (2) Plan to use industrial water to supplement domestic water capacities; (3) Purchase tap water pipelines and supplement water supplies with water trucks when necessary; (4) Ground water management.

Our ESG Committee (Working Group) conducts monthly reviews of introductions, assessments, and applications for reclaimed water and desalinated sea water. We expanded water resource usage in 2023, and our water sources included 0.24 million liters of ground water and 0.76 million liters of subsurface water. We also inventoried and maintained functionality of water wells in factories to ensure we have adequate water resources and to lower risks from water resource impacts, as shown in the following table.

Water resources (Unit: million liters)	2021	2022	2023
Tap water	2,058.9	2,026.5	1,677
Water trucks	4.1	1	0.24
Rainwater	0	0.12	1.7

Groundwater	2.8	0	0
Subsurface water	0	0	0.76
Desalinated sea water	Scheduled to be used in 2026		
Reclaimed water	Scheduled to be used in 2026		

According to the “Water Resource Risk Assessment Tool” developed by the World Resources Institute, the main area where our operations are located has Low-Medium water stress, indicating that Ennostar’s water usage does not cause significant impacts to ecological environments. However, our Epicrystal factories in China are located in Changzhou (Jiangsu), an area with High water stress. As the water consumed by Epicrystal factories amounts to 13% of Group usage, we estimate that there are no major impacts and risks are low. We will continue to establish diverse water resources, manage water usage, and promote water recycling and reuse plans.

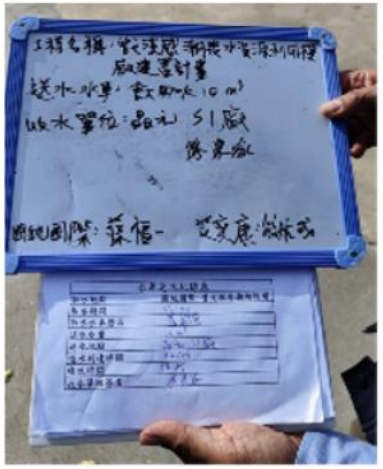
The Group’s Responses to Water Regime Changes

Ennostar

Water restriction level	Water supply	Government measures	Corporate response measures
Blue	Stable supply	Routine management	Routine management
Green	Stable supply	1. Water condition reminders 2. Water source adjustments and measures	1. Suspend all unnecessary water use 2. Comprehensive review of leakages in all factory tap water pipes and water tanks 3. Daily monitoring and reporting of factory water storage conditions 4. Water conservation promotions
Yellow	Water pressure reductions	1. Reduce water pressure during off-peak and specific periods 2. Suspend water supply for irrigation, landscaping, and cleaning	1. Extend pure water system use times and reduce backwashing frequencies 2. First-stage enhancements of chiller tower water electrical conductivity (adjusted according to factory operations) 3. Reduce frequency of water replacements for factory air pollutant scrubbers 4. Coordinated reduction of water tank overflows
Orange	Water pressure reductions	1. Suspend water supply for fire hydrants and rooftop discharge 2. Reduce supply to large users surpassing 1000 cubic meters	1. Coordinated suspension of water tank overflows, water for polishing processes, and limitations on production capacity 2. Second-stage enhancements of chiller tower water electrical conductivity (adjusted according to factory operations) 3. Initiate water truck supplementary measures (reduce water storage levels to less than 70%) 4. Adhere to emergency factory measures for abnormal tap water levels
Red	Regional water rationing	1. Regional water rationing or timed suspension of water supply 2. Fixed water supply locations	Adjustments in production capacities

Water Shortage Drills

In 2023, EPISTAR conducted a total of 8 water shortage drills, mainly encompassing water replenishments from water trucks. At our Southern Taiwan Science Park factory, we conducted a drought and water rationing drill. The aim of this drill was to respond to possible shortages in water resources and implement contingency measures and preparations in advance to ensure the continuity and stability of production operations. During the drill, we simulated actual water shortage conditions and tested the effectiveness and feasibility of water truck replenishment solutions. These drills not only improved employee emergency response abilities, but also further improved our contingency plans in response to possible water shortages in the future, ensuring the continuity and stability of production operations.



Water Sources and Discharge Points for All Factories

Water used by the Group is mainly sourced from tap water. Discharge water is processed by sewage treatment facilities or

drained to underground sewers connected to science park sewage treatment plants in accordance with law before final discharge to oceans.

Company	Facility	Water Sources	Wastewater Treatment	Final Discharge Point
EPISTAR	Hsinchu Science Park Factory	Baoshan First Reservoir, Baoshan Second Reservoir, and Yongheshan Reservoir	Our factories are located in a science park and wastewater is processed by park sewage treatment plants	Keya River, Sinkang River
	Central Taiwan Science Park Factory	Liyutan Reservoir		Wu River
	Southern Taiwan Science Park Factory	Nanhua Reservoir		Yanshuei River
Lextar	Packaging and Assembly Factory	Tap water is sourced from Yongheshan Reservoir and industrial water is sourced from Dapu Reservoir	Our factories are located in the Pao Yuan Science Park and wastewater is processed by the Pao Yuan sewage treatment plant	Yangang River
Unikorn	Hsinchu Science Park Factory	Baoshan Reservoir	Our factories are located in a science park and wastewater is processed by park sewage treatment plants	Keya River
Epicrystal	Epicrystal Factory	Municipal tap water (Yangtze River water), reused water from Wunan Reclaimed Water Plant	Our factories are located within the Wujin High-Tech Industry Development Zone. Domestic sewage and industrial wastewater without nitrogen and phosphorus	Wunan River

			are treated by the Wunan Sewage Treatment Plant; industrial wastewater containing nitrogen and phosphorus is treated by the Wunan Reclaimed Water Plant.	
Episky	Xiamen Factory	Tingxi Reservoir	Our factories are located in the Torch Hi-Tech Industrial Development Zone (Xiangan) and wastewater is treated by the Xiangan Water Purification Plant	Tongan Bay
Can Yang	Yangzhou Factory	Municipal tap water	Wastewater is treated by factory wastewater treatment systems before being discharged into sewer networks	Yangtze River water
Lextar Electronics	Suchu Industrial Park	Shaheji Reservoir	Wastewater is treated by the Suchu Industrial Park sewage treatment plant	Qingliu River

Water Resource Management and Reduction Actions

The Group implements water resource management in accordance with the PDCA process shown in the figure below, encompassing formulation of annual plans, management objectives, external audits, and real-time adjustments.

We also actively work to maximize water-saving benefits, including by publicizing energy-saving actions (see the figure below), identifying recyclable water sources, and increasing use of secondary water.

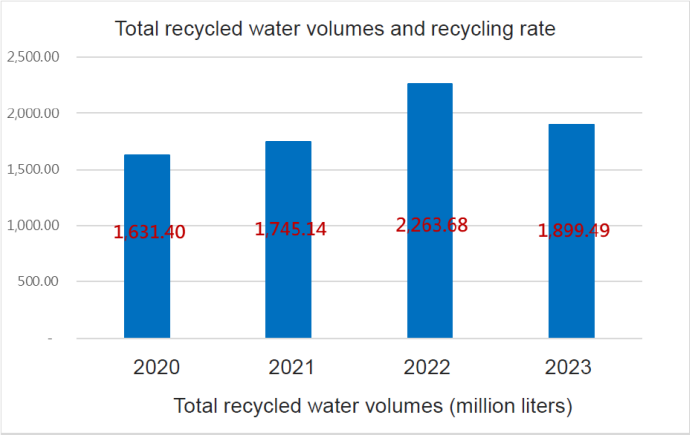
Installed water-saving devices on faucets	Utilized new agents to reduce water usage of air-conditioners	Adjusted toilet flush valves	Optimized adjustments of urinal water usage
Daily water-saving washing and mopping procedures in canteens	Converted pure water recycling and collection procedures for use as secondary water	Added dual-flush valves for toilets	Monitor and record daily water usage

Water consumed at Ennostar subsidiaries (Lextar and Lextar Electronics) is mainly composed of domestic water, and water consumed at Unikorn and EPISTAR stem from the same sources. EPISTAR's water consumption accounts for 90% of Group

consumption, and therefore our water withdrawal efficiency management measures are focused on EPISTAR. The following table shows water withdrawal intensities and pure water usage intensities. In 2023, EPISTAR's water withdrawal intensity rose from 107.18 m^3/m^2 to 136.72 m^3/m^2, and pure water usage intensity rose from 61.80 m^3/m^2 to 74.80 m^3/m^2, the main reason being production efficiency improvements and adjustments in our factories that were implemented in 2023. We will continue to manage water resources and lower water usage intensities.

Company indicator/Year	2021	2022	2023
EPISTAR_water withdrawal usage intensity (m^3/m^2)	86.03	107.18	136.72
EPISTAR_pure water usage intensity (m^3/m^2)	51.06	61.80	74.80

In 2023, EPISTAR recycled 1,899.49 million liters of water by reducing and recycling drainage. Compared to our base year (2021), the amount of water recycled and reused through our overall recycling system increased by 154 million liters, but decreased compared with 2022, mainly due to production efficiency improvements and adjustments in our factories. The overall amount of recycled water still increased compared with our base year of 2021, showing that we are continuing to implement water-saving measures, as shown in the following figure.



In 2023, EPISTAR invested 3.58 million in water-saving construction projects, and reviewed all water sourcing stages, including storage, generation, usage, recycling, drainage, and discharge, to identify possible water conservation and reuse opportunities. We also evaluated and formulated budgets and implementation plans as well as conducted regular reviews to meet our water conservation goals.

Looking to 2024-2025, in the short term, EPISTAR plans to continue participating in government-organized projects, using and purchasing water from the Hsinchu Desalination Plant and Anping Reclaimed Water Plant in the Southern Taiwan Science Park; our long-term goal is to import water during water shortages. We also plan to invest NT$15 million in equipment upgrades which are expected to reduce unit production area (m^2) wastewater volumes by 34%. Ennostar will also conduct weekly water consumption reviews, establish weekly consumption volumes and production capacity trends, and aim to increase recycled

(reduced) water volumes by more than 1% across all factories every year. In 2023, EPISTAR's new water-saving measures achieved 1.49% of water savings, and we will continue to formulate budgets based on factory water recycling plans.

Water conservation solutions in 2023	Water conserved in 2023 (million liters/year)	Water conservation rate in 2023 (%)
N2 pure water RO wastewater recycling project	0.472	0.03%
N2 RD general acid and alkali wastewater recycling project	0.024	0.00%
Water for use by pure water system equipment/EDI water recycling project (N2 and N8)	0.526	0.03%
N3 process drainage diversion, recycling, and improvement project	4.2	0.25%
Rainwater recycling and reuse (H1, S3, N5, N8)	0.827	0.05%
N9 scrubber water reduction and improvement project	9.2	0.55%
S1 pure water, reclaimed water, and washing water reduction	1.554	0.09%
S3 air-conditioning condensate water recycling	7.582	0.45%
S3 polishing wastewater diversion, processing, recycling, and reuse	0.528	0.03%

Prevention and Management of Water Pollution

The main purpose of water pollution management is to reduce direct entry of process pollutants into wastewater. Our wastewater is processed by wastewater treatment equipment which lowers pollutant content so that discharged water can meet science park administration standards. Our main water processes involve water purification systems which convert tap water into ultra-pure water used in process equipment for cleaning chemical resides on wafer surfaces.

In order to effectively monitor and manage wastewater, we implement the following three steps to achieve pollution prevention. Warnings of abnormalities are sent to staff on shift 24 hours a day so they can immediately respond to emergencies. The Group's discharged wastewater all adhered to the requirements of competent authorities in 2023.

Segregation Based on Wastewater Classification	Wastewater Treatment and Prevention	Wastewater Monitoring and Optimization
● Gallium, arsenic, fluorine/iron, and acid and alkaline wastewater ● Inorganic wastewater, organic wastewater, polishing	● All wastewater adhered to regulated standards. ● Adhered to the ISO 14001 Environmental Management System and used systemic management measures to implement environmental protection strategies and wastewater plant operations. Responsible units also conducted maintenance	● We have installed equipment at wastewater plant outlets to monitor water quality (acid and alkaline levels) and water volumes so we can carry out appropriate responses if abnormalities occur. ● All factories are required to undergo inspections of effluents and raw water every six months

wastewater, and fluorine wastewater ● Domestic wastewater	procedures and periodic inspections based on equipment characteristics. ● We have installed appropriate backup pumps and temporary equipment to ensure that backups are available in the event of operational interruptions, thereby reducing abnormal discharge of pollutants.	in accordance with law to ensure that effluent quality adheres to required standards. Ennostar also conducts voluntary sampling tests of water quality on a monthly basis.

4-2-2 Waste Management

To balance economic activity and ecological environments, the Group transformed waste into resources that entered new material cycles through collaborations with industry, government, and academic institutes, thereby creating new materials and inputs. We incorporate green design concepts and improved processes to recycle and reduce organic solvents, exhaust emissions, and metals while working with suppliers to assess feasibility of recycling measures for hazardous substances. We also participate in industry-academia collaborations to test whether replacing wastewater treatment materials can enhance pollutant removal rates and energy-saving performance. We use sustainable raw materials, reduce material consumption, and enhance product yields to lower production costs and create symbiotic environments for enterprises and resources. We implement waste classification, waste recycling, and packaging material reuse measures to reduce waste while continuing to implement improvements using the PDCA cycle and working to achieve sustainable management. The Group did not incur any violations of environmental laws associated with waste in 2023.

Our production processes adhere to regulations and waste from all process stages are classified according to their characteristics.

Waste is managed and stored according to procedural manuals before treatment by legally qualified vendors. We continue to seek out opportunities related to waste reduction and waste reuse in our manufacturing processes by working with new collaborators to develop waste recycling and reuse technologies that enhance recycling rates and reduce volumes of non-recycled (incinerated, stabilized, and landfilled) waste. We hope to continue reducing the proportions of non-recycled waste and increasing the proportions of recycled waste. In total, our generated waste volumes declined by 23% compared with the previous year.

The waste recycling intensity of Lextar's Zhunan Factory was reduced by 5.4% compared with 2022. Recycling volumes of hazardous waste was effectively increased as factory organic waste liquids was converted to alternative fuel for co-generation power plants. Additionally, we also introduced various recycling projects to reduce usage of non-recyclable waste, fully utilizing internal material reuse cycles and external cross-company reuse cycles, and worked with cross-industry partners to recycle materials. Our recycling rate rose from 50% in 2022 to 67%.

All Group factories have established "Waste Management Procedures" to ensure that waste generated during factory operations are treated legally, appropriately, and safely to minimize environmental impacts. We have also established "Supplier/Contractor EHS Appraisal Regulations" which stipulate that we only collaborate with qualified waste disposal companies which have passed our checks. Ennostar regularly conducts supplier audits to ensure that collaborating suppliers dispose of waste in accordance with contracts and regulations.

Note: Please refer to the Data Overview section for more information on waste volumes.

4-2-3 Circular Economy

In the face of growing global concern for circular economy issues, the Group not only works to reduce product carbon emissions, but also actively promotes Group-wide strategies and goals under a “zero waste” blueprint strategy. Our strategies include increasing conversion rates of general industrial waste, reducing incineration and landfill volumes, working with manufacturing departments to improve front-end factory throwing rates, and reducing and reusing packaging materials and raw materials. Our EHS departments seek out back-end recycling and reuse vendors for general industrial waste and have established a goal of “Increasing waste recycling ratios and waste recycling intensities per unit of production capacity (for each million of revenue) by 3%” to achieve circular economy within the Group.

Unikorn recycles gold (Au) and platinum (Pt) used in manufacturing processes. The overall recycling rate reached 96.70%:

Material Category	Category	Usage Volumes in 2023 (kg)	Recycled Volumes in 2023	Recycling Rate
Gold (Au) Pure gold and alloys	Slug (gold)	1,938.48	1,875.08	96.73%
	Au target	0.0101	0.0098	96.95%
Platinum (Pt)	Slug (platinum)	184.63	178.00	96.41%
Subtotal		2,123.12	2,053.09	96.70%

Circular Economy Achievements in 2023

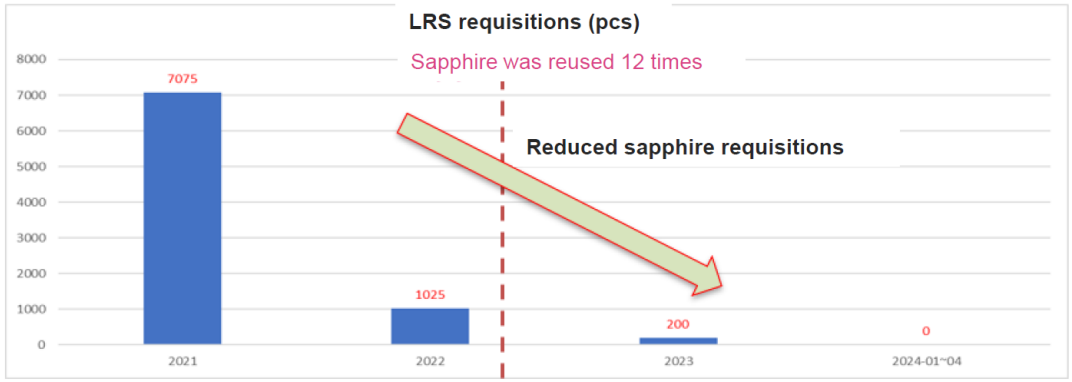
EPISTAR

Project title	BU1 sapphire substrate reduction
Project duration	2023/1/1~2026
Project boundaries	BU1 sapphire substrates
Project description and quantitative performance	**The initial yield rate of MR20 products was 79.3% when this project was launched in 2022; as of May 2024, the product yield rate has risen to 95.1%.** **Reduced actual usage volumes by 525 kg in 2023** Sapphire substrate is an important but non-renewable raw material that is used extensively in LED production. EPISTAR's ESG team selected this material as a target for reduction of non-renewable materials. After confirming that no other alternative materials could be found at present, we increased product yield rates to effectively increase material usage efficiency under the same production capacities and conditions. This project combined three major factory units (process/equipment/production) to analyze MR20 product yield rate losses and to formulate improvement procedures.

Project title	Reduction of BU1 chemicals
Project duration	2023/1/1~2026
Project boundaries	BU1 chemicals
Project description and quantitative	**The initial yield rate of MR20 products was 79.3% when this project was launched in 2022; as of May 2024, the product yield rate has risen to 95.1%.** **Reduced actual usage volumes by 8,025 kg in 2023**

performance	Photoresist is an important raw material used extensively in LED production, but photoresist waste needs to undergo special treatments or be recycled by specific vendors, and cannot be handled or processed independently. EPISTAR's ESG team selected this material as a reduction target for process waste. Data comparisons confirmed that we have repeatedly improved processes associated with this chemical, so there was little room to reduce usage amounts for each chip and to achieve our goal of effective reductions. Therefore, we combined three major factory units (process/equipment/production) to analyze MR20 product yield rate losses and to formulate improvement procedures. We increased product yield rates to effectively achieve our goal of reducing chemical usage per chip under the same production capacities and conditions.

Project title	Reduce sapphire process usage volumes
Project duration	2021~2023
Project boundaries	BU2 LRS process sapphire materials
Project description and quantitative performance	**Used reclaim processes to implement repeated sapphire use in LRS processes and reduced need for 25,902 units in 2023** Sapphire is used as a temporary substrate in PX products and sapphire surfaces are engraved during production. After LRS processes, sapphire is separated from components and cleaned for reuse, and can be reused up to six times. We introduced sapphire reclaim processes in August 2022: sapphire that had been reused six times were sent to our south factory for grinding and polishing, following which they could be used for another six times, meaning we could now get twelve uses out of one piece of sapphire. This process effectively reduced sapphire usage, and sapphire requisition amounts gradually decreased year by year from 2021 to April 2024.

Project title	Reduction of cleaning fluid used during lapping processes
Project duration	2023/1~2024/10
Project boundaries	Cleaning fluid used for lapping processes in 3 product series
Project description and quantitative performance	**Reduced 415,924 ml of cleaning fluid in 2023 through reduced use of ESP-411** During lapping processes, wax is used to affix wafers on lapping tools, and high-hardness ceramic materials are mixed with lubricants and used to buff and thin wafer surfaces. After lapping, high-hardness organic solvents are used to remove organic residuals generated during the lapping process. The ESP-411 cleaning fluid currently used in HB grinding processes mainly contain NMP, TMAH, and PG, and is used to clean residual wax and powder residuals generated during lapping processes. In March 2023, lapping processes for all HB ITO Top products were replaced with grinding processes which used grinding wheels to replace polishing powder and vacuum absorption to replace wax adhesion. No

	significant organic pollutant residuals remained after grinding, so only simple ACE cleaning was required to clean wafer surfaces. Therefore, after introducing grinding processes, we also assessed elimination of ESP-411 cleaning processes for 3 product series. ESP-411 requisition and average consumption volumes are shown in the following figure. After introducing new grinding processes on May 1, 2023, cleaning fluid usage was reduced month by month. We ultimately reduced cleaning fluid consumption by 1469,641 ml in 2023 and did not incur any related quality issues or adverse customer reactions.

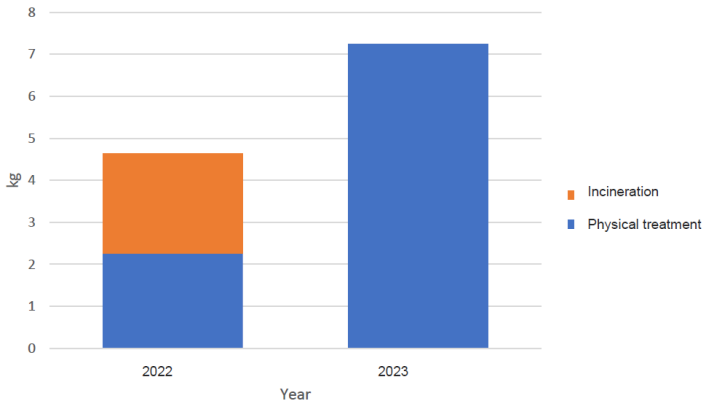
Project title	NH_3 reductions
Project duration	2023/01~2023/12
Project description and quantitative performance	Ammonia is one of the main materials used in LED production, so the electronics industry uses large amounts of ammonia. Due to process purity requirements, some residual gas may be left over for each batch of ammonia tankers or cylinders, resulting in wasted resources. The epitaxy units use the highest amounts of gas within our factories, so we conducted horizontal investigations of residual ammonia gas at each factory; the H1, N6, and N8 factories had higher levels of residual gases in ammonia cylinders (10-15%). We conducted discussions with the epitaxy units and set a target cylinder residual gas volume of 7% to gradually reduce cylinder residual gas volumes in factory BSGS and ISO tankers without affecting product quality. Our achievements in 2023 were as follows: BSGS Total ammonia reductions: 15,206 kg Costs saved: 15,206*80=1,216,480 ISO tankers

	Total ammonia reductions: 4,000 kg Costs saved: N6 (2,060*120) + H1 (2,000*80)=407,200 ※ We reduced ammonia usage by 19,206 kg/year and reduced costs by NT$1,623,688/year

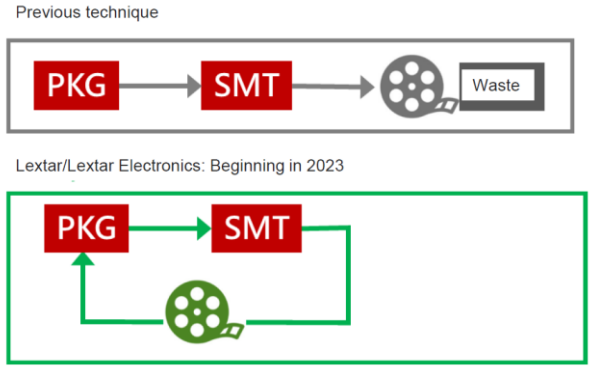
Lextar

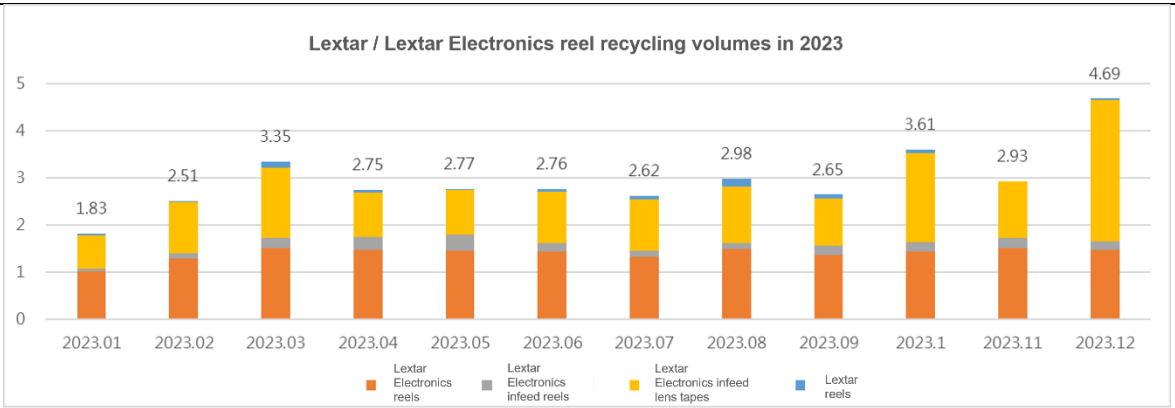
Project title	Recycling rates for general industrial waste in factories
Project boundaries	Zhunan Facility
Project description and quantitative performance	General industrial waste in factories, which was previously incinerated, is now processed using SRF (Solid Recovered Fuel) treatment to generate alternative fuel for use by other factories (such as cement plants and co-generation plants); our recycling rate for general industrial waste increased from 0% to 73.9% from August to October. County and city incinerators are now reaching the end of their service lives, so often require long annual maintenance periods, during which time general industrial waste can only be stored temporarily in factories. Therefore, during a time when the Taiwanese government was promoting SRF policies, Lextar's Zhunan Factory collaborated with waste handling vendors and assessed the feasibility of using SRF treatment to process general industrial waste. We contacted vendors for sampling analysis, established waste information for factories, and further classified and collected general industrial waste depending on whether they were suitable for SRF treatment in collaboration with various units. We completed the first in-factory general industrial waste SRF treatment process in October, and our recycling rate for general industrial waste rose from 0% to 73.9% from August to October, effectively increasing reuse rates for general industrial waste.[13]

[13] Formula used for calculation: General industrial waste that can be processed using SRF treatment/Total amount of general industrial waste*100%

Project title	Factory organic waste liquid was converted into alternative fuel for use by co-generation power plants
Project boundaries	Zhunan Facility
Project description and qualitative/quantitative achievements	**Instead of original treatment procedures, organic waste liquids in factories, including alcohol and acetone used for clearing adhesives, were converted into alternative fuel for use by co-generation power plants.** **Compared with 2022, the recycling rate of organic waste liquids rose from 49% to 100%.** Organic waste liquids at Lextar's Zhunan Factory mainly include alcohol and acetone. As the purities of waste alcohol varied, our original recycling vendor was reluctant to offer a quote for their services. Therefore, we delivered the waste alcohol and waste acetone to treatment plants for physical processing and subsequent conversion to alternative fuel for reuse. In May, we completed the first set of processes to convert organic waste liquid to alternative fuel for use by co-generation power plants. In 2023, the recycling rate of our organic waste liquids rose from 49% in the previous year to 100%. 

Lextar Electronics

Project title	Recycling and reuse of reels
Project boundaries	Lextar/Lextar Electronics
Project description and qualitative/quantitative achievements	1. Internal reel cycles: PKG and SMT lines offer comprehensive production services. PKGs are fed to SMT mounting processes via reels, and the reels are directly returned to PKG lines for use after SMT mounting, creating a complete internal cycle. Reels are not discarded unless they have become deformed or cannot be used.  2. Lextar/Lextar Electronics reel recycling figures in 2023 were as follows. We recycled a total of 35.46 tons.

Project title	Selected delivery cardboard boxes were returned to and reused by factories
Project boundaries	Lextar Electronics SMT material packaging materials
Project description and qualitative/quantitative achievements	We inventoried carrier boxes for SMT materials and found that many boxes were scrapped even though they were only used once for incoming materials and the exteriors were not damaged. Therefore, we returned selected boxes to our suppliers so they could be reused, thereby reducing the amount of scrapped boxes.

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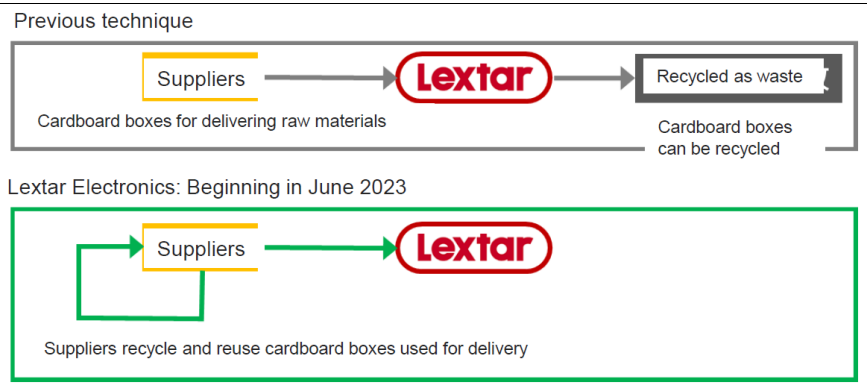
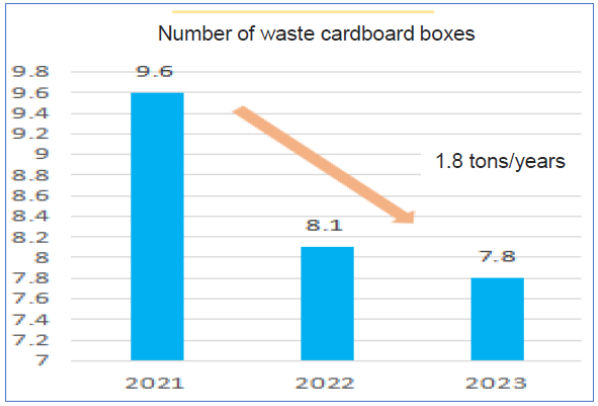


In 2023, we scrapped 7.8 tons of cardboard boxes/year, a reduction of 1.8 tons/year compared with our base year of 2021.


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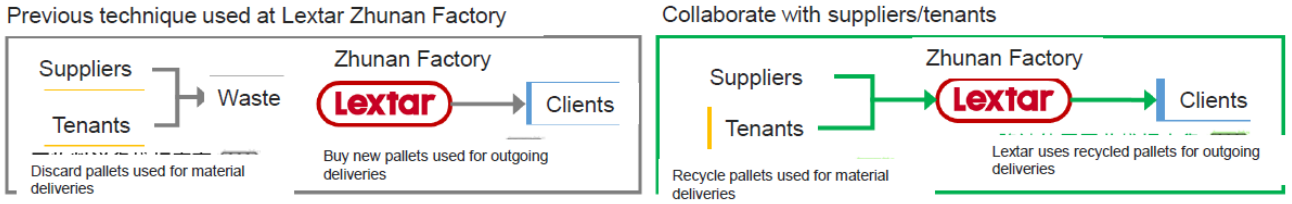
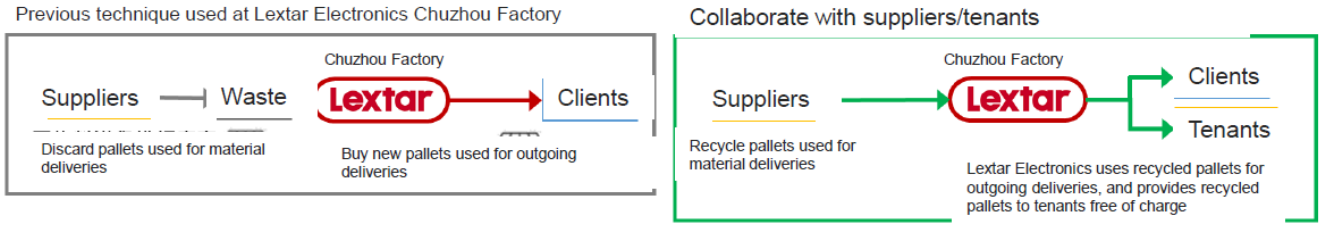
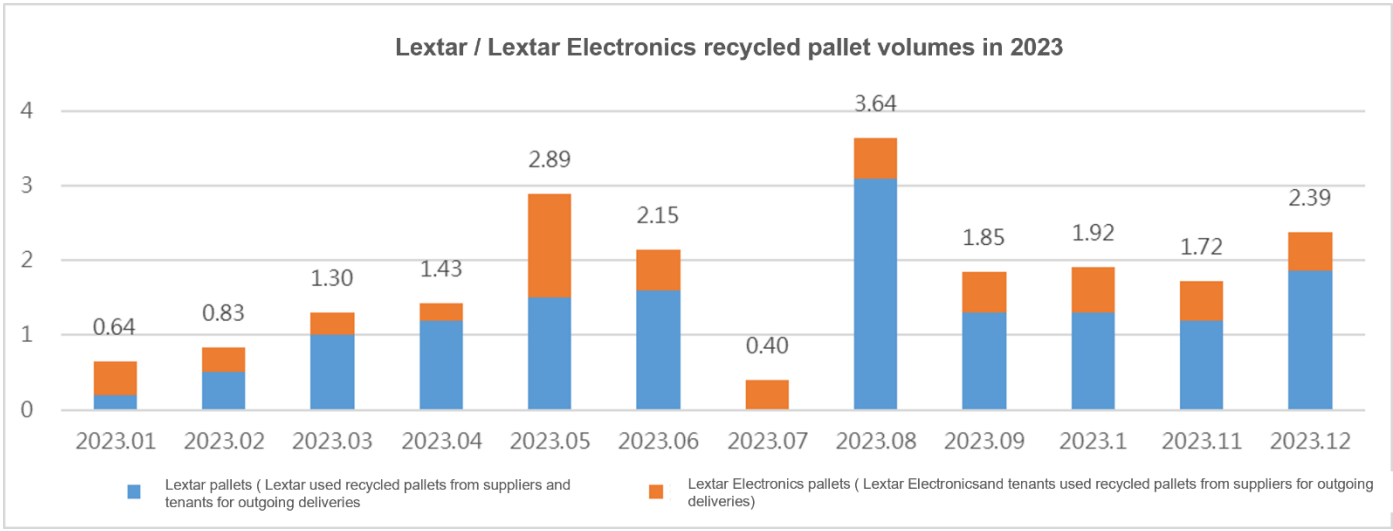
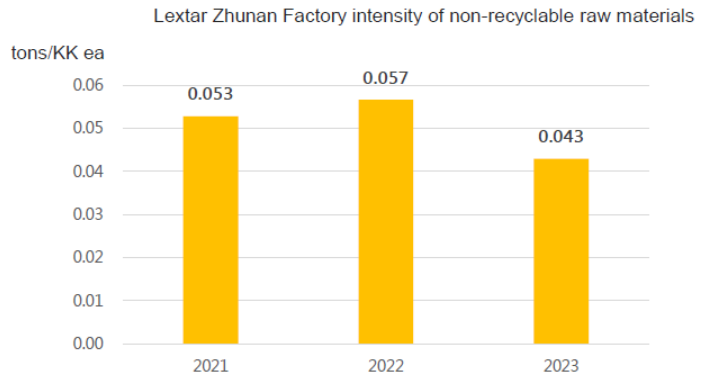
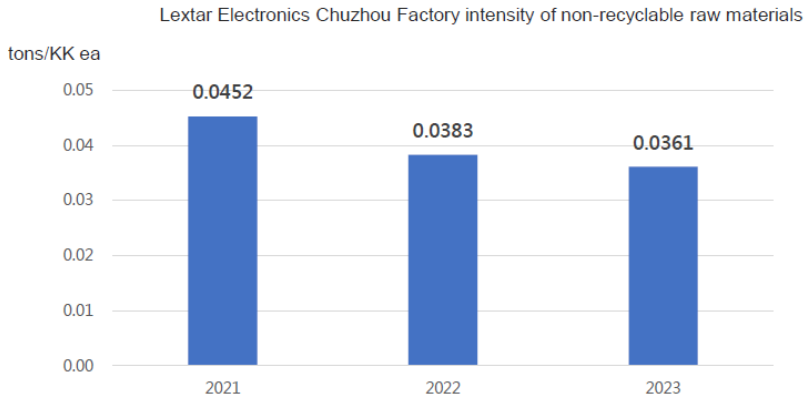
<tr><td>Project title</td><td>Pallet recycling and reuse project</td></tr>
<tr><td>Project boundaries</td><td>Lextar Zhunan Factory/Lextar Electronics</td></tr>
</table>

Project description and qualitative/quantitative achievements	Pallets are used for supplier deliveries as well as Lextar/Lextar Electronics shipments. Due to regulatory restrictions, shipping pallets need to adhere to certain specifications. To reduce pallet procurement costs and maximize pallet utilization rates, Lextar's Zhunan Factory and Lextar Electronics's Chuzhou Factory both worked with suppliers and tenants to complete cross-enterprise cycles. 1. Lextar's Zhunan Factory: As tenants had large amounts of incoming deliveries, they provided their pallets to Lextar free of charge, and Lextar confirmed that suppliers used pallets complying with shipment regulations.  2. Lextar Electronics: The Chuzhou Factory is Lextar Electronics's biggest production factory and has large amounts of incoming deliveries, so also has many pallets. Apart from using these pallets for outgoing shipments, we also provide these pallets to our tenants free of charge for use in outgoing shipments. 

	Achievements: In 2023, Lextar's Zhunan Factory and Lextar Electronics's Chuzhou Factory recycled and reused a total of 21.15 tons of pallets a year. 

Project title	Reduce usage of non-recyclable raw materials
Project boundaries	Lextar Zhunan Factory/Lextar Electronics
Project description and qualitative/quantitative achievements	Lextar and Lextar Electronics promoted reductions of non-recyclable raw materials, and also introduced and implemented various recycling and reuse projects. We converted most paper-based operations to paper-free operations, reduced process throwing rates, and decreased the volumes of consumables, thereby reducing the intensity of non-recyclable materials. We hope to further reduce waste generation by reducing resource usage. Lextar's new product experiment line/laboratory was established in the Zhunan Factory. As there was a complex array of new materials and we had not yet confirmed application amounts, the intensity of non-

	recyclable materials in 2022 was relatively high compared with our base year of 2021, but the intensity in 2023 was lower than the base year.  Lextar Electronics built a new factory in 2019 which mainly focused on mass production products. We used 2021 as the base year and added in mass production factors for continued lowering of product intensities.

4-2-4 Air Pollution Prevention

Material Topic: Air Pollution Management | Base year: 2021			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
1. Compliance with emission requirements of air pollution regulations	Not achieved	Compliance with emission requirements of air pollution regulations	Compliance with emission requirements of air pollution regulations
2. Zero major violations of environmental regulations	Achieved	Zero major violations of environmental regulations	Zero major violations of environmental regulations

3. Replaced or upgraded three control equipment	Achieved	Replace or upgrade five control equipment	Replace or upgrade three control equipment in a year
Responsible unit	Manufacturing centers of all Group subsidiaries		

Exhaust gas from Group production processes is mainly categorized as acidic exhaust gas, alkaline exhaust gas, volatile organic exhaust gas, and general exhaust gas. Equipment for preventing air pollution differs by pollutant type and characteristics. Acid and alkaline substances in acidic and alkaline exhaust gases are collected by associated equipment before discharge to a central scrubber for filtering and cleaning with chemicals and water. Volatile organic compounds in volatile organic exhaust gases are collected by associated equipment before discharge to a zeolite concentration runner where high heat is used to break down the majority of volatile organic compounds, following which the exhaust gas is discharged into the atmosphere. Exhaust gas concentrations are tested periodically in accordance with law. Key parameters and operational signals of all prevention equipment receive 24-hour management and monitoring. Staff on shift immediately handle all abnormalities such as operational interruptions due to equipment failure, and backup equipment is also available to minimize environmental impacts.

In 2023, EPISTAR violated Paragraph 4, Article 34 of the Air Pollution Control Act and Paragraph 4, Article 7 of the Regulations for Establishment and Management of Air Pollution Control Dedicated Units and Personnel, incurring a fine of NT$200,000 and 2 hours of mandatory attendance in an environmental training course. This violation occurred as organizational personnel changed dedicated air pollution personnel from business managers to engineers in accordance with management requirements, but the date provided on submitted documents was erroneous, resulting in non-compliance with the time limits for changes stipulated by regulatory requirements. Following several unsuccessful attempts at communication with competent authorities, we submitted an appeal to the Ministry of Environment, who refused to accept the appeal as it had not been submitted within the statutory limit of

30 days. Our dedicated air pollution control personnel completed environmental training on March 21, 2024.

Note: Please refer to the Data Overview section for air pollution data

Air Pollution Management and Future Targets for Optimization

We consider air pollution management to be an important environmental management issue. Apart from the aforementioned management guidelines, the Group also implemented optimized management plans, including gradual integration of air pollution control equipment in 2023. We also collected equipment operation and test data for gradual equipment optimization and assessments to demonstrate our emphasis and commitment to environmental issues.

CH5 Talent Sustainability

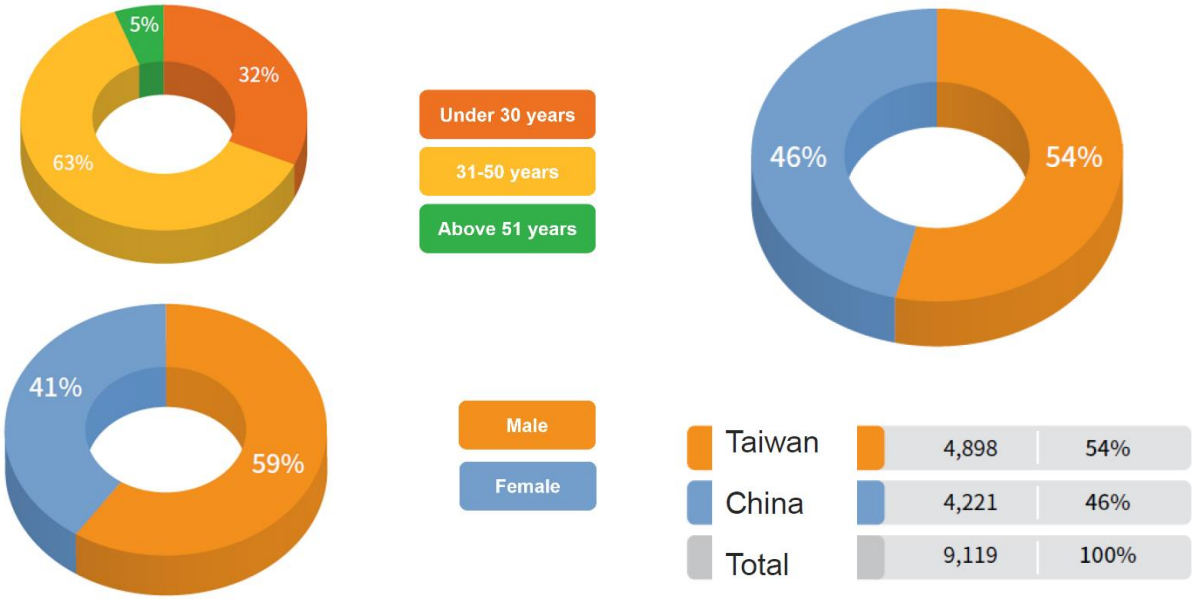
5-1 Talent Management

5-1-1 Talent Structure

Global manpower distribution

As of year-end 2023, the Group has a total of 9,119 employees in Taiwan and overseas.

Personnel composition in 2023



Ratios of New Hires and Terminated Employees

Category	Type		New employees in 2023		Terminated employees in 2023	
			Number of employees	New employee ratio for each group	Number of employees	Proportion of total employees
By gender	Female	3,694	2,282	62%	2,433	66%
	Male	5,425	5,011	92%	5,319	98%
By age	Under 30 years	2,605	6,456	248%	2,704	104%
	31-50 years	5,169	799	15%	5,002	97%
	Above 51 years	437	38	9%	46	11%
By region	Taiwan	4,898	340	7%	756	15%
	China	4,221	6,953	165%	6,996	166%

Lextar Electronics is located in Chuzhou, Anhui, where local companies that require cleanroom clothing tend to have high turnover rates. We discovered that one reason for this high turnover rate was that our outsourced labor agency did not clearly explain actual work conditions when recruiting workers, so workers found that actual conditions differed from their expectations when arriving at work. To avoid these types of situations, the human resources department explains working environments and requirements such as standing shifts and cleanroom clothing requirements in 1F/2F factory areas before workers are interviewed by recruiting departments,

thereby reducing turnover rates. We also provide employment information on terminated employees.

Expatriate Employees

Type	Male		Female		Total	
	Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio
Foreign employees	158	1.73%	551	6.04%	709	7.77%
Expatriate employees	46	0.50%	3	0.03%	49	0.54%
Total	204	2.24%	554	6.08%	758	8.31%

Employment of Indigenous Workers[14]

	2022	2023
Male	5	2
Female	17	16
Total	22	18

The Group respects the cultures of ethnic minorities. To promote cultural inclusiveness, the Group provides annual ceremonial leave to indigenous employees, encouraging them to participate in traditional cultural events.

Employment of Workers with Disabilities

The Group has a diverse group of employees. We comply with the People with Disabilities Rights Protection Act in employing people with disabilities that possess work capabilities. The Group actively employs workers with disabilities and redesigned work duties to promote friendly workplace environments.

[14] As our factories in China do not employ any indigenous workers, employment data for indigenous workers is mainly taken from factories in Taiwan

	2021	2022	2023
Male	19	20	22
Female	14	23	18
Total	33	43	45
Proportion of total employees	0.62%	0.52%	0.49%

Note: Figures for 2021-2022 were only for the Taiwan region; figures for 2023 included employees from Taiwan and China.

Parental Leave Statistics

In accordance with the “Act of Gender Equality in Employment,” the Group offers pregnancy checkup leave and maternity leave for female employees during pregnancy and childbirth, and male employees can take paternity leave when their spouses give birth. Our employees can also apply for parental leave without pay in accordance with our “Leave Without Pay Regulations.”

Employee parental leave without pay application rate, reinstatement rate, and retention rate in 2023		Male	Female	Total
Application rate 32.08%	A. Number of employees eligible for parental leave without pay in 2023	234	165	399
	B. Actual number of applicants for parental leave without pay in 2023	59	69	128
	Application rate (%)=B/A	25.21%	41.82%	32.08%
Reinstatement rate 87.25%	C. Number of parental leave without pay employees scheduled for reinstatement in 2023	47	55	102
	D. Actual number of parental leave without pay employees reinstated in 2023	44	45	89
	Reinstatement rate (%)=D/C	93.62%	81.82%	87.25%

Retention rate 75.44%	E. Actual number of parental leave without pay employees reinstated in 2022	53	61	114
	F. Number of parental leave without pay employees who continued working for one year following reinstatement in 2022	45	41	86
	Retention rate (%)=F/E	84.91%	67.21%	75.44%

5-1-2 Talent Attraction and Retention

Material Topic: Talent Attraction and Retention | Base Year: 2022				
Achievements in 2023 (facilities in Taiwan)	Achievement status	Short-term targets 2023-2024	Mid-term goals 2025-2026	Long-term goals 2027 and beyond
1. Added 8 effective talent source channels	Achieved	Add 8 effective talent source channels	Add 3 effective talent source channels	Add 3 effective talent source channels
2. Added collaborations with 5 new key target college departments	Achieved	Add collaborations with 6 new key target college departments	Add collaborations with 8 new key target college departments	Add collaborations with 6 new key target college departments
3. Hired a cumulative total of 6 people from key college departments	Achieved	Hire a cumulative total of 16 people from key college departments	Hire a cumulative total of 32 people from key college departments	Hire a cumulative total of 40 people from key college departments

4. Was active on social media and made 88 regular posts	Achieved	Be active on social media and make 74 regular posts	Be active on social media and make 78 regular posts	Be active on social media and make 90 regular posts
5. Achieve employee engagement surveys coverage rate of 21%	In preparation	Achieve employee engagement survey coverage rate of 60%	Achieve employee engagement survey coverage rate of 70%	Achieve employee engagement survey coverage rate of 70%
Responsible unit	Group Human Resources Center			

We have made it our responsibility to cultivate professional students who can become pillars of society. We continue to establish rich and diverse industry-academia collaborations by providing scholarships to schools all around Taiwan, organizing courses and classroom lectures, donating school equipment, and setting up internship programs. We have broken away from traditional single-point recruitment concepts and use talent supply chain models to contact and attract talent by developing diverse recruitment channels, contacting potential talent through industry-academic collaborations, and attracting outstanding talent by managing an employer brand, thereby generating innovative momentum for future progress.

Campus cultivation
Work to strengthen contact with campus students and help them apply their skills

Internship programs
Scholarship programs
Optoelectronics courses
Technical forums
Internship program for international students
New class for overseas compatriot students
Corporate briefings
Corporate visits

Social media management
Focus on target audiences, increase interactions, and improve stickiness

Routine posts: 3 posts/month
Convey corporate culture through themed posts

Precise talent selection
Reflect core Group values and build talent consensus

Upgrade assessment tools
Connect Group functions

Long-term retention program for migrant workers
Enhance sense of belonging in migrant workers to relieve labor shortages on production lines

Cultural integration (photography/festival exhibitions)
Chines training courses for talent reserves

Campus Cultivation Achievements in 2023

Channel	Partner schools	Benefits
Key target schools and departments	National Tsing Hua University/National Central University/National Taipei University of Technology/National Changhua University of	We collaborated with 20 schools/departments and hired 9 people

	Education/National Yunlin University of Science & Technology/Yuan Ze University/National United University/Chang Gung University/National Chung Hsing University/Southern Taiwan University of Science and Technology/I-Shou University/National Kaohsiung University of Science and Technology/Soochow University	
Southbound recruitment and school contacts	National Taiwan University of Science and Technology/National Chung Hsing University/National Cheng Kung University/National Chiao Tung University/Taiwan External Trade Development Council	Collaborated with 5 schools and recruited 2 people

The Group assessed and identified key target schools and departments, then recruited talent from collaborating schools, increasing the efficiency of recruitment resources, and making talent searches more accurate and more effective. Additionally, the Group actively expanded southbound recruitment channels in response to government policies and talent shortage challenges in Taiwan to recruit more outstanding students and diverse talents to our team.

Industry-Academic Collaboration and Diverse Recruitment Channels in 2023

The Group's talent strategy is focused on long-term goals. We actively promote industry-academia collaborations and diverse recruitment channels to inject new blood into our organization and to maintain our youth and vitality. Working with academic institutes allows us to attract and cultivate young talent with innovative perspectives and professional skills. Our diverse recruitment channels ensure that we attract outstanding personnel with different backgrounds and experience levels, who help us build a solid foundation for continued organizational development.

Channel	Benefits
Internship program	(EPISTAR) A total of 13 students participated in internships and 2 were retained (Unikorn) A total of 7 people participated in workplace experiences and equipment internships, and 1 person was retained after internships concluded
EPISTAR Scholarship Program	A total of 249 students submitted applications and 5 students successfully received scholarships amounting to NT$570,000.

Lextar scholarships and R&D substitute services program	A total of 3 students applied for scholarships, and 1 PhD student from National Tsing Hua University received the Lextar Rising Star Scholarship.
R&D substitute services	A total of 14 people were admitted and registered at EPISTAR and Unikorn
Campus recruitment	EPISTAR, Lextar, Lextar Electronics, and Unikorn participated in a total of 33 campus recruitment activities and reached nearly 6,700 students.

Internal recommendations	A total of 15 internally recommended candidates participated in interviews and 10 were hired.
EPISTAR professional programs	Added collaborative programs with 3 departments (optoelectronics/information technology programs); a total of 40 students signed up for these programs.
Lextar industry-academia professional program	A total of 50 students participated in the program and total teaching hours amounted to 30 hours

Unikorn technology/career development lecture	Attended by a total of 188 student participants
Southbound recruitment	Hosted a total of 5 southbound briefing sessions/lectures, 2 talent recruitment exhibitions, and 1 corporate visit, reaching 258 people.
Corporate visits	(Lextar) 3 visits with a total of 68 participants (Unikorn) 2 visits with a total of 49 participants

Southbound Recruitment Program

In response to low birth rates and the government's southbound policies, EPISTAR initiated recruitment promotions and campus events for southbound talent to expand corporate talent sources and promote workplace diversity. We worked with the international offices of target schools and departments to host 5 briefing sessions/career development lectures which reached 115 people. A total of 7 overseas compatriot students entered the scholarship written review process and 2 received scholarships. We participated in 2 corporate matchmaking activities hosted by schools and 2 corporate matchmaking activities hosted by the Taiwan External Trade Development Council. On-site interviews were conducted with suitable candidates, who were then recommended to supervisors. A

total of 441 resumes were obtained through multiple channels, exceeding our talent pool target for 2023 by 7 times.

Indian students from National Taiwan University who were accepted to our program	Foreign talent recommended by the Taiwan External Trade Development Council

Featured Highlight: EPISTAR Professional Program
EPISTAR worked with key schools, departments, and unit supervisors to establish a collaborative program with courses which helped students learn corporate skills. Students who adhered to course standards and were hired by the company received pre-employment signing bonuses. This program enabled students to plan their careers in advance and apply their skills. Collaborating schools cultivated outstanding talent needed by society and EPISTAR was able to make advance arrangements to reduce training costs and attract talent, creating a mutually beneficial situation for all parties. A total of 40 students signed up for this program. EPISTAR organized lectures by industry personnel, internship opportunities, corporate visits, and other resources for participating students to help them apply the skills they had learned. In 2023, we hosted 1 corporate visit for 32 participants. Student

understanding of EPISTAR was significantly enhanced through these activities.

Lextar Campus Activity Award

Lextar worked with a number of colleges and universities to host a series of briefing sessions, corporate visits, and lectures during the first half of the year to help participants better understand Lextar and integrate their professional skills with practical applications.

Employee Engagement Surveys

To enhance employee cohesion and organizational commitment, we began conducting employee engagement surveys in our factories in Taiwan starting from 2022. In 2023, we conducted surveys which covered five major aspects: employee life cycles, job roles, workplace environments, management styles, and welfare measures. Survey results showed that we achieved an overall satisfaction score of 3.87 out of 5 points. This engagement survey helped us gain a comprehensive understanding of employee perspectives and we analyzed the vulnerabilities identified by the survey to formulate related plans for subsequent improvements and to improve overall organizational effectiveness. Employee engagement scores were incorporated into ESG performance indicators linked to variable compensation for senior executives in 2024.

Company	Average score	Coverage rate[15]	Proportion of engaged

[15] Number of completed responses/Number of company employees (invalid responses were removed)

			employees[16]
Ennostar	3.79	47%	37%
EPISTAR	3.82	17%	43%
Lextar	3.82	30%	43%
Unikorn	4.06	78%	81.8%

Building an Employer Brand

The Ennostar Group continues to participate in employer brand activities and obtain employer brand awards. We received multiple awards in 2023, including:

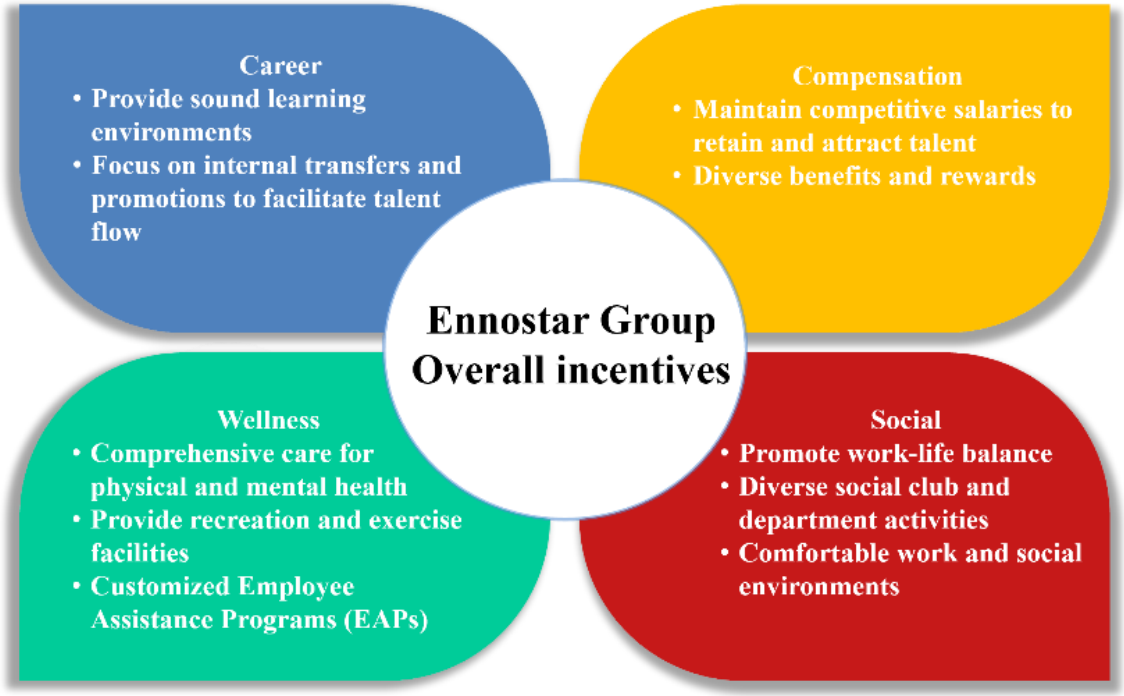
- EPISTAR: TCSA Human Rights Leadership Awards
- Lextar: TCSA Human Rights Leadership Awards
- EPISTAR: Ranked first in 2023 TCSA Workplace Wellbeing Leadership Award
- EPISTAR and Lextar: 1111 Job Bank 2023 Happy Enterprise Online Vote Silver Award
- EPISTAR, Lextar, and Unikorn: 2023 TALENT, in Taiwan initiative

Remuneration and Benefits

The Group has established human-oriented management systems and diverse incentive policies. We promote welfare measures that adhere to employee needs and provide happy workplace environments to help employees gain satisfaction from their work while balancing their physical and mental health, enjoying family relations, participating in social welfare, and enriching their careers and lives, thereby creating mutual benefits for families and companies, and building virtuous cycles for sustainable Group management.

[16] Number of people who gave a score of 4 points or above/Number of completed responses

We focus on employee “career development,” “physical and mental health,” “remuneration and benefits,” and “social lives.” We maintain competitive salaries and benefits while also offering customized physical and mental health assistance programs. Please refer to Appendix I [Social Data] for more information on the Group’s remuneration and welfare measures in 2023.



Remuneration Policies and Management Systems

The Group’s remuneration management mechanism proposals are based on corporate operational performance and are submitted to the Board by the Remuneration Committee to ensure close links with corporate finances and operational performance. We also

consider individual work duties, contributions, and results of performance appraisals when determining employee remuneration.

The Group attaches great importance to the consistency and fairness of remuneration operations, monetary incentives, and management of employee bonuses. Individual salaries are based on the education, expertise, and professional experience of each employee, but do not differ on the basis of race, religion, skin color, political affiliation, age, gender, marital status, or physical and mental disabilities. We provide Employee Assistance Programs (EAPs) to help our colleagues relieve work and life stresses and problems. We also review turnover rates and reasons for termination each month and handle severance pay in accordance with the regulations of related labor laws.

The Group has established clawback mechanisms and our contracts include service terms and performance achievement conditions regarding long-term incentives and reward measures for senior executives. Relevant bonuses are paid after performance reviews have been completed, and all bonuses must be returned if service terms have not been completed as agreed.

The Group adjusts employee salaries by referencing market salary levels, economic trends, price indexes, and related information, as well as corporate operational performance and individual performance. We provide our employees with basic salaries that exceed the standards stipulated by the Labor Standards Act.

Incentive Policies for Senior Executives

At year-end 2023, the Group linked variable remuneration for senior executives with ESG indicators encompassing the three ESG (environmental, social, and corporate governance) aspects. Performance on these indicators are incorporated into senior executive appraisals and linked to long-term incentives and bonuses. We disclose progress on all indicators every quarter and assess performance on all indicators at the end of every year, following which the human resources department confirms ESG performance based on this information. This policy was approved by the Remuneration Committee and officially implemented in 2024 to ensure that Group operations adhere to sustainable management goals. We also work with our supply chain partners to achieve mutual prosperity.

In terms of performance management, we review achievements of performance indicators and activate or cancel clawback mechanisms based on remuneration regulations. KPIs are linked to corporate management performance and ESG performance, and serve as a reference for the Corporate Sustainability and Risk Management Committee when promoting various goals.

Comprehensive Welfare Program

Benefits	Description
Health care	The Group has established a “Health Center” which not only provides the functions of a normal clinic, but also voluntarily organizes a variety of free health checks, health consultancy lectures, fitness checks, smoking cessation activities, and weight loss events. We care about employee health and provide periodic health examinations that offer comprehensive physical and mental health care to our colleagues.
Employee trips	We promote employee trips to help our colleagues maintain their mental and physical health.
Festival bonuses	We provide bonuses to our colleagues every year for Dragon Boat Festival, Moon Festival, Lunar New Year, birthdays, and Labor Day.

Employee insurance	Labor insurance, national health insurance, and group insurance (including life insurance, casualty insurance, hospitalization insurance, and accident medical insurance).
Emergency relief	We provide timely and appropriate financial support to employees and their families when major incidents significantly impact their economic welfare.
Employee welfare committee activities and rewards	Birthday bonuses, Labor Day bonuses, wedding gifts, funeral & burial benefits, childcare support, and hospitalization solatium. Employee welfare committee points can be used for employee trips, tickets to recommended venues, and other group activities. We have also established a movie ticket platform to help our colleagues enjoy their free time when on leave. A total of 3,660 people participated in these activities and total procurement costs amounted to NT$5,966,970.
Friendly workplace environments	We have established a fitness and leisure area, dance studio, billiards facilities, and table tennis facilities that our colleagues can use free of charge. We have also established well-equipped clinics and lactation rooms.
Volunteer leave	We provide employees with 10 hours of paid volunteer leave to encourage social participation.
Engagement leave	We provide 1 day of paid engagement leave
Family care	We provide a wedding bonus of NT$2,000 and a childcare bonus of NT$3,600 for each child.
Childcare	We provide semi-annual childcare subsidies of NT$3,600 per child for employee offspring aged between 2-6 years who attend government-registered kindergartens or childcare centers, with no limit on the number of children. If both parents are Group employees, they can both apply for these subsidies.
Employee share	All subsidiaries in Taiwan established employee share ownership trusts so employees could share

ownership trust	operational benefits. We encourage employees to increase their savings, add value to their post-retirement lives, and create a win-win situation. Employees who join our shareholding program can contribute different amounts based on their job positions, and we match 100% of contributions, allowing our employees to retain flexibility in contributions.
Employee stock options	Unikorn motivated talents required for corporate development, enhanced employee commitment and sense of belonging, and jointly created benefits alongside employees by designing an employee stock option incentive program with stock subscription subsidies.
Retirement benefits	To fulfill our social responsibilities and stabilize employee post-retirement lives, the Group adheres to the regulations of the Labor Standards Act and the Labor Pension Act. We have established the “Retirement Regulations for Appointed Managers and Directors Concurrently Serving as Workers” and the “Employee Retirement Regulations,” which were reviewed by the Remuneration Committee and submitted to the Board for approval before taking effect. We also implement monthly appropriations in accordance with law. The old system adheres to the “Labor Standards Act”: 2% of total salaries are appropriated to retirement funds each month in the name of the “Supervisory Committee of Labor Retirement Reserve” and deposited to a special account at the “Bank of Taiwan.” The new system adheres to the Labor Pension Act: 6% of salaries are appropriated to labor retirement funds and deposited in personal employee accounts at the Bureau of Labor Insurance. Group subsidiaries in China appropriate a specific portion of total salaries for local employees to pension insurance funds each month in accordance with the People’s Republic of China’s governmental pension insurance system. Pensions for each employee are managed and coordinated by the government, and the Group does not bear any additional obligations apart from monthly appropriations.

5-1-3 Talent Development and Cultivation

Material Topic: Talent Cultivation | Base Year: 2022			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
1. Increased digitalization ratios for annual training programs to more than 10%: EPISTAR 22%, Lextar 32%, Unikorn 10%	Achieved	Increase digitalization ratios for annual training programs to more than 20%	Increase digitalization ratios for annual training programs to more than 30%
2. Lextar completed incorporation of its learning platform, and EPISTAR and Unikorn continued to expand platform learning resources	Achieved	Increase total individual learning hours by more than 10% each year	Increase total individual learning hours by more than 20% each year[17]
3. Formulated learning blueprints:	Achieved	Complete 100% of professional learning blueprints for (competency) development units	Ensure that 80% of our colleagues have individual learning blueprints

[17] Including 20% from independent learning

EPISTAR 100%, Lextar 80% Unikorn systems are currently being developed			
4. Achieved 90% promotion rate for development-oriented performance management	Achieved	Incorporation rate of performance management in competency appraisals: 100%	Incorporation rate of Individual Development Plans (IDP) in performance appraisals: 100%
5. Formulate plans to establish key talent teams	In preparation	Complete talent inventories and identify 100% of key positions by 2024 Establish IDPs for 100% of key talent	Fill 80% of key positions from internal replacements
Responsible unit	Group Human Resources Center		

Our long-term talent development goal is to ensure that our employees keep pace with the times and strengthen organizational resilience. Apart from supporting our operational growth needs, we also promote lifelong learning and career development for employees. We reserve talent momentum by promoting independent learning, training and development, development-oriented performance management, and key talent teams.

The Group considers talent to be our most important asset. In 2023, the Group initiated the three stages of “Aggregate,” “Integrate,” and “Incorporate” to gradually maximize the synergy of Group resources, and we made adjustments based on the conditions of each subsidiary. Talent cultivation is a very important component of this process. The Group’s six axes for talent cultivation are “newcomer orientation,” “general capabilities,” “professional capabilities,” “management capabilities,” “self-development,” and “sustainability awareness.” Our subsidiaries EPISTAR and Lextar established “Epistar University” and “Lextar Academy” to provide education and training based on these axes. In terms of talent development strategies, we have established functional capabilities and mapped out the abilities required by our colleagues. We enabled structured learning for our colleagues, strengthened supervisor guidance and feedback, and allowed our colleagues to accumulate experiences and learn from their work by adopting a corporate university model and establishing training blueprints.

During the second half of 2023, we took stock of all courses provided by subsidiaries so we could establish joint learning courses for Group personnel and make these learning resources more widely available. Integration of Group performance systems is our first priority for talent cultivation, and we also integrated functional capabilities with subsidiary cultures to establish Group-level capabilities that meet future standards for talent cultivation.

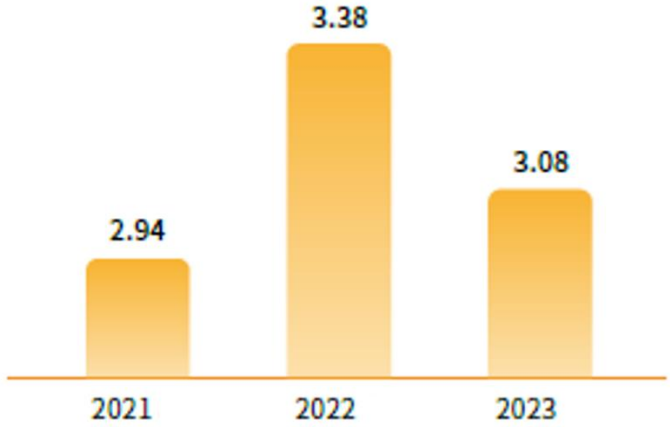
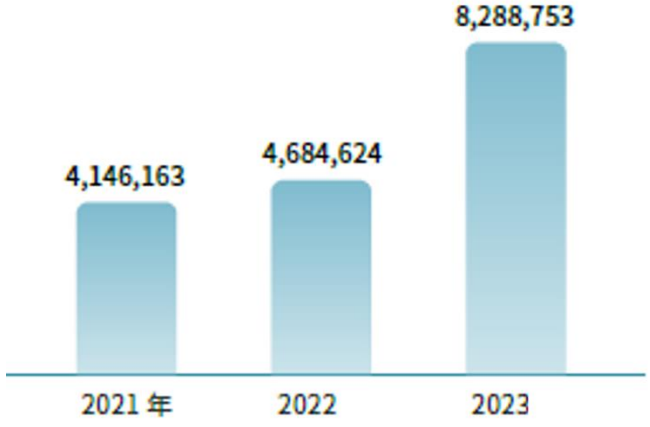
Six main axes	Axis capabilities	Corresponding courses
Orientation training for new employees	Introduction to the Group, environmental safety, quality concepts, information security, and other regulations	New employee orientation and training, new employee cultivation blueprint courses
General capabilities	Help colleagues demonstrate the basic abilities needed for performing their duties effectively	Quality college blueprint courses, corporate culture courses, and legal compliance courses (including dissemination of Foreign Corrupt Practices Act policies and internal reporting channels)
Professional capabilities	The professional and technical abilities required by our colleagues for different tasks	Strategic blueprint courses for science, engineering, and quality colleges; unit training blueprint courses
Management capabilities	Leadership capabilities for entry-level, mid-level, and senior-level managers	Management college strategic blueprint courses and management courses for managers of all levels
Self-development	Employee short-term capability requirements and long-term potential development	Language training and external training courses
Sustainability awareness	Establishment of sustainability awareness	Sustainability college strategic blueprint courses

Corporate University

Our corporate university includes five colleges which provide diverse competency training for relevant talent. We invited experts from all fields to design learning maps integrated with annual corporate targets and strategic focuses, which were used to formulate themed courses. The five colleges have designed diverse learning programs to meet different needs and benefits, and to provide all

employees with comprehensive learning resources that encompass introduction to quality concepts, cultivation of professional skills, strengthening of general knowledge, enhancement of leadership and management, and establishment of sustainability awareness.

In 2023, the Group provided training to 57,272 people with total training costs of NT$8.29 million; average satisfaction scores for all courses exceeded 4.6 points.

Average education and training hours per person	**Total training costs**
	

Indicator	By position			By gender	
	Management	Indirect labor (Non-management)	Direct labor	Male	Female
Total training	26,300.2	94,457.1	70,684.6	134,303.3	57,138.6

hours					
Total number of training participants	1,509.0	5,826.0	8,992.0	11,741.0	4,586.0

The Group adheres to equality principles when providing professional training to all personnel. Direct personnel mainly undergo training associated with production lines and short-term operations, and therefore their average training hours were lower than for indirect personnel. We have more male managers than female managers, and management courses tend to take more hours, so overall average training hours for female managers were lower than for male managers.

Training Focuses in 2023

College	Training Content
Engineering College	■ Internal lecturers taught classes on “Fundamental principles and characteristics of LEDs” and “Introduction and use of EDAs” to help new employees understand LED principles and learn common tools used in routine work. ■ In response to smart corporation trends, Lextar launched the “Introduction to machine learning: Comprehensive skills from data preparation to model building” course; 8 people completed training. ■ A total of 900 people completed training in 2023.
Science College	■ Organized regular “LED semiconductor physics” courses to assist new employees in reviewing basic theories and establishing fundamental knowledge. ■ One of our eight ESG Task Forces, the Innovative Technology Team, hosted the 2023 “Net Zero

	Emissions Transformations" Innovative Technology Forum, and invited experts and scholars from the National Science and Technology Council and other academic institutes. Ennostar Chairman Paul Peng delivered the opening speech for the event, and chairpersons, presidents, and factory and division managers from all subsidiaries attended the event. ■ A total of 899 people completed training in 2023.
Technological R&D	■ Unikorn semiconductor process related training ■ A total of 249 people completed training in 2023.
Quality College	■ LED market applications, demand analysis, market trend lecture series ■ Failure modes, effect analysis, and management plans ■ A total of 2,777 people completed training in 2023.
Management College	■ Management functions 2.0 courses (entry-level/mid-level/senior-level managers) ■ Performance appraisals—functional capability assessments and experiences ■ Detection and prevention of problems in employees ■ Management of and communication with new generations ■ A total of 1,094 people completed training in 2023.

<table>
<tr><td rowspan="4">Sustainability College</td><td colspan="2">■ Legal compliance awareness: RBA seed personnel training, Act of Gender Equality in Employment, sexual harassment in the workplace, anti-trust laws, patent strategies, intellectual property rights, and current US export control laws. A total of 894 people completed training in 2023.
■ Sustainability awareness: Information security awareness, social innovation, how to reduce carbon footprints, CDP, and TCFD course series. A total of 934 people completed training in 2023.</td></tr>
<tr><td>Digital trust under sustainable developments lecture
British Standards Institution (BSI) NE Asia region managing director Peter Pu</td><td>How to reduce carbon footprints</td></tr>
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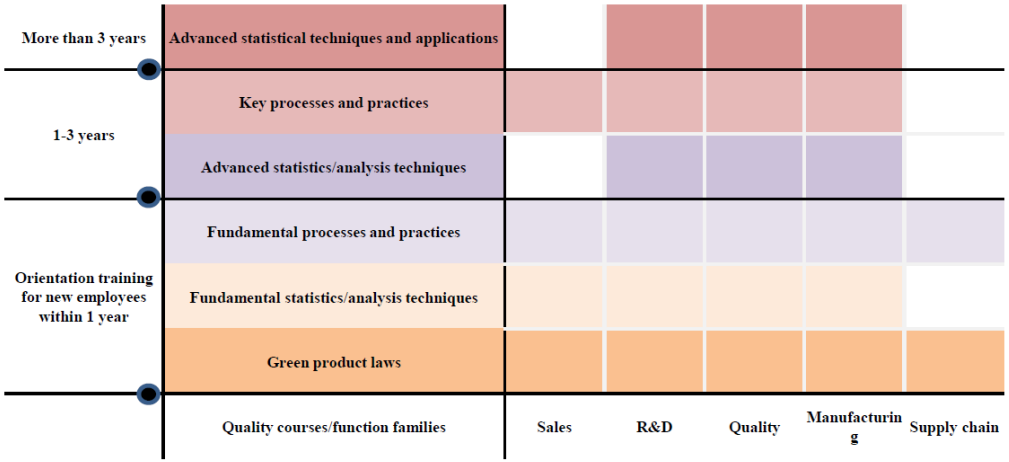
Ennostar

Featured Highlight
Lextar began establishing learning blueprints for all functional capabilities in 2023. Within a year of starting their jobs, new employees should clearly understand Lextar's green product requirements, related laws, and basic operational processes and fundamental statistical/analysis methods, and we plan to clarify key IATF16949 system processes and five main tools and techniques for new employees within the first three years of employment. We consider data collation, statistical analysis methods, and problem solving techniques to be important issues associated with quality, and work to strengthen data analysis and form a basis for management. Apart from quality, R&D, manufacturing, and other units directly associated with quality, we are also planning mandatory courses for corresponding upstream and downstream value chain sales units and supply chains.



At Lextar's Chuzhou Factory, we produced and distributed "Quality Cards for 2023" to all employees to promote corporate quality and green product polices, as well as quality targets. In 2024, our subsidiary Unikorn will host a quality poster competition and establish a section for sharing new quality information.

Talent Training Programs

Establishment of Learning Blueprints

All Group subsidiaries attach great importance to cultivation of professional skills and management capabilities in corporate talent. Each subsidiary has established individual learning blueprints (as described below), and we plan to establish Ennostar University in 2025 to integrate all learning blueprints. We began by reviewing all functional categories and understanding all functional responsibilities, then conducted interviews, before finally formulating learning blueprints that adhere to overall talent cultivation strategies at the Group. We hope that all Group employees can gradually complete their learning blueprints in future and acquire solid professional capabilities for performing their duties.

EPISTAR: Reviews college training blueprints each year, then fine-tunes and organizes courses based on the requirements for each year, and also plans establishment of professional unit blueprints to realize career developments for all employees.

Lextar: Established learning blueprints based on functional categories to allow our colleagues and supervisors to review the training completed by themselves and their subordinates through announcements on the learning system homepage.

Unikorn: Prioritizes introductory semiconductor courses and product application courses (such as introduction to third-generation semiconductor manufacturing and Micro LED process technology courses) based on the basic knowledge and technological capabilities needed by semiconductor foundries and for corporate R&D. Implementation of quality concepts is also a focus for training

courses at Unikorn, and therefore we prioritize basic quality concept and quality technique courses organized by internal lecturers. In 2023, Unikorn's six core functional capabilities (analytical thinking, problem solving, diligence and responsibility, teamwork, communication and coordination, and ethics and integrity) and management capabilities for managers of all levels were determined following assessments and discussions between senior executives. After confirming these functional capabilities, we plan to establish function-oriented training systems to complete Unikorn's employee learning maps.

Online Learning Courses

The Group has self-produced multimedia online learning courses so our colleagues can implement post-class reviews and independent learning without being limited by time and space constraints. Our online courses include mandatory courses for all employees. These courses helped our colleagues complete education and training on Group subsidiary regulations for each year through the online texts and tests on our learning platform. In 2023, we organized 8 courses, including "Management and Promotion of Group Ethical & Moral Conduct and Human Rights Policies & Protection Principles" and "Promotion of Human Rights Protections and Labor-Management Communications." A total of 11,884 people completed training.

All subsidiaries are gradually uploading their online courses based on their respective needs and strategies.

Examples of self-produced online multimedia courses	
EPISTAR	Produced an animated "Core functions 2.0" course to help colleagues understand core functional capabilities and how to apply these capabilities at work
Lextar	Prioritizes uploads of cross-functional mandatory "Fundamental Quality Courses" and mandatory product introduction courses for new employees, and also produced digital courses for new managers to help them understand required legal knowledge and operational processes in the shortest possible time.
Unikorn	Prioritizes compilation of "Global Economic Conditions and Prospective Industrial Outlooks" to provide senior executives and business units with knowledge required for decision-making, as well as courses which help new employees quickly understand basic KLayout operations and basic FMES operations.

Manager Performance Management Training

To promote our "development-oriented" performance management goals, the Group listed "incorporating performance on functional capabilities into appraisals" as a focus for change in 2023, and we formulated and promoted related plans based on current corporate conditions.

Lextar	Prioritized the "Functional capability experiences and assessments" course for managers at the business group level and below, using case studies to help managers identify "STAR"[18] contexts in work scenarios, observe behaviors, and objectively appraise subordinate functional performance. A total of 153 managers attended the class, achieving an attendance rate of 90% and an average satisfaction score of 9.3 out of 10 points. Additionally, we also used meetings and newsletters to promote the aims of our new systems, functional appraisal items, and scoring methods to managers and employees so our colleagues could conduct self-assessments and appraisals of functional capabilities with full awareness.
EPISTAR	Hosted "Management functions 2.0" course for managers at the business group level and below. A total of 408 managers attended the class, achieving an attendance rate of 93% and an average satisfaction score of 4.5 out of 5 points; all managers who did not complete training received related documents for perusal. We used videos, case discussions, group exercises, and experiential activities to help managers of all levels understand the significance of management functions and related applications. After the course, we invited managers to select a functional capability and practice writing "Individual Development Plans" which could be applied to themselves or their subordinates.

With the help of this course, functional performance appraisals were successfully completed for the first time through year-end

[18] STAR is an acronym for four main elements: Situation, Task, Action, Result.

performance processes. All of our colleagues were able to complete these processes in accordance with regulations, and proposed functional STAR examples were of higher quality than before.

Lextar functional capability experiences and assessments course	EPISTAR management function course

Development-Oriented Rotation Program

To facilitate sustainable talent developments, Lextar continues to promote various talent cultivation plans. Firstly, we launched the “Comprehensive development assessment” for senior-level talent at the 2021 year-end personnel performance appraisal meeting; VPs offered development suggestions regarding the functional performance and potential of business group managers, and these suggestions were implemented in subsequent personnel appraisal meetings (organization and promotion personnel appraisal meetings) so key talent could take on responsibilities according to plan and accumulate experiences. In order to establish a succession team for key positions and accelerate positioning strategies for new businesses, Lextar initiated a rotation program for all divisions at the beginning of 2023 to help managers take stock of their talents and implement cross-functional rotations based on their development potential and job characteristics, thereby expanding the scope of capabilities for all personnel. In 2023, a total of 53 employees underwent rotations at R&D, business, manufacturing, and supply chain units. We also completed organizational changes in December to add a number of key positions in our business units which were filled by internal personnel. A total of 11

people[19] received promotions or were rotated (including center level and business group level senior executive positions).

Key Talent Team

To align with Group organizational integrations and exert Group synergies, we developed Group talent development plans and cultivated key talent at the Group level to reduce risks of vacancies in key positions or unavailability of rotation candidates within the organization. We established a Talent Development Committee at the end of 2023. Committee members personally appointed by the chairman discuss the organization's five-year strategic plans at quarterly Committee meetings to identify key positions within the organization, inventory talent, track talent information, and formulate plans for talent development mechanisms to help managers and employees develop trust in organizational developments and commitments, revitalize human resource structures, and strengthen organizational competitiveness.

Featured Highlight: 2023 TTQS (Talent Quality-Management System) Evaluations
EPISTAR participated in the Workforce Development Agency's TTQS (Talent Quality-management System) evaluations and received a silver award. We have participated in these evaluations six times over the years and received six silver awards, showing that the Workforce Development Agency recognizes EPISTAR's efforts in talent cultivation. EPISTAR adheres to core TTQS axes (Plan, Design, Do, Review, Outcome) in cultivating talent. Apart from implementing training, we further proposed continued improvement plans such as periodic review of training blueprints, restructuring of functional capabilities, development of lecturer selection forms, and expansion of lecturer pools.

[19] Only included personnel in business units; no other units were included.

Development-Oriented Performance Management

The Group has formulated an appraisal system for performance management and development which aims to enhance overall individual and organizational performance. We implement bidirectional communications with our employees and appraise employee development using fair and reasonable performance appraisal procedures that are used as a basis for promotion, salary adjustments, bonus distributions, career development, and training. Our regulations stipulate that all employees who have worked at the Group for more than three months (including indirect labor and direct labor) are required to undergo mid-year and year-end appraisals. Employees are graded based on their work product and competencies. The Group provides appropriate severance pay measures in accordance with relevant laws to protect employee work rights.

Company	Male		Female		Indirect labor		Direct labor	
	Number of persons	Participation rate	Number of persons	Participation rate	Number of persons	Participation rate	Number of persons	Participation rate
Ennostar	82	100%	205	100%	287	100%	No direct labor	No direct labor
EPISTAR	3,609	100%	3,378	100%	3,498	100%	3,489	100%
Lextar	785	100%	497	100%	1,033	100%	249	100%
Unikorn	231	100%	181	100%	272	100%	140	100%
Lextar Electronics	789	100%	462	100%	526	100%	725	100%
Episky	748	100%	500	100%	545	100%	703	100%

Epicrystal	241	100%	195	100%	217	100%	219	100%
Can Yang	360	100%	215	100%	316	100%	259	100%
Total	6,845	100%	5,633	100%	6,694	100%	5,784	100%

5-2 Diversity, Equity, and Inclusion

5-2-1 Protection of Human Rights

The Group complies with internationally recognized labor rights, adheres to the guiding principles of the Universal Declaration of Human Rights (UDHR), and manages human rights in accordance with the Responsible Business Alliance (RBA) Code of Conduct, strengthening respect for human rights by protecting human rights; establishing a diverse, equal, and inclusive workplace; and building smooth communication channels.

Human Rights Policies

The Group's Human Resources Center jointly formulated human rights policies in three languages which were released on all Group corporate websites following approval by our chairman; these policies are applicable to all Group corporations, including all employees and operational activities, and we also require compliance with these standards from our suppliers, outsourcing vendors, contractors, clients, and other value chain partners. The Group adheres to the "United Nations Global Compact," "Universal Declaration of Human Rights," "United Nations Guiding Principles on Business and Human Rights," "Organisation for Economic Cooperation and Development Guidelines for Multinational Enterprises," "Social Accountability International (SAI)," "Responsible Business Alliance (RBA)," and other relevant labor laws and international human rights standards. We have established human

rights regulations to ensure protection of human rights in all operational activities as well as compliance with employment laws and international standards.

The Group is committed to shaping sound environments with beneficial human rights protections that prevent operational activities from resulting in human rights violations or negative impacts. We have formulated the following principles:

1. Prohibition of human trafficking and forced labor.
2. Prohibition of child labor.
3. Provide employees with working hours and salaries that adhere to legal regulations.
4. Eliminate all forms of inhumane treatment.
5. Respect diverse cultures and eliminate illegal discrimination.
6. Respect freedoms of association.
7. Provide a safe, healthy, clean, and comfortable working environment for all employees.
8. Uphold the highest business ethics standards

Due Diligence Procedures for Human Rights Issues

Ennostar adheres to the RBA Code of Conduct and assesses risks using the RBA self-assessment questionnaire (SAQ), as shown in the figure above. We implement, monitor, and manage mitigation and prevention measures for identified risk issues:

Human Rights Risks	Prevention or Remedial Measures	Implementation Progress

Promotion of human rights policies	● Annual promotions of human rights issues	● In Taiwan, a total of 4,880 employees participated in education and training (100% of participants completed training) ● In China, promotions were incorporated into newcomer induction training documents/homepage of corporate websites
Freedom to seek employment and prohibition of forced labor	● Implemented zero-fee policy for foreign migrant workers and promoted freedom to seek employment ● Convened regular (quarterly) communication meetings with foreign migrant workers	● 100% execution each year ● 12 meetings in northern, central, and southern regions
Work hours and salaries that comply with legal regulations	● Regular reports and early warning mechanisms: Weekly attendance records were sent to our colleagues and monthly working hour reports were sent to supervisors	● 100% execution each year
Prevention of sexual harassment and unlawful infringement in the workplace	● Set up dedicated 7885 complaint hotline and email address (Internal responsible unit: employee relations units; external channels: audit units) ● The Grievance Handling Committee is a permanent organization which is dedicated to complaint handling.	● A total of 3 complaints were submitted in 2023, and all cases have been closed.
Non-	● Amended recruitment processes and personnel charts	● 100% execution each year

discrimination	to ensure non-discrimination	
Freedom of association	● Implemented promotions and training related to labor-management meetings for new employees and all other employees to ensure that all colleagues were made aware of their right to participate in said meetings.	● All factories convened quarterly labor-management meetings (100% execution)
Environment, health and safety	● Established comprehensive workplace health protection and care system covering hazard prevention, health care, health management, health promotion, and maternal protection to promote employee health. ● Formulated environment, health and safety management manuals and occupational health and safety regulations in accordance with international standards, local regulations, and established the Environment, Safety and Health Committee which convenes either quarterly (head office) or monthly (all factories) meetings.	● Quarterly Environment, Health and Safety Committee meetings are chaired by our president and monthly meetings are convened by factory supervisors (100% execution)

In 2023, the Ennostar Group reviewed and assessed all human rights issues related to discrimination, indigenous rights, child labor, forced labor, and obstructions to freedoms of association (union formation) to confirm that no disputes or major human rights violations occurred at any Group sites.[20]

[20] Definition of major legal violations: Incidents incurring fines of more than NT$300,000

Migrant Worker Agency Audits

To protect the rights of migrant employees and maintain order within the labor market, we audit migrant worker agencies once every year in accordance with local and international labor agency management regulations to ensure that these agencies abide by law; provide legal, equal, and transparent services; protect migrant worker rights; and promote reasonable operations in the labor market. Audit procedures include document audits and dormitory audits. Document audits encompass personnel management, recruitment services, resignation/departure/repatriation procedures, complaint channels and handling, and implementation of recruitment conditions; dormitory audits encompass human rights, management records, dormitory facilities, and environmental safety. All EPISTAR factories passed audits in 2023, demonstrating EPISTAR's continued commitment to responsible business practices and confirming that our operations adhere to the highest standards in the industry.

Human Rights Education Activities

Human Rights Policies Education and Training

The Group regularly organizes annual "human rights policies" courses and tests for all Group personnel. Our human rights education and training in Taiwan were attended by 4,880 participants over a total of 4,880 training hours, achieving a training completion rate of 100%. The courses covered gender mainstreaming, sexual harassment prevention, gender equality, labor laws, and the Labor Standards Act, ensuring that our employees understand our corporate human rights policies, thereby preventing human rights risks. We also disseminate information on human rights policies and demonstrate our emphasis on human rights through irregular newsletters to enhance employee awareness of human rights issues.

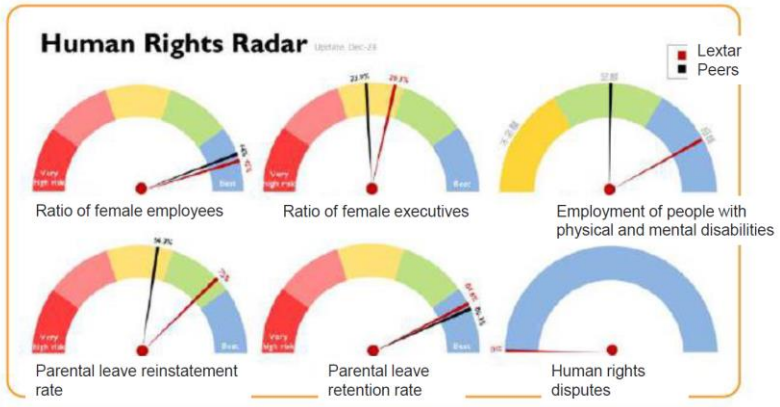
Act of Gender Equality in Employment, Sexual Harassment Regulations, and Case Analyses

In response to the Me Too movement and governmental amendments to the three gender equality laws, the Group's main subsidiaries arranged for legal experts to conduct education and training on related regulations and cases for human resources and legal personnel to strengthen their handling capabilities of related issues. In 2023, a total of 80 people participated in training, and average satisfaction scores reached 4.98 points (on a five-point scale). Training course topics included:

1. Establishing a friendly workplace that promotes gender equality (Act of Gender Equality in Employment: "Prohibition of gender discrimination" and "Measures to promote equality at work")
2. Sexual harassment definitions and related regulations (three sexual harassment prevention laws and amendments)
3. Employer workplace sexual harassment prevention measures
4. Workplace sexual harassment grievances and handling processes
5. Discussion of workplace sexual harassment cases

Human Rights Radar

Lextar has incorporated human rights concerns into various management measures. In addition to helping our colleagues understand human rights issues, we also transparently disclose human rights indicator information on our human rights radar dashboard to manage specific implementations for various human rights issues. Our performance on all indicators exceeded industry averages, apart from parental leave without pay retention rates, which were slightly lower than our peers, but still reached 84.6% and ranged in the highest ranking.



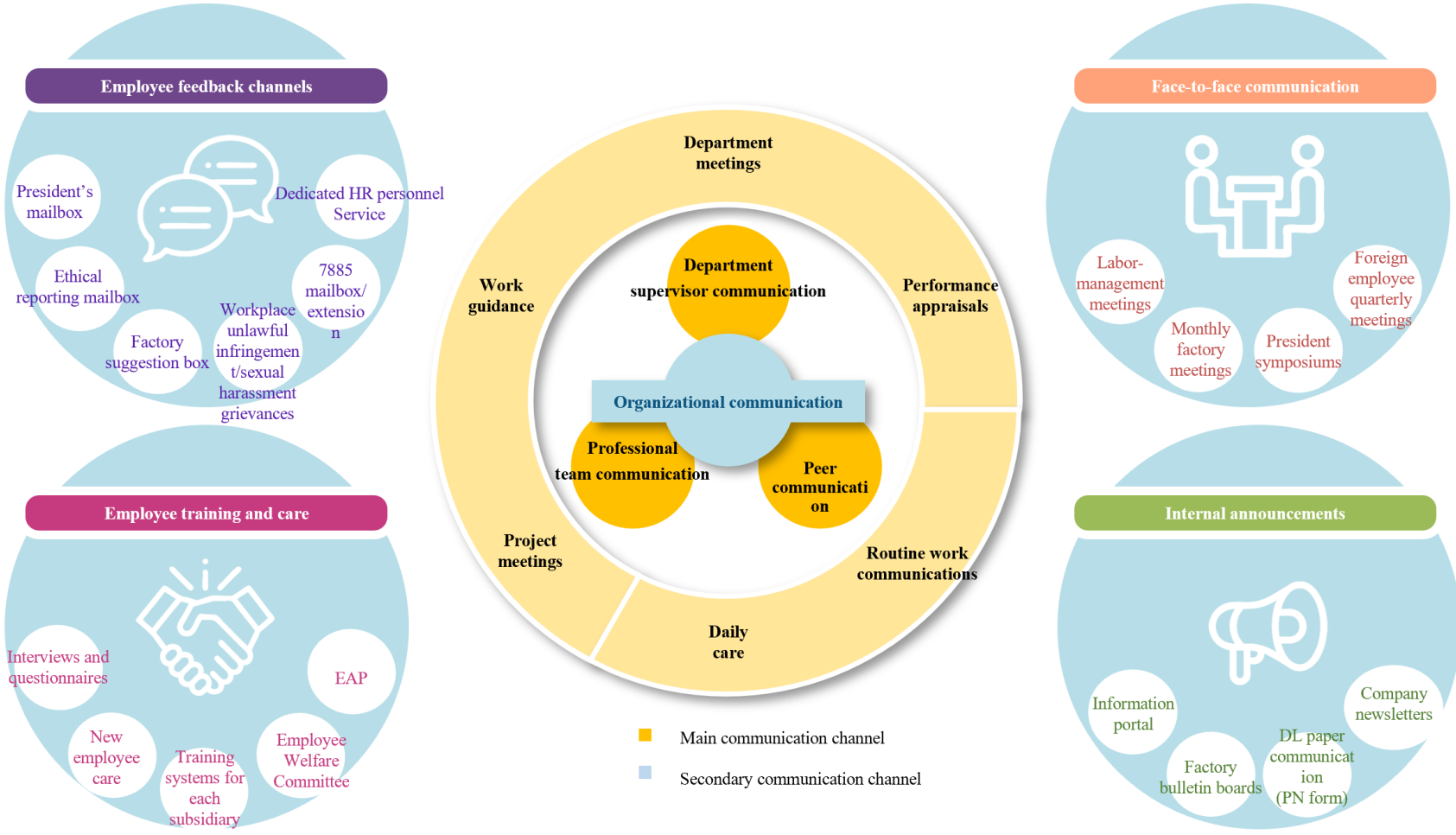
Comparison chart for December 2023

Indicator	Lextar (Indicator 1)	Industry average (Indicator 2)
Ratio of female employees	45.0%	44.0%
Ratio of female executives	28.3%	23.9%
Parental leave reinstatement rate	75.0%	54.3%
Parental leave retention rate	84.6%	84.3%
Employment of people with physical and mental disabilities	Exceeded requirements	Met requirements
Human rights disputes	0	-

Gender Equality Scavenger Hunt Activity

Unikorn continues to build gender-friendly workplace environments and actively promote gender equality. On the eve of Mother's Day, we invited our colleagues to participate in a scavenger hunt activity while carrying a five-kilogram weight so they could experience what it would be like to be pregnant. This activity helped our colleagues experience and understand the difficulties and inconveniences of pregnant women, inspiring their empathy toward mothers, and promoting joint establishment of gender-friendly workplace awareness and environments. A total of 30 people participated in this activity, which garnered a satisfaction score of 95.78 out of 100 points.

5-2-2 Employee Communication


Employee feedback channels
President's mailbox
Dedicated HR personnel Service
Ethical reporting mailbox
7885 mailbox/ extension
Factory suggestion box
Workplace unlawful infringement/sexual harassment grievances
Employee training and care
Interviews and questionnaires
EAP
New employee care
Training systems for each subsidiary
Employee Welfare Committee
Department meetings
Work guidance
Performance appraisals
Project meetings
Routine work communications
Daily care
Department supervisor communication
Organizational communication
Professional team communication
Peer communication
Main communication channel
Secondary communication channel
Face-to-face communication
Labor-management meetings
Foreign employee quarterly meetings
Monthly factory meetings
President symposiums
Internal announcements
Information portal
Company newsletters
Factory bulletin boards
DL paper communication (PN form)

Labor-Management Communication

Although the Ennostar Group currently has no labor unions or collective agreements with employees, we convene regular quarterly meetings to exercise relevant duties, decide on employee welfare policies, and promote employee activities. All reports are filed within the time limits required by competent authorities. Major operational changes and related response measures that affect employee interests are communicated through management meetings, labor-management meetings, and other channels before implementations, and we notify affected units and employees in advance in accordance with the Labor Standards Act.

Indicator	Company	Number of sessions	Description	Frequency
Labor-management meetings	Ennostar, EPISTAR, Lextar, Unikorn	56	Establishes positive labor-management interactions. Labor representatives can put forward employee suggestions or propose matters for improvement, while management representatives can report on corporate management information or make commitments related to employee suggestions as appropriate. We conduct collective negotiation procedures with employees each quarter and maintain harmonious labor-management relations through positive communications. Changes to labor conditions are all discussed and approved in advance through labor-management meetings.	Once every quarter at each factory

Employee Welfare Committee meetings	Ennostar, EPISTAR, Lextar, Unikorn	56	Determines employee welfare policies and promotes a variety of employee activities	Once every quarter at each factory
Meetings with the president	EPISTAR (EPISTAR communication meetings) Lextar, Lextar Electronics (Lextar Talk) Unikorn (Unikorn Talk)	6	Our main subsidiaries regularly organize communication meetings hosted by their presidents, who talk with attending colleagues and explain corporate visions and operational blueprints. Our colleagues can also raise questions or propose suggestions associated with the company to enhance two-way communication.	Twice a year
Lextar News (internal publication)	Lextar	2	*Lextar News* promotes Lextar's operational achievements, new technological developments, and events to colleagues, helping them to focus on joint development aims.	Issued every six months

Quarterly Migrant Worker Meetings

To establish harmonious, equal, and friendly workplace environments, EPISTAR hosts quarterly northern, central, and southern region meetings for migrant workers; each meeting was attended by approximately 20-30 participants. Attendants included migrant workers, dormitory managers, and human resources and unit managers. The meetings explained and promoted key announcements and welfare measures for the quarter, and also commended outstanding workers while offering two-way communications with our colleagues through Q&As which discussed problems encountered in life and work. As our production line employees work in shifts, we also post meeting details on bulletin boards to avoid information asymmetry for colleagues who did not attend these meetings. After concluding quarterly meetings, EPISTAR uses interviews and questionnaires to ensure that all migrant workers are treated fairly and to build a friendly and inclusive workplace.

Employee Grievance Mechanisms

All grievance reports received by the Group from both internal and external channels are handled confidentially. We have established a dedicated handling committee for special complaints: committee members include the heads of the legal affairs department, human resources department, and many other divisions. Incidents that involve general employees are reported to department managers and incidents that involve directors or senior managers (insiders) are reported to the Board and independent directors. We have adopted

appropriate measures in compliance with law to protect informant identities and report content, and we pledge that informants will not receive inappropriate disciplinary actions due to their whistle-blowing.

Substantiated violations of our corporate bylaws and ethical management policies are punished in accordance with relevant regulations, and relevant content may be disclosed through labor-management meetings if appropriate. We take necessary legal proceedings for serious violations, and dismiss and blacklist said violators. In 2023, we added a new communication channel (7885 QRC) so our colleagues could immediately report issues at any time using their mobile phones.

Internal Grievance Channels

Channel	7885 QRC	Employee relations feedback hotline	Dedicated employee relations email	Direct communications with employee relations personnel	Labor-management meetings/contact labor representatives	Factory employee suggestion boxes
Responsible unit	Employee relations department					

Five-Step Grievance Handling Procedures

Ennostar

Employee Relations Department

1. Initiate investigations after receiving complaint
2. Determine whether complaint can be substantiated
3. General complaints:
   Transferred to related units for handling
   Special complaints:
   Form handling committee
4. Substantiated complaints are categorized as general complaints or special complaints (workplace violence/sexual harassment)
5. General complaint post-investigation responses
   Known complainants: Respond to complainant and complainee
   Anonymous: Case studies or policy promotions
   Close complaints or allow one chance for appeal

Number of Reports Received Through Employee Suggestion Feedback Channels

We have established a reporting system for professional ethics violations on our official website as well as a president's mailbox (personally handled by the president) on the homepage of our intranet. To protect the information of related parties, our system is designed to keep sender IPs confidential, and our suggestion boxes are placed in locations which cannot be filmed by surveillance cameras so the rights of our colleagues are protected when they make anonymous reports. In 2023, we received 82 suggestions, 5 of which were grievances; 100% of cases were closed. Our suggestions and feedback channels fully support anonymous reports and all reports are handled confidentially. We have also established anti-retaliation regulations to prevent employees from being treated adversely.

To ensure that all employees can express their opinions, our dedicated employee relations unit has provided a bilingual online mailbox and hotline. Additionally, we responded to received suggestions and tracked improvements in 2023 by conducting one-on-one meetings with 148 employees.

5-2-3 Friendly Work Environments

Friendly Canteen

China has 56 ethnic groups, and the Hui people in particular have many dietary restrictions and taboos. Lextar Electronics, which is located in Chuzhou, took care of Hui employees by preparing special meals to reassure our colleagues and promote ethnic diversity, equity, and inclusion (DEI) in the workplace.

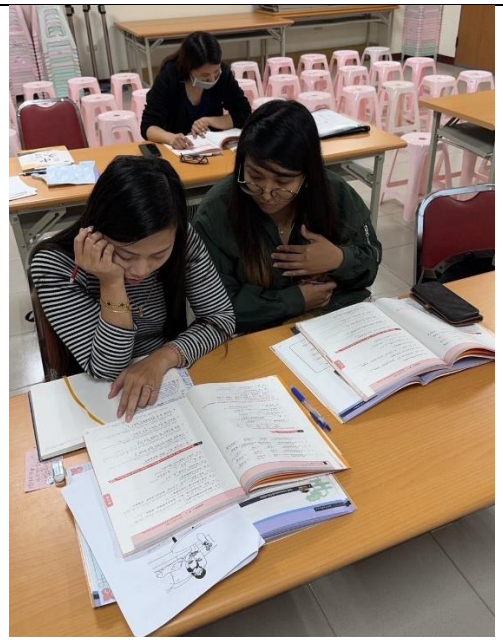
Long-Term Retention Program for Migrant Workers

To promote cultural prosperity and build a harmonious, fair, and friendly workplace, the Group hosted a photo exhibition at our Southern Taiwan Science Park Factory and invited our fellow migrant workers to submit photo entries associated with their lives in Taiwan, their hometowns, Mother's Day, and thoughts of home. The exhibition was hosted in tandem with an event offering free massages to female colleagues on Mother's Day, and we invited charities to set up booths selling desserts from Taiwan and Southeast Asia to build a diverse and friendly workplace while fulfilling our social responsibilities. The exhibition received 81 entries, and we invited our fellow migrant workers to vote for the two best photos. Our colleagues stated that they hoped we could host these types of meaningful events every year.

Chinese Classes for Migrant Workers

The Group offers free Chinese classes to motivate and retain outstanding migrant workers, facilitate cross-cultural exchanges, and reduce cultural conflicts. These classes were offered at our Tainan Factory in 2023 and will subsequently be implemented at other factories. When developing these classes, we invited outstanding senior migrant workers to assess class content, and provided their

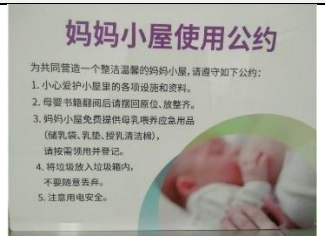
feedback to collaborating schools for reference. In 2023, a total of 16 migrant workers participated in our Chinese classes, and the classes received a very high satisfaction score of 9.8 out of 10 points. These migrant workers plan to take the TOCFL in March 2024 and the fees for their first examination will be subsidized by the Group.



Student feedback: Spending time on Chinese learning helped us improve our communication skills; if we are able to pass the exam, this will indirectly help us stay at the company and continue working.

Maternal Protection and Care

The Group attaches great importance to care of employee health before, during, and after pregnancy. We not only provide full protection mechanisms, but also established maternity-friendly workplace environments with pregnancy parking, nursery rooms, and other tangible assets. We conducted maternal health risk assessments on workplace environments; identified possible hazards, control measures, and risk classifications in operational areas; and required our operational departments to reference physician suggestions regarding operational adjustments and environmental improvements to provide maternal health care for employees. We track employee health conditions through maternal risk assessment reports and health care surveys, and adjust environments and operations as needed.

Lactation room	Nursery	Breastfeeding room notice	Pregnancy parking
			

Employee maternal protection and care services include the following:

Measures	Description

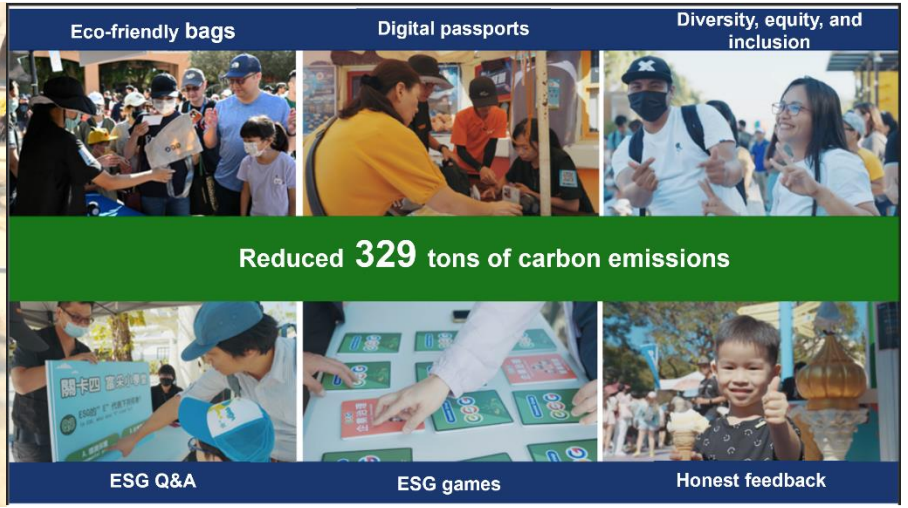
Dedicated cleanroom clothing/pregnancy parking	We provide dedicated yellow cleanroom clothing and parking spaces closest to exits for our pregnant employees so they could quickly and safely arrive at work.
Welcoming Babies initiative	We encourage our colleagues to notify the health center of their pregnancy status as soon as possible so workplace health protection assessments for pregnant colleagues can be initiated. The health center confirms the number of pregnant personnel in each unit with unit assistants by email on the tenth of every month and arranges for factory physicians to provide maternal protection services. As part of our plan to build a friendly, healthy, and happy workplace, our pregnant colleagues can receive a pregnancy gift from our health center by showing their mother's handbook.
Women's health activities	To protect the health of female colleagues, Lextar hosts paid women's health activities every year to provide convenient and rapid Pap smears, transvaginal scans, and mammograms to our female employees.
Surveys for childrearing women	The health center confirms the number of personnel who are pregnant, on maternity leave, or breastfeeding at each unit with unit assistants by email every month, and survey results are compiled and reported to managers via email to protect the interests of childrearing female personnel.

Employee Welfare Committee

The Group established the Employee Welfare Committee in accordance with law to care for daily employee needs, maintain harmonious labor-management relations, and encourage employees to engage in reasonable recreational and leisure activities.

Committee members are nominated or elected from each department depending on the ratio of employees in each department. The Committee convenes regularly once every quarter to exercise their duties, decide on employee welfare policies, and promote employee activities.

Group Family Day
We hosted the first Group Family Day in 2023, encompassing 12 Group companies and attracting nearly 6,000 participants. To align with the Group's ESG goals, all preparations for this event were conducted digitally. In future, we will continue to host Group activities and invite everyone to become part of One Ennostar, One Family.



Unikorn Giant Card-Stacking Competition
Unikorn hosted the Unikorn Giant Card-Stacking Competition on Engineer's Day, facilitating team building through this fun card-

staking activity and helping our colleagues learn teamwork skills and problem-solving capabilities.

2023 Running Lextar

Lextar attaches great importance to the physical and mental health of employees and hosted the 10th Running Lextar road race in 2023, gathering 10 teams from Lextar and other Group companies who all worked to win the championship. This fun competition and road race encouraged our colleagues to exercise while building an atmosphere for teamwork.

Happy EPISTAR
To thank our colleagues for their contributions and build a positive and cohesive organizational atmosphere, EPISTAR began hosting the “Happy EPISTAR” activity starting in 2018, purchasing cookies handmade by charities and gifting them to all colleagues. We also launched the EPISTAR-exclusive puzzle-solving activity, MY EPISTAR, which was hosted online and allowed our colleagues to communicate with each other and solve puzzles. This bilingual activity enabled participation from colleagues at different factories, on different shifts, and of different nationalities. This activity received a satisfaction score of 90.93 out of 100 points.

5-3 Occupational Health and Safety

We implement a culture of safety and an occupational health and safety management system, promote physical and mental health in our employees and contractors through workplace safety management and comprehensive health care, and help to their strengthen work-life balance.

5-3-1 Occupational Health and Safety Management

Material Topic: Occupational Health and Safety | Base Year: 2021			
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
Zero major deficiencies	Achieved	1. Ensure zero major	1. Ensure zero major deficiencies

discovered during external ISO 45001 and CNS 45001 audits		deficiencies are discovered during external ISO 45001 and CNS 45001 audits 2. Maintain our record of zero major industrial safety incidents each year 3. Participate in selection processes for excellent occupational safety and health units organized by local science park administration offices every two years 4. Achieve 100% management of workplace hazard health risks in Taiwan and China factories 5. Implement diverse health promotions for 100% of employees 6. Achieve EAP satisfaction score of 90% 7. Obtain Accredited Healthy Workplace certificates for each year	are discovered during external ISO 45001 and CNS 45001 audits 2. Maintain our record of zero major industrial safety incidents each year 3. Participate in selection processes for excellent occupational safety and health units organized by local science park administration offices every two years 4. Achieve 100% management of workplace hazard health risks in Taiwan and China factories 5. Implement diverse health promotions for 100% of employees 6. Achieve EAP satisfaction score of 90% 7. Obtain Accredited Healthy Workplace certificates for each year
Zero major industrial safety incidents	Achieved		
Taiwan factories participated in annual selection processes for excellent occupational safety and health units organized by local science park administration offices	Selected in 2022 Completed short-term goal		
Achieved 100% management of workplace hazard health risks in Taiwan factories	Achieved		
Achieved EAP satisfaction score of 90%	Achieved		
Obtained Accredited Healthy Workplace	Achieved		

certificates for the year			
Responsible unit	Environmental safety and health management units of all Group subsidiaries		

The Group strives to promote a culture of health and safety. We ensure the health and safety of all employees and contractors through our comprehensive environment, health and safety management system, which adheres to ISO45001, RBA Code of Conduct, local regulations, and EHS system stipulations (ISO 14001, ISO 45001, CNS 45001). We established the “EHS Management Manual” and “Environment, Health and Safety Principles,” and also formed the “Environment, Health and Safety Committee” to identify, assess, and control hazards in workplace environments and operations. To actively keep informed of potential hazards in all processes, factory systems, equipment, and operations, all departments analyze health and safety hazards to prevent occupational disasters, and to achieve our goal of ensuring health and safety.

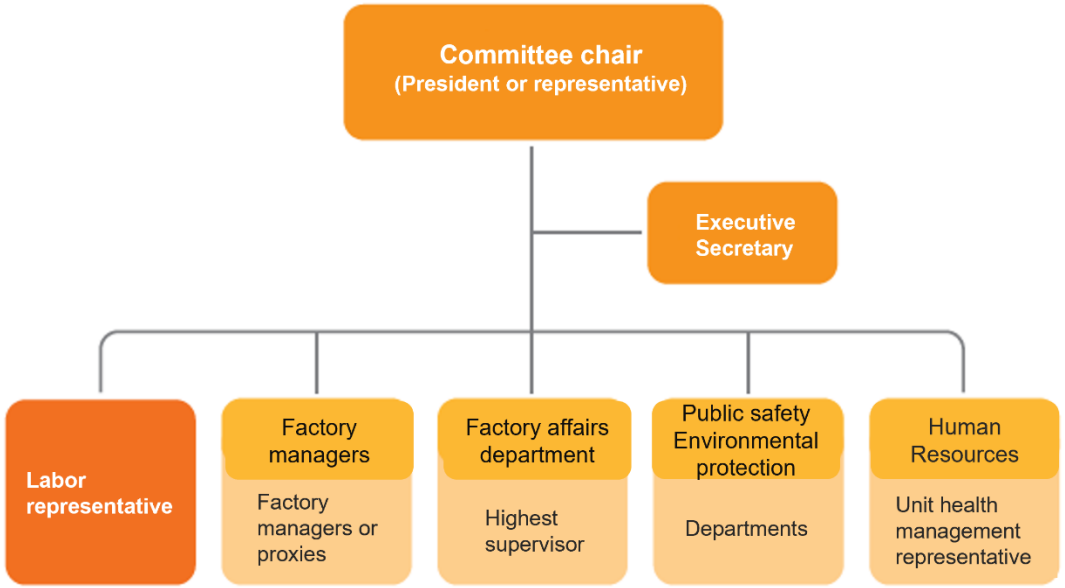
No major deficiencies were discovered in the Group’s internal audits, external ISO 45001 management system audits, and customer audits in 2023. Corrections for all deficiencies and suggestions associated with audits have been fully implemented, and we have passed ISO 14001 and ISO 45001 verifications. Our management systems encompass 100% of employees. Additionally, EPISTAR has obtained CNS 45001 certification.

Environment, Safety and Health Committee

All Group subsidiaries have established environment, safety and health (ESH) committees to discuss and coordinate ESH matters, formulate targets, and continue to promote improvement plans. We have established complete contractor management regulations as well as hazard identification, risk assessment, incident investigation, and emergency response procedures. We also strengthen safety risk awareness in our employees and contractors through rigorous occupational health and safety training, emergency response drills, and hazard communication courses.

The Group’s ESH Committee is convened each quarter by presidents or proxies. Factory-level ESH committee meetings are convened at least once every month by factory managers and meeting conclusions are applicable to all factories. Meeting attendees include committee members such as factory managers or proxies and the highest level managers from the R&D, support,

quality assurance, and human resource centers; environmental safety department representatives; and labor representatives, who are required to exceed more than one-third (33%) of committee members.

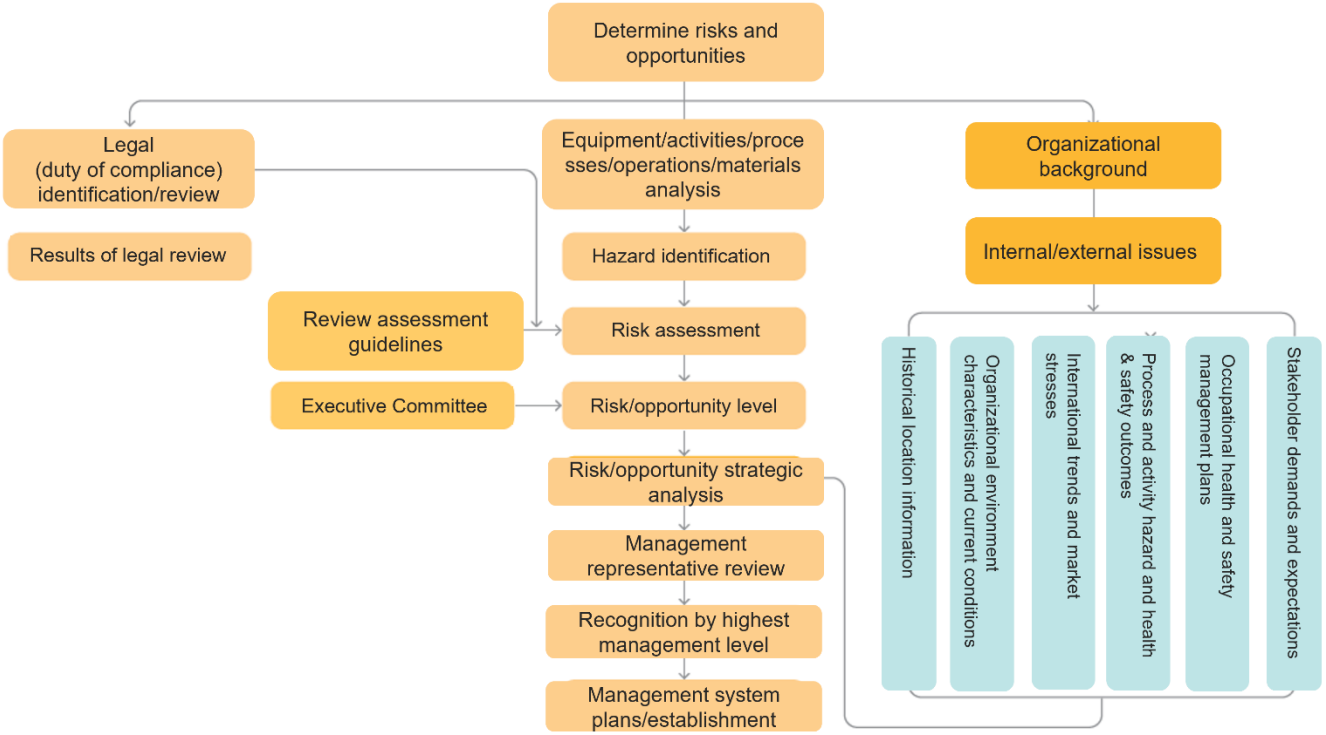


Hazard Identification and Risk Assessment

The Group has formulated identification and risk assessment procedures for major hazards. We analyze potential risks that could result in abnormalities using risk assessment technologies and have adopted preventive measures to lower probabilities and severity of hazards. Analysis of health and safety hazards are conducted in accordance with the activities/processes/scope of each department and associated steps/machinery and equipment/work items and other operational procedures. We classify physical,

chemical, biological, ergonomic, social, and other types of hazards, estimate their probabilities of occurrence, exposure risks, and levels of severity to identify risks and opportunities.

Process for determining and handling risks and opportunities:



Implementation of Internal and External Audits

To ensure that our EHS activities adhere to EHS management systems (ISO 14001, ISO 45001, and CNS 45001), regulations,

corporate policies and goals, and related processes, the Group formulated annual audit plans in accordance with the “Environment, Health and Safety Internal Audit Execution Procedures.” By implementing the Plan, Do, Check, Action processes of our EHS management system, we can discover existing and potential problems in advance, control risks, enhance system efficiency, assess overall benefits of EHS operations, and provide a reference for managers. We implement internal audits of management systems each year in accordance with the requirements of the “Environment, Health and Safety Internal Audit Execution Procedures.” Audit categories include routine inspections, factory and division level inspections, and business group level inspections; these audits are used to assess the operational performance of overall EHS management systems. In 2023, all factories implemented internal audits. For our factories in Taiwan, 10 items were marked for observation and suggested improvements; we discovered 1 major deficiency and 86 secondary deficiencies and suggested improvements for our factories in China. All deficiencies were corrected and suggested improvements were implemented. External audits (government institute, ISO, RBA, and customer audits) in 2023 did not uncover any major deficiencies. All deficiencies have been corrected.

Incident Notification and Investigation Procedures

The Group attaches great importance to the occupational safety of employees. We promptly implement notification procedures at the first instance after abnormal incidents have occurred and initiate emergency response mechanisms to reduce personnel injuries and operational losses. We have established “Incident Notification and Investigation Procedures”[21] which should be implemented following incident occurrence. Incident investigations are conducted with labor representatives to discover the root causes of incidents, and this information is used to formulate corrective and preventive measures. Incident investigation reports are simultaneously submitted to the safety committees of all factories, and we expand disclosures of investigation results when necessary to serve as a reference for implementing improvements at each factory and to prevent similar incidents from reoccurring.

[21] The “Incident Notification and Investigation Procedures” are applicable to all Group employees and contractors at all factories. Notifications and investigations are limited to factory incidents and traffic accidents. Incidents that occur outside of factories are only included in notification and data compilation procedures.

1 Incident occurrence	2 Notification	3 Emergency response	4 Investigation	5 Correction and prevention
Discover incidents	Notify internal units and seek assistance from local government institutes when necessary	Establish corresponding emergency response centers based on incident circumstances	Conduct incident investigations with labor representatives to discover root causes of incidents, and formulate corrective and preventive measures	Incident investigation reports are simultaneously submitted to the safety committees of all factories, and we expand horizontal investigations when necessary to serve as a reference for implementing improvements at all factories, and to prevent similar incidents from reoccurring.

Emergency Response Procedures

The Group has established “EHS Emergency Response Procedures” and adopts a hierarchical management system. We have established response organizations at the head office level and factory level. Abnormal incidents that occur in factories are initially handled on site, but if subsequent responses are required, we rapidly complete notification procedures and initiate factory emergency response mechanisms to reduce personnel injury and operational losses. If incident impacts continue to expand, response organizations at the head office level will be activated. All personnel comply with their required duties in responding to various

situations during emergencies.

These emergency response procedures are applicable to all Group employees and contractors at all factories. We conduct factory emergency response drills at least once a year. Apart from factory-wide emergency responses, the Group also encourages on-site units to independently organize their own drills for strengthening of regional response capabilities and to practice preliminary responses when abnormalities occur so that emergencies do not expand to the entire factory. In 2023, we conducted a total of 123 emergency response drills. To make evacuation drills more challenging and timely, we set standard emergency evacuation times based on the scope and number of workers at each factory in response to various emergency conditions.

Environment, Health and Safety Training

The Group organized 942 EHS training courses in 2023, including fire and disaster prevention drills, general knowledge of hazards, emergency evacuations, first aid training, emergency response training to chemical spills, factory-wide evacuation drills, and traffic safety warnings. Some of these courses were conducted online to enhance employee occupational safety awareness. To prevent language barriers from affecting occupational safety for our fellow migrant workers, all presentation files for health and safety education and training courses were made available in both Chinese and other native languages for migrant workers. Our in-person classes were equipped with interpreters who helped to answer questions from migrant workers in real time, ensuring that our fellow migrant workers fully understand how to implement occupational safety procedures and prevent hazards.

All 253 of our environmental health and safety personnel have obtained occupational health and safety certification and

qualifications. We conduct annual training and certification procedures for internal environmental health and safety auditors, and also undergo internal audits of environmental health and safety systems at least once every year.

Featured Highlight

Lextar Electronics Recognized by State Council Fire Protection Appraisal Team

The second State Council safe production and fire protection appraisal and inspection team conducted fire protection appraisals and inspections on Lextar Electronics. The appraisal team listened to Lextar Electronics reports on “factory-in-factory” fire protection management tasks; inspected corporate fire control rooms, fire pump rooms, and other fire protection facilities; and checked all software information associated with fire protection and management. The appraisal team fully affirmed the work Lextar Electronics had done in clarifying fire safety responsibilities, strengthening fire safety management, and building a fire safety culture.

Management of Work-Related Injuries

The Group attaches great importance to safe workplace environments for employees and contractors. To prevent occupational disasters, our environment, health and safety department implements periodic and non-periodic EHS investigations, and invites managers ranking above factory department supervisors to participate in monthly EHS investigations. Defects are recorded by

responsible units, who also assess related correction and response periods; all defects are tracked until they have been corrected.

Statistics on Occupational Injuries[22]

In 2023, the Group's employees incurred 14 work-related injuries, none of which were high-consequence work-related injuries. The main injury types included bumps and falls, and there were no fatalities. We explain corrections to the health and safety committee after occupational injury incidents occur. Apart from strengthening disseminations related to these work-related injuries, we also inspected the locations where injuries occurred and the equipment that caused the injuries to prevent similar injuries from reoccurring.
1 contact with hazardous substances/4 bump injuries/2 cuts/2 crush injuries/3 falls/1 electric shock (burn injury)/1 fracture

Region	Gender	Occupational disasters		C Number of high-consequence work-related injuries	D Total number of employees	E Total number of work-related injuries (=A+B)	F Total work hours (=D*8*T)	G Occupational injury rate (=E/F*200,000)	H High-consequence work-related injury rate (=C/F*200,000)	I Total days away from work	J Total employee-days (=D*T)	K Absence rate (=I/Jx100%)	L Lost workdays	M Lost workday rate (L/F*200,000)
		A Number of injured personnel	B Number of fatalities											
Factories in Taiwan	Female	1	0	0	2,332	1	4,626,688	0.04	0.00	3.00	578,336	0.00%	3	0.13
	Male	5	0	4	2,566	5	5,090,944	0.20	0.16	22.00	636,368	0.00%	126	4.95
Factories in China	Female	2	0	0	1,362	2	2,702,208	0.15	0.00	70.00	337,776	0.02%	70	5.18

[22] Actual number of working days in 2023: 248 days

	Male	6	0	0	2,859	6	5,672,256	0.21	0.00	37.00	709,032	0.01%	36	1.27
Total		14	0	4	9119	14	18,092,096	0.15	0.04	132.00	2,261,512	0.01%	235	2.60

Work-Related Ill Health

No work-related ill health incidents or mortalities occurred at our factories in 2023.[23]

EPISTAR and Unikorn incurred 3 fines due to violations of occupational safety laws; all violations were immediately corrected and we paid the fines in accordance with law. Violation details were as follows.

Paragraph 2, Article 43 of the Occupational Safety and Health Act	In July 2023, one of our colleagues deviated from standard operating procedures and did not don cleanroom clothing; a bottle burst when they were preparing to install source materials in a machine, resulting in an eye injury. The injury was immediately washed with water for 30 minutes, following which said employee was sent to Mackay Hospital for emergency treatment. After initial diagnosis and treatment, the employee was transferred to Chang Gung Memorial Hospital (Linkou) for treatment as Mackay Hospital was not equipped with a night ophthalmologist. The employee was hospitalized for treatment following physician assessment, and our occupational safety unit notified competent authorities in accordance with Paragraph 2, Article 37 of the Occupational Safety and Health Act. After this incident, we immediately disseminated information on source changing processes to all colleagues; revised our standard operating procedures; strengthened operational safety, personnel education and training; and thoroughly implemented management of personal protective gear. Our injured colleague suffered no lasting effects and has now returned to work.

[23] Diagnosis certificates from a hospital occupational medicine specialist are required to confirm occupational diseases. Work-related ill health can include acute, recurring, and chronic health problems caused or aggravated by work conditions or practices, including musculoskeletal disorders, skin and respiratory diseases, malignant cancers, diseases caused by physical agents (e.g., noise-induced hearing loss, vibration-caused diseases), and mental illnesses (e.g., anxiety, post-traumatic stress disorder).

Paragraph 1, Article 6 of the Occupational Safety and Health Act	The Hsinchu Science Park Bureau labor inspection section conducted checks on Unikorn factories in July 2023 and found that some health and safety equipment and measures did not adhere to regulations as single cylinders should be immobilized using double chains. We immediately implemented corrections and paid fines in accordance with law.
Paragraph 1, Article 26 of the Occupational Safety and Health Act	The Hsinchu Science Park Bureau conducted a spot check of Unikorn's contractor hazard notification records and found that "No hazards" had been checked on one form. Bureau inspection personnel determined that there were still some hazards in public areas that could cause falls/slips, indicating that contractors did not provide notification of health and safety matters in accordance with regulations. We found that said equipment contractor entered our factories to modify machinery programs and did not perform any construction activities, which was why the contractor personnel who entered our factories checked the "No hazards" option on the form. We immediately implemented corrections and paid fines in accordance with law.

Ergonomic Engineering Technologies

Combining technologies and tools is key for occupational safety and disaster prevention. Apart from possessing outstanding technologies, occupational safety and disaster prevention also requires use of tools that support decision-making on safety matters. Development of tools for online hazard assessments, emergency responses and decision-making support, safety cost analysis, and optimization not only provides effective support, but also gives the best assistance to safety and disaster prevention personnel.

The Group identified some occupational health and safety challenges such as occupational musculoskeletal injuries and diseases. In response to these challenges, we used ergonomic engineering technologies to improve postures and prevent injuries from repeated tasks and load-bearing work. We also applied ergonomic engineering technologies to occupational health and safety management, as well as to prevent slips, falls, and other occupational accidents.

In future, we will continue to introduce smart technologies and develop new assessment technologies, focusing on assessment and improvement of exposure factors associated with occupational musculoskeletal injuries and diseases, human-machine interface designs, and management systems. By widely reviewing and analyzing exposure factors, we provide convenient assessment and

improvement tools that help us to develop pragmatic improvement and management strategies, and reduce impacts on workers.

Activities for Enhancing Safety Awareness

EHS Competition

The Group not only strengthens safety risk awareness in employees and contractors through rigorous occupational health and safety training, emergency response drills, and hazard communication courses, but also uses EHS competitions and other fun activities to enhance safety awareness in employees.

EHS Knowledge Competition	
Several of our factories in China hosted EHS knowledge competitions for the first time this year to strengthen employee prevention capabilities and understanding of hidden dangers in the workplace. After the competition, winning colleagues and teams shared ENS knowledge with their respective units and continued to promote the importance of these concepts to build safe, healthy, and happy workplace environments.	

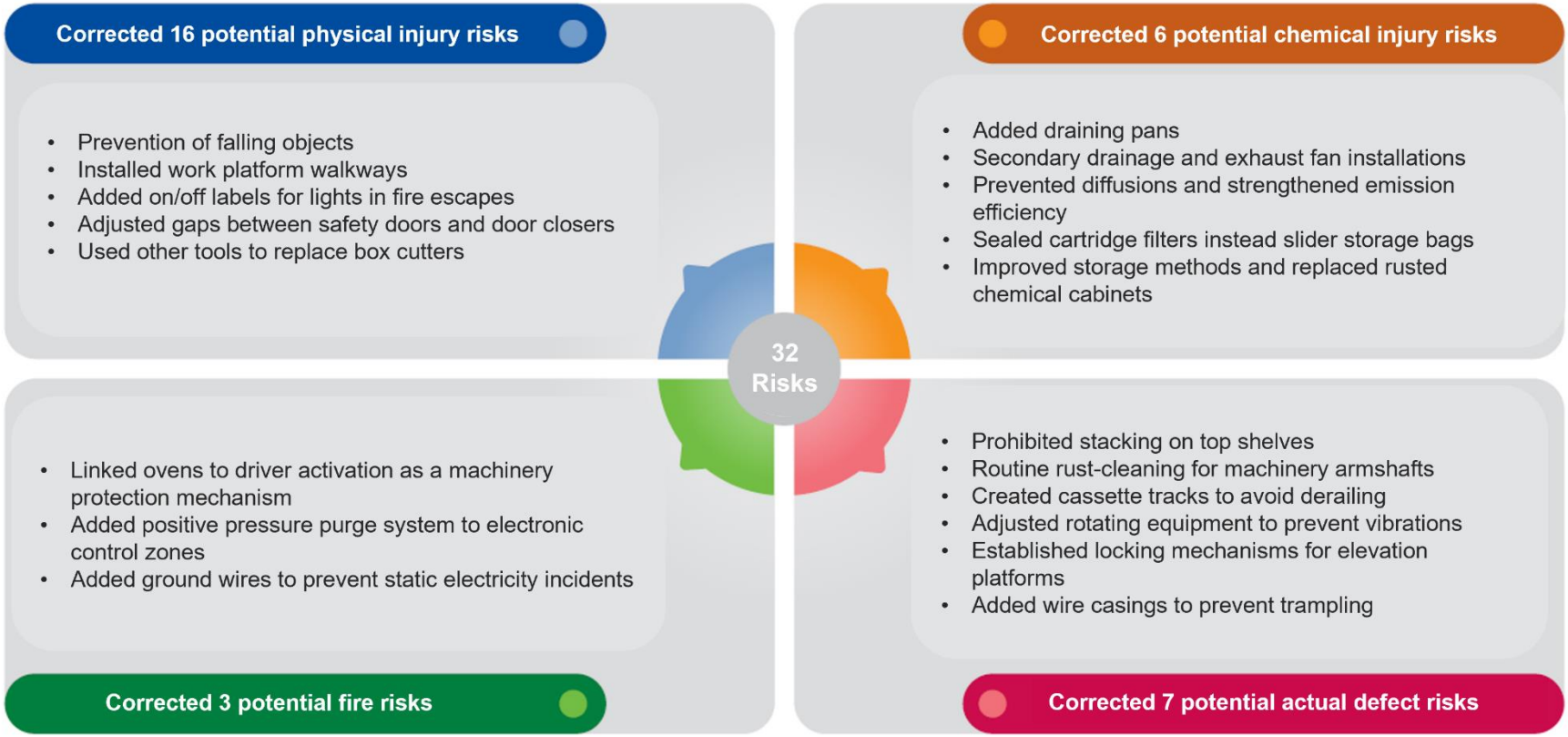
Fire Safety Competition
Epicrystal hosted fire safety knowledge quizzes, firefighting competitions, and other activities.

Voluntary Suggestions for Unsafe Environments

EPISTAR established scoring indicators for competitions that encouraged employees to actively propose suggestions and improvements in operational environments based on their own understanding of business procedures and observed workplace environment conditions. Our occupational safety unit implemented cross-unit support to complete all improvements while promoting employee emphasis on safety in workplace environments.

Self-discovered potential risks

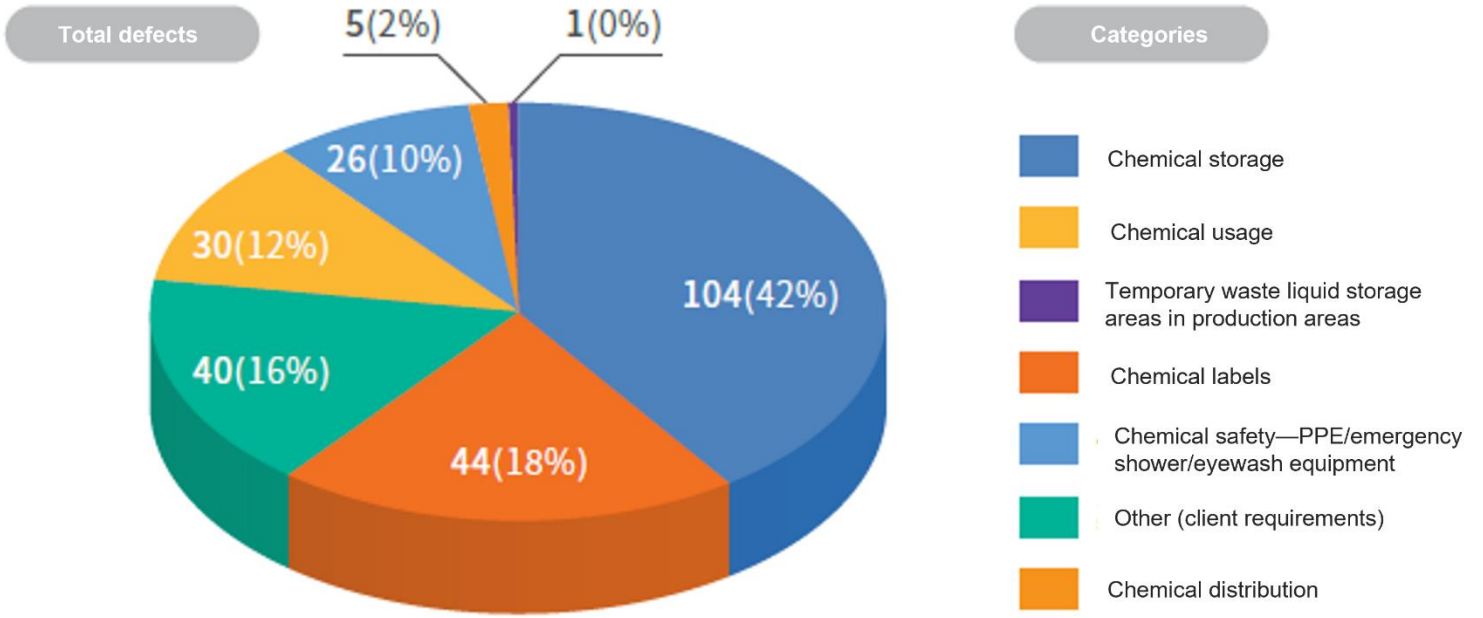
Ennostar


Corrected 16 potential physical injury risks
• Prevention of falling objects
• Installed work platform walkways
• Added on/off labels for lights in fire escapes
• Adjusted gaps between safety doors and door closers
• Used other tools to replace box cutters
Corrected 6 potential chemical injury risks
• Added draining pans
• Secondary drainage and exhaust fan installations
• Prevented diffusions and strengthened emission efficiency
• Sealed cartridge filters instead slider storage bags
• Improved storage methods and replaced rusted chemical cabinets
32 Risks
• Linked ovens to driver activation as a machinery protection mechanism
• Added positive pressure purge system to electronic control zones
• Added ground wires to prevent static electricity incidents
Corrected 3 potential fire risks
• Prohibited stacking on top shelves
• Routine rust-cleaning for machinery armshafts
• Created cassette tracks to avoid derailing
• Adjusted rotating equipment to prevent vibrations
• Established locking mechanisms for elevation platforms
• Added wire casings to prevent trampling
Corrected 7 potential actual defect risks

In 2023, Episky collected 85 safety proposals and 85 risk source identification proposals. All suggested improvements have since been implemented.

Corrections of Inspection Deficiencies for Chemical Categories

EPISTAR divided chemical management into 7 categories with 54 audit items. We conduct quarterly audits for each factory department/region based on chemical category guidelines. Audit results must be recorded in a list of corrective and preventive measures, and tracked until corrections have been completely implemented. After completing quarterly audits, we compile our findings into analysis reports and report on correction completion rates at ESG Committee meetings to enhance personnel safety when handling chemicals, and to reduce occurrence of occupational injuries, fines issued by competent authorities, deficiencies in customer audits, and other risks.



Contractor Operational Safety

1 Digital management system review	2 Education & training and submission of related information	3 Apply for construction approval	4 Conclude projects

To protect employee and contractor safety, the Group conducts rigorous reviews of contractor qualifications using a digital contractor management system which is linked to construction application and site entry control systems, thereby ensuring that all contractors entering our sites understand and agree to comply with contractor regulations, have adequate occupational disaster protections, and

possess education and training certifications as well as online hazard communication course certifications. We also maintained factory information security and fully informed contractors of our systems through our information security control statement to prevent contractors from violating information security requirements when working in our factories due to ignorance of related requirements. Contractors who violate our EHS regulations are notified through our digital system. If occupational safety employees discover abnormalities during inspections, they immediately issue a violation form, communicate with contractors, and require corrections. We store violation information to serve as a reference for assessing and selecting contractors in future. No contractor incidents occurred in 2023.

Apart from informing contractors of high-risk operational hazards before they entered factories, EPISTAR and Unikorn also strengthened contractor awareness of hazards through online courses. Contractors must obtain full scores on these courses before entering sites. Our implementation rate in 2023 was 100%.[24][25]

Contractor retraining

Fire prevention training for on-site contractors

[24] Contractors stationed in factories such as security and cleaning personnel were also included in training. For example, as security guard rooms are the first line of defense for factory fire protection, we worked with security guards to implement EHS training for joint protection of factory safety.

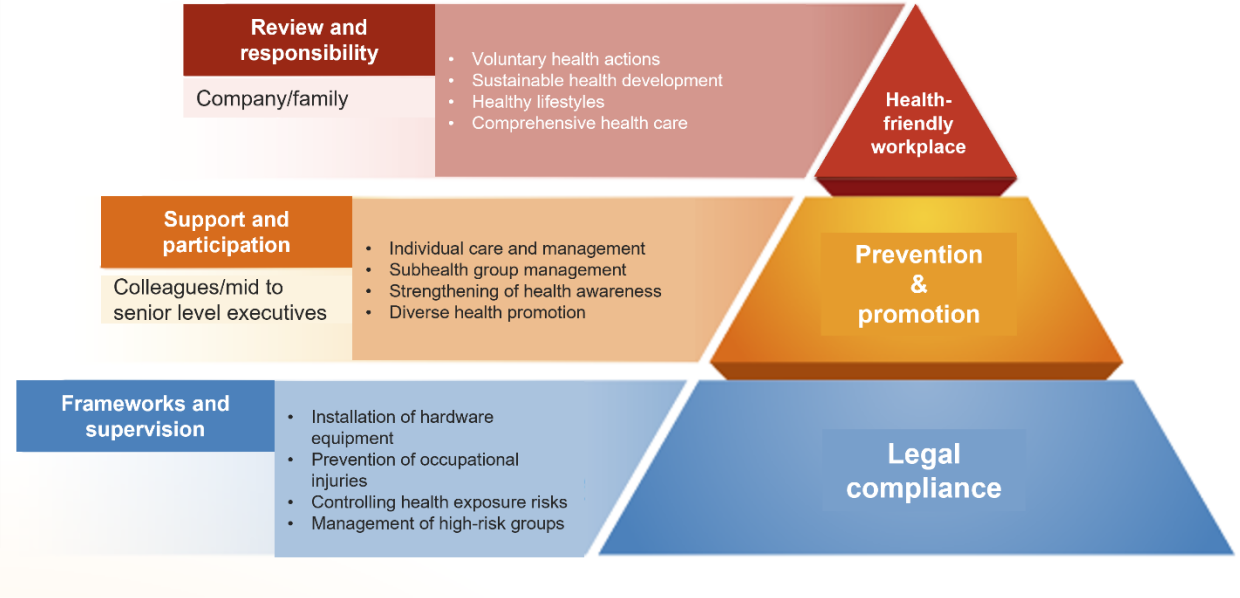
[25] Lextar currently provides in-person education and training, and is considering provision of online courses and tests in future.

Unikorn added new automated external defibrillators to strengthen safety defenses

Unikorn added new automated external defibrillators and hosted CPR+AED first-aid training courses to build a safer workplace environment.

5-3-2 Health Promotion

The Group considers protection of employee physical and mental health to be a core component of employee care. We provide periodic employee health checks, establish comprehensive systems to prevent employees from suffering unlawful infringements and overwork, and actively build healthy and friendly workplace environments. We evaluate all possible environment and work factors that could cause injuries or diseases, establish corresponding preventive measures, and track related improvements.



The Group analyzed employee health requirements based on domestic and internal health-associated big data and epidemiology information, then implemented health-related plans based on this information. We formulated specific and themed activities, and supplied diverse health checks and health promotion activities for high-risk groups.

Category	Detailed items
Physical examinations	Employee health examinations

	On-site services (physicians) Cancer screening Increased the number of contracted hospitals for physical examinations Newly contracted hospitals (health examinations for senior executives) Collaborated with external hospitals to provide lung computed tomography (CT) scans (an independent item not included in legal health checks)
Health management	Graded management based on health examinations
Health promotion	Health promotion activities Promoted paid flu vaccinations
Hazard prevention	First-aid courses

Health Promotion Activities in 2023

Category	Indicator	Hosting company	Implementation results for 2023[26]
Physical examinations	Three-in-one screening activity for women	Ennostar and EPISTAR	264 participants Overall satisfaction score: 94 points
	Health screening activity for women	Lextar	46 participants Overall satisfaction score: 92 points
	Physical fitness tests	EPISTAR	80 participants Overall satisfaction score: 95 points
	LDCT tests	EPISTAR	174 participants

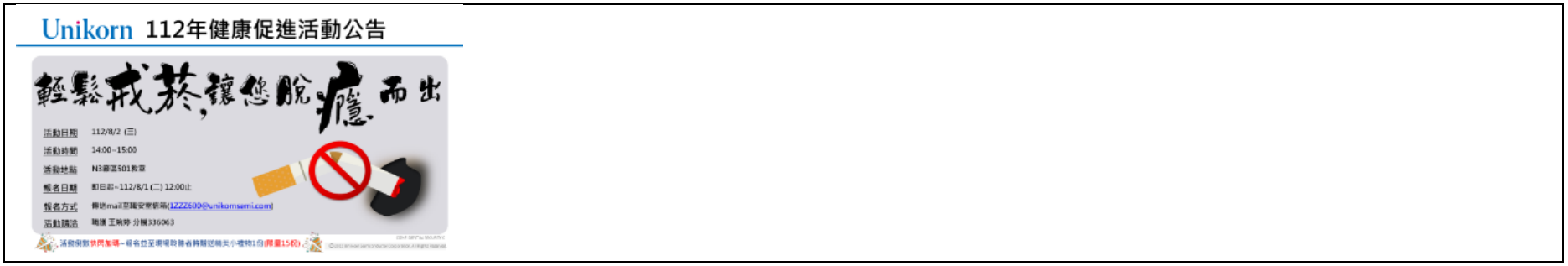
[26] All satisfaction scores were scored out of 100 points.

	Eye examination: non-mydriatic fundus photography tests	Lextar, Lextar Electronics	112 participants
	Annual health examinations	Ennostar and EPISTAR	A total of 3,112 people were scheduled for special operations and general health examinations; we achieved an examination rate of 100%. No occupational diseases were discovered. A total of 53 employees were found to have major abnormalities in general health examinations, and we provided care to 100% of these employees (all colleagues are undergoing regular follow-ups and treatment).
	Annual health examinations (including health examinations for special operations)	Unikorn	A total of 256 people received annual general health examinations A total of 25 senior executives received health examinations
	Annual health examinations for special operations	Lextar	A total of 591 people were scheduled for special operations and general health examinations; no occupational diseases were discovered.
Massage activities	Father's Day massage activity	EPISTAR	240 participants

	Mother's Day massage activity	EPISTAR	201 participants
Health promotion	Influenza vaccination	Ennostar, EPISTAR, Lextar, and employee family members	278 participants
	Health lectures—How to read health examination reports	Lextar	55 participants
	Health lectures—Visual health	Ennostar, EPISTAR, Lextar	79 participants
	Health lectures—Choosing the right rice to eat healthily	Unikorn	19 participants

Unikorn health promotion activity series in 2023

Succulent potted plant experiential activity   Employee feedback: This course gave me a chance to rest and reflect. I hope that the company can host more activities so more people can participate.
Smoking cessation lectures and promotions

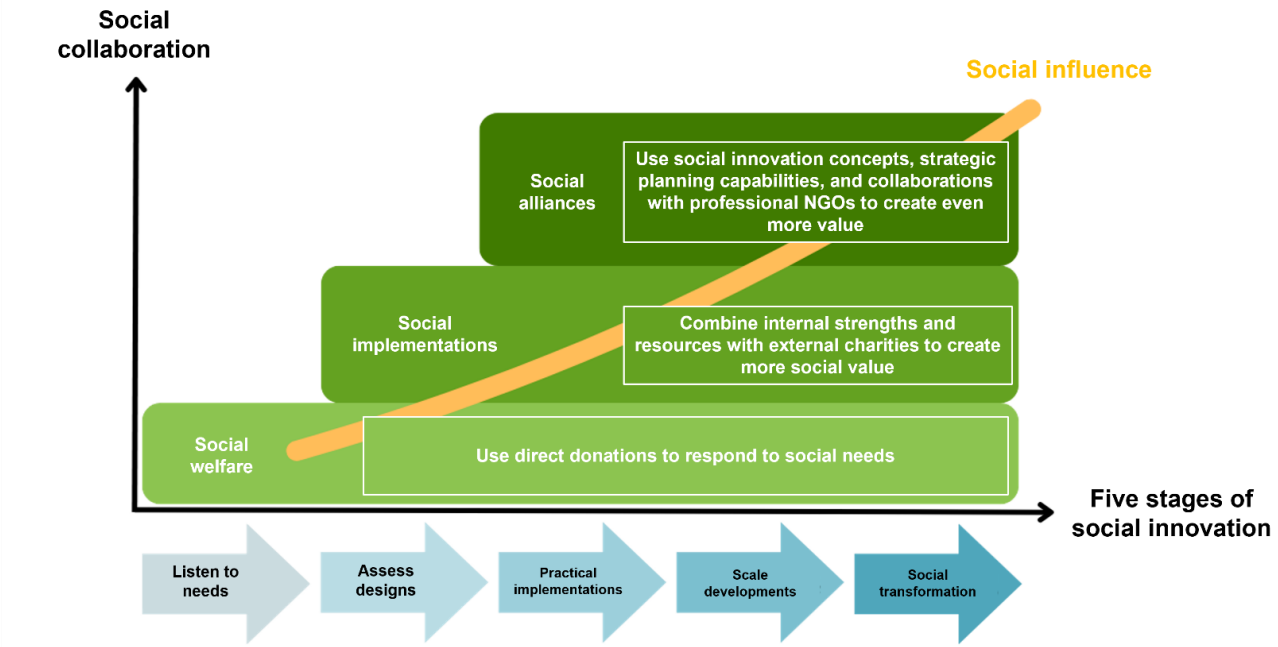


Mental Health Care—EAP

All Group subsidiaries in Taiwan offer Employee Assistance Programs (EAPs) to care for employee mental health. EPISTAR has operated EAP services for 13 years and offers free employee counseling hours each year, issues regular EAP newsletters, and organizes periodic mental health lectures (covering topics such as physical and mental health, social interactions, laws, and finances). Professional psychologists lead our colleagues in learning self-awareness and stress relief, and also offer comprehensive physical and mental health care. A total of 1,292 people participated in these activities in 2023, and we achieved an overall satisfaction score of 91.94 out of 100 points.

CH6 Social Prosperity

The Group actively participates in social welfare to achieve our core purpose of “taking root in society and giving back to society.” We encourage all subsidiaries to actively lead their employees in social participation to provide care for children, elderly people, animals, and the environment, thereby generating positive social impacts. The Ennostar Group initiated a social innovation research project in January 2023 (Note 1) which combined the social innovation theory proposed by Professor Yeh-Yun Lin (2016) at National Chengchi University with the six stages of social innovation proposed by Mulgan et al. (2010) to develop a conceptual social innovation framework encompassing five stages. We further conducted additional research on the implementations for each stage, incorporating IDEO design thinking, human-centered design (HCD) methodology, and project management techniques into our social innovation framework to systematically promote the Group’s positive social influence.



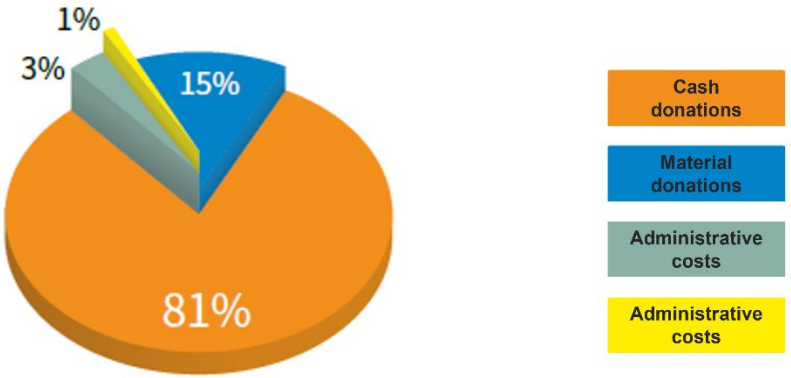
Five stages of social innovation conceptual framework

Note 1: Social innovation is defined as any new solution created to satisfy social needs and generate more social value.

We encourage our employees to voluntarily organize and join social participation events. Our subsidiaries EPISTAR and Lextar have both established volunteer clubs and promote various sponsorship activities and education plans. In 2023, the Group invested a total of NT$3,767,090 in social participation.

Unit: TWD

Year/Item	Material donations	Cash donations	Administrative costs	Volunteer costs	Total
2022	386,115	1,252,732	241,819	728,722	2,609,388
2023	550,990	3,063,130	122,558	30,412	3,767,090



6-1 Social Welfare

Unit: TWD

Donation projects	Corporate donations	Employee donations	Total
Dreams Come True Project (Dongguang Elementary School/Huayuan Elementary School)	200,000	315,300	515,300

Indigenous Cultural Heritage Support Project	100,000	-	100,000
Care for Rural Schools (Puhe/Taixing/Singuang/Atayal Academy)	400,000	-	400,000
You Can Be Santa Claus (In association with the World Vision International)	250,000	890,000	1,140,000
Charity Clothing Donations for Environmental Protection (SOS Children's Village of Taiwan & Lohas Children's Home)	10,000	43,700	53,700
Total			**2,209,000**

Charitable Donations

Care for Rural Schools

Starting in 2020, EPISTAR began providing annual donations of NT$100,000 to Singuang Elementary School, Atayal Academy, Taixing Elementary School, and Puhe Elementary School to fund school meals, indigenous cultural heritage, student transportation, and football education programs depending on the different needs for each school.

Indigenous Cultural Heritage Support Project

Lextar has long been attentive of indigenous cultural heritage in rural regions and supported the Hsinchu County Nahuy Township Pqwasal Biru Naro Atayal Children's Choir in 2023, not only improving student choir skills through basic training, but also promoting Atayal songs, musical culture, and artistic talents through training courses. Thanks to the love and support provided by Lextar

employees, the Choir participated in the National Student Competition of Music and won a “Distinguished Honor” award, becoming the pride of the Atayal tribe.

Charitable Procurements

The “Happy EPISTAR” campaign was launched in 2022. This campaign makes purchases from social welfare groups each year and gifts their products to all employees. In 2023, our total procurements from Zhanyi Bakery amounted to NT$225,700. The “Employee Welfare Committee-Charitable Procurement and Sustainable Selections” campaign was launched in 2022 and selects products from charities or stores with sustainable concepts that our employees can redeem using the “points” provided by the Employee Welfare Committee, making it easy for our colleagues to access and purchase sustainable products as well as support social welfare organizations. In 2023, we worked with “SO BRIGHT, Yunfull Dream Sheltered Workshop, the Institute for the Blind of Taiwan, and Teapower,” with total purchases amounting to NT$924,090. In future, we will continue to organize these activities to build a virtuous cycle and contribute toward sustainability.

Material Donations

Charity Clothing Donations for Environmental Protection

To fulfill its corporate social responsibilities and enable environmental protection, Unikorn continues to work with SOS Children's Village of Taiwan, and also began collaborating with Lohas Children's Home, calling on all colleagues to purchase new clothes for these children. In 2023, we selected new clothes for 39 children, collected funds and eco-friendly bags from our colleagues, and invited 21 corporate volunteers to package gifts and write heart-warming cards, which not only helped the children feel our love, but also conveyed "environmental protection and green living" concepts. We collected NT$53,700 through this activity; NT$33,244 was used to buy new clothes and the remainder was donated to the Lohas Children's Home to fund the construction of new dormitories so that the children could have a safe living environment.

Free Store: Joyful Sharing to Extend Love

EPISTAR combined resource sharing and circular economy concepts, and launched the internal "EPISTAR Free Store" in 2020 to promote a "joyful sharing" organizational culture, inviting Group colleagues to donate and claim secondhand goods. Unclaimed goods were donated to various social welfare organizations as needed. As of 2023, we have hosted a total of 6 events, collected a total of 3,917 items, and donated 1,230 items. In 2023, we donated 81.2 kilograms of secondhand clothes, books, and daily necessities, reducing 1,249.23 kilograms of carbon emissions.

“Gifts with Love” Children’s Day Charity Event

Generous Lextar employees launched the “Gifts with Love” event on Children’s Day so that rural schoolchildren could own their first Lego toys. In 2023, we collected more than 900 Lego sets which were gifted to disadvantaged schoolchildren in rural areas of Hsinchu and Miaoli. Donations were made to the Taiwan Fund for Children and Families, Boyo Social Welfare Foundation, Renai Children’s Home, St. Teresa Children Center, and St. Francis Xavier Home for Children and Juvenile.

You Can Be Santa Claus

Since 2016, EPISTAR has worked with World Vision Taiwan to host the “You Can Be Santa Claus” Christmas gift collection and donation drive, raising funds internally to buy 500 Christmas gifts. The children who received gifts from this event were spread out all

over Taiwan and outlying island areas. In 2023, we invited all Ennostar Group subsidiaries to participate in this event. All 500 gifts were funded within 7 days and donations reached a record high of NT$890,000.

6-2 Social Implementations

Food and Agricultural Education

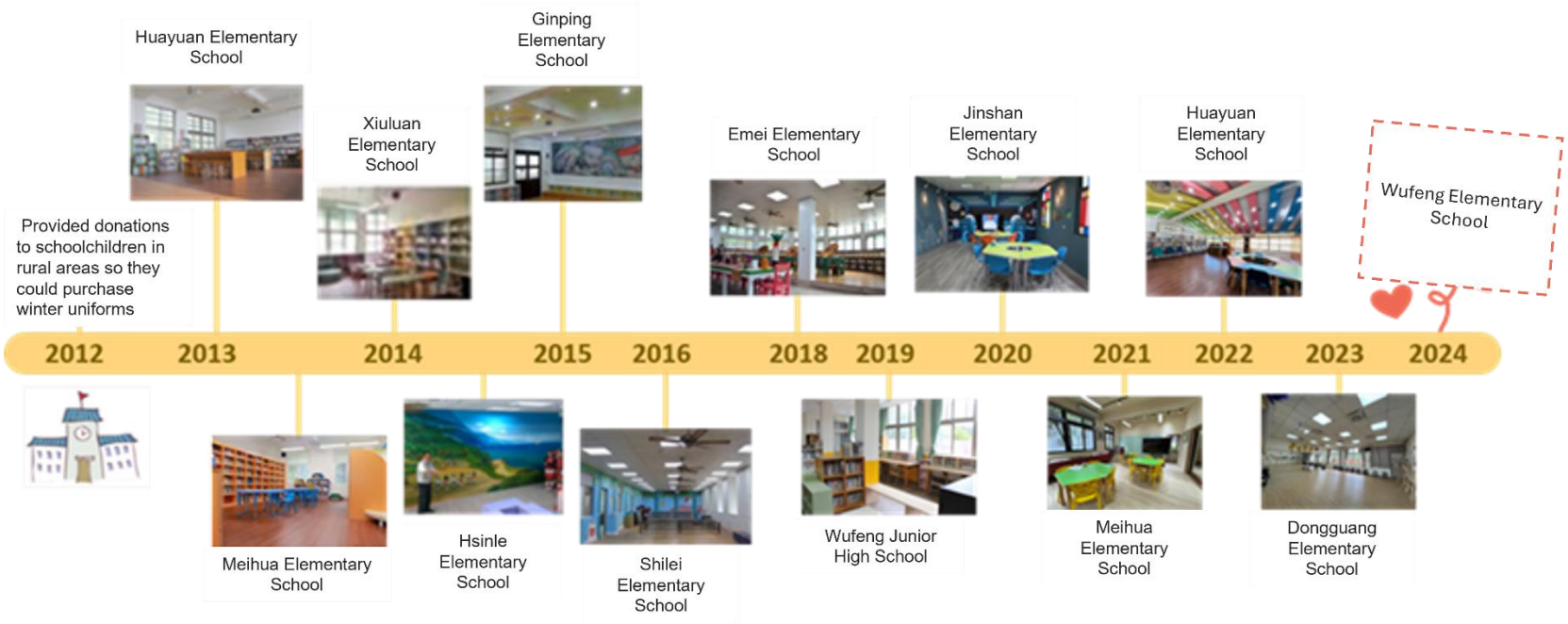
To promote ESG and sustainability concepts, Lextar hosted the “Lextar Green Party” event in 2023 so our colleagues and their families could understand the importance of biodiversity, experience sustainable farming, and co-exist with nature through multiple activities such as exploring farms, harvesting crops, participating in environment tours, and hand-making golden kimchi. A total of 200 people participated in this environmental education event, and the event achieved a number of goals such as increasing local job opportunities by 250 hours, providing food and agricultural education to employees and their families over 800 hours, and reducing 342 kilograms of carbon emissions through ride-sharing. During the event, we also donated organic fruits and vegetables to Changjang Institute of Rehabilitation and the Grown-Up with Hands Family institute to expand our positive influence. This event was

recognized by the Agriculture and Food Agency “2023 Commendation for Enterprises and Organizations with Outstanding Contributions to Agriculture and Food Product Marketing.”

Dreams Come True Project

Lextar launched the “Read Together to Achieve Dreams Project” in 2012. As of 2023, we have assisted 12 rural schools in renovating their classrooms and raised a total of NT$4.12 million. In 2023, Lextar and its employees raised a total of NT$387,400 to help Dongguang Elementary School renovate their idle storage spaces. Thanks to the ideas and efforts of the teachers and students, the idle space was transformed into a classroom for music and dance, as well as a preparation base for university students who came to teach at the school.

Ennostar



Optoelectronics Science Education

The five major elements of STEAM education

Family Party

Starting in 2013, EPISTAR has hosted annual “Family Party” events and invited our colleagues and their children to join us, enabling the children to learn more about their parents’ jobs and grow through learning via the “Little EPISTAR worker” experience.
STEAM education is a multidimensional concept which emphasizes that education should be learner-oriented through active cultivation of independent thinking and creative abilities in students. In 2023, the EPISTAR Fun Summer Vacation Family Party combined the five main elements of STEAM education with existing activity framework designs to cultivate unique and creative talents in Taiwan using our corporate influence.

During the event, participating children explored each stage of the LED chip production process and experienced the size differences between physical chips and chips seen under a microscope. We displayed LED devices and explained LED optoelectronic knowledge to these children. Immersive education was combined with a fun factory cleanroom suit experience to strengthen the children’s interest in the chip production process. A total of 73 employee children participated in this activity.

Summer Activity for Rural Schools

In 2023, we realized our vision to “Shine a light on hope” through practical actions and worked with rural schools that we had previously sponsored, combining the characteristics of local schools and EPISTAR’s optoelectronic capabilities to host a multidimensional summer education camp that allowed employee offspring to interact with local students. Camp activities covered LED knowledge education and optoelectronic experiences, and brought scientific education resources to rural areas while allowing our colleagues and their children to learn local traditional arts such as ramie weaving, harmonica playing, and traditional archery. In 2023, we hosted two camps at Puhe Elementary School and Taixing Elementary School for a total of 110 participants.

Art Walkway

Art can inspire creativity and imagination while also enhancing quality of life and expanding cultural horizons. We worked with the AAEON Foundation to establish an art walkway on the canteen floor of our headquarters which periodically displays beautiful artwork, helping our colleagues learn about artists, experience different art creations, and enjoy the beauty of art and culture. We organized 5 exhibitions in 2023.

Volunteer Activities

EPISTAR called on all colleagues to become volunteers in line with our belief that “social influence starts with your actions,” and provided each employee with 10 hours of volunteer leave per year. In 2023, we focused on the two main themes of “care for the disadvantaged” and “child education,” working with social welfare organizations and non-profit organizations across Taiwan to host 8 volunteer events over a total of 298.5 hours. Our activities included working with the Catholic Huakuang Social Welfare Foundation to organize living spaces for service recipients, working with World Vision Taiwan to provide after-school companionship to schoolchildren participating in LED science and eco-friendly handicraft activities, and working with the Tainan City Longqi Sustainable Development Association to visit elderly people at home. Additionally, we also contacted the Taichung YMCA and the Garden of Hope Foundation Tainan Branch to match our colleagues with volunteer positions at charity carnivals and charity drama performances.

Ennostar

Ennostar

Appendices

Appendix I. Data Overview

[Governance Data]

List of directors, academic backgrounds, work experience, term of office, and meeting attendance rates

Title	Name	Gender	Age range	Term of office	Academic and work experiences	Actual attendances	Proxy attendances	Actual attendance rate	Remarks
Chairman	Shuan-Lang Peng	Male	61-70 years	3 years	Chairman and CEO, AU Optronics Corp. Director, Qisda Corporation MBA, Heriot-Watt University	3	0	100.0%	Newly elected; 3 attendances required
Director	AU Optronics Corp. Representative: Yu-Chieh Lin	Female	41-50 years	3 years	Vice President, AU Optronics Corp. Supervisor of Taiwan Display Union Association M.A., Institute of Physics, National Central University	3	0	100.0%	Newly elected; 3 attendances required
Director	Chin-Yung Fan	Male	51-60 years	3 years	Chairman, Epistar Corporation M.A., Institute of Physics, National Central University	5	0	100.0%	Re-elected
Director	Xiu-Mu Tang	Male	51-60 years	3 years	Chairman of Lextar Electronics Corp. PhD, Chemical Engineering National Tsing Hua University	3	0	100.0%	Newly elected; 3 attendances required
Independent director	Wei-Min Sheng	Male	61-70 years	3 years	Professor, Department of Public Finance, National Taichung University of	5	0	100.0%	Re-elected

Title	Name	Gender	Age range	Term of office	Academic and work experiences	Actual attendances	Proxy attendances	Actual attendance rate	Remarks
					Science and Technology Independent director, EPISTAR Corporation PhD in Accounting, Purdue University				
Independent director	Hsien-He Sheng	Male	71-80 years	3 years	Vice President, AU Optronics Corp. Independent director, Lextar Electronics Corp. Bachelor's degree, Department of Electronic Engineering, Chung Yuan Christian University	5	0	100.0%	Re-elected
Independent director	Wei-Cheng Wang	Male	61-70 years	3 years	Deputy chairman and CPA, PwC Taiwan Department of Accounting, National Chengchi University	5	0	100.0%	Re-elected
Independent director	En-Te Hsu	Male	61-70 years	3 years	Professor, Department of Accounting, Tunghai University. Director of Accounting and Industry Research Center and Director of EMBA, Tunghai University. PhD, Department of Accounting, National Taiwan University	3	0	100.0%	Newly elected; 3 attendances required
Independent director	Chun-Hsin Tsou	Female	41-50 years	3 years	Doctor of Laws, China University of Political Science and Law Director, AIPT International Law Office	3	0	100.0%	Newly elected; 3 attendances required

Title	Name	Gender	Age range	Term of office	Academic and work experiences	Actual attendances	Proxy attendances	Actual attendance rate	Remarks
					Doctor/Arbitrator, Chinese Construction Industry Arbitration Association				
Chairman	Biing-Jye Lee	Male	61-70 years	3 years	Chairman, Epistar Corporation Research fellow/supervisor, Institute of Photonics Technologies in Industrial Technology Research Institute (ITRI) PhD, Institute of Chemical Engineering, National Tsing Hua University	2	0	100.0%	Incumbent; 2 attendances required
Vice Chairman	AU Optronics Corp. Representative: Shuan-Lang Peng	Male	61-70 years	3 years	Chairman and CEO, AU Optronics Corp. Director, Qisda Corporation MBA, Heriot-Watt University	2	0	100.0%	Incumbent; 2 attendances required
Director	Feng Cheng Su	Male	61-70 years	3 years	Chairman, Lextar Electronics Corp. Senior vice president, AU Optronics Corp. PhD, Materials Science and Engineering, State University of New York, Stony Brook	2	0	100.0%	Incumbent; 2 attendances required
Independent director	Sheng-Tai Weng	Male	Above 71 years	2 years	Vice chairman, Ability Enterprise Co., Ltd. Independent director, Lextar Electronics Corp. MBA, Rutgers, The State University of New Jersey	2	0	100.0%	Incumbent; 2 attendances required

Title	Name	Gender	Age range	Term of office	Academic and work experiences	Actual attendances	Proxy attendances	Actual attendance rate	Remarks
Independent director	Ji-Yen Liang	Male	61-70 years	2 years	Chairman, TAINET Communication System Corp. Independent director, EPISTAR Corporation MBA, National Chengchi University Bachelor's degree, Department of Chemical Engineering, National Tsing Hua University	2	0	100.0%	Incumbent; 2 attendances required

Self-Evaluation Survey Results for the Board and all Committees

Survey type	Target	Collected surveys	Valid surveys	Recovery Rate
Board performance self-evaluation surveys	9 directors	9	9	100%
Self-evaluation surveys for Board members	9 directors	9	9	100%
Audit Committee self-evaluation surveys	5 committee members	5	5	100%
Remuneration Committee self-evaluation surveys	3 committee members	3	3	100%
Corporate Sustainability and Risk Management Committee	3 committee members	3	3	100%
Corporate Governance and Nominating Committee	6 committee members	6	6	100%

Note: The Steering Committee is an integrated functional committee established under the Board, and is not subject to annual self-assessments or the performance evaluation regulations of the "Regulations of Board of Directors and Functional Committee Performance Evaluations."

Ennostar

[Environmental Data]

EPISTAR, Lextar, Unikorn 2021-2023 Annual Greenhouse Gas Emissions

Indicator (Unit)	Company	EPISTAR			Lextar			Unikorn		
	Year	2021	2022	2023	2021	2022	2023	2021	2022	2023
Category 1: Direct emissions (t CO_2e)		67,042.00	60285.09	31,348.71	6,079.46	285.01	194.35	3,836.98	1896.59	2,075.14
Category 2: Indirect emissions (t CO_2e)		175,469.00	177,698.88	137,643.10	34,902.18	8,469.827	7,362.82	4,832.06	5383.60	5,110.94
Category 3: Indirect emissions from transportation (t CO_2e)		-	256.16	3,130.27	-	130.159	978.51	-	169.98	201.66
Category 4: Indirect emissions from products used (tCO2e)		35,941.00	40,385.84	137,362.25	6,896.61	94.494	2,428.04	968.45	1036.17	5,368.84
Total (tCO2e)		278,452.00	278,625.98	309,484.33	47,878.25	8,979.49	10,963.72	9,637.49	8,486.33	12,756.58

Ennostar, Epicrystal, Episky, Can Yang, and Lextar Electronics 2022-2023 Annual Greenhouse Gas Emissions

Indicator	Company	Ennostar	Epicrystal	Episky	Can Yang	Lextar Electronics

(Unit) Year	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Category 1: Direct emissions (t CO_2e)	3.28	6.55	2,034.72	1,813.73	839.51	902.57	672.77	961.90	68.77	175.32
Category 2: Indirect emissions (t CO_2e)	54.08	173.76	3,0296.4	32,658.98	18,810.61	19,233.26	24,334.37	29,703.50	15,368.54	15,089.93
Category 3: Indirect emissions from transportation (t CO_2e)	41.14	95.85	-	2,633.33	-	9,340.37	-	3,344.54	-	279.43
Category 4: Indirect emissions from products used (t CO_2e)	-	34.16	-	16,464.15	-	128,345.47	-	23,877.89	-	28,649.88
Total (t CO_2e)	98.5	310.32	32,331.12	53,570.19	19,650.12	157,821.67	25,007.14	57,887.83	15,437.31	44,194.56

Total Group-Wide Category 1 Greenhouse Gas Emissions

Greenhouse gas	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	NF_3	Total
t CO_2e	3,046.12	614.07	2,290.64	2,163.12	28,892.68	471.64	-	37,478.27

Group-Wide Energy Usage

Indicator	Unit	2021	2022	2023
Purchased power	GJ	2,029,858	1,898,813	1,746,535
Electricity from renewable energy	GJ	14,210	14,052	13,260

Diesel	GJ	815	722	659
Liquefied natural gas (LNG)	GJ	73,924	58,422	56,785
Total energy consumption	GJ	2,118,807	1,972,009	1,817,239
Energy intensity	(GJ/million NTD)	58	68	81
Proportion of electricity usage to total energy usage	%	95.8%	96.3%	96.84%
Renewable energy usage	%	0.7%	0.7%	0.73%

Water Resources

Indicator	Unit	2021		2022		2023	
		Total	Regions under water stress	Total	Regions under water stress	Total	Regions under water stress
Total water withdrawn	million liters	3,846	452	3,492	318	3,062	385
Water withdrawal intensity	million liters/million TWD	0.11	-	0.12	-	0.14	-
Total discharge	million liters	3,111	390	2,822	293	2,069	280.8
Total water consumption	million liters	735	-	670	-	991	-

Recovered and reused water	Unit	2021	2022	2023
Total recovered and reused water	million liters	1,814	2,346	2,092

Waste Amounts

Indicator	Unit	2021	2022	2023
General industrial waste	tons	1,618.155	1,616.548	1,727.58
Hazardous industrial waste		13,707.656	9,149.760	6,581.87
Recycling rates for general industrial waste	%	37.97	58.23	58.59
Recycling rates for hazardous industrial waste		77.76	70.73	81.45
Waste recycling rate		72.30	68.53	76.70

Waste Classified by Disposal Method in 2023

Indicator		Unit	General Industrial Waste	Hazardous Industrial Waste
Amount of recyclable waste	Reuse preparations	tons	183.13	2,507.18
	Recycling		429.57	540.55
Amount of non-recyclable waste	Incineration (including recycled energies)		705.84	300.65

	Incineration (excluding recycled energies)		0	0
	Landfill		9.57	85.89
	Other disposal methods		399.46	3147.61

Waste Classified by Disposal Site in 2023

Indicator		Unit	General Industrial Waste	Hazardous Industrial Waste
On-site	Transferred for disposal	tons	0	0
	Direct disposal		0	0
Off-site	Transferred for disposal		1,012.16	6,195.34
	Direct disposal		715.41	386.54

Air Pollutants

Factories in Taiwan				
Gas	**Unit**	**Emissions in 2021**	**Emissions in 2022**	**Emissions in 2023**
Nitrogen oxides (NOx)	kg	18,781	23,924	3,703.44
Sulfur oxides (SOx)		12,380	15,544	7,275.36
Volatile organic compounds (VOCs)		45,415	42,430	16,351.94

Factories in China			
Gas	**Unit**	**Emissions in 2022**	**Emissions in 2023**

Nitrogen oxides (NOx)	kg	183.28	2,221.58
Sulfur oxides (SOx)		262.72	562.05
Volatile organic compounds (VOCs)		2,444.34	8,094.01

[Social Data]

Note 1: Exchange rates in China: Data for 2021 was based on an exchange rate of 1:4.3597 for RMB to TWD; data for 2022 was based on an exchange rate of 1:4.4173 for RMB to TWD; data for 2023 was based on an exchange rate of 1:4.4024 for RMB to TWD.
Note 2: Personnel numbers were calculated at year-end 2023. Parental leave without pay personnel were not included for the Taiwan region. Parental leave without pay personnel were retained and included in department counts for the China region.

Employed Personnel at Each Region in 2023

Region	Type	Male		Female		Total number of employees
		Number of employees	Ratio	Number of employees	Ratio	
Taiwan	Full-time personnel	2,544	27.90%	2,321	25.45%	4,865
	Non-full time personnel (temporary/contracted personnel)	22	0.24%	11	0.12%	33
China	Full-time personnel	1,927	21.13%	1,061	11.64%	2,988
	Non-full time personnel (temporary/contracted personnel)	932	10.22%	301	3.30%	1,233
Total		5,425	59.49%	3,694	40.51%	9,119

Ennostar

Employee Positions and Age Distributions in 2023

Region	Type	Senior executives				Mid-level executives				Junior executives			
		Male		Female		Male		Female		Male		Female	
		Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio
Taiwan	Under 30 years	0	0.00%	0	0.00%	0	0.00%	0	0.00%	4	0.04%	0	0.00%
	31-40 years	5	0.05%	3	0.03%	42	0.46%	13	0.14%	70	0.77%	24	0.26%
	41-50 years	95	1.04%	17	0.19%	111	1.22%	34	0.37%	132	1.45%	42	0.46%
	Above 51 years	64	0.70%	8	0.09%	18	0.20%	2	0.02%	12	0.13%	7	0.08%
China	Under 30 years	0	0.00%	0	0.00%	0	0.00%	0	0.00%	5	0.05%	2	0.02%
	31-40 years	10	0.11%	3	0.03%	32	0.35%	12	0.13%	56	0.61%	51	0.56%
	41-50 years	109	1.20%	18	0.20%	17	0.19%	5	0.05%	15	0.16%	9	0.10%
	Above 51 years	73	0.80%	8	0.09%	2	0.02%	0	0.00%	0	0.00%	0	0.00%
	Total	356	3.90%	57	0.63%	222	2.43%	66	0.72%	294	3.22%	135	1.48%

Region	Type	R&D and technical personnel				Direct labor				Contract labor			
		Male		Female		Male		Female		Male		Female	
		Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio
Taiwan	Under 30 years	255	2.80%	174	1.91%	101	1.11%	234	2.57%	6	0.07%	4	0.04%
	31-40 years	472	5.18%	224	2.46%	245	2.69%	593	6.50%	1	0.01%	3	0.03%

	41-50 years	534	5.86%	190	2.08%	298	3.27%	530	5.81%	4	0.04%	1	0.01%
	Above 51 years	74	0.81%	26	0.29%	12	0.13%	104	1.14%	9	0.10%	1	0.01%
China	Under 30 years	271	2.97%	125	1.37%	683	7.49%	361	3.96%	269	2.95%	111	1.22%
	31-40 years	180	1.97%	111	1.22%	328	3.60%	233	2.56%	90	0.99%	75	0.82%
	41-50 years	30	0.33%	24	0.26%	17	0.19%	33	0.36%	14	0.15%	14	0.15%
	Above 51 years	7	0.08%	0	0.00%	2	0.02%	1	0.01%	0	0.00%	7	0.08%
Total		1823	19.99%	874	9.58%	1686	18.49%	2089	22.91%	393	4.31%	216	2.37%

Note: Exchange rates in China: Data for 2021 was based on an exchange rate of 1:4.3597 for RMB to TWD; data for 2022 was based on an exchange rate of 1:4.4173 for RMB to TWD; data for 2023 was based on an exchange rate of 1:4.4024 for RMB to TWD.

Annual Total Compensation Ratio for 2023

Company	Annual total compensation ratio (%)
Ennostar	799.9
EPISTAR	1,160.1
Lextar	1,079.4
Unikorn	1,271.5
Lextar Electronics	924.6
Epicrystal	2,623.6
Episky	2,244.5
Can Yang	663.3

Formula for calculation: (The total compensation for the highest-paid individual in 2023/Median annual total compensation for all employees) * 100% (excluding the highest-paid individual).

Ratio of Annual Compensation for Women to Men in 2023

Company	Ennostar	EPISTAR	Lextar	Unikorn	Lextar Electronics	Epicrystal	Episky	Can Yang
Entry-level employees	0.63	0.65	0.86	0.78	0.52	0.69	0.64	0.64
Junior executives	-	0.91	0.94	0.94	0.47	1.55	0.75	1.00
Mid-level executives	0.78	0.91	0.97	0.95	-	0.38	0.31	0.54
Senior executives	0.42	0.90	0.95	0.52	-	0.10	-	-

Ratio of Basic Salary and Remuneration of Women to Men

Company	Position	2021	2022	2023
Ennostar	Management	0.82	0.51	0.52
	R&D and technical personnel	-	0.78	0.95
	Direct labor	-	-	-
	Contract labor	-	-	-
EPISTAR	Management	0.76	0.75	0.83
	R&D and technical personnel	0.85	0.87	0.87
	Direct labor	0.89	0.95	0.94
	Contract labor	-	-	-
Lextar	Management	0.77	0.76	0.88

	R&D and technical personnel	0.88	0.87	0.85
	Direct labor	1.04	0.94	0.95
	Contract labor	1	1	1
Unikorn	Management	0.78	0.68	0.63
	R&D and technical personnel	0.79	0.83	0.82
	Direct labor	0.96	0.94	0.95
	Contract labor	-	-	-
Lextar Electronics	Management	0.86	0.84	0.43
	R&D and technical personnel	0.88	0.91	0.84
	Direct labor	1	1	1
	Contract labor	1	1	1
Episky	Management	0.69	0.70	0.49
	R&D and technical personnel	1.07	1.03	0.42
	Direct labor	1.01	0.99	0.84
	Contract labor	-	-	0.26
Epicrystal	Management	-	-	0.65
	R&D and technical personnel	-	-	0.39
	Direct labor	-	-	0.74
	Contract labor	-	-	-
Can Yang	Management	0.85	0.83	0.86
	R&D and technical personnel	0.72	0.77	0.86
	Direct labor	1	1.02	0.98
	Contract labor	-	-	-

Epicrystal made no disclosures in 2021-2022

Ennostar

Non-Managerial Full-Time Employees Average Salaries, Median Salaries, and Historical Differences

Unit: Thousand TWD

Company	Category	2021	2022	2023
Ennostar	Number of non-managerial full-time employees	52	58	133
	Total salaries for non-managerial full-time employees	65,462	82,221	174,708
	Average salaries for non-managerial full-time employees	1,259	1,418	1,314
	Median salaries for non-managerial full-time employees	1,046	1,221	908
EPISTAR	Number of non-managerial full-time employees	3,348	3,713	3410
	Total salaries for non-managerial full-time employees	2,925,741	3,029,522	2,718,519
	Average salaries for non-managerial full-time employees	874	816	797
	Median salaries for non-managerial full-time employees	715	635	614
Lextar	Number of non-managerial full-time employees	1276	826	734
	Total salaries for non-managerial full-time employees	1,102,180	763,825	719,218
	Average salaries for non-managerial full-time employees	891	958	979
	Median salaries for non-managerial full-time employees	725	786	833
Unikorn	Number of non-managerial full-time employees	179	246	405
	Total salaries for non-managerial full-time employees	145,422	216,035	368,510
	Average salaries for non-managerial full-time employees	812	878	910

	Median salaries for non-managerial full-time employees	734	801	737
Epicrystal	Number of non-managerial full-time employees	1,288	802	709
	Total salaries for non-managerial full-time employees	203,279	184,684	184,242
	Average salaries for non-managerial full-time employees	158	230	328
	Median salaries for non-managerial full-time employees	105	64	318
Episky	Number of non-managerial full-time employees	1,239	1,658	1,785
	Total salaries for non-managerial full-time employees	227,120	270,712	299,085
	Average salaries for non-managerial full-time employees	183	163	167
	Median salaries for non-managerial full-time employees	118	94	106
Can Yang	Number of non-managerial full-time employees	472	457	478
	Total salaries for non-managerial full-time employees	77,841	73,939	139,232
	Average salaries for non-managerial full-time employees	165	162	291
	Median salaries for non-managerial full-time employees	135	136	266
Lextar Electronics	Number of non-managerial full-time employees	1,366	1,099	1,546
	Total salaries for non-managerial full-time employees	87,718	81,178	92,784
	Average salaries for non-managerial full-time employees	64	74	60
	Median salaries for non-managerial full-time employees	73	76	68

Education and Training

Indicators for the past three years

Indicator	Total training costs (Thousand TWD)	Total training hours (hours)	Total number of trainees	Average training hours per person (hours)
2021	4,146	32,218	10,951	2.94
2022	4,685	54,034	15,967	3.38
2023	8289	176,474	57,272	3.08

By position and gender

Company	Indicator	By position			By gender	
		Management	Indirect labor (Non-management)	Direct labor	Male	Female
Ennostar	Total training hours	1,394	1,670	No direct labor	1,103	1,961
	Total number of training participants	88	141	No direct labor	60	169
EPISTAR	Total training hours	13,573	42,250	19,175	50,982	24,016
	Total number of training participants	487	1,287	1,641	1,760	1,655
Lextar	Total training hours	2,823	3,252	547	4,935	1,687
	Total number of training participants	277	341	334	525	427

Unikorn	Total training hours	2,697	9,897	956	9,564	3,986
	Total number of training participants	68	273	164	286	219
Lextar Electronics	Total training hours	17	71	528	554	62
	Total number of training participants	38	573	3,616	3,962	265
Episky	Total training hours	5,308	35,525	41,667	59,732	22,769
	Total number of training participants	410	2,725	2,296	4,071	1360
Epicrystal	Total training hours	160	248	128	416	120
	Total number of training participants	13	14	14	29	12
Can Yang	Total training hours	326	1,544	7,684	7,018	2,539
	Total number of training participants	128	472	927	1,048	479

Employee Welfare

Unit: Thousand TWD

Type	2022		2023	
	Persons	Amounts	Persons	Amounts

Physical examinations	2,964	3,123	5,361	9,923
Employee trips	2,673	4,527	2,223	7,255
Festival bonuses	14,982	13,081	15,105	12,822
Employee insurance	8,464	404,190	18,046	458,674
Other allowances	1,033	1,941	1,623	2,917
Emergency relief	2	9	1	22
Activity bonuses	18,641	25,865	18,368	28,815
Total	48,759	452,737	60,727	520,462

Ratio of Positions Filled Internally[27]

Company	Ennostar	EPISTAR	Lextar	Unikorn	Lextar Electronics	Epicrystal	Episky	Can Yang
Ratio	0.72%	34%	8.5%	0%	40%	4%	29%	0.08%

Appendix II. GRI Index

The following information has been verified by TUV Rheinland, an independent third-party institute. Verification results are shown in Appendix VI. Independent Assurance Statement.

Statement of Use	This Ennostar Sustainability Report has been compiled in accordance with GRI standards. The disclosure period for this Report is 2023 (January 1, 2023 to December 31, 2023).
GRI 1 Standards Used	GRI 1: Foundation 2021

[27] Formula for calculation: Number of open positions filled by own employees/Total number of open positions at the company

Applicable GRI Industry Standards	As there are no applicable GRI industry guidelines, we have used SASB semiconductor industry standards as a basis for disclosing relevant information.

GRI 2: General Disclosures 2021

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
1. The organization and its reporting practices					
GRI 2: General Disclosures 2021	2-1	Organizational details	About Ennostar	13	
	2-2	Entities included in the organization's sustainability reporting	About This Report	7	
	2-3	Reporting period, frequency and contact point	About This Report	7	
	2-4	Restatements of information	No material restatements of information affecting past reporting periods occurred in 2023	-	
	2-5	External assurance	About This Report Appendix VI	370	
2. Activities and workers					
GRI 2: General Disclosures 2021	2-6	Activities, value chain and other business relationships	About Ennostar	13	
	2-7	Employees	Appendix I [Social Data]	340	
	2-8	Workers who are not employees	Appendix I [Social Data]	340	
3. Governance					
GRI 2: General Disclosures 2021	2-9	Governance structure and composition	2-2 Governance Organizations	81	
	2-10	Nomination and selection of the highest governance body	2-2 Governance Organizations	81	
	2-11	Chair of the highest governance body	2-2 Governance Organizations	81	
	2-12	Role of the highest governance body in overseeing the management of impacts	2-2 Governance Organizations	81	
	2-13	Delegation of responsibility for managing impacts	2-2 Governance Organizations	81	
	2-14	Role of the highest governance body in sustainability reporting	About This Report	7	

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
	2-15	Conflicts of interest	2-2 Governance Organizations	81	
	2-16	Communication of critical concerns	2-3 Ethical Management	81	
	2-17	Collective knowledge of the highest governance body	A Message from our Chairman 1-1 Sustainable Development Strategies	11, 20	
	2-18	Evaluation of the performance of the highest governance body	Appendix I [Governance Data]	331	
	2-19	Remuneration policies	2-2 Governance Organizations 5-1-2 Talent Attraction and Retention	81, 240	
	2-20	Process to determine remuneration	2-2 Governance Organizations 5-1-2 Talent Attraction and Retention	81, 240	
	2-21	Annual total compensation ratio	Appendix I [Social Data]	340	
4. Strategy, policies and practices					
GRI 2: General Disclosures 2021	2-22	Statement on sustainable development strategy	1-1 Sustainable Development Strategies	20	
	2-23	Policy commitments	1-3-2 Management of Material Topics 5-2-1 Protection of Human Rights	47, 272	
	2-24	Embedding policy commitments	1-3-2 Management of Material Topics 5-2-1 Protection of Human Rights	47, 272	
	2-25	Processes to remediate negative impacts	1-3 Materiality Analysis and Stakeholder Communication 2-3 Ethical Management	43, 91	
	2-26	Mechanisms for seeking advice and raising concerns	2-3 Ethical Management	91	

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
	2-27	Compliance with laws and regulations	2-3 Ethical Management	91	
	2-28	Membership associations	Appendix V	368	
5. Stakeholder engagement					
GRI 2: General Disclosures 2021	2-29	Approach to stakeholder engagement	1-3-3 Stakeholder Communication and Engagement	62	
	2-30	Collective bargaining agreements	5-2-2 Employee Communication	279	

GRI 3: Material Topics 2021

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
GRI 3: Material Topics 2021	3-1	Process to determine material topics	1-3-1 Identification of Material Topics	43	
	3-2	List of material topics	1-3-1 Identification of Material Topics	43	
Material topic: Corporate Governance and Ethical Management					
GRI 3: Material Topics 2021	3-3	Management of material topics	2-3 Ethical Management	91	
GRI 205: Anti-Corruption 2016	205-1	Operations assessed for risks related to corruption	2-3 Ethical Management	91	
	205-2	Communication and training about anti-corruption policies and procedures	2-3 Ethical Management	91	
	205-3	Confirmed incidents of corruption and actions taken	2-3 Ethical Management	91	
GRI 206: Anti-Competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	2-3 Ethical Management	91	
Material topic: Economic Performance					
GRI 3: Material Topics 2021	3-3	Management of material topics	2-1 Economic Performance	75	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	2-1 Economic Performance	75	
	201-2	Financial implications and other risks and	4-1-2 Task Force on Climate-	186	

		opportunities due to climate change	Related Financial Disclosures (TCFD)		
	201-3	Defined benefit plan obligations and other retirement plans	5-1-2 Talent Attraction and Retention	240	
	201-4	Financial assistance received from government	Lextar: Total government subsidies amounting to NT$18,729 thousand (Industrial Development Bureau grant of NT$16,000 thousand and A+ grant of NT$2,729 thousand) was recognized as income.	-	
Material topic: Information Security and Privacy Protection					
GRI 3: Material Topics 2021	3-3	Management of material topics	2-5 Information Security	116	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	No complaints concerning breaches of customer privacy or customer data occurred in 2023.	-	
Material topic: Innovation Management and Smart Transformation					
GRI 3: Material Topics 2021	3-3	Management of material topics	3-1 Innovation Management and Smart Transformation	136	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Appendix I [Environmental Data]	335	
	302-2	Energy consumption outside of the organization	Appendix I [Environmental Data]	335	
	302-3	Energy intensity	Appendix I [Environmental Data]	335	
	302-4	Reduction of energy consumption	4-1-5 Energy Management	199	
	302-5	Reductions in energy requirements of products and services	4-1-5 Energy Management	199	
Material Topic: Product Quality					
GRI 3: Material Topics 2021	3-3	Management of material topics	3-2-1 Product Quality and Safety	165	
GRI 416: Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	3-2-1 Product Quality and Safety	165	

2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No violations of relevant regulations or voluntary compacts occurred in 2023.	-	
Material topic: Customer Relationship Management					
GRI 3: Material Topics 2021	3-3	Management of material topics	3-2-2 Customer Relationship Management	170	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	No complaints concerning breaches of customer privacy or customer data occurred in 2023.	-	
Material topic: Energy Management					
GRI 3: Material Topics 2021	3-3	Management of material topics	4-1-5 Energy Management	199	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Appendix I [Environmental Data]	335	
	302-2	Energy consumption outside of the organization	Appendix I [Environmental Data]	335	
	302-3	Energy intensity	Appendix I [Environmental Data]	335	
	302-4	Reduction of energy consumption	4-1-5 Energy Management	199	
	302-5	Reductions in energy requirements of products and services	4-1-5 Energy Management	199	
Material Topic: Air Pollution Prevention					
GRI 3: Material Topics 2021	3-3	Management of material topics	4-1-4 Greenhouse Gas Management 4-2-4 Air Pollution Prevention	196,233	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	4-1-4 Greenhouse Gas Management	196	
	305-2	Energy indirect (Scope 2) GHG emissions	4-1-4 Greenhouse Gas Management	196	
	305-3	Other indirect (Scope 3) GHG emissions	4-1-4 Greenhouse Gas Management	196	
	305-4	GHG emissions intensity	4-1-4 Greenhouse Gas Management	196	
	305-5	Reduction of GHG emissions	4-1-4 Greenhouse Gas Management	196	

	305-6	Emissions of ozone-depleting substances (ODS)	4-2-4 Air Pollution Prevention Appendix I [Environmental Data]	233, 335	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4-2-4 Air Pollution Prevention Appendix I [Environmental Data]	233, 335	
Material topic: Talent Attraction and Retention					
GRI 3: Material Topics 2021	3-3	Management of material topics	5-1-2 Talent Attraction and Retention	240	
GRI 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	5-1-2 Talent Attraction and Retention	240	
	401-3	Parental leave	5-1-2 Talent Attraction and Retention	240	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	5-1-1 Talent Structure	236	
	405-2	Ratio of basic salary and remuneration of women to men	Appendix I [Social Data]	340	
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Appendix I [Social Data]	340	
Material topic: Talent Cultivation					
GRI 3: Material Topics 2021	3-3	Management of material topics	5-1-3 Talent Development and Cultivation	257	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	5-1-3 Talent Development and Cultivation	257	
	404-2	Programs for upgrading employee skills and transition assistance programs	5-1-3 Talent Development and Cultivation	257	
	404-3	Percentage of employees receiving regular performance and career development reviews	5-1-3 Talent Development and Cultivation	257	
Material topic: Occupational Health and Safety					
GRI 3: Material Topics 2021	3-3	Management of material topics	5-3-1 Occupational Health and Safety Management	293	
GRI 403: Occupational Health and Safety	403-1	Occupational health and safety management system	5-3-1 Occupational Health and Safety Management	293	
	403-2	Hazard identification, risk assessment, and	5-3-1 Occupational Health and	293	

2016		incident investigation	Safety Management		
	403-3	Occupational health services	5-3-2 Health Promotion	311	
	403-4	Worker participation, consultation, and communication on occupational health and safety	2-6 Responsible Supply Chain	124	
	403-5	Worker training on occupational health and safety	2-6 Responsible Supply Chain	124	
	403-6	Promotion of worker health	5-3-2 Health Promotion	311	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	2-6 Responsible Supply Chain	124	
	403-8	Workers covered by an occupational health and safety management system	5-3-1 Occupational Health and Safety Management	293	
	403-9	Work-related injuries	5-3-1 Occupational Health and Safety Management	293	
	403-10	Work-related ill health	5-3-1 Occupational Health and Safety Management	293	

Standards for Topic-Specific Disclosures

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
Topic-Specific Disclosures: GRI 200 Economic Disclosures					
GRI 202: Market Presence 2016	202-2	Proportion of senior management hired from the local community	5-1-1 Talent Structure Appendix I [Social Data]	236, 340	
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	2-6 Responsible Supply Chain	124	
GRI 207: Tax 2019	207-1	Approach to tax	2-1 Economic Performance	75	
	207-2	Tax governance, control, and risk management	2-1 Economic Performance	75	
Topic-Specific Disclosures: GRI 300 Environmental Disclosures					
GRI 301: Materials 2016	301-1	Materials used by weight or volume	Appendix I [Environmental Data]	335	

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Appendix I [Environmental Data]	335	
	302-2	Energy consumption outside of the organization	Appendix I [Environmental Data]	335	
	302-3	Energy intensity	Appendix I [Environmental Data]	335	
	302-4	Reduction of energy consumption	4-1-5 Energy Management	199	
	302-5	Reductions in energy requirements of products and services	4-1-5 Energy Management	199	
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	4-2-1 Water Resource Management	205	
	303-2	Management of water discharge-related impacts	4-2-1 Water Resource Management	205	
	303-3	Water withdrawal volumes	4-2-1 Water Resource Management	205	
	303-4	Discharge volumes	4-2-1 Water Resource Management	205	
	303-5	Water consumption	4-2-1 Water Resource Management	205	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	2-6 Responsible Supply Chain	124	
	308-2	Negative environmental impacts in the supply chain and actions taken	2-6 Responsible Supply Chain	124	
GRI 301: Materials 2016	301-2	Recycled input materials used	4-2-2 Waste Management 4-2-3 Circular Economy	218, 220	
	301-3	Reclaimed products and their packaging materials	4-2-2 Waste Management 4-2-3 Circular Economy	218, 220	
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	4-2-2 Waste Management	218	
	306-2	Management of significant waste-related impacts	4-2-2 Waste Management	218	
	306-3	Waste generated	4-2-2 Waste Management Appendix I [Environmental Data]	218, 335	

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
	306-4	Waste diverted from disposal	4-2-2 Waste Management Appendix I [Environmental Data]	218, 335	
	306-5	Waste directed to disposal	4-2-2 Waste Management Appendix I [Environmental Data]	218, 335	
Topic-Specific Disclosures: GRI 400 Social Disclosures					
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	5-2-2 Employee Communication Major operational changes and related response measures that affect employee interests are communicated through management meetings, labor-management meetings, and other channels before implementations, and we notify affected units and employees in advance in accordance with the Labor Standards Act.	-	
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	5-2-1 Protection of Human Rights	272	
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	5-2-1 Protection of Human Rights 2-6 Responsible Supply Chain	272, 124	
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	5-2-1 Protection of Human Rights 2-6 Responsible Supply Chain	272, 124	
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	5-2-1 Protection of Human Rights	272	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	5-1-1 Talent Structure	236	
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	1-3 Materiality Analysis and Stakeholder Communication	43	
	413-2	Operations with significant actual and potential negative impacts on local	No operational activities with significant negative impacts	-	

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
		communities	occurred in 2023.		
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	2-6 Responsible Supply Chain	124	
	414-2	Negative social impacts in the supply chain and actions taken	2-6 Responsible Supply Chain	124	
GRI 415: Public Policy 2016	415-1	Political contributions	No political contributions were made in 2023.	-	
GRI 417: Marketing and Labeling 2016	417-2	Incidents of non-compliance concerning product and service information and labeling	No violations of relevant regulations or voluntary compacts occurred in 2023.	-	
	417-3	Incidents of non-compliance concerning marketing communications	No violations of relevant regulations or voluntary compacts occurred in 2023.	-	

Appendix III. Sustainability Accounting Standards Board (SASB) Index

Disclosure Topics	Metric description	Category	Code	Description	Corresponding Sections	Page No.
Greenhouse Gas Emissions	(1) Gross global Scope 1 emissions and	Quantitative	TC-SC-110a.1	37,478.27 tCO_2e	4-1-3 Management of Greenhouse Gases	196
	(2) amount of total emissions from perfluorinated compounds	Quantitative		31,527.44 tCO_2e	4-1-3 Management of Greenhouse Gases	196
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	TC-SC-110a.2	Short term: Adjust process recipes with fluorine gas to implement source reduction	4-1 Climate Actions	176

				Mid to long term: Gradually install local scrubbers to reduce fluorine gases and to achieve carbon reduction benefits		
Energy Management	(1) Total energy consumed,	Quantitative	TC-SC-130a.1	1,817,239 GJ	4-1-4 Energy Management	196
	(2) percentage grid electricity,	Quantitative		96.84%	4-1-4 Energy Management	196
	(3) percentage renewable	Quantitative		0.73%	4-1-4 Energy Management	196
Water Management	(1) Total water withdrawn	Quantitative	TC-SC-140a.1	3,062 million liters	4-2-1 Water Resources Management	205
	(2) Total water consumption	Quantitative		80 million liters	4-2-1 Water Resources Management	205
	(3) percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative		12.57%	4-2-1 Water Resources Management	205
Waste Management	Amount of hazardous waste from manufacturing, percentage recycled	Quantitative	TC-SC-150a.1	6,581.87 tons 81.45%	4-2-2 Waste Management and Circular Economy	218
Employee Health & Safety	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	Discussion and Analysis	TC-SC-320a.1	Promoted safety culture and occupational health and safety management systems in accordance with	5-3-1 Occupational Health and Safety Management	293

				ISO45001, RBA Code of Conduct, local regulations, and EHS system stipulations (ISO 14001, ISO 45001, CNS 45001); established “EHS Management Manual” and “Occupational Health and Safety Principles”; formed the “Occupational Health and Safety Committee” to identify, assess, and control hazards in workplace environments and operations, and to analyze health and safety hazards for each department.		
	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	Quantitative	TC-SC-320a.2	NT$400,000	5-3-1 Occupational Health and Safety Management	-
Recruiting & Managing a	Percentage of employees that are	Quantitative	TC-SC-330a.1	Foreign nationals: 7.77%	5-1-1 Talent Structure	236

Global & Skilled Workforce	(1) Foreign nationals (2) located offshore			Located offshore: 0.54%		
Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances	Quantitative	TC-SC-410a.1	Unikorn: Around 95% of Unikorn's managed prohibited and restricted substances are included in the IEC 62474 declarable substances list; we will continue to evaluate whether the remaining 5% of materials should be included in Unikorn's list of prohibited and restricted substances in future. Lextar: As two substance requirement regulations were not applicable for Lextar, these were not included in controlled substances lists.		-
	Processor energy efficiency at a system-level for: (1) servers, (2) desktops, (3) laptops	Quantitative	TC-SC-410a.2	Not applicable as the Ennostar Group does not produce the aforementioned products.		-
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Quantitative	TC-SC-440a.1	We continue to diversify supplier sources and obtain verification for key materials as well as keep informed of geographical distributions for supplier production lines to reduce variability in material supplies and prevent future	2-6 Responsible Supply Chain	124

				supply shortage risks caused by extreme weather or major natural disasters.		
Intellectual Property Protection & Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	Quantitative	TC-SC-520a.1	The Ennostar Group incurred no monetary losses due to legal proceedings associated with anti-competitive behavior in 2023.		-

Appendix IV. ISO 26000 Guidance on Social Responsibility Index

Item Code	Issue	Corresponding Sections	Page No.
1. Organizational governance			
1.1	The system by which an organization makes and implements decisions in pursuit of its objectives	CH2 Corporate Governance	73
2. Human rights			
2.1	Due diligence	CH5 Talent Sustainability	236
2.2	Human rights risk situations	CH5 Talent Sustainability	236
2.3	Avoidance of complicity	CH2 Corporate Governance	73
2.4	Resolving grievances	CH2 Corporate Governance	73
2.5	Discrimination and vulnerable groups	CH5 Talent Sustainability	236
2.6	Civil and political rights	CH5 Talent Sustainability	236
2.7	Economic, social and cultural rights	CH2 Corporate Governance	73
2.8	Fundamental principles and rights at work	CH2 Corporate Governance	73
3. Labour practices			
3.1	Employment and employment relationships	CH5 Talent Sustainability	236

3.2	Conditions of work and social protection	CH5 Talent Sustainability	236
3.3	Social dialogue	CH5 Talent Sustainability	236
3.4	Health and safety at work	CH5 Talent Sustainability	236
3.5	Human development and training in the workplace	CH5 Talent Sustainability	236
4. Environmental			
4.1	Prevention of pollution	CH4 Green Operations	176
4.2	Sustainable resource use	CH4 Green Operations	176
4.3	Climate change mitigation and adaptation	CH4 Green Operations	176
4.4	Protection of the environment, biodiversity and restoration of natural habitats	CH4 Green Operations	176
5. Fair operating practices			
5.1	Anti-corruption	CH2 Corporate Governance	73
5.2	Responsible political involvement	CH2 Corporate Governance	73
5.3	Fair Competition	CH2 Corporate Governance	73
5.4	Promoting social responsibility in the value chain	CH2 Corporate Governance	73
5.5	Respect for property rights	CH3 Innovation and Growth	136
6. Consumer issues			
6.1	Fair marketing, factual and unbiased information and fair contractual practices	CH3 Innovation and Growth	136
6.2	Protecting consumers' health and safety	CH3 Innovation and Growth	136
6.3	Sustainable consumption	CH3 Innovation and Growth	136
6.4	Consumer service, support, and complaint and dispute resolution	CH3 Innovation and Growth	136
6.5	Consumer data protection and privacy	CH3 Innovation and Growth	136
6.6	Access to essential services	CH3 Innovation and Growth	136

6.7	Education and awareness	CH3 Innovation and Growth	136
7. Community involvement and development			
7.1	Community involvement	CH6 Social Prosperity	317
7.2	Education and culture	CH6 Social Prosperity	317
7.3	Employment creation and skills development	CH5 Talent Sustainability	236
7.4	Technology development and access	CH3 Innovation and Growth	136
7.5	Wealth and income creation	CH2 Corporate Governance	73
7.6	Health	CH5 Talent Sustainability	236
7.7	Social investment	CH2 Corporate Governancef	73

Appendix V. List of Affiliated Public Associations

Category	Affiliated Association or Organization	Management Role	Member
Local industry	Taiwan Panel & Solution Association (TPSA)	-	V
International	SEMI	-	V
Local industry	Academia-Industry Consortium for Southern Taiwan Science Park	-	V
Local industry	Taiwan Flat Panel Display Materials & Devices Association (TDMDA)	Director	V
Local industry	Taiwan Display Union Association (TDUA)	Director	V
Local industry	Taiwan Optoelectronic Semiconductor Industry Association (TOSIA)	Vice chairman	V
Local industry	Taiwan Optoelectronic Semiconductor Industry Association Intellectual Property Right Strategic Committee	Committee chair	V
Local industry	Taiwan Optoelectronic Semiconductor Industry Association Standards and Regulations Committee	Vice committee chair	V
Local	Taiwan Optoelectronic Semiconductor Industry Association	Vice committee chair	V

Category	Affiliated Association or Organization	Management Role	Member
industry	Environment and Safety Sustainable Development Committee		
Local industry	The Allied Association for Science Park Industries	-	V
Local industry	Taiwan Electrical and Electronic Manufacturers' Association LED and Lighting Committee	Vice committee chair	V
Local industry	Taiwan Lightning Fixture Export Association (TLFEA)	Executive director	V
Local industry	Taiwan Lightning Fixture Export Association Committee of Illumination Technics	Committee member	V
Local industry	Taiwan Plant Factory and Smart Agriculture Development Association	Director	V
Local industry	The International Commission on Illumination-Taiwan (CIE-Taiwan)	Executive committee member	V
Local industry	Photonics Industry & Technology Development Association (PIDA)	-	V
Local industry	Taiwan Association for Trade Secrets Protection	-	V
Local industry	Taipei Computer Association	Director	V
Local industry	High Power Device Application and Research Alliance (Taiwan Institute of Economic Research)	-	V
Local industry	Smart Display Industrial Alliance (SDIA)		V

Ennostar

Appendix VI. Independent Assurance Statement from TUV Rheinland

TÜVRheinland®
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Independent Assurance Statement

Ennostar Group 2023 Sustainability Report

Introduction:

TÜV Rheinland Taiwan Ltd., member of TÜV Rheinland Group, Germany ("TÜV Rheinland Taiwan", "We") has been entrusted by the management of Ennostar Inc. (including Epistar Corporation, Lextar Electronics Corporation and Unikorn Semiconductor Corporation, "Ennostar Group") to conduct independent assurance of Ennostar Group 2023 Sustainability Report ("the Report"). All contractual contents for this assurance engagement rest entirely within the responsibility of Ennostar Group. Our task was to give a fair and adequate judgment on the Ennostar Group 2023 Sustainability Report.

The intended users of this assurance statement are stakeholders having relevance to the Ennostar Group overall Sustainability Performance and impacts of its business activities during 2023 (January 2023 ~ December 2023).

TÜV Rheinland Group is a global service provider of CSR & Sustainability Services in over 65 countries, having qualified professionals in the field of Corporate Sustainability Assurance, Environment, Social and Stakeholder Engagement. We have maintained complete impartiality and independence during the assurance engagement and were not involved in the preparation of report contents.

Assurance Standard:

The Independent Assurance was carried out in accordance with AccountAbility, U.K Standard AA1000 Assurance Standard v3 and related standards AA1000 AccountAbility Principles (2018), AA1000 SES (2015), Principles of Inclusivity, Materiality, Responsiveness and Impact, Global Reporting Initiative (GRI) Universal Standards 2021.

Scope & Type of Assurance:

Our Assurance engagement covers the following:

- Ennostar Group Sustainability performance as described in the 2023 Sustainability report in accordance with GRI Universal Standards 2021 and performance indicators and according disclosure on management approach (DMAs) from Economic, Environment & Social category, also defined in Reporting boundaries.
- SASB Standards, SEMICONDUCTORS Sustainability Accounting Standard.
- Evaluation of disclosed information in the report as per the Assurance Standards.
- Type-2, Moderate Level as per AA1000 Assurance Standard v3.

Limitation:

The assurance engagement was carried out at Ennostar Group at Hsinchu City, Taiwan. The consultations with external stakeholder were not carried out. We have not observed any significant situations to limit our assurance activity. The verification is carried out based on the data and information provided by Ennostar Group, assuming they are complete and true. We did not verify the reported financial data as same is verified by another third party in annual report.

Assurance Methodology:

TÜV Rheinland Taiwan has challenged the report contents and assess the process undertaken by Ennostar Group from source to aggregate in disclosure of information related to Sustainability performance. Our judgment is based on the objective review of reported and based on the principles defined in the assurance standards, the principles of inclusiveness, materiality, responsiveness and impact, and the integrity of the data provided in the report.

Analytical methods and the performance of interviews as well as verification of data, done as random sampling, to verify and validate the correctness of reported data and contents in light of contractual agreement and the factual Ennostar Group Corporate Sustainability strategy as mentioned in the report. Our work included consultation with over 20 Ennostar Group representatives

including senior management and relevant employees. The approach deemed to be appropriate for the purpose of assurance of the report since all data therein could be verified through original proofs, verified database entries.

The Assurance was performed by our multidisciplinary team of experienced professionals in the field of Corporate Sustainability, Environment, Social and Stakeholder Engagement. We are of the opinion that our work offers a sufficient and substantiated basis to enable us to come to a conclusion mentioned below and based on the content of our contract.

Adherence to AA 1000 principles:

Inclusivity:
Ennostar Group has continually sought the engagement of its stakeholders, identify and understand their stakeholder, and use the communication mechanism to identify the material issues and achieve an accountable response.

Materiality:
Ennostar Group has implemented the material issues identification processing. The identification was based on the requirements and focus of attention of the stakeholder, the consideration of the company internal policy, shareholders meeting, questionnaires and the understanding and communication on the sustainable development content. The sustainability information disclosed enables its stakeholders to make informed judgements about Ennostar Group 's management and performance.

Responsiveness:
Ennostar Group has implemented the policy including environment and safety, quality, and corporate sustainability. The 2023 Sustainabiluty report disclosed the management system of the company and stakeholder engagement, responding to their stakeholders against material issues of the sustainable development.

Impact:
Ennostar Group has identified and fairly represented impacts that were measured and disclosed in effective way. Ennostar Group has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization.

Conclusion:

In conclusion, we can mention that no instances or information came to our attention that would be to the contrary of the statement made below:

- Ennostar Group 2023 Sustainability Report meets the requirement of Type-2, Moderate Level Assurance according to AA1000AS v3 and Global Reporting Initiative (GRI) Universal Standards 2021.
- The Report includes statements and claims that reflects Ennostar Group achievements and challenges supported by documentary evidences and internal records.
- The performance data we found in the report are collected, stored and analyzed in a systematic and professional manner and were plausible.
- TÜV Rheinland Taiwan shall not bear any liability or responsibility to a third party for perception and decision about Ennostar Group based on this Assurance Statement.

Vito Lin

AA1000
Licensed Report
000-734/V3-6T62P

Vito C. C. Lin Technical Manager

TÜV Rheinland Taiwan Ltd.

Taipei, August 12, 2024