



Ennostar

Bright Innovation, Sustainable Future

2024 Corporate Sustainability Report



Contents

Preface

03	About This Report
05	A Message from our Chairman
06	2024 Sustainability Performance Highlights
07	Achievements and Awards
08	About Ennostar

CH 1 Commitment to Sustainability

13	1-1 Sustainable Development Strategies
22	1-2 Sustainable Governance
27	1-3 Materiality Analysis and Stakeholder Communication

CH 2 Corporate Governance

35	2-1 Economic Performance
38	2-2 Governance Organizations
42	2-3 Ethical Management
45	2-4 Risk Management
55	2-5 Information Security
62	2-6 Responsible Supply Chain

CH 3 Innovation and Growth

70	3-1 Innovation Management and Smart Transformation
94	3-2 Products and Services

CH 4 Green Operations

100	4-1 Climate Actions
112	4-2 Environmental Management

CH 5 Talent Sustainability

124	5-1 Talent Management
140	5-2 Diversity, Equity, and Inclusion
151	5-3 Occupational Health and Safety

CH 6 Social Prosperity

162	Social Prosperity
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Appendices

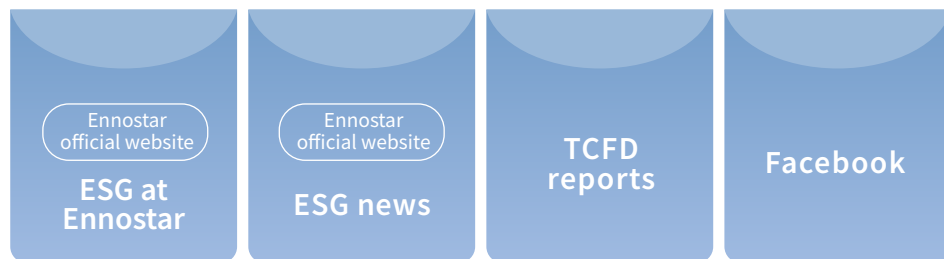
170	I. Data Overview
183	II. GRI Index
195	III. Sustainability Accounting Standards Board (SASB) Index
198	IV. ISO 26000 Guidance on Social Responsibility Index
200	V. Sustainability Disclosure Guidelines: Optoelectronics Industry
201	VI. List of Affiliated Public Associations
202	VII. Independent Assurance Statement from TUV Rheinland

About This Report

Ennostar Inc. was founded on January 6, 2021, and began issuing annual sustainability reports in 2022. This is the fourth 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 2024 (hereinafter referred to as “this Report”) is structured according to the 2021 Global Reporting Initiative (GRI) 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 (SASB), Task Force on Climate-Related Financial Disclosures (TCFD), and ISO 26000 Guidance on Social Responsibility.

Report Duration

This Report spans the period from January 1 to December 31, 2024, 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:



* Due to organizational restructuring, shares in Unicorn originally held by Ennostar, Harvestar, Precistar, and Praistar have been transferred to EPISTAR. As of December 31, 2024, EPISTAR holds 100% of Unicorn shares, and therefore Unicorn was included in the reporting scope of EPISTAR as a subsidiary in 2024.

** Notes are provided for data in this Report which apply only to specific factories/subsidiaries.

*** Exchange rates for China: Data for 2021 was based on an exchange rate of RMB:TWD=1:4.3597; data for 2022 was based on an exchange rate of RMB:TWD=1:4.4173; data for 2023 was based on an exchange rate of RMB:TWD=1:4.4024; and data for 2024 was based on an exchange rate of RMB:TWD=1:4.4557.

Reporting Boundary

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 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”); Unicorn Semiconductor Corporation (hereinafter “Unicorn”^{*}); and Lextar Electronics Corporation (hereinafter “Lextar”) and its Chinese subsidiary Lextar Electronics (Chuzhou)(hereinafter “Lextar Electronics”^{**}).

Note: For more information on consolidated entities not included in the reporting boundary, please refer to consolidated financial reports.

Report Compilation Process

A Sustainability Editorial Team composed of representatives appointed by functional units at Ennostar, EPISTAR, and Lextar compiled this Report based on stakeholder communications and disclosed environmental, social, and corporate governance issues arising from our operational activities. The team operates in accordance with Plan-Do-Check-Action concepts, investigates topics of concern to stakeholders, and set up various points-of-contact within the team to evaluate and review implementations and response measures to these issues. The team is responsible for overall planning, communication, compilation, and goal setting. Following confirmation of these procedures by the team convener, editing processes for this Report were ment and ESG Report Preparation and Verification. 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 are reported periodically or non-periodically to our chairman or board, and related resolutions are recorded in meeting minutes for tracking by administrative units for subsequent reporting at the next board meeting. The currency used for all financial data is TWD and the units for relevant statistical data adhere to internationally accepted standard indicators. ***



This icon means that a link to relevant external information is given.



This icon means that a link to relevant information in the report is given.

Reporting Principles and Guidelines

Non-financial data		Financial information
Standards	<ul style="list-style-type: none"> GRI Universal Standards 2021 TCFD framework SASB Guidelines—Semiconductors Industry-Based Standards AA1000 AccountAbility Principles United Nations Sustainable Development Goals (SDGs) 	Financial data from annual reports
Verification Institute	<ul style="list-style-type: none"> TUV Rheinland performed Type 2 Moderate Level verification in accordance with the AA1000AS Assurance Standard (AA1000AS v3) Please refer to Appendix VII for the Independent Assurance Statement 	PwC Taiwan

Management Systems

ISO 14001 Environmental Management System

EPISTAR, Unikorn, Epicrystal, Episky, Can Yang, Lextar, Lextar Electronics

ISO 14064-1 Greenhouse Gas Emissions at the Organizational Level

Ennostar, EPISTAR, Epicrystal, Episky, Can Yang, Lextar, Lextar Electronics

ISO 50001 Energy Management System

Lextar, Lextar Electronics, Epicrystal

ISO 45001 Occupational Health and Safety System

EPISTAR, Unikorn, Epicrystal, Episky, Can Yang, Lextar, Lextar Electronics

CNS 45001 Taiwan Occupational Health and Safety System

EPISTAR

ISO 27001 Information Security Management System

Ennostar, EPISTAR, Unikorn, Lextar

IATF 16949 Automotive Quality Management System

EPISTAR, Epicrystal, Episky, Can Yang, Lextar, Lextar Electronics

ISO 9001 Quality Management System

EPISTAR, Unikorn, Epicrystal, Episky, Can Yang, Lextar, Lextar Electronics

ISO 26262 ASIL B Automotive Functional Safety Certification

Lextar

Note Ennostar operates only office spaces and has incorporated ISO 14064-1 and ISO 27001 management systems in accordance with current management requirements.

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 August 2024
- Current issue: Released June 2025
- Next issue: June 2026

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

Contact number: +886-3-567-9000 #339075

Email: ESG@Ennostar.com

ESG website: <https://www.ennostar.com/ESG>

ESG unit: Ennostar Sustainable Development Department



Ennostar ESG Website



A Message from our Chairman



Chairman

A handwritten signature in black ink, consisting of stylized Chinese characters.

In the face of global climate change, resource pressure and rapid rise in social expectations, sustainable development has become an indispensable part of the core competitiveness of enterprises. Fucai adheres to the vision of "walking with light, driving optoelectronic innovation, smart sustainability, and illuminating the future of the world" (Bright Innovation, Sustainable Future), continues to lead the transformation with innovative technology, and firmly promotes a smart, low-carbon and co-prosperous future.

In 2024, Fucai will use the "dual value-added engine" strategy to deepen optoelectronic integration solutions from "solution value-added" and "field value-added" to focus on 3+1 high value-added fields such as automotive, advanced display, smart sensing, and AI optical communications, and actively introduce energy-saving, carbon reduction and smart application technologies. The Group's annual R&D investment reached 9.97% of revenue, higher than the original target of 7%, and officially incorporated the ESG ROI (sustainable return on investment) evaluation mechanism into the technology innovation process to ensure that every technology upgrade can take into account environmental benefits and economic value, and practice the mission of "leading product technology innovation, building an optoelectronic field service ecosystem, and creating the best value experience for customers."

In terms of climate action, Fortune has launched a comprehensive carbon reduction plan. In 2024, the group's carbon emissions were successfully reduced by approximately 53,487 metric tons compared to the base year 2022, with a carbon reduction effect of 15.44%. At the same time, we officially joined the RE100 initiative, committed to the group's renewable energy utilization rate of 60% in 2030 and 100% renewable energy in 2050, and published an independent TCFD report to disclose climate risks and response strategies to strengthen operational resilience.

We are well aware that sustainability must be rooted from the inside out. Therefore, Fortune held its first "Sustainability Annual Meeting" in 2024, with "Together for Better" as the main theme. Focusing on the two major topics of "net zero" and "biodiversity", it held Ennostar ESG Award, net zero technology exhibition, theme lectures and green markets, and invited suppliers, academia, and local friendly businesses to participate, deeply integrating the ESG concept into the group's DNA, and cultivating all colleagues to discover and practice sustainable actions from daily business.

In terms of sustainable supply chain management, Fucai released the "Code of Conduct for Suppliers and Outsourcers", launched a sustainable capability coaching program, and held the first "Supplier Carbon Reduction Coaching Workshop", working with partners to strengthen carbon reduction resilience and sustainable governance and expand sustainable influence.

Social prosperity is another sustainable axis we adhere to. In 2024, Fucai promoted social welfare and education promotion with the "STAR Strategy" - Sustainability, Talent, Art, and Responsibility

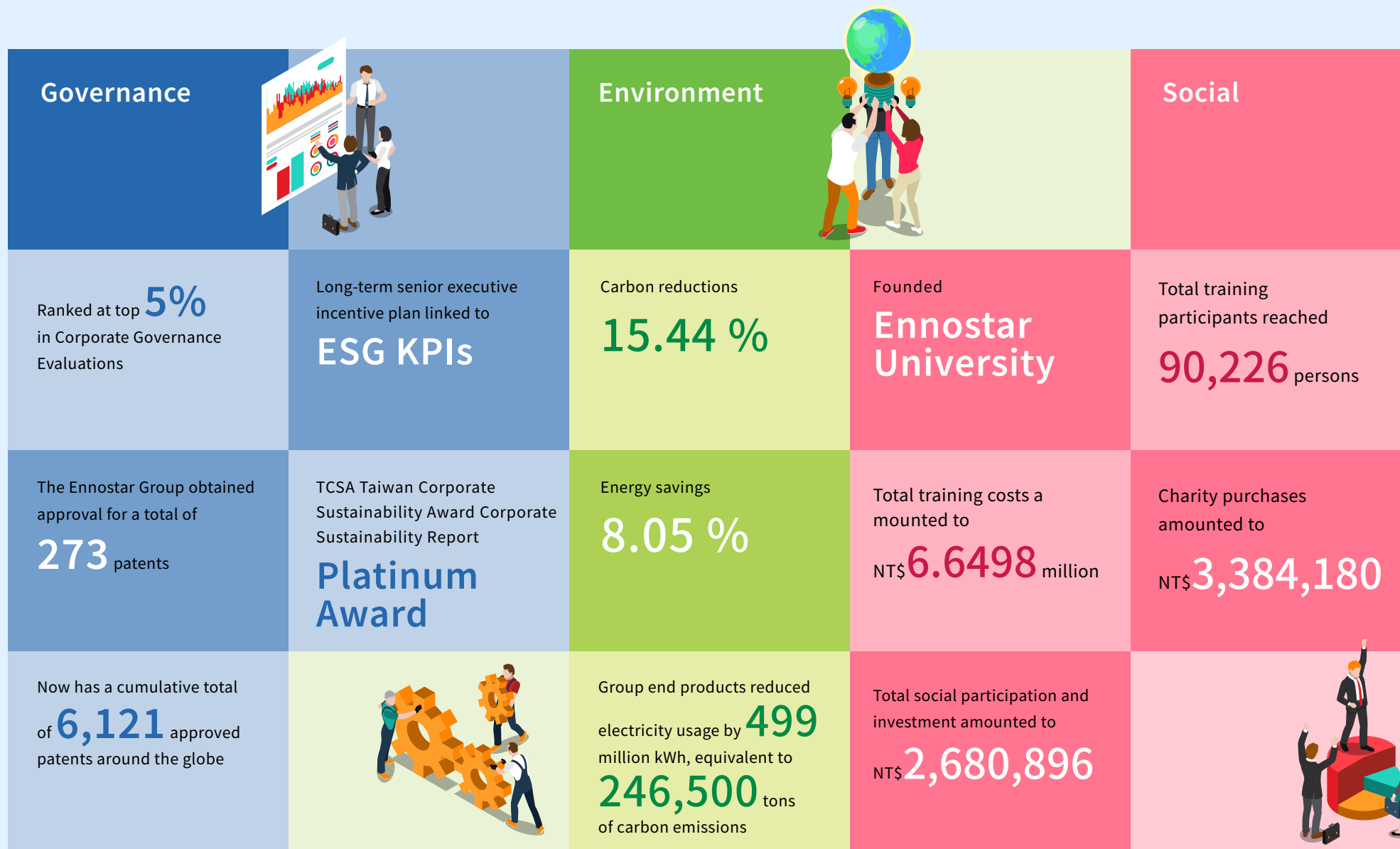
as the core, and the total social participation investment for the whole year was about NT\$2,680,896. It is worth mentioning that we also launched the first LED Science Popularization Sustainable Education Program to root optoelectronic knowledge and sustainable concepts and enlighten the next generation.

In terms of corporate governance and talent sustainability, Fucai has officially incorporated ESG performance indicators into the long-term incentive plan for senior managers since 2024. Through a three-year contract and shareholding trust mechanism, it closely links remuneration with financial performance and ESG goals (such as energy saving and carbon reduction) to implement responsible governance and long-term commitment.

In 2024, Fucai's efforts in the field of sustainability have also been recognized at home and abroad. These honors belong to every Fucai person who works hard and are also proof of our unremitting commitment.

Sustainability is not a project that can be accomplished overnight, but every firm step we take to "walk with the light". In the future, Fortune will continue to use innovation as light and responsibility as a path, and work together with all partners to move towards the goal of net zero carbon emissions, smart applications, and social prosperity, and together illuminate the future of the world.

2024 Sustainability Performance Highlights



Achievements and Awards



FTSE4Good

Ennostar Group

FTSE4Good All-World Index



FTSE4Good

Ennostar Group

FTSE4Good Emerging Index



Ennostar Group

Ranked in top 5% of listed companies in the 10th Corporate Governance Evaluation Ranked in top 10% of electronic companies with a market value exceeding NT\$10 billion



國立臺北大學商學院
企業永續發展研究中心
Center for Corporate Sustainability

Ennostar Group

Taiwan Sustainability Ratings
AAA



Ennostar Group

Carbon Disclosure Project (CDP)
surveys Obtained A rating



Ennostar Group

2024 TCSA Taiwan Corporate
Sustainability Award
Corporate Sustainability Report
Platinum Award



Ennostar Group

2024 TSAA Taiwan
Sustainability Action Awards
SDG 13 Silver Award



EPISTAR

2024 TSAA Taiwan
Sustainability Action Awards
SDG 04 Silver Award



EPISTAR

Hsinchu Science Park
Administration 2024 Promoting
Equal Rights in the Workplace
Distinguished Honor Award



EPISTAR

Southern Taiwan Science Park
Administration 2024 Promoting
Equal Rights in the Workplace
Excellence Award



EPISTAR

The Manila Economic and
Cultural Office (MECO)
Plaque of Appreciation



EPISTAR

2024 TOSIA AWARD
Outstanding Product Award



EPISTAR

2024 TOSIA AWARD
Outstanding Product Award



EPISTAR

2024 TOSIA AWARD
Innovative Technology



EPISTAR

2024 HangJia Aurora Award
RGB and Mini LED chip



EPISTAR

2024 TCSA Taiwan Corporate
Sustainability Award
Innovative Growth
Leadership Award



Lextar

2024 Smart Display Industrial
Alliance (SDIA) Award-Innovative
Application Category
Silver Award



Lextar

2024 HangJia Aurora Award
Product Award



Lextar

2024 TSAA Taiwan
Sustainability Action Awards
SDG 02 Silver Award



Lextar Electronics

Hisense Visual Technology
Quality Excellence Award



Unikorn

2024 TSAA Taiwan
Sustainability Action Awards
SDG 12 Silver Award

About Ennostar

Ennostar was founded on January 6, 2021 through a share swap between EPISTAR and Lextar. The Ennostar Group is a comprehensive optoelectronic integration solution provider focused on technological development and manufacturing of optoelectronic product materials for III-V compound semiconductors. In 2024, the Ennostar Group adopted the “Dual Value-added Strategy Approach” to drive transformation along two axes using the “Field Value-added Approach” and the “Solution Value-added Approach.” The “Field Value-added Approach” focuses on the “3 + 1 long-term development strategy” encompassing automotive applications, advanced displays, smart sensing, and emerging markets (such as AI optical interconnects and high-efficiency III-V solar cells) to improve profits by creating competitive products and technologies that meet market demand. The “Solution Value-added Approach” integrates Group upstream and downstream resources in combination with module drivers and algorithms to provide customers with one-stop shop services and to enhance the efficiency of our value chain.

The Ennostar Group continues to leverage collaboration synergies, adhere to “Dual Value-added Strategy Approach” axes in promoting R&D technological and investment strategies, and accelerate development in high value-added domains to become a comprehensive provider of integrated optoelectronic solutions.

Group Overview



Date of listing

January 6, 2021
Ticker code 3714



Total number of employees

7,542



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\$7,379,405,000



2024 revenues

NT\$24,387,261,000



Automotive applications

The Group possesses comprehensive automotive lighting solutions encompassing adaptive driving beam (ADB) lights, interior Mini LED backlights, Micro LED transparent displays, driver monitoring systems (DMS), and LiDAR, which have been adopted by many international car manufacturers; Ennostar will continue to provide modular solutions and collaborate with clients around the globe.



Advanced displays

The Group continues to invest in R&D of advanced display technologies and constantly makes breakthroughs in Micro LEDs and Mini LEDs. Micro LEDs, which are characterized by high brightness, high contrast, high reliability, and low power consumption, have been incorporated into many international brand products, including smart wearable devices, high-end TVs, and transparent displays, and can overcome many challenges in automotive applications. Use of Mini LEDs have steadily expanded in backlight and RGB display projects, and have been integrated into the supply chains of multiple international brands.



Smart sensing

The Group provides full-wave band lighting product lines and cutting-edge technological specifications paired with sensing solutions across a wide range of solutions encompassing biosensing applications (measuring heart rate, glucose, skin hydration, and other biological signals), industrial automation 1D/3D inspections, IT sensing technologies that can identify users, and automotive safety and electronic equipment proximity sensors. We will continue to expand our sensing modules and driver IC solutions for high value-added applications.



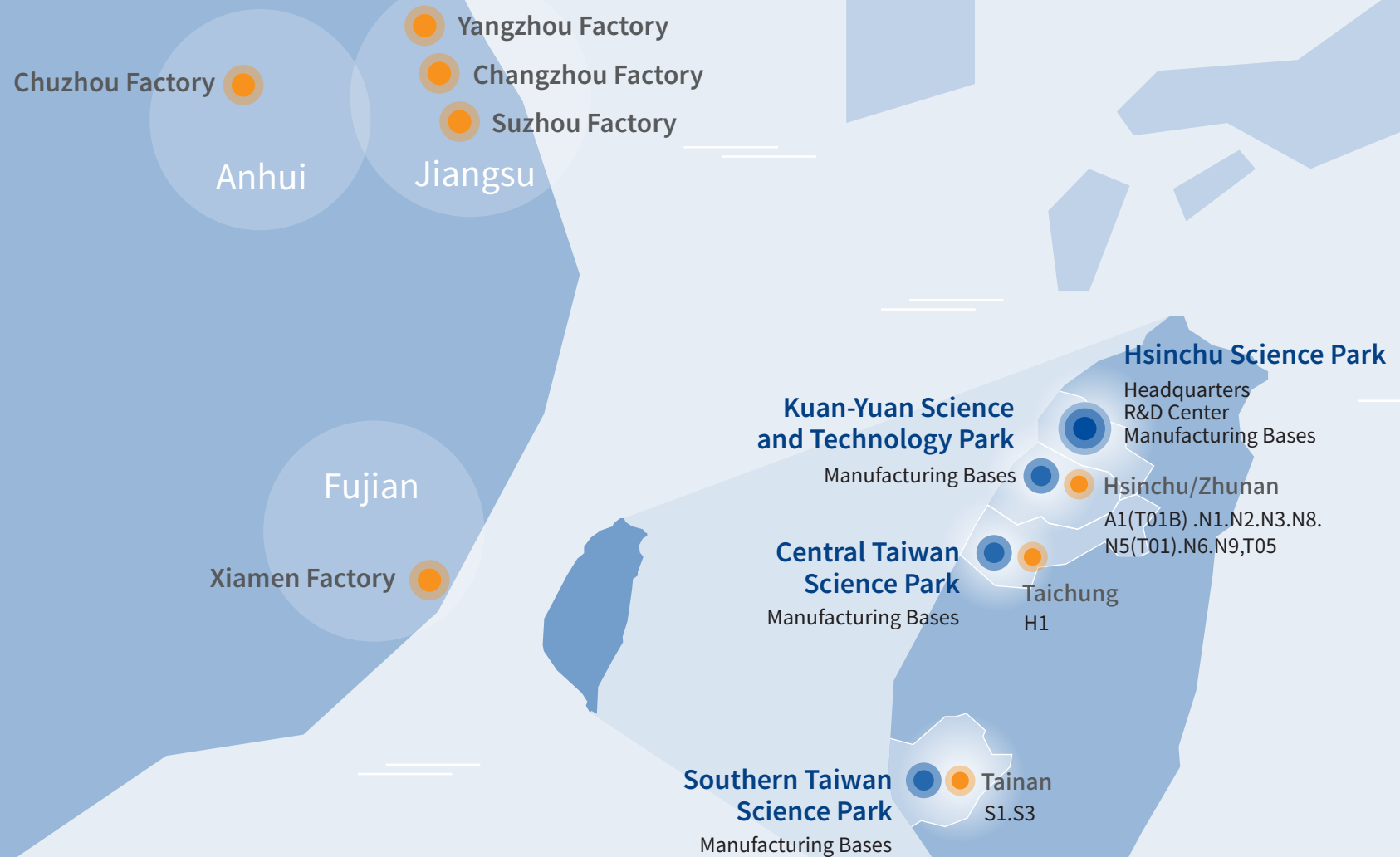
Emerging markets

The Group leverages strong expertise in III-V compound semiconductor optoelectronic materials to actively advance into high value-added domains such as AI optical interconnects, CPO lighting systems (high-speed VCSEL/DFB LD/Micro LEDs), high-efficiency III-V solar cells, professional lighting, and other applications to improve growth momentum, profitability, and risk resistance capabilities.



For more information on analysis of industry environments and organizational operations, please refer to 2-1 Economic Performance

Main Operational Sites



1

Commitment to Sustainability

1-1 Sustainable Development Strategies

1-2 Sustainable Governance

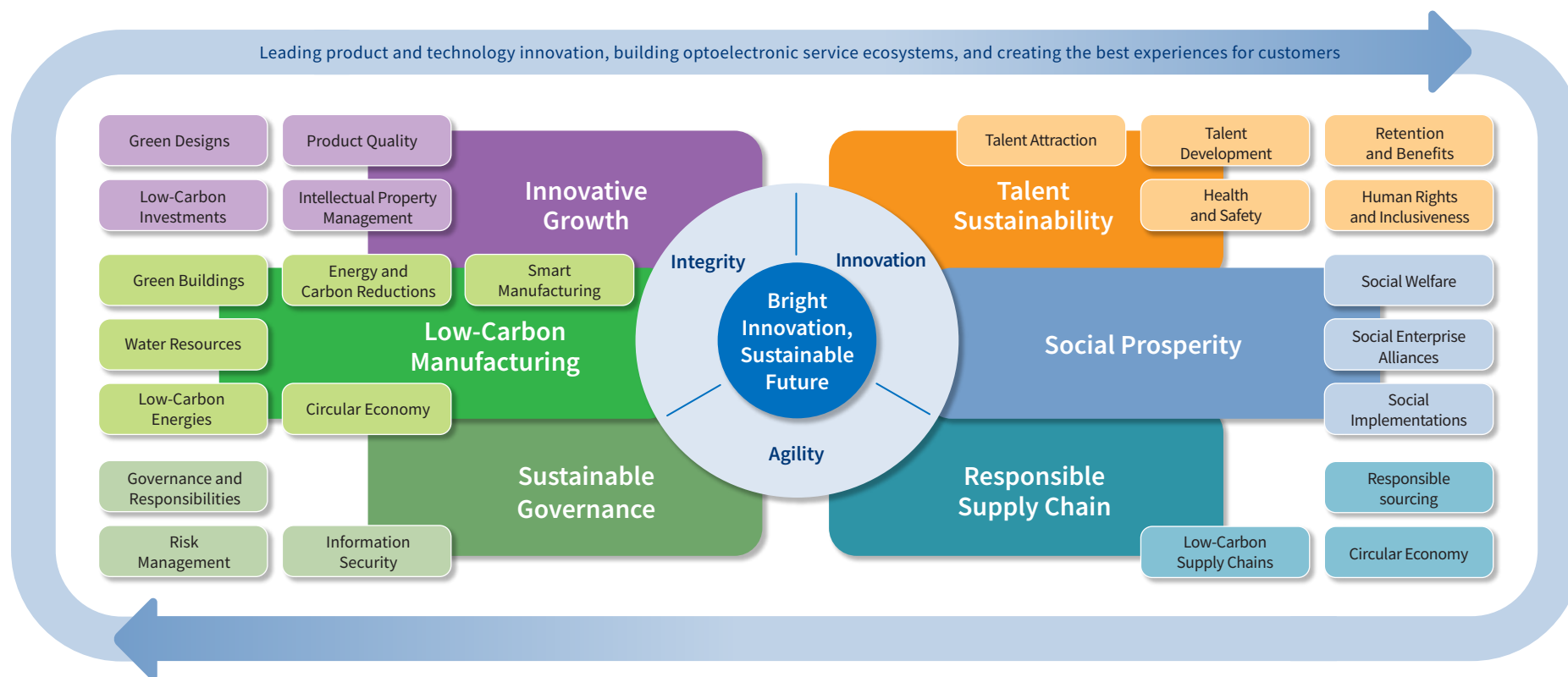
1-3 Materiality Analysis and Stakeholder Communication

- 1-3-1 Identification of Material Topics
- 1-3-2 Management of Material Topics
- 1-3-3 Stakeholder Communication and Engagement

Sustainable Development Strategies

The Ennostar Group began implementing sustainability and ESG actions in 2022. 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.












Please refer to associated sections for more information on targets, scope, and details

● Achieved

Aspect	Topic	Metrics	Target for 2024	Target for 2025	Target for 2026	Target for 2030	Corresponding sections
Sustainable Governance	Governance and Responsibilities	Number of serious violations *	● 0	0	0	0	2-3 Ethical Management
	Risk Management	ERM Enterprise Risk Management System	● Strengthen	Maintain	Maintain	Maintain	2-4 Risk Management
	Information Security	Number of information security incidents	● 0	0	0	0	2-5 Information Security
		Number of substantiated complaints concerning breaches of customer privacy and losses of customer data	● 0	0	0	0	
Responsible Supply Chain	Low-Carbon Supply Chains	Number of high-ranking key suppliers who implement energy and carbon reduction measures	● 12 A+B suppliers 36 C+D suppliers		15 A+B suppliers 35 C+D suppliers	-	2-6 Responsible Supply Chain
	Circular Economy	Number of high-ranking key suppliers who use renewable materials	● Renewable packaging materials 12 A+B suppliers; 7 C+D suppliers		Renewable packaging materials 17 A+B suppliers; 11 C+D suppliers	-	
			● Renewable raw materials 3 A+B suppliers; 10 C+D suppliers		Renewable raw materials 6 A+B suppliers; 7 C+D suppliers	-	
	Responsible Sourcing	Pledge not to use conflict minerals	● 100%	100%	100%	100%	
Innovative Growth	Low-Carbon Investments Green Designs	Green intellectual property rights	● Proportion of green patents: 30% Proportion of green trade secrets: 30%	Proportion of green patents: 30% Proportion of green trade secrets: 30%	Proportion of green patents: 30% Proportion of green trade secrets: 40%	-	3-1 Innovation Management and Smart Transformation
	Intellectual Property Management	Number of patent applications per year	● 264 patents/year	265 patents/year	265 patents/year	-	
	Product Quality	Ratio of products complying with international environmental protection regulations such as RoHS and REACH SVHC	● 100%	100%	100%	100%	3-2 Products and Services
Low-Carbon Manufacturing	Energy and Carbon Reductions	Absolute carbon reductions	● Reduce carbon emissions by 4.2% each year	-	-	Achieve cumulative reductions of 50.4% by 2032	4-1 Climate Actions
		Annual electricity savings	● 3%	3%	3%	3%	
	Water Resources Management	Factory water recycling rate (EPISTAR)	● 70.0%	70.5%	70.5%	75%	4-2-1 Water Resources Management
	Circular Economy	Increases in waste reuse ratios (EPISTAR)	● 75%	76%	77%	78%	4-2-2 Waste Management 4-2-3 Circular Economy

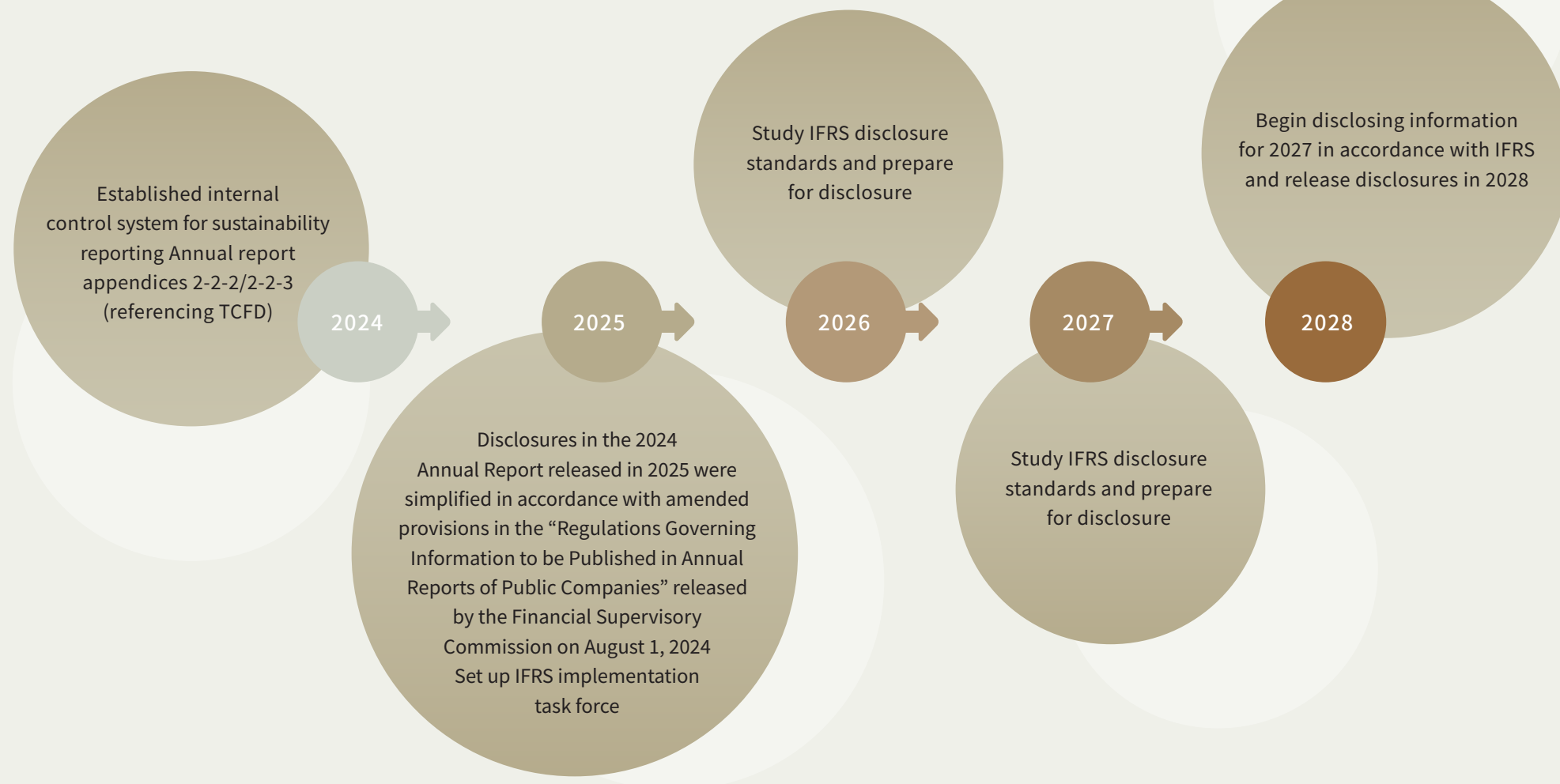
* Refers to single incidents that incurred cumulative fines of more than NT\$1 million

 Achieved

Aspect	Topic	Metrics	Target for 2024	Target for 2025	Target for 2026	Target for 2030	Corresponding sections
Talent Sustainability	Talent Attraction and Retention	Employee engagement rate	 60%	70%	70%	70%	5-1-2 Talent Attraction and Retention
		Number of new collaborations with departments in key target schools	 Cumulative increase of 6 departments	Add collaborations with 5 new departments each year	Add collaborations with 3 new departments each year	Add collaborations with 3 new departments each year	
	Talent Development and Cultivation	Formulate comprehensive learning blueprint	 100% coverage for manager learning blueprints (based on management capabilities)  More than 70% coverage for professional learning blueprints (based on professional capabilities)	Complete 100% of professional learning blueprints for (competency) development units	Complete 100% of professional learning blueprints for (competency) development units	Ensure 80% of colleagues have individual learning blueprints	5-1-3 Talent Development and Cultivation
	Protection of Human Rights	Coverage rate of due diligence procedures for human rights issues	 100%	100%	100%	100%	
	Diversity, Equity, and Inclusion	Rate of closed employee feedback (complaint) cases	 100%	100%	100%	100%	
	Occupational Health and Safety	Disabling injury frequency rate (FR)	 Lextar: <1.84 Lextar Electronics: <1.79 Episky: <1.84 Epicrystal: <1.17 Can Yang: <0.96	Lextar: <1.69 Lextar Electronics: <1.75 Episky: <1.69 Epicrystal: <0.62 Can Yang: <1.34	Lextar: <1.54 Lextar Electronics: <1.75 Episky: <1.54 Epicrystal: <1.54 Can Yang: <1.54	Lextar: <0.87 Lextar Electronics: <1.69 Episky: <0.87 Epicrystal: <0.87 Can Yang: <0.87	
		Disabling injury severity rate (SR)	 Lextar: <21 Lextar Electronics: <20.8 Episky: <21 Epicrystal: <1.17 Can Yang: <4.6	Lextar: <20 Lextar Electronics: <20 Episky: <20 Epicrystal: <0.62 Can Yang: <4.96	Lextar: <19 Lextar Electronics: <20 Episky: <19 Epicrystal: <1.54 Can Yang: <19	Lextar: <18 Lextar Electronics: <18.2 Episky: <18 Epicrystal: <0.87 Can Yang: <18	
Mutual Prosperity	Charitable Donations	Annual charity donations	Surpass previous year	Surpass previous year	Surpass previous year	-	
	Volunteer Participation	Number of participants in volunteer activities	 Exceed 100 participants	Surpass previous year	Surpass previous year	-	

International Financial Reporting Standards, IFRS

To align with international standards and strengthen comparability of financial reports with international enterprises, the Ennostar Group plans to begin adopting IFRS S1 (General Requirements for Disclosure of Sustainability-related Financial Information) and S2 (Climate-related Disclosures) in 2028 to disclose information for 2027. We have commenced training for related personnel and are working to set up the IFRS implementation task force.



Identifying Sustainable Economic Activities

The Ennostar Group's main economic activities at present encompass die/chip manufacturing and packaging modules, and do not include any industries or economic activities listed in the Financial Supervisory Commission Taiwan Sustainable Taxonomy. Therefore, we used the forward-looking economic activities (FLEAs) criteria for disclosure and identification.

Forward-Looking Economic Activities	Project description	Does no significant harm (DNSH) to environmental objectives?	Complies with minimum safeguards?	Corresponding sections
Energy-efficient equipment manufacturing and applications of energy-efficient technologies	<ol style="list-style-type: none"> 1. Three factories have passed third-party ISO 50001 Energy Management System verifications 2. 3. Incorporated I report system in manufacturing processes to enable real-time data analysis and comparison, timely management of resource consumption, and achievement of smart manufacturing goals 4. Initiated smart manufacturing in 2019 starting from "simplified processes" and "automation," then gradually developed "systematic" and "smart" applications for continued optimization of manufacturing efficiency and product quality 	Yes	Yes	3-1-1 Innovation and R&D 4-1-5 Energy Management
Construction of renewable energy	Completed installation of rooftop solar power equipment in Taiwan factories with installed capacity of 1285.615 KWp; 1,494,572 kWh of electricity was sold in bulk to Taiwan Power Company in 2024, and all wholesale contracts will be converted to self-generation for self-use in 2025.	Yes	Yes	4-1-5 Energy Management
Engineering and consulting services for climate change adaptation	<ol style="list-style-type: none"> 1. Released independent TCFD report 2. Introduced internal carbon pricing pilot project 3. Installed local scrubbers (fluorine-reducing equipment) 4. Reduced fluorine volumes 	Yes	Yes	4-1 Climate Actions
Equipment or system installation, technology development, and professional services for water conservation, water resource recycling, or development of new sources of water	<ol style="list-style-type: none"> 1. Incorporated pure water system in process wastewater recycling processes to increase water recycling rates 2. Initiated project to recycle wet scrubber wastewater 	Yes	Yes	4-2-1 Water Resources Management
Application of other low-carbon and circular economy technologies	<ol style="list-style-type: none"> 1. Worked with vendors to convert waste into solid recovered fuels (SRF) through factory general industrial waste recycling project 2. Converted foam waste into plastic pellets for reuse 3. Changed disposal method for gallium waste from landfill to recycling and reuse 4. Factory organic waste liquid was converted into alternative fuel for use by co-generation power plants 5. Recycled and reused trays, cardboard boxes, pallets, and anti-static bags 	Yes	Yes	4-2-2 Waste Management 4-2-3 Circular Economy

Featured Highlight

TOGETHER for BETTER

Ennostar Annual Sustainability Conference

It takes a team to go the distance on the path to sustainability. We understand that ESG must be more than just a slogan, that it must be a deeply embedded concept throughout the entire Group. Our colleagues have to recognize the links between their duties and ESG concepts, discover and incorporate ESG elements into their daily work, and make ESG part of the Group's DNA.

Therefore, the Ennostar Group launched its first Annual Sustainability Conference in early summer of 2024. We organized four activities (Ennostar ESG Award, net zero technology exhibition, themed lectures, and green markets) under the two main themes of the annual sustainability conference: Net zero and Biodiversity. We hoped to introduce ESG concepts to our colleagues in a fun and

Corresponding SDGs



interesting manner through these activities, and embed sustainability principles into their daily lives and work. This event was made possible through cross-departmental collaborations: The event was organized by the sustainability department and human resources center with support from the information center, sustainable manufacturing team, sustainable energy team, sustainable supply chain team, technological innovation team, and corporate communications department, as well as involvement from external partners including suppliers, experts, net zero technology vendors, and local/eco-friendly vendors. Just like our theme, Together for Better, this annual conference helped our colleagues better understand ESG and brought them together so they could build new possibilities at Ennostar to achieve mutual prosperity.

Net Zero

Biodiversity

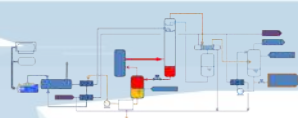
Ennostar
ESG
AwardNet Zero
Technology
ExhibitionThemed
LecturesGreen
Market

Epistar, Lextar, Unikorn sent out their best teams to compete in the Ennostar ESG Finals! Be a part of this thrilling competition by cheering on your team!



Trophy made from company materials

Gathered energy and carbon reduction, toxic and waste reduction, renewable materials, and circular economy vendors to explore how these technologies and solutions can lead us toward a sustainable future!



What new technologies can be used for current production processes and how can we find new opportunities?

Net zero experts led us in exploring net zero targets, while ecological experts brought us closer to nature with their interesting stories!



What species will be introduced in biodiversity lectures?

Come visit the green market with agricultural and creative products as well as fun activities! Enjoy eco-friendly food and activities!



Exclusive ecological experiences with food and agriculture education

Sustainability DIY activities



Click here to watch the annual meeting video

Ennostar ESG Award

We established the ESG Award to promote ESG innovations within the Group and encourage our employees to propose ESG projects. All subsidiaries hosted their own ESG Awards in 2023, and outstanding teams competed in the group-level Ennostar ESG Awards in 2024. This competition cultivated sustainability thinking in our colleagues, encouraged all departments to incorporate ESG concepts into their duties, and served as a platform for exchanging and showcasing outstanding proposals.

Our president and senior executives judged entrants based on environmental (energy consumption reduction, pollution reduction), governance (production efficiency enhancements, reduced costs), and social (social benefits, reproducibility) criteria. A total of nine teams from three subsidiaries participated in the Ennostar ESG Award this year, presenting proposals associated with a range of topics from raw material reduction, energy and carbon reduction, and circular economy. The “Sustainable Manufacturing ESG Power Saving DAD321 Cutting Saw CDA Reduction Team,” the “Butterfly Effect Team,” and the “Simplifying PEC Processes and Reticles Team” received gold awards.

This competition promoted cross-departmental collaboration and discussion, enabling colleagues from different fields to jointly explore problems and develop solutions, while also supporting discovery of innovation topics with good ESG potential to generate innovative ideas for future development within the Group.



(The ESG Award gathered outstanding proposals from our three subsidiaries)

Themed Lectures

One of the four activities, themed lectures, was divided into two parts (lectures for the public and lectures for experts) to introduce biodiversity and net zero concepts from different perspectives.

The lectures for the public introduced biodiversity topics to our colleagues using simple concepts, and were hosted by Jimmy, an ecological speaker from the Society of Wilderness with many years of experience. During the lectures, he related fun stories from his many years working with wild animals to help our colleagues better understand the creatures hidden in our daily lives. We hope these lectures brought ecological knowledge and experiences closer to our colleagues, encouraged them to develop a sense of curiosity toward nature, taught them to coexist peacefully with wildlife and understand the crises they face, and increased their awareness toward the interconnectivity and vulnerability of life; any ecosystem disruptions can affect the survival of different species, including ourselves.

The lectures for experts introduced the SBTi net zero carbon emissions initiative. The Ennostar Group officially submitted SBTi commitments in November 2023 and we invited Professor Allen H. Hu to speak on international carbon reduction trends and directions based on his many years of experience. Professor Hu also explained practical implementations for carbon reduction measures required by SBTi.



(Colleagues and senior executives at SBTi net zero lecture introducing net zero pathways)

Net Zero Technology Exhibition

Net zero technologies and related services are developing rapidly due to sustainability trends. To bring the latest technology trends to our colleagues, we identified 12 vendors in four categories (energy and carbon reduction, waste and toxin reduction, renewable materials, circular economy), and invited them to display their technologies/services so our colleagues could quickly grasp the latest trends.

According to SBTi regulations, carbon reduction not only includes reduction of own carbon emissions, but also the carbon emissions of product raw materials. The Group has formulated supply chain carbon reduction targets and aims to reduce 20% of supplier carbon emissions by 2030. We also invited supplier representatives to join our exhibition tour so we could share related information and resources. During the two-day exhibition, a total of 62 senior executives and 51 Ennostar supplier representatives participated in the tour, which also attracted 217 employees. We hosted a net zero seminar on the second day of the exhibition where 9 net zero vendors presented highlights on their technologies and solutions. We invited Group employees, managers, and supplier representatives to participate in this event so they could learn about the different technologies and brainstorm ideas for carbon reduction in the Group.



(Group senior executives, employees, and supplier representatives participate in net zero technology exhibition)

The net zero technology exhibition and seminar created mutual benefits and opportunities for three parties: Our colleagues and executives learned about the latest net zero technologies and industrial trends, and were able to talk with different vendors without needing to leave the factory to access external resources; suppliers participating in our supplier conference were given an opportunity to learn more about exhibited net zero resources; and the vendors were able to showcase and speak about their technologies with key personnel at different companies. We hope this platform brings mutual prosperity to all three parties (the Group, suppliers, and net zero vendors) so these strong partner connections can enable the Ennostar Group to make stable progress on the path to net zero.



(Vendors presented highlights of their technologies and solutions at the net zero seminar)

NET ZERO

Green Markets

During the annual conference, we hosted green markets at five factories around Taiwan to showcase outstanding products and allow our colleagues to gain a better understanding of companies working hard to generative positive influence. Our colleagues contribute to a better world by purchasing these products.

All green market products adhere to at least one sustainability principle:

1. Local production: Apart from reducing carbon footprints from transportation, these products invigorate local economic developments and enhance competitiveness of local products
2. Environmental friendliness: Products that support environmental pollution reduction and ecological conservation
3. Diverse employment: Products that support disadvantaged groups/small farmers/young people returning to their hometowns and other diverse groups

The green markets prohibited use of plastic bags and encouraged colleagues to carry eco-friendly shopping bags.

We also hosted an ESG-themed DIY activity where participants created aroma tags and potted plants from recycled oyster shells, and made marinades using local pineapples. These fun activities emphasized waste reuse and food & agricultural education while helping our colleagues learn ESG knowledge.

Green Market Rules

Local Production/ Manufacturing

Planted/produced/
manufactured in Taiwan
or local regions

Environmental Friendliness

Ecological conservation/natural
farming/circular products/food
waste/aquaponics/community
transformation

Diverse Employment

Sheltered employment/new
immigrants/career returners/aged
workers/indigenous workers/small
farmers/returnee or local
youths/minority groups



5 factories

21 stalls



We only want the best for our employees

Reusing
oyster shells



Reusing
oyster shells



Probiotic
kombucha



Local
nirgundi



Learning about
insects



Local
pineapples



Reusing
glass bottles



Sustainable Governance

Corporate Sustainability and Risk Management Committee

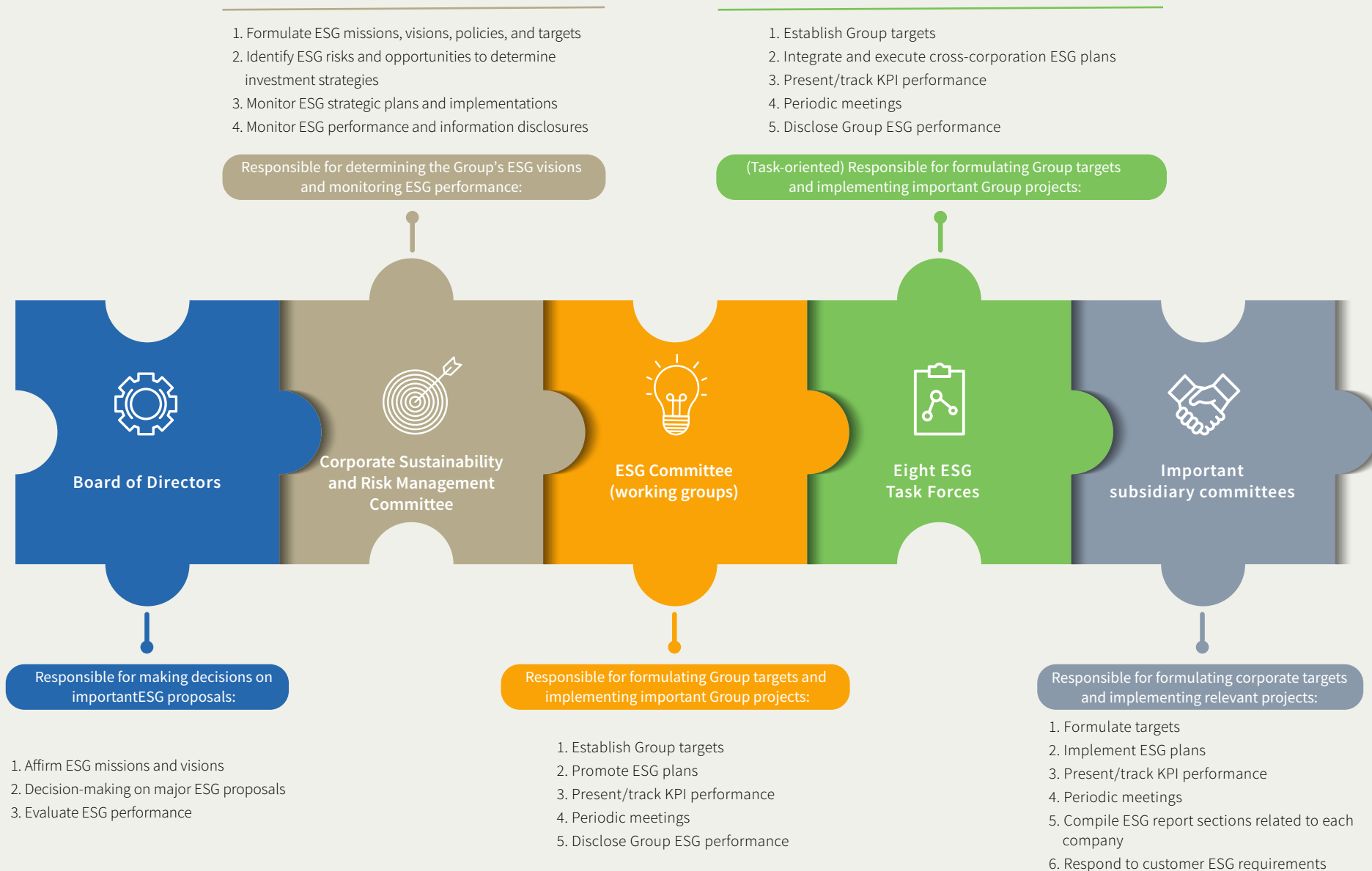
The Group was established in 2021 and formed a Corporate Sustainability and Risk Management Committee under the Board at the end of the year. The Committee is composed of the Group chairman, independent directors, and senior executives from our main subsidiaries (EPISTAR and Lextar). The Corporate Sustainability and Risk Management Committee is a Board functional committee 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 began expanding sustainability governance to overseas factories. Our four subsidiaries in China established respective ESG committees to formulate management guidelines and commence official operations; these committees have been incorporated into our Corporate Sustainability and Risk Management Committee.

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 and decision-making 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 implement sustainability blueprint 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.

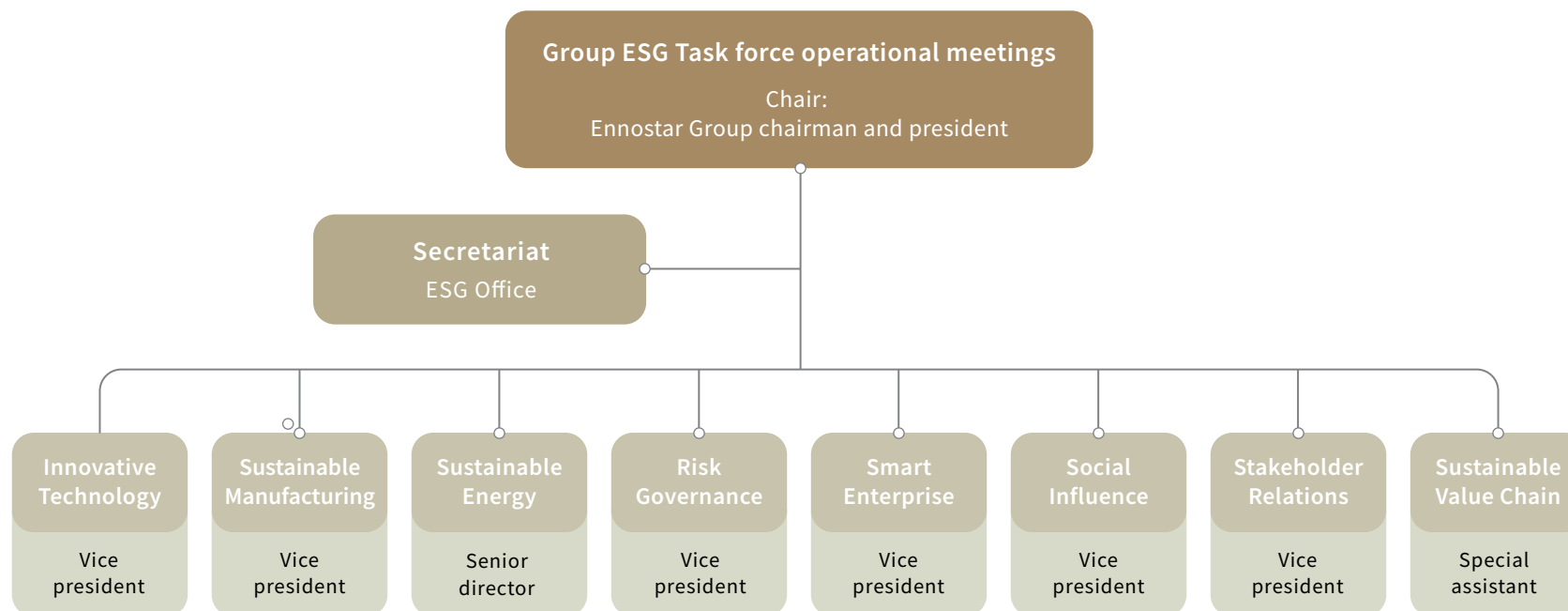
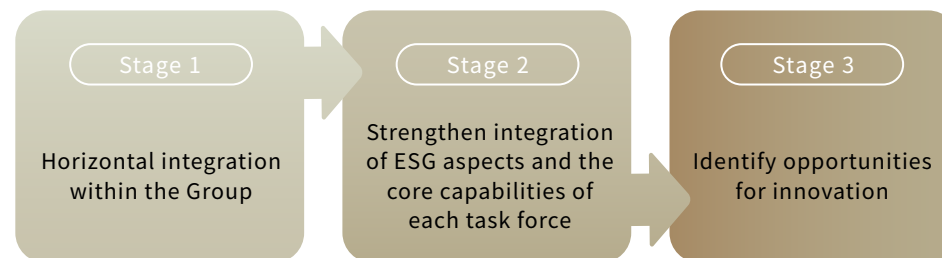


Operations and Responsibilities for Committees at All Levels



Ennostar Group Eight ESG Task Forces

To accelerate horizontal and cross-enterprise integration of various Group sustainability issues, we officially established eight ESG Task Forces in the third quarter of 2022, and these task forces officially commenced operations in 2023. The task forces are chaired by the Group president and chairman, and senior executives from our main subsidiaries lead each cross-enterprise task force in implementing Group projects. Physical meetings are convened every quarter to report progress on Group projects. These task forces enable the Group to lead all subsidiaries in making strides toward 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.



Related Issues

Task Force	Mission	Corresponding Section
Innovative Technology Task Force	<ul style="list-style-type: none"> Low-carbon and innovative technologies 	3-1-1 Innovation and R&D
Sustainable Manufacturing Task Force	<ul style="list-style-type: none"> Energy and carbon reductions Circular economy 	CH4 Green Operations
Sustainable Energy Task Force	<ul style="list-style-type: none"> Renewable energy Energy and carbon reductions 	4-1 Climate Actions
Sustainable Value Chain Task Force	<ul style="list-style-type: none"> Mutual benefits for the supply chain 	2-6 Responsible Supply Chain
Smart Enterprise Task Force	<ul style="list-style-type: none"> Information security ESG digitalization 	2-5 Information Security
Risk Governance Task Force	<ul style="list-style-type: none"> Corporate governance Risk management 	2-4 Risk Management
Social Influence Task Force	<ul style="list-style-type: none"> Diversity, equity, and inclusion Mutual prosperity 	CH5 Talent Sustainability CH6 Social Prosperity
Stakeholder Relations Task Force	<ul style="list-style-type: none"> Stakeholder management 	1-3-3 Stakeholder Communication and Engagement

Group Sustainability Promotions and Expectations

Innovative Technology Task Force



Technology Center

CN Huang

Vice President

"What's our impact?" is a question our team often uses to assess the sustainability values of ESG projects. Years from now, we hope we can proudly share with future generations the efforts and challenges we took on, as well as the sustainable contributions we made for the planet.

Sustainable Energy Task Force



Operational Center Factory Group

Edward Lin

Division Director

The Group's active energy and carbon reduction actions in recent years greatly enhanced our energy efficiency and enabled us to make significant strides in renewable energy usage. We continue to explore financially feasible energy and carbon improvements and investments so we can build a robust sustainability foundation primed for growth, and become an industry benchmark.

Risk Governance Task Force



Finance Center

Jerry Liu

Vice President

Risk governance focuses on enhancing corporate resilience to ensure operational stability and sustainable development. Over the past year, Ennostar has continued to strengthen ERM systems, optimize risk management systems, and improve emergency response capabilities. The Group has built a solid foundation that is continually being improved, and risk governance has become a strong pillar for progress at Ennostar as we work to generate sustainability values.

Innovative Technology
Task Force

Technology Center

CN Huang
Vice President

In an era with limited resources and intensifying climate change, “sustainable manufacturing” has become a critical topic associated with industrial upgrading, corporate survival, and social responsibility.

Ennostar’s Sustainable Manufacturing Team will continue to work on the following topics:

1. Promotion of smart factory systems: Effective system analysis and AutoML promotions to enhance system processing capabilities at all factories and meet energy and carbon reduction targets.
2. Enhance resource efficiency: Enhance process energy efficiency and factory utilization rates (optimize factory utilization), promote circular economy concepts, focus on reuse of products and process materials, and optimize material and energy efficiency.

Ultimately, we hope to build a resilient and internationally competitive enterprise by improving smart manufacturing and resource efficiency.

Social Influence
Task Force

Human Resources Center

Dale Yang
Vice President

Enterprises can amplify social impacts by connecting with social enterprises, schools, and communities to jointly strengthen social resilience when facing future challenges and advancing toward a vision of sustainability and mutual prosperity through development of future talent, social prosperity, and community growth.

Stakeholder Relations
Task Force

Human Resources Center

Dale Yang
Vice President

When conducting business activities, enterprises must focus on stakeholder feedback and requirements on issues of concern. We adhered to this principle by establishing multi-level communication channels to ensure that issues of concern for all parties are appropriately handled and responded to.

Smart Enterprise
Task Force

Information Center

Hung Ching Chao
Senior Division Director

We continue to strengthen cybersecurity scope and data governance, promote ESG digitalization and smart integration, and leverage digital technologies to drive sustainable management and provide a solid foundation for green and smart manufacturing within the Group.

Sustainable Value
Chain Task Force

Supply Chain Group

Jackson Hsu
Senior Division Director

In constantly changing global markets, only value chains with both “resilience” and “sustainability” can overcome risks and lead progress in the future. Ennostar continues to work with supply chain partners to jointly build sustainable value networks and competitive advantages.

Materiality Analysis and Stakeholder Communication

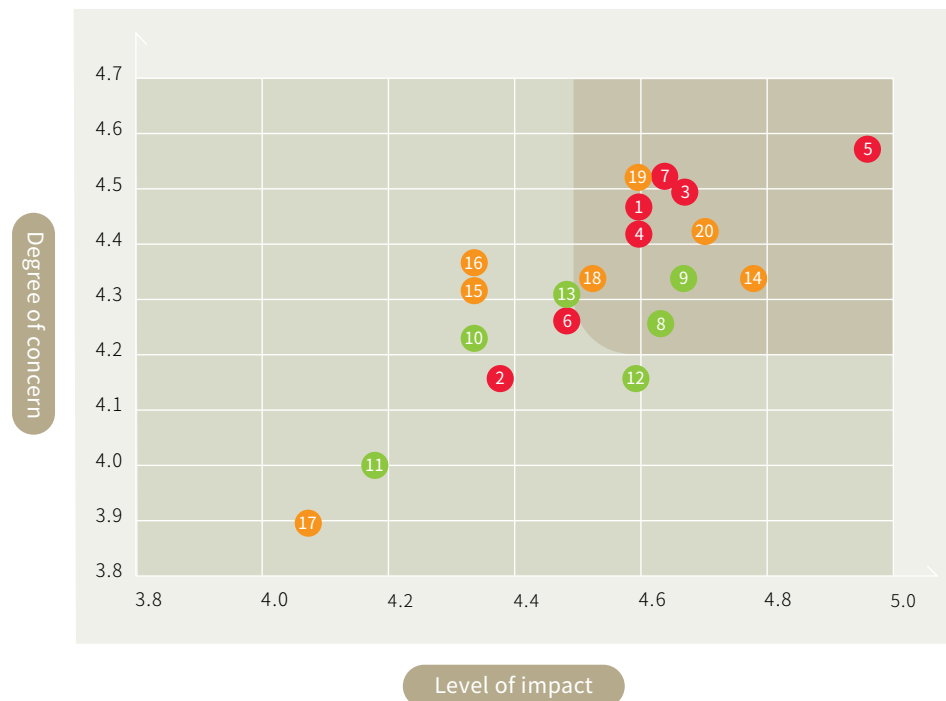
Identification of Material Topics

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 communications office and human resources, auditing, R&D, manufacturing, shareholder affairs, environmental health and safety, quality assurance, factory affairs, and materials departments. All units adhered to 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 corporate governance, social, and environmental impacts: The 11 material topics for the year were determined following internal discussion, and these issues were submitted to and confirmed by the Corporate Sustainability and Risk Management Committee before reporting.

Collection and Identification	Stage 1	1 Identify stakeholders	9 stakeholder categories	We identified 9 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, banks, and the community (including non-profit organizations, schools, and other social groups).
		2 Identify sustainability issues	20 sustainability issues of concern	We tracked global sustainability standards and related reports, including ISO 26000 Guidance on social responsibility, GRI specific topics, Sustainability Accounting Standards Board (SASB) standards, international trends, industry benchmark cases, issues of concern for international sustainability evaluations (including the DJSI Dow Jones Sustainability Index and MSCI Indexes), the Ennostar Group five-year plan, and the sustainability report for the previous year to survey and confirm organizational contexts, then compiled 20 sustainability issues of concern.
Survey and Analysis	Stage 2	3 Survey external degrees of concern	859 surveys	We distributed online and physical surveys to communicate with various stakeholders, and collected 859 surveys which were used to determine stakeholder degrees of concern on 20 sustainability topics of concern.
		4 Survey levels of impact on corporate operations	27 senior executives	The sustainability editorial team distributed the “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	11 material topics	Following comprehensive internal assessments, the sustainability editorial team referenced suggestions from the management team to select material topics with average “degree of concern” and “level of impact” scores exceeding 4.42 points. We then generated a materiality matrix for 11 material topics.
Confirmation and Disclosure	Stage 3	6 Confirm material topics	11 GRI topics	Referenced specific GRI disclosures: We matched our 11 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 disclosures. 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.

Materiality Matrix



Corporate Governance Aspect

- 1 Risk Management
- 2 Sustainable Supply Chain
- 3 Information Security and Privacy Protection
- 4 Economic Performance
- 5 Corporate Governance and Ethical Management
- 6 Innovation Management and Smart Transformation
- 7 Product Quality

Environmental Aspect

- 8 Energy Management
- 9 Air Pollution Management
- 10 Water Management
- 11 Biodiversity
- 12 Climate Change
- 13 Waste Management and Circular Economy

Social Aspect

- 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
- 20 Customer Relationship Management

Management of Material Topics

Material Topics and Discrepancies from Previous Year



Material topics for 2024	Ranking for 2024	Discrepancies from previous year
Corporate Governance and Ethical Management	1	All 11 topics were material topics in 2023
Information Security and Privacy Protection	2	
Product Quality and Liability	3	
Customer Relationship Management	4	
Occupational Health and Safety	5	
Talent Attraction and Retention	6	
Risk Management	7	
Economic Performance	8	
Air Pollution Management	9	
Energy Management	10	
Talent Cultivation	11	

Impacts of Material Topics and Associations with Value Chain



Topic	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
			Direct Impacts	Business Relations	Indirect Impacts					
			The Group	Suppliers/ contractors	Clients	Shareholders /investors	Local communities	Government		
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.	✔	✔	✔	✔		✔	205 Anti-corruption 206 Anti-Competitive Behavior	2-3 Ethical Management
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.	✔		✔				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 to create products that meet market opportunities and negatively impacting the Group’ s business and economic performance.	✔					✔	401 Employment 405 Diversity and Equal Opportunity	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 affect satisfaction levels, but also makes it impossible to understand product quality performance from a client perspective, generating negative economic impacts.	✔	✔	✔	✔			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 due to violations of laws and regulations, failure to meet client requirements, penalties, and product elimination after products are rejected by the market.	✔	✔	✔				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, leading to 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 and society.	✔	✔				✔	403 Occupational Health and Safety	5-3 Occupational Health and Safety





Topic	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
			Direct Impacts	Business Relations	Indirect Impacts					
			The Group	Suppliers/ contractors	Clients	Shareholders /investors	Local communities	Government		
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 values through continued increases in revenues, profitability, and R&D investments. We continue to make good use of profits and actively participate in environmental protection, employee welfare, and social contribution to generate positive social impacts.	✓	✓	✓	✓		✓	201 Economic Performance	2-1 Economic Performance 2-4-2 Risk Items and Response Measures
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 that support stable corporate developments. We also improve employee capabilities to reduce function gaps and to generate positive social and economic impacts.	✓					✓	404 Training and Education	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 for 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.	✓			✓		✓	-	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.	✓			✓	✓	✓	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.	✓				✓	✓	305 Emissions	4-2-4 Air Pollution Prevention




Stakeholder Communication and Engagement

The Ennostar Group attaches great importance to stakeholder interests. We strive to establish diverse two-way communication channels using a variety of methods to ensure that we accurately understand issues of stakeholder concern; we review these issues in a timely manner and prioritize responses.



Stakeholders	Significance to the Group	Material Issues of Concern	Engagement Results Corresponding Sections	Engagement Methods and Frequency	Communication Results for 2024
 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, attract outstanding talent, and work to grow together.	<ul style="list-style-type: none"> Corporate Governance and Ethical Management Occupational Health and Safety Product Quality Information Security and Privacy Protection 	2-2 Governance Organizations 2-3 Ethical Management 5-3 Occupational Health and Safety 3-2 Products and Services 2-5 Information Security	<ul style="list-style-type: none"> ESG questionnaires [Annual] Internal network messaging system [Real time] Strategic planning meetings [Annual] Bidirectional communications 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] 	<ul style="list-style-type: none"> In 2024, we received a total of 86 employee suggestions, 29 of which were complaints. We initiated investigation procedures for all received complaints, planned relevant training and promotion, and also provided counseling, medical aid, and other required assistance to concerned parties
 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.	<ul style="list-style-type: none"> Corporate Governance and Ethical Management Talent Attraction and Retention Occupational Health and Safety Information Security and Privacy Protection Product Quality 	2-2 Governance Organizations 2-3 Ethical Management 5-1-2 Talent Attraction and Retention 2-5 Information Security 3-2 Products and Services 2-4 Risk Management	<ul style="list-style-type: none"> ESG questionnaires [Annual] Shareholders' general meetings [Annual] Investor conferences [Quarterly] Public financial reports and quarterly reports [Quarterly, annually] Investor section [Real time] 	<ul style="list-style-type: none"> Hosted 1 shareholders' general meeting Hosted 4 investor conferences Published monthly operational overviews before the tenth of each month and released quarterly reports

Stakeholders	Significance to the Group	Material Issues of Concern	Engagement Results Corresponding Sections	Engagement Methods and Frequency	Communication Results for 2024
 Clients	Transactions with clients are an important source of revenue for the Group. We continue to provide high-quality products and services to meet client expectations.	<ul style="list-style-type: none"> Corporate Governance and Ethical Management Occupational Health and Safety Protection of Human Rights Customer Relationship Management Economic Performance 	2-2 Governance Organizations 2-3 Ethical Management 5-3 Occupational Health and Safety 5-2-1 Protection of Human Rights 2-1 Economic Performance	<ul style="list-style-type: none"> ESG questionnaires [Annual] Customer satisfaction surveys [Annual] 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] 	<ul style="list-style-type: none"> Participated in external industrial and technological activities such as 2024 Touch Taiwan and 2024 SEMICON Taiwan Weekly/quarterly/semi-annual video/physical conferences with important clients and non-periodic client visits.
 Suppliers/Contractors	Suppliers/contractors are important Group partners. Maintaining sound collaborative relations helps us enhance customer satisfaction and enable us to make timely responses when impacted by major incidents.	<ul style="list-style-type: none"> Corporate Governance and Ethical Management Occupational Health and Safety Product Quality Information Security and Privacy Protection Customer Relationship Management 	2-2 Governance Organizations 2-3 Ethical Management 5-3 Occupational Health and Safety 3-2 Products and Services 2-5 Information Security	<ul style="list-style-type: none"> ESG questionnaires [Annual] Supplier audits and interviews [Annual, non-periodic] Contractor agreements and organizational meetings [Non-periodic] Correspondence between business departments [Non-periodic] 	<ul style="list-style-type: none"> Distributed surveys to key suppliers to determine financial risks, level of local manufacturing and use of renewable materials, and energy and carbon reductions; survey response rate was 100% Hosted 1 supplier sustainability conference attended by 81 suppliers Hosted 1 supplier carbon inventory workshop attended by 9 suppliers
 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.	<ul style="list-style-type: none"> Occupational Health and Safety Risk Management Corporate Governance and Ethical Management Product Quality Mutual Prosperity 	5-3 Occupational Health and Safety 2-4 Risk Management 2-2 Governance Organizations 2-3 Ethical Management 3-2 Products and Services CH6 Social Prosperity	<ul style="list-style-type: none"> ESG questionnaires [Annual] Public hearings [Non-periodic] Official correspondence [Non-periodic] 	<ul style="list-style-type: none"> Attended all competent authority meetings on environmental issues relating to Group factory operations Immediately responded to queries from competent authorities Actively participated in related meetings and courses
 Media	The media provides an important channel for bidirectional and timely communication between the Group and stakeholders.	<ul style="list-style-type: none"> Corporate Governance and Ethical Management Innovation Management and Smart Transformations Product Quality Diversity, Equity, and Inclusion Talent Cultivation Occupational Health and Safety Energy Management 	2-2 Governance Organizations 2-3 Ethical Management 3-1 Innovation Management 5-2 Diversity, Equity, and Inclusion 5-1-3 Talent Development and Cultivation 5-3 Occupational Health and Safety 4-1-5 Energy Management	<ul style="list-style-type: none"> ESG questionnaires [Annual] Online customer service mailbox Spokesperson and deputy spokesperson [Real time] Press conferences and media exchanges [Annual] 	<ul style="list-style-type: none"> Hosted 1 press conference and 2 media exchanges in 2024 Hosted 10 external professional lectures 1,446 mentions in the media Increased Group website users by 30% The Group's social media received 168,506 views

Stakeholders	Significance to the Group	Material Issues of Concern	Engagement Results Corresponding Sections	Engagement Methods and Frequency	Communication Results for 2024
 Insurance companies	The services provided by insurance companies offer additional protection for factory equipment and personnel.	<ul style="list-style-type: none"> Product Quality Economic Performance Corporate Governance and Ethical Management Risk Management Information Security and Privacy Protection Customer Relationship Management 	3-2 Products and Services 2-1 Economic Performance 2-2 Governance Organizations 2-3 Ethical Management 2-4 Risk Management 2-5 Information Security	<ul style="list-style-type: none"> ESG questionnaires [Annual] Meetings, phone calls, and emails [Real time] 	<ul style="list-style-type: none"> Human resources unit: Conducted 4 meetings with insurance companies to discuss employee group insurance agreements Financial unit: Regularly communicate with 3 insurance brokers, and implement irregular communications via phone calls, emails, and online or physical meetings
 Banks	Sound interactions with banks enable us to establish better capital utilization plans and continue to grow corporate operations through investments or financing.	<ul style="list-style-type: none"> Corporate Governance and Ethical Management Climate Change Economic Performance Occupational Health and Safety Air Pollution Management 	2-2 Governance Organizations 2-3 Ethical Management 4-1 Climate Actions 2-1 Economic Performance 5-3 Occupational Health and Safety 4-2-4 Prevention of Air Pollution	<ul style="list-style-type: none"> ESG questionnaires [Annual] Online customer service mailbox [Real time] 	<ul style="list-style-type: none"> We have relations with more than 17 banks and maintain regular communications around once a month to receive updates on market conditions/regulatory compliance and discuss future collaborations.
 Community (including non-profit organizations, schools, and other social groups)	Collaborate with social groups and non-profit organizations to expand our positive social influence	<ul style="list-style-type: none"> Air Pollution Management Waste Management and Circular Economy Mutual Prosperity Talent Attraction and Retention 	4-2-4 Prevention of Air Pollution 4-2-2 Waste Management 4-2-3 Circular Economy 5-1-2 Talent Attraction and Retention CH6 Social Prosperity	<ul style="list-style-type: none"> ESG questionnaires [Annual] Online customer service mailbox [Real time] Events and business collaborations [Non-periodic] Meetings, phone calls, and emails [Real time] 	<ul style="list-style-type: none"> In 2024, we hosted social prosperity activities and worked with 6 schools and 4 non-profit organizations

2

Corporate Governance

2-1 Economic Performance

2-2 Governance Organizations

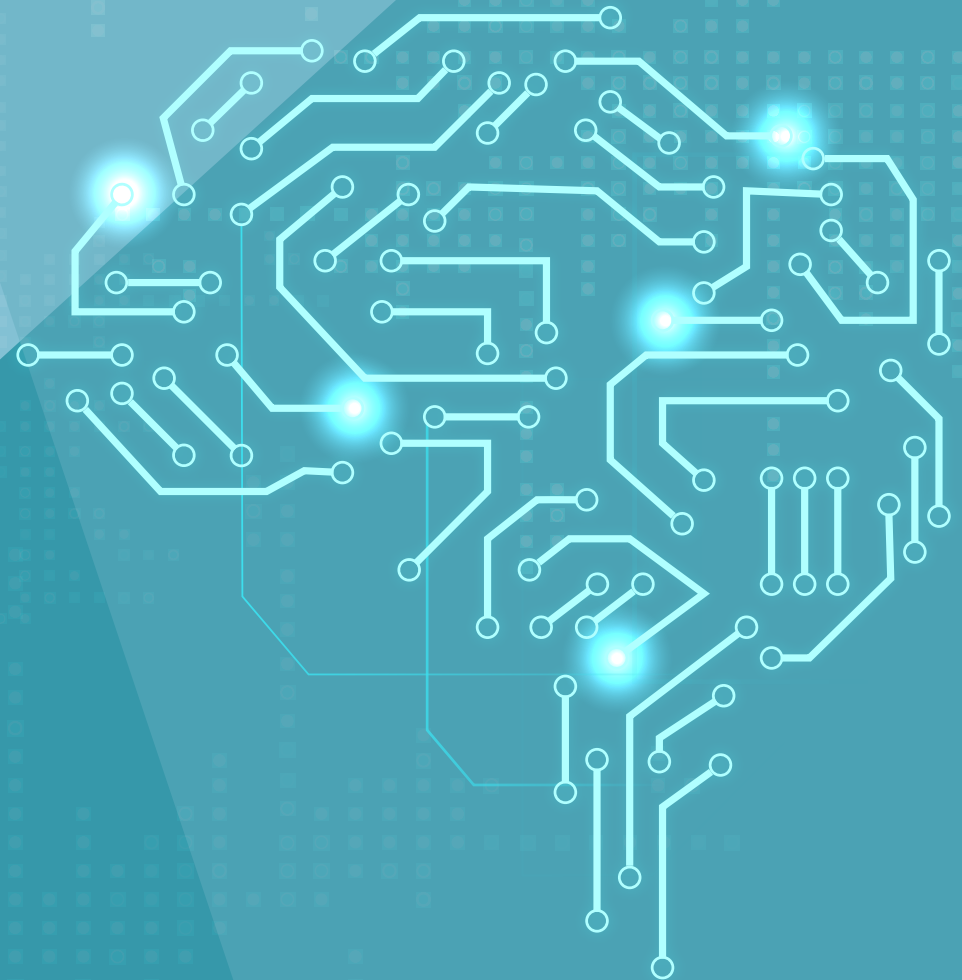
2-3 Ethical Management

2-4 Risk Management

- 2-4-1 Risk Management Systems
- 2-4-2 Risk Items and Response Measures
- 2-4-3 Establishing a Risk Management Culture

2-5 Information Security


2-6 Responsible Supply Chain



Economic Performance

Corresponding SDGs



Material Topic	Economic Performance				Base year: 2021
Indicators	2024		Target for 2025	Targets for 2026 and beyond	
	Achievement	Target			
R&D investment to revenue ratio at the Group	 9.97%	> 7%	> 7%	> 7%	
Responsible unit	Innovative technology task force, R&D department, and intellectual property rights department				

Condensed and Consolidated Income Statement

Unit: Thousand TWD

Indicator	Amounts
Revenues	24,387,261
Gross operating profit (retained economic value)	3,317,665
Operating profit and/or loss	-1,624,264
Net profit (loss)	-1,767,327
Payment made to investors	0
Earnings per share (TWD)	-1.87
Employee compensation and benefits	7,617,134
Payments made to the government (taxes)	98,713

Note: The financial information in this table was taken from consolidated financial reports.

Product Manufacturing Volumes

Product	Output volume	Product	Output volume
Chips/wafers	1,880,261,773 (K EA)	Assembly and modules	4,263,165 (K PCS)

Global Sales

Unit: Thousand TWD

Country	Sales	Ratio
Taiwan	2,603,666	10.68%
China	13,830,163	56.71%
Malaysia	2,094,545	8.59%
Japan	2,070,438	8.49%
Hong Kong	1,360,358	5.58%
South Korea	978,196	4.01%
Singapore	539,016	2.21%
Other	910,879	3.73%
Total	24,387,261	100.00%

Business Proportions

Unit: Thousand TWD

Product	Revenues	Ratio
Chips/wafers	15,831,412	64.92%
Assembly and modules	7,458,523	30.58%
Other	1,097,326	4.50%
Total	24,387,261	100.00%

Short and Long Term Business Development Plans

Short-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 lower costs and meet profitability targets.
- (9) Establish market positions in sensor businesses associated with automotive applications, industrial sensing, robots and drones, consumer and medical biometric monitoring, 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.

Mid- to long-term plans

- (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 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.

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 accounting division director in planning and fulfilling tax duties. The chief financial officer assumes all ultimate responsibilities for tax management. Additionally, our 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

Faced with pressures from global economic challenges and fluctuations in optoelectronic industry needs, the Ennostar Group established the “Dual Value-Added Strategy Approach” to guide dual-axis investment blueprint developments. Apart from continuing to integrate existing investment businesses, we also actively explore potential targets and focus our resources on the “3+1” application domains which include automotive applications, advanced displays, smart sensing, and optical interconnects. We strive to build a diversified growth engine that can serve as the Group's foundation for sustainable development.

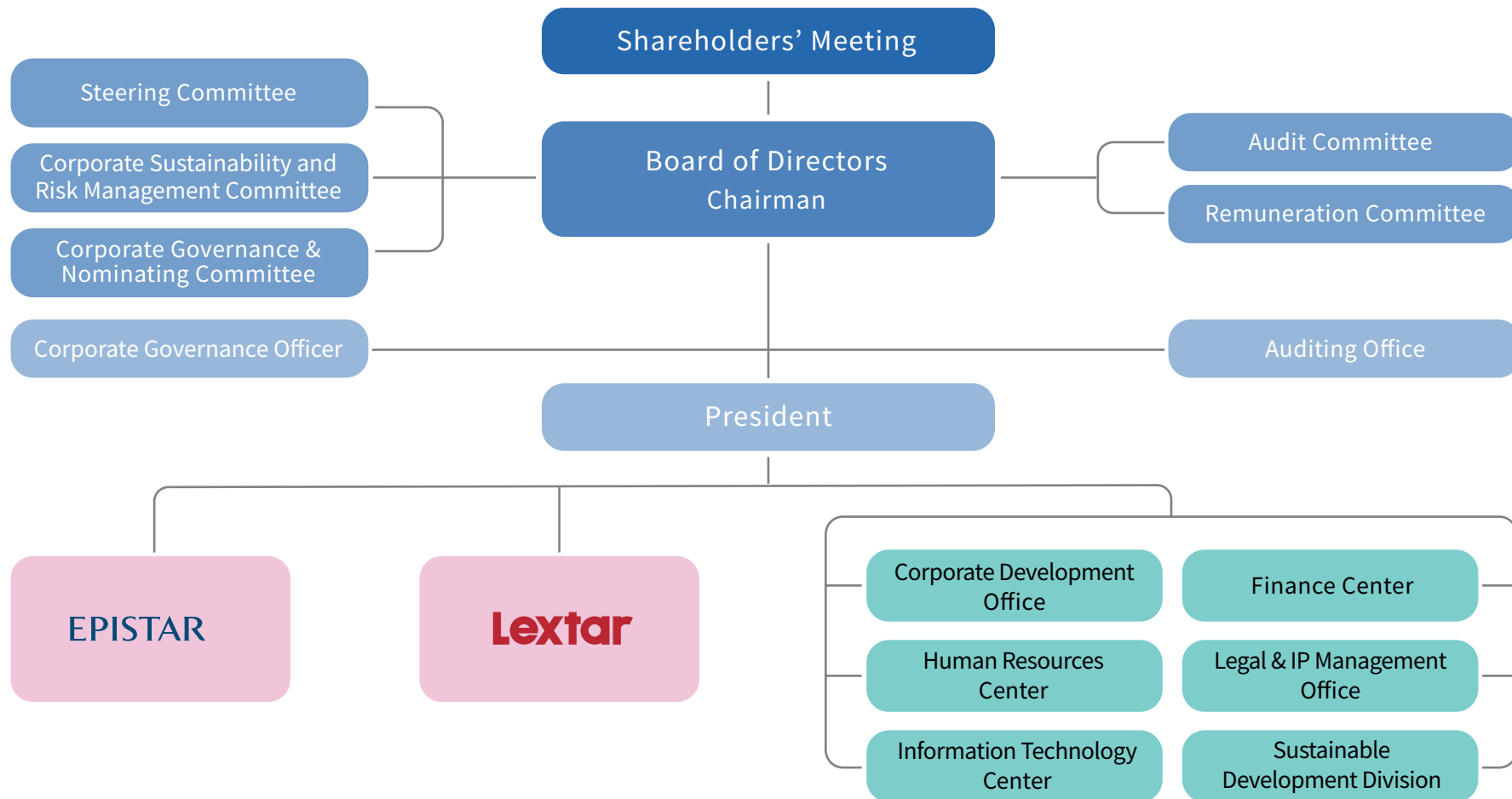
In the face of increasingly stringent net zero requirements and policies from clients and governments around the world, we fully understand the important role sustainable investment plays in corporate growth and social responsibility. However, lack of green energy resources, lagging progress, and incomplete certifications are putting pressure on industrial sustainability goals. Additionally, power supply challenges highlight the necessity of innovative designs, and we have established differentiated competitive advantages in the market through energy-saving and carbon-reducing designs in energy vehicles and silicon photonics, using innovative technologies to respond to external environmental challenges. We actively incorporate ESG (environmental, social, corporate governance) issues into our investment decisions and adhere to the United Nations Principles for Responsible Investment (PRI). We also use smart transformation to drive R&D of high-performance manufacturing technologies and components, enhance manufacturing efficiency, and minimize the environmental and social impacts of manufacturing. Digital transformation and smart manufacturing are our current priorities and important pillars for long-term development which will enable us to drive diversified growth.

In terms of investment strategies, we continue to keep informed of the latest PRI developments, set ESG issues as core considerations for investment decisions, and regularly disclose the ESG achievements of our current investments. We actively participate in formulation and implementation of industrial sustainable investment standards and have established sustainable investment strategies and standards for the Group which incorporate ESG concepts into our policies and assessment standards as we strive to implement all related principles.

The Ennostar Group is committed to creating long-term values for shareholders, clients, society, and other stakeholders, and strives to achieve the vision of “Bright Innovation, Sustainable Future.”

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 of Directors 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 shareholder meeting directives; are responsible for establishing sound Board governance systems; implementing supervision, designation, and guidance for Group executives; strengthening management functions; monitoring overall economic, social, and governance operations; and working to maximize stakeholder interests.

Ennostar's "Corporate Governance Best Practice Principles" stipulate that Board composition should be diverse and include industrial and academic experts who have the ability to formulate practical management targets. Our second Board of Directors 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.

The average term of our directors is 3 years. The term of the current Board spans from May 31, 2023 to May 30, 2026. The Board convened a total of 8 times in 2024 and the average director attendance rate was 97.2%. *

Director Nomination and Election Process

Director (and independent director) candidates are nominated according to our "Articles of Incorporation," "Rules for Elections of Directors," and "Organizational Charter for Corporate Governance and Nominating Committee." The Board and 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 Ennostar, 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

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 Sustainability & ERM Committee, with operations and implementations respectively governed by the "Rules for the Procedures of the Board of Directors' Meeting," "Audit Committee Charter," "Remuneration Committee Charter," "Organizational Charter for Corporate Governance and Nominating Committee," "Rules for the Procedures of Steering Committee Meetings," and the "Sustainability & ERM Committee Charter."



Audit Committee

1. Responsible for supervising effective implementation of internal controls, fair presentation of corporation financial statements, selection and dismissal of CPAs, assessment of CPA independence and performance, compliance with laws and regulations, management of existing or potential risks, and exercising supervisor duties.
2. Composed of 5 independent directors, with Independent Director Wei-Min Sheng serving as convener.
3. Convened a total of 7 times in 2024 and achieved an average attendance rate of 94.3%.



Remuneration Committee

1. Assists the Board in evaluating director and manager remuneration and links with business performance, recommends 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. Composed of 3 independent directors, with Independent Director Hsien-He Sheng serving as convener.
3. Convened a total of 6 times in 2024 and achieved an average attendance rate of 100%.

* Please refer to Appendix I [Governance Data] for a list of meeting attendees and attendance rates in 2024



Corporate Governance and Nominating Committee

1. Establish diversity and independence standards for Board members. Formulate organizational structures and performance evaluations for the
2. 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. Convened a total of 2 times in 2024 and achieved an average attendance rate of 100%.



Sustainability & ERM Committee

1. Responsible for formulating ESG missions, visions, policies, and goals; identifying ESG risks and opportunities; determining investment strategies; overseeing ESG strategic plans and implementations; and supervising ESG performance and information disclosures.
2. Composed of 1 director (the Chairman) and 2 independent directors, with our Chairman serving as convener.
3. Convened a total of 4 times in 2024 and achieved an average attendance rate of 100%.



Steering Committee

1. Assists the Board in managing Group developments and supervising long-term cultivation plans and related implementations for management successors.
2. The Chairman serves as convener and assigns 2-4 Committee members as needed. The Committee is currently composed of 5 members: 3 directors concurrently serving as managers, the chief strategy officer, and 1 senior executive.
3. Convened a total of 16 times in 2024 and the average attendance rate was 96.25%.

Performance Evaluations of the Board and Functional Committees

In order to implement corporate governance and enhance the functionality of 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 2024 were reported to the Board during the first quarter of 2025 and have also been published on our corporate website.*

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. To maintain quality of conducted duties, Ennostar’s independent directors adhere to regulations and do not concurrently serve as independent directors of more than three other public companies.

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.

* Please refer to Appendix I [Governance Data] for Board self-evaluation results in 2024

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. Global economic conditions were slow to recover in 2024, and although overall operations have improved since last year, there were still external environmental challenges and the consumer market has not shown significant rebounds, resulting in losses for this year. Remuneration standards for senior executives at the Group adhere to the remuneration policies set by the Remuneration Committee and the Board of Directors, which are submitted to the Board for approval following annual review by the Remuneration Committee. Total compensation for Group senior executives is composed of salaries, long/short-term variable bonuses, and employee remuneration from earnings distributions. We participate in remuneration surveys conducted by industry institutes or external consulting companies to regularly review the competitiveness and market alignment of our remuneration policies. Variable bonuses are determined based on operational performance, involvement in operations, and company profitability. The Group established a long-term incentive plan for senior executives in 2024 which contains financial indicators and links to ESG performance (corporate governance, social participation, and environmental sustainability performance indicators). Performance is assessed annually based on achievements of financial and ESG targets over a three-year period. Incentives are granted through a stock trust mechanism and include a clawback clause to strengthen alignment with shareholder interests and reinforce our commitment to sustainable operations. In terms of employee retirement benefits, we have formulated employee retirement policies based on the Labor Standards Act/Labor Pension Act, and retired employees collect pension payments in accordance with these policies.

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 related 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 departments 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 transaction practices and possibilities of fraud and corruption, providing a reference for the Board and our president when evaluating the effectiveness of internal control systems and 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 report 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 the transaction practices of our 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 2024, 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, our “Regulations for Sustainable Information Management and ESG Report Preparation and Verification” was approved by the Board in November 2024 and was used to incorporate sustainable information management into internal control systems.



Ethical Management

Corresponding SDGs



Material Topic	Corporate Governance and Ethical Management				
	2024		Target for 2025	Target for 2026	Target for 2030
Indicators	Achievement	Target			
Number of serious violations*	0	0	0	0	0
Substantiated reports of fraud received through grievance mechanisms	0	0	0	0	0
Number of major deficiencies found in internal control audits	0	0	0	0	0
Number of substantiated anti-competitive cases/ domestic and international anti-competition litigation rulings	0	0	0	0	0
Number of substantiated corruption cases/judicial rulings or penalties imposed by supervisory authorities	0	0	0	0	0
"Procedures for Ethical Management and Guidelines for Conduct" employee training completion rate	100%	100%	100%	100%	100%
Anti-competition promotion and employee training completion rate	100%	100%	100%	100%	100%
Anti-corruption promotion and employee training completion rate**	100%	100%	100%	100%	100%

* Refers to single incidents that incurred cumulative fines of more than NT\$1 million

** Calculated as the number of participants that completed training/total participants in Ennostar Group Sustainability College 2024 online courses promoting ethical and human rights policies x 100%

Ethical Governance

Establishing an Ethical Policy and Culture

The Group abides by business principles of honesty, transparency, and responsibility. We have formulated the "Ethical Corporate Management Best Practice Principles" and "Ennostar Procedures for Ethical Management and Guidelines for Conduct" to establish sound business operations and prohibit all forms of corruption and fraud. Substantiated violations of Group bylaws and ethical management policies are punished in accordance with relevant regulations. 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, the Ennostar official 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.


Employee Ethical Management Training

Ennostar continuously strengthens employee education and training while reiterating the need for colleagues to remain vigilant at all times to avoid conflicts of interest related to their duties. We adopt a zero-tolerance policy toward business conduct involving bribery, extortion, and corruption; prohibit unreasonable gifts, hospitality, or other improper benefits; prohibit use, disclosure, disposal, destruction, or other infringement of intellectual properties without the consent of rights holders; and ensure that all business activities comply with the Fair Trade Act and relevant competition laws (anti-trust laws).

Grievances and Reporting Systems

To strengthen corporate governance and implement ethical management and codes of ethical conduct, we set up the "Whistle-Blowing Channel and Protection System" and "Reporting System for Professional Ethics Violations" on our corporate website and intranet to 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. Reports can be made anonymously, and whistleblower identities and reports are protected and kept confidential to prevent unfair retaliation or treatment.

Our chairman assigned report handling responsibilities to the audit director, and external experts (such as lawyers and CPAs) are 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 incidents that could cause severe damage to the company, following which written notifications are submitted to the Audit Committee and supervisors. Incidents involving directors or senior executives are reported to the Audit Committee, independent directors, or supervisors before reports are made to the Board.

Internal/ External	Grievance Channels	
	Internal	External
	<ul style="list-style-type: none"> 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 employee relations unit of the human resources department Factory labor representatives/regular labor-management meetings President's mailbox Grievances directly reported to audit units 	
		<ul style="list-style-type: none"> "Reporting System for Professional Ethics Violations" on corporate website "Contact Us" hotline number and email on corporate website

Grievance Hotlines and Emails

Company	Grievance hotline	Grievance emails
Ennostar	(03) 5678000	ESG@Ennostar.com Query@Ennostar.com
EPISTAR	Extension 7885/ (03) 5678000 ext. 7885	7885@epistar.com
Lextar	Extension 7885/ (03) 5658800 ext. 7885	7885@lextar.com

In 2024, 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:
 - Major violations or incidents that could cause severe damages
 - Reports involving the chairman or senior executives

The number of business ethics violation reports received in 2024 were as follows:

Company name	Total reports	Number of cases related to business ethics	Substantiated business ethics violations	Cases related to corruption, bribery, or confidentiality	Cases related to diversity, equality, or sexual harassment	Cases related to discipline	Other
Ennostar	0	0	0	0	0	0	0
EPISTAR (including Unikorn)	2	0	0	0	0	0	2
Lextar/ Lextar Electronics	1	0	0	0	0	0	1

Note "Other" refers to reports that were not associated with business ethics.

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.

In 2024, 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, and incurred no violations of related marketing and communications (including advertisement, promotion, and sponsorship) regulations or voluntary compacts.*

* In accordance with the Regulations Governing Material Information Verification and Disclosures by Listed Companies, major violations are defined as single incidents which incurred cumulative fines of more than NT\$1 million.

Legal Compliance Management Systems and Regulations

Indicator	Management Systems
Board of Directors	The Ennostar Group and all major subsidiaries have established respective 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, engage in legal consultation, and review stakeholder contracts, thereby preventing corporate risks and enhancing business performance.
Grievance System	Ennostar and Lextar have established the "Whistle-Blowing Channel and Protection System" and EPISTAR and Unikorn have established the "Whistleblower System and Whistleblower Protection" to ensure that illegal behaviors are reported and handled, whistleblower identities are protected, and acts of retaliation are prevented.
Management Regulations/ Education and Training	<ul style="list-style-type: none"> Established the Ennostar Group Procedures for Ethical Management and Guidelines for Conduct, encompassing management for 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. The legal affairs office launched the Ennostar Group Sustainability College legal compliance module course series in the second to fourth quarters of 2024, including online courses on the US Foreign Corrupt Practices Act and the Personal Data Protection Act, and an online anti-trust lecture series. 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 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. <p>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 for employees.</p>

Indicator	Management Systems
	<ul style="list-style-type: none"> Apart from annual education and training, the legal affairs department also delivers non-periodic newsletters on legal compliance to all Group employees to strengthen employee awareness of social and economic regulations.
Internal Control and Management	<p>Ennostar 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 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.</p> <p>In 2024, the Ennostar Group incurred no major violations and no major abnormalities or deficiencies were discovered during audits of internal control systems.</p>
Punishment Mechanisms	Personnel who violate corporate ethical management policies may incur the following punishments based on severity of circumstances: written admonishment, termination of employment, economic loss, or compensation claims. Ennostar Group also reserves the right to take legal action if said incident violates local laws. 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 we confirm that said violation involves concealment, inappropriate supervision, or insufficient supervision, relevant personnel and direct supervisors will also be punished.

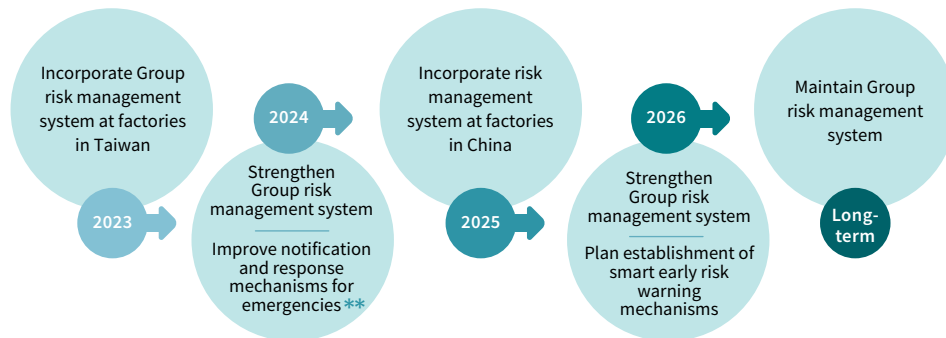
Legal compliance is the cornerstone of corporate social responsibilities and corporate governance. Looking to 2024 and 2025, we will not only continue to review legalities and implementations of related regulations within the Group, but will also regularly post announcements and organize training courses 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 in accordance with law, reviewing internal control systems and procedures based on audit deficiencies, audit abnormalities, and substantiated reports, then propose improvement measures to prevent similar incidents from reoccurring. Adherence to anti-corruption and fair competition regulations help us build sound corporate governance and risk management systems, fulfill corporate social responsibilities, and create business environments conducive to sustainable development.

Risk Management

Material Topic	Risk Management				
	2024		Target for 2025	Target for 2026	Target for 2030
Indicators	Achievement	Target			
ERM Enterprise Risk Management System*	Achieved	Strengthen	Maintain	Maintain	Maintain
Improve notification and response mechanisms for emergencies**	Achieved	Strengthen	Maintain	Maintain	Maintain
Smart early risk warning mechanisms***	NA	NA	Not included	Plan	Maintain

Base year: 2023

Ennostar Group Risk Management System Incorporation Pathway



* The Group's enterprise risk management system aligns with the Risk Management Best Practice Principles for TWSE/TPEX Listed Companies, Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies, and Regulations Governing Establishment of Internal Control Systems by Public Companies; enhances corporate resilience, shareholder values, and sustainable management; and fulfills corporate social responsibilities.

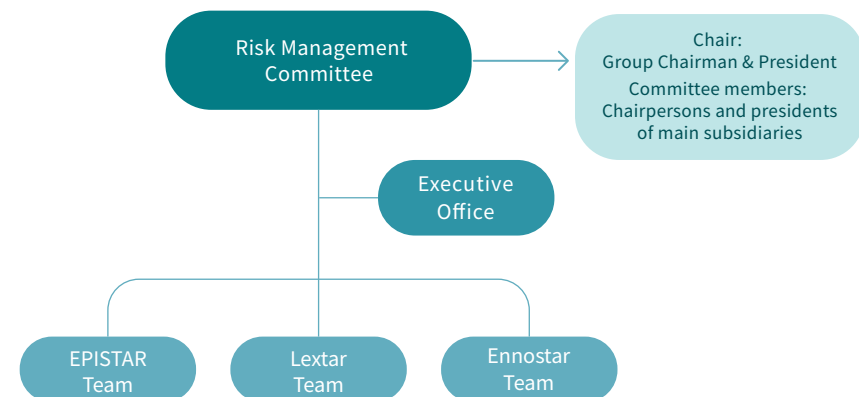
** Our emergency reporting mechanisms enable timely identification and reporting of potential risks, assisting the Group in taking prompt responsive measures to reduce losses and impacts, ensuring compliance with relevant laws and regulatory requirements, and avoiding fines or other legal liabilities due to delayed reporting. Timely reporting and handling of major incidents help maintain the Group's reputation and prevent trust crises caused by a lack of transparency. These mechanisms also provide accurate and timely information that aid management in making informed decisions, thereby enhancing the Group's responsiveness and competitiveness.

*** The Group leverages intelligent risk early warning mechanisms which utilize artificial intelligence and big data analytics to proactively identify potential risks, enabling the Group to take preventive measures before risks materialize. Real-time data analysis and forecasting enables management to make rapid and informed decisions that reduce financial losses and operational disruptions caused by risk events, enhancing the Group's agility in responding to market changes and challenges, improving competitiveness and increasing shareholder value.

To protect the interests of employees, shareholders, partners, clients, and other internal and external stakeholders, the Ennostar Group adheres to international risk management guidelines; the Board-approved "Risk Management Policies and Procedures" serves as our highest guideline for risk management. The Group adheres to established risk management policies and actively established a risk management framework including systems and processes which define various risks based on corporate operational strategies. We built mechanisms for early identification, assessment, accurate measurement and response, effective supervision, and strict control of operational risks, as well as mechanisms for internal risk reporting and response, forming a comprehensive internal risk management system framework that embeds risk management culture into daily operations and enhances business resilience. We combine these mechanisms with annual systemic assessment and identification of material risk topics to help our management team make decisions, continually improve best practices for risk management, enabling us to create and enhance corporate value as we fulfill our commitment to corporate sustainability.

Risk Management Systems

Risk Management Organizational Structure and Responsibility



**Board of
Directors**

Highest
governance
unit for risk
management

The highest governance unit for risk management at the Ennostar Group, responsible for supervising overall risk management executions, reviewing major risk management policies and regulations, and monitoring risk management implementations, ensuring effective management of risks.

- Approve Group “Risk Management Policies and Procedures”
- Approve Group risk management organizations
- Ensure Group operational strategies are consistent with “Risk Management Policies and Procedures”
- Ensure the Group has established appropriate risk management mechanisms and risk management culture
- Supervise and ensure effective operation of Group risk management mechanisms
- Deploy and assign sufficient and appropriate resources to ensure effective risk management
- Approve and authorize the responsibilities of the Risk Management Committee
- Approve Group annual risk management reports

**Risk
Management
Committee**

- Review formulation and revision of Group risk management policies and procedures, Group risk management organizational structures, and Group risk management process regulations, and regularly review suitability and effectiveness
- Approve Group risk appetite (risk tolerance) and guide resource distributions
- Ensure internal implementation of risk management policies and effective operation of risk management systems and mechanisms
- Approve Group risk control priorities and risk levels
- Review risk management implementations and propose necessary recommendations, review and confirm Group annual risk management reports, and report risk management implementations to the Sustainability & ERM Committee and the Board every year
- Implement Board risk management decisions and handle Board directives
- Regularly convene and chair Risk Management Committee meetings, supervise risk management implementation results, and ensure risk management implementation progress within the Group
- Provide resources to establish, implement, and maintain risk management mechanisms within the Group
- Designate executive office members

**Risk
Management
Executive
Office**

- Assist the Risk Management Committee in designing, formulating, promoting, and maintaining risk management mechanisms
- Formulate Group “Risk Management Policies and Procedures,” Group risk management organizational structures, and Group risk management process regulations
- Formulate Group risk appetite (risk tolerance) and establish qualitative and quantitative assessment standards for risk tolerance
- Analyze and identify Group risk sources and categories, and regularly review applicability
- Regularly compile Group risk management implementations and achievements each year to create the Group’s annual risk management report
- Assist and supervise Group and sub-Group risk management activities, and provide necessary support for risk management implementations
- Coordinate Group and sub-Group cross-department risk management interactions and communications
- Implement Risk Management Committee risk management decisions and handle Committee directives
- Plan risk management training courses to enhance risk awareness and culture within the Group
- Promote the Group’s “Risk Management Policies and Procedures” to ensure internal risk management implementations
- Formulate and implement annual risk management plans
- Coordinate and organize regular Risk Management Committee meetings and related risk management meetings
- Supervise progress and achievements of Group risk response action plans
- Collect, evaluate, compile, and report external risks
- Establish and maintain risk databases

**Risk
Management
Team**

- Ensure sub-Group internal implementations of the Group’s “Risk Management Policies and Procedures” and effective operation of risk management systems and mechanisms
- Approve sub-Group risk control priorities and risk levels, and ensure consistency with Group risk appetite (risk tolerance)
- Review sub-Group risk management implementations, propose necessary improvement suggestions, and review sub-Group annual risk management reports
- Implement Group Risk Management Committee risk management decisions and handle Committee directives
- Regularly participate in Group Risk Management Committee meetings and report risk management implementation results
- Convene and chair monthly Risk Management Team meetings, supervise risk management implementation results, and ensure risk management implementation progress
- Provide resources for sub-Group promotion, implementation, and maintenance of risk management mechanisms

Risk Management Processes

To ensure that all responsible units effectively implement risk management activities, adhere to the “Risk Management Policies and Procedures,” and realize risk management targets, the Ennostar Group formulated the “Risk Management Operational Procedures” stipulating risk management operational procedures and related issues to serve as a guideline.

The Risk Management Operational Procedures include risk identification, risk analysis, risk assessment, risk response, risk supervision and review, and risk reporting and disclosure 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.

The Group conducts comprehensive risk identification processes at least once a year, compiles past experiences, and assesses possible risks in future operations. Our senior executives conduct identification of key and emerging risks, and the business units of major subsidiaries also conduct risk identification activities and disclose identified risks and management achievements. We analyze potential impacts from risk events based on risk assessment results, and then formulate risk response strategies as well as prevention, warning, response, crisis management, and business continuity plans to mitigate, transfer, and avoid risks. Finally, we confirm risk supervision and review mechanisms to ensure that our risk management procedures operate effectively, and include risk response plans in performance measurements and reports, which are compiled and reported to the Sustainability & ERM Committee by the Risk Management Team every six months to continue improving risk management implementation benefits and enhance overall operational decision-making.

Risk Items and Response Measures

Group Risk Assessment and Analysis

To achieve our goal of strengthening ERM systems, the Group’s executive secretary conducted Group risk assessment procedures in 2024 under the guidance of external consultants and completed Ennostar’s Top Down and Bottom Up enterprise risk maps.

- During the risk assessment period, we met with the consultants every two weeks and discussed subsidiary risk management assessment issues for more than 100 hours.
- Completed Ennostar Group advanced risk management interim and final reports (one meeting for each report), 3 Risk Management Committee meetings, and the Ennostar Group advanced risk map calibration meeting (a total of 3 meetings, including meetings for subsidiaries).
- Ennostar and subsidiaries EPISTAR and Lextar hosted one risk management team meeting each month (a total of 36 monthly meetings) where executive secretaries worked with other unit managers to supervise and track progress on risk projects.
- A total of 33 Ennostar and subsidiary units implemented annual risk analyses and assessments, completing a total of 254 risk analyses and formulating 24 action plans to reduce operational risks and increase corporate resilience.

Improve Notification and Response Mechanisms For Emergencies

- Conducted two Group risk scenario drills to effectively strengthen Group reporting procedures for major emergency incidents, enabling senior executives to grasp related risk incident information at the first instance, make decisions, and provide direction to effectively reduce risk impacts.
- Convened and completed review meetings and tracking of subsequent corrections for two major emergency incidents in 2024, and reported implementation results at Risk Management Committee meetings.

Reporting Mechanism for Major Emergency Incidents

Apart from regularly reviewing corporate management risks, the Ennostar Group has also established reporting mechanisms for major emergency incidents to enable rapid and accurate responses, and to reduce impacts from risk incidents.

- Established risk incident scope and impact reporting standards for domestic and foreign emergency incidents, information security incidents, and environmental safety incidents.
- Formed Group senior executive decision-making team and sub-Group reporting and monitoring teams.
- Established procedures: Established prompt reporting, monitoring, and assessment response plans for major emergency incidents, and formulated reporting, response, and monitoring standard procedures for senior executive decision-making team. All departments handle follow-up actions based on their responsibilities and continue monitoring and reporting of major incidents to keep informed of and lower impacts and risks from major emergency incidents.
- 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.



Ennostar Group Top 5 Major Risks in 2024

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

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.

Mid-term

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.
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.

Long-term

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.

Supply chain (production equipment)

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	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Establish safety stock to meet customer orders 2. Arrange diverse transshipment methods, including cross-border transshipments, to reduce risks. 	<ol style="list-style-type: none"> 1. Establish second suppliers outside of China to facilitate deployment of production capacities. 2. Establish outsourcing strategies to avoid material shortage problems 	<ol style="list-style-type: none"> 1. Establish evaluation measures for long-term strategic partners and implement HUB/VMI management 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	<ol style="list-style-type: none"> 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 (raw materials)

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	<ol style="list-style-type: none"> 1. Optimize parameters/modify hardware in accordance with current equipment processes to align with the needs of OEM products. 	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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

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	<ol style="list-style-type: none"> Expand recruitment channels <ul style="list-style-type: none"> Participate in exhibitions and work with headhunters to find appropriate key corporate talents Launch industry-academia classes/corporate visits/rising talent programs to recruit new academic talents Formulate internal talent rotation plans 	<ol style="list-style-type: none"> Execute internal talent rotation plans and make flexible adjustments based on actual implementations to ensure stability of key talent Cultivate student talents early on through corporate internships and continue to develop and discover campus talents 	<ol style="list-style-type: none"> Strengthen ties with school campuses, cultivate student talents, and aim to cultivate 20 emerging R&D personnel 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	<ol style="list-style-type: none"> Expand talent sources through corporate visits and campus lectures Enhance our corporate image and strengthen recruitment advertisements, academic exposure, and social media 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	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Re-examine client contracts and seek exemptions from possible 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 	<ol style="list-style-type: none"> 1. Improve cross-border operational management, utilize the Group's import and export platforms, and form strategic collaborations. 2. Evaluate budgets and manpower channels for factories established in third countries, and request supplemental assessments from our supply chains. 	Establish common self-production capacities and backups for products from Taiwan and Chuzhou.
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	<ol style="list-style-type: none"> 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	2024 green electricity procurement plan: <ul style="list-style-type: none"> Continue to track progress on supplier electricity purchase contracts Continue to contact amenable green electricity suppliers 	<ol style="list-style-type: none"> Promote construction of self-built solar power generation systems in factories Apply for T-RECs and initiate self-generation and self-use starting from 2025 	<ol style="list-style-type: none"> Gradually introduce use of renewable energy across the whole Group Continue to assess renewable energy sources and renewable energy needs at all stages
EPISTAR	<ol style="list-style-type: none"> Centralize operations and reduce factory power consumption Factories in China: Replace pumps in chillers to reduce an estimated 640,000 kWh of electricity a year 	<ol style="list-style-type: none"> Optimize controls and integrations of iCool system Factories in China: Assess possibility of constructing solar power generation systems and improve cooling tower fans to conserve energy 	<ol style="list-style-type: none"> Build new solar power generation systems for self-generation and self-use in our factories Import green energy and aim to reach 60% Group renewable energy usage and 100% renewable energy usage for factories in China by 2025 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 Utilize desalinated sea water and reclaimed water supplies in some factories
Lextar	Improve energy conservation of factory equipment: <ul style="list-style-type: none"> Factory: Improve CDA/Oven energy savings Factory management: Upgrade air compressors, cooling tower fans, and oil seal PVs 	<ol style="list-style-type: none"> Establish contingency measures for power outages announcements issued by Taiwan Power Company 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 	<p>Establish solar power/offshore wind power procurement plans and discuss ways to increase green electricity usage proportions at Zhunan Factory.</p>
Unikorn	<ol style="list-style-type: none"> Water shortages: Factories prepare contingency plans which include sharing tap water suppliers and having water tankers on standby Power shortages: Handle Taiwan Power Company issues (such as voltage drops and power outages) based on EPISTAR facility standards 	<ol style="list-style-type: none"> Water shortages: Reduce domestic and process water consumption by installing water-saving devices and adjusting water consumption Power shortages: Prioritize shutdowns of high-temperature equipment and implement rolling blackouts 	<ol style="list-style-type: none"> Water shortages: Assess reclaimed water and recycled water solutions to reduce water consumption risks Power shortages: Invest in equipment with voltage protection, install backup generators, and consider use of solar power generation facilities.

Internal and External Review Mechanisms

Mechanisms	Internal	<ol style="list-style-type: none"> 1. The Group and all subsidiaries established risk management teams convened by the highest-ranking manager, who appointed team executive officers; the teams are overseen by the highest-ranking managers at all operational units, and progress on risk items are reviewed at monthly meetings. 2. Report progress on risk items of interest at regular Risk Management Committee meetings and present associated results to the ESG committees of each company and the Group Board of Directors. 3. Implemented reporting and response mechanisms for major emergency incidents.
	External	Clients audit risk items of concern and associated mechanisms
Achievements	Internal	<ol style="list-style-type: none"> 1. Generated Group risk management reports and annual risk map 2. Identified and assessed risk items, responded to risk items with action plans, and listed said items for regular tracking. 3. Optimized the Ennostar Group's reporting and response mechanisms for major emergency incidents.
	External	No risk management deficiencies discovered

Establishing a Risk Management Culture

Risk Management Education and Training

The Ennostar Group hosted two training courses, “Global Risk Trends” and “Digital Technology and Artificial Intelligence Trends and Risk Management” in 2024. “Global Risk Trends” focused on understanding emerging risks and external environmental changes, building capabilities to identify annual risks, and discussing key risk issues. “Digital Technology and Artificial Intelligence Trends and Risk Management” focused on relative risks of AI from government plans and digital development trends to help Group risk management personnel understand risks and responses to emerging technologies.

Group Risk Scenario Drills

The Ennostar Group conducted two Group risk scenario drills to effectively strengthen Group reporting procedures for major emergency incidents, enabling senior executives to grasp related risk incident information at the first instance, make decisions, and provide direction to effectively reduce risk impacts. We also convened review meetings and tracking of subsequent corrections, and reported implementation results at Risk Management Committee meetings.

Featured Highlight

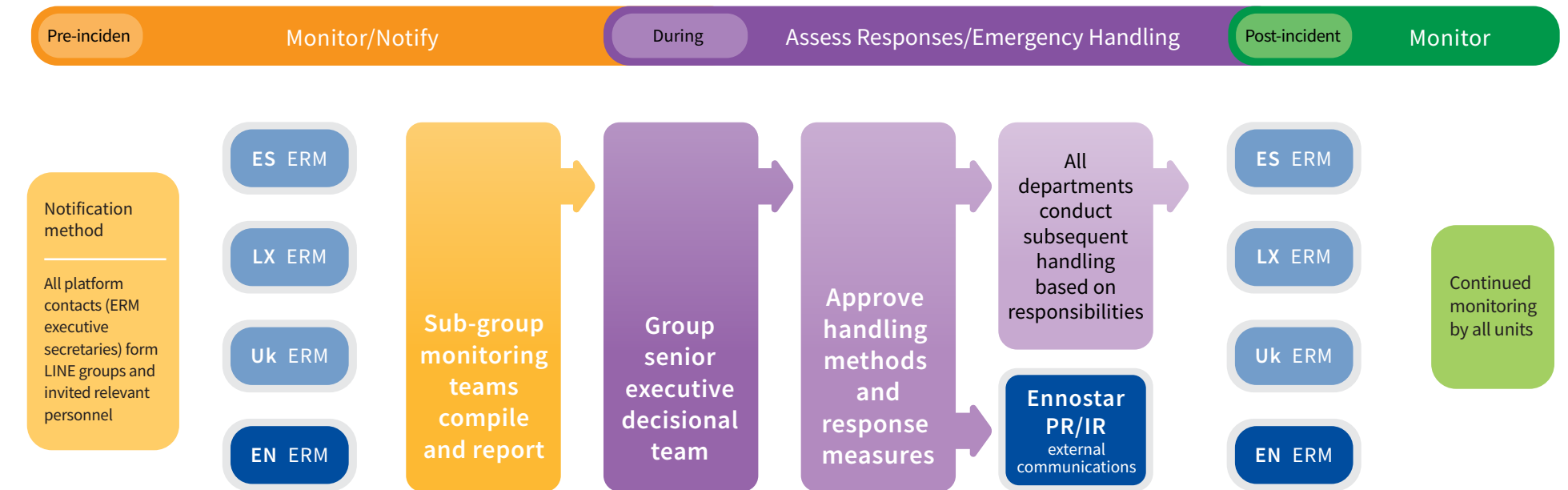
Major Emergency Incident Drills

We organized two major emergency incident drills in 2024: One labor-management dispute drill at EPISTAR's H Factory and one evacuation and reporting drill for a fire in the basement of Ennostar's A1 Factory. During the drills, we tested the timeliness and effectiveness of Group major emergency incident reporting procedures for risk scenarios, as well as department handling and responses, enabling senior executives to grasp related risk incident information at the first instance, make decisions, and provide direction to effectively reduce risk impacts.



The Ennostar Group uses risk management systems to support organizational identification, assessment, control, and mitigation of various risks. In future, we will continue to strengthen ERM mechanisms, expand and update risk management databases, establish Group-wide risk management mechanisms, and assess and plan incorporation of risk indicators in smart risk warnings.

Reporting Mechanism for Major Emergency Incidents



Information Security

Material Topic	Information Security and Privacy Protection					Base year: 2021
Indicators	2024		Target for 2025	Target for 2026	Target for 2030	
	Achievement	Target				
Pass ISO 27001 Information Security Management verifications each year (factories in Taiwan)	✓ Passed	Passed	Passed	Passed	Passed	
Number of information security incidents	✓ 0	0	0	0	0	
Number of information security incidents resulting in property damages	✓ 0	0	0	0	0	
Number of information security week activities over the year (Information security awareness promotion activities and training)	✓ 0	0	0	0	0	
Number of social engineering and phishing email drills over the year	✓ 1 event/year	1 event/year	1 event/year	1 event/year	1 event/year	
Number of information security incidents (Core systems, attacks on official websites, data leaks, and DDoS)	✓ 4 times/year	4 times/year	6 times/year	6 times/year	6 times/year	
Multi-factor authentication coverage rate (*Remote access, cloud, OWA, DA privileged accounts)	✓ 83%	83%	85%	100%	100%	
Client privacy protection promotion and employee training completion rate	✓ 100%	100%	100%	100%	100%	
Number of substantiated complaints concerning breaches of customer privacy and losses of customer data	✓ 0	0	0	0	0	
Number of client privacy violation incidents involving judicial investigation, judicial rulings, or government penalties	✓ 0	0	0	0	0	
Responsible unit	Smart enterprise team, information department, legal affairs department					

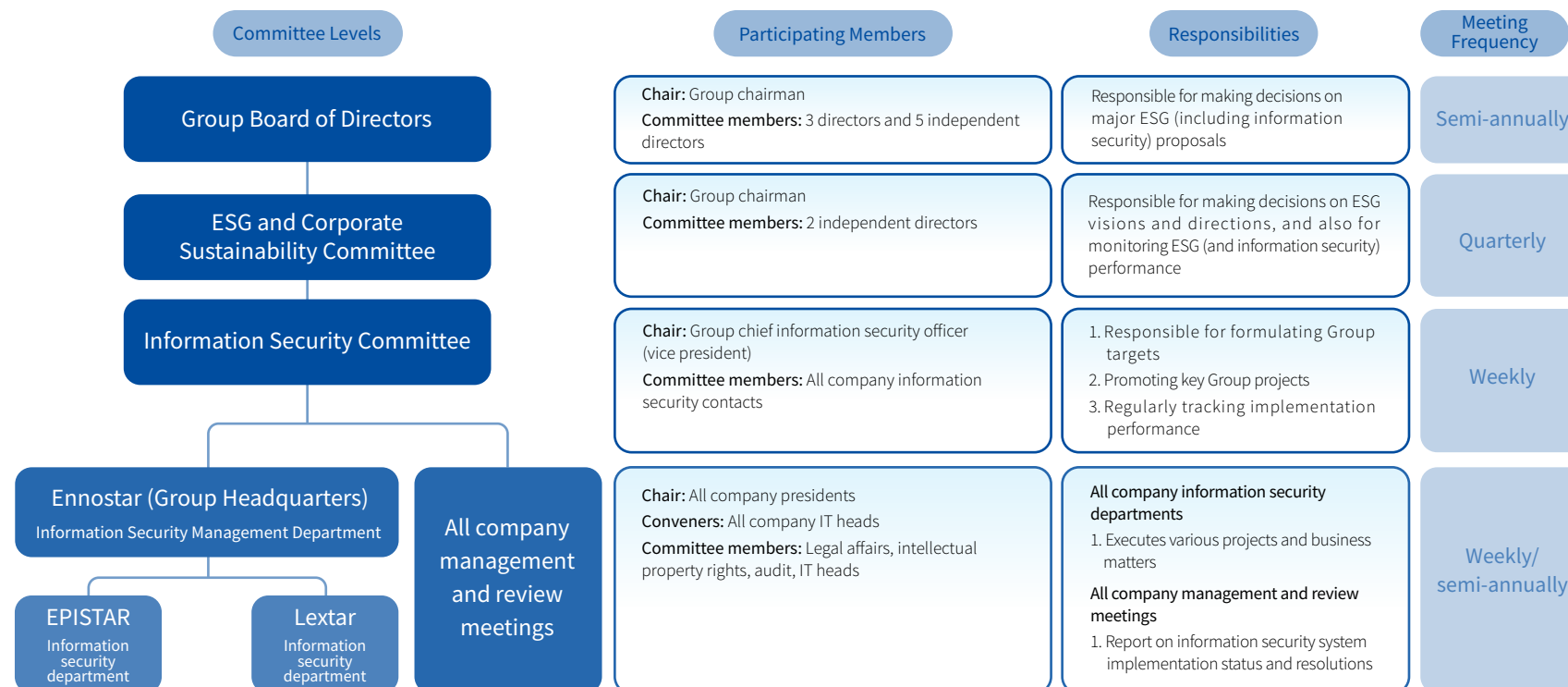
Information security and privacy controls have become an essential part of business. Our parent company has established a dedicated information security management department responsible for information security maintenance, information security frameworks, information security policies, and other information security projects and review procedures to lead our subsidiaries in joint realization of Ennostar information security goals.

The Group has established information security management regulations to ensure normal, secure, and stable operations of core information systems (ERP/MES/CIM) and critical information infrastructure. These regulations serve as the ultimate guideline for information security management systems at our information center, providing secure and trustworthy information services; safeguarding confidentiality, integrity, and availability of information center assets and compliance with relevant regulations; maintaining business continuity; reducing information operation risks; and protecting the rights of information service users.

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

Information Security Management Framework

The Group established the "Information Security Committee" to oversee 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.



Management Strategies

Our information security policies stipulate:

- We should obtain and maintain international ISO 27001 Information Security Management certification, establish dedicated information security personnel or units responsible for planning information security systems as well as overseeing and implementing information security management procedures. Dedicated information security personnel must obtain ISO 27001 lead auditor certifications.
- We should establish information security risk evaluation mechanisms and conduct evaluations at least once every six months; approved risk management plans should be copied and submitted to the Ennostar Information Security Department for future reference.
- We should conduct at least one BCP drill, test, and review each year.
- We should conduct internal information security audits at least once every six months and auditors must be objective, impartial, and professional when reviewing the effectiveness of information security

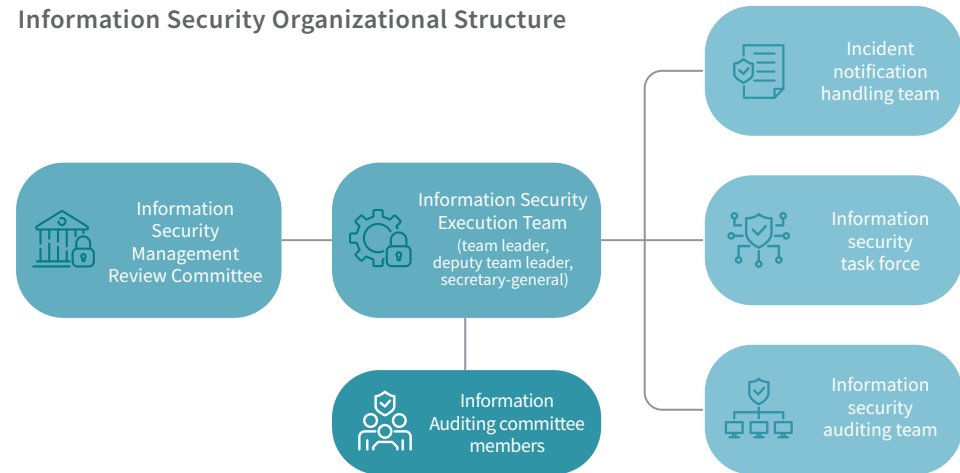
control mechanisms, and provide appropriate improvement recommendations. If deficiencies or items requiring improvement are discovered during audits, improvement reports must be submitted within specified timelines using the methods stipulated by inspecting authorities. Reports that have been approved by our President are copied to the Ennostar Information Security Department for future reference.

- We should convene information security management review meetings at least once every six months to review corporate information security implementations.
- We should regularly organize employee information security training and promotion to strengthen employee information security awareness and ensure compliance with information security regulatory requirements. Dedicated information security personnel are required to receive at least 14 hours of training each year.

- Information security incidents at Level 3 and above should be immediately reported to information security units, which should report said incident to the Ennostar Information Security Department within 2 hours in accordance with relevant regulations to facilitate reporting to competent authorities, and adopt appropriate handling measures to control the scope of impact from said information security incident.
- Business continuity plans should be tested regularly to ensure their effectiveness and to familiarize relevant personnel with their content. Business continuity plan drills must be approved by the convener of the Information Security Management Review Committee before implementation. Drill methods may include: tabletop exercises, notification drills, critical activity drills, simulation drills, and full-scale exercises. The Information Security Implementation Team is responsible for supervising any changes to business continuity plans, and these plans must be completely reviewed and evaluated at least once a year, including performing business impact analyses, adjusting organizational responsibilities and members, and reviewing incident response procedures and recovery strategies.
- We should adopt email data loss prevention (DLP) mechanisms to ensure that emails sent by employees do not contain keywords; if keywords or encrypted files are detected in emails, they will be blocked and notifications will be sent to direct supervisors. If email DLP mechanisms need to be overridden due to special business needs, applications must be submitted and approved by an administrator before settings can be changed to enable sending to external email addresses. However, records of outgoing emails will still be retained.
- We should exchange information security protection measures and share information security information with our parent company to form joint information security protections and enhance overall information security protection capabilities.
- Information assets on cloud services must be protected using the same level of information security protections as other corporate information assets, and related security protections should be regularly reviewed or reviewed when major changes occur.
- We should formulate an information security maturity dashboard incorporating data on employee equipment, information security awareness, information security incidents, and compliance rates to promote a culture that shares information security responsibilities and enhance independent information security awareness in all employees.

We have 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 2024, 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:

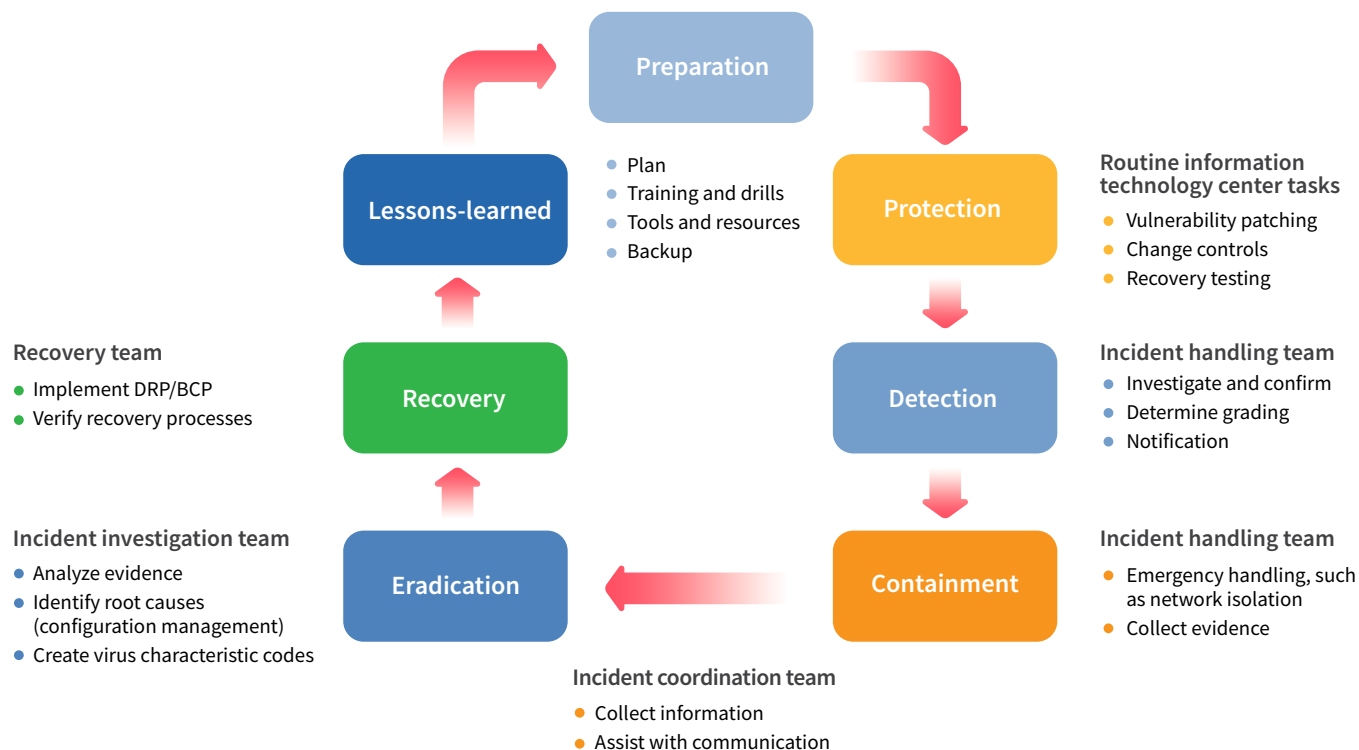
- Pass external third-party independent ISO 27001 information security audit verifications each year.
- Conduct risk evaluations once every six months.
- Conduct internal audits once every six months.
- Implement daily monitoring to check whether cyberattacks have triggered major information security incidents.
- Conduct 4 non-periodic social engineering and phishing email drills every year.
- Conduct business continuity drills each year in accordance with business process impact analysis charts.

- Ensure that weekly third-party Security Scorecard scores are maintained at A level (90 points or above) and monitor Security Scorecard system every day to check whether there are any new vulnerabilities that should be fixed.
- Regularly monitor and identify vulnerabilities in application programs and third-party packages used by each department, and refer severe and high-risk items to relevant departments for handling. We reference the Common Vulnerability Scoring System (CVSS 3.0) base score metrics to determine vulnerability severity levels, assist departments in conducting security vulnerability testing and patching, and audit patching status.
- Formulate and implement vulnerability scanning plans.

Information Security Incident Reports and Incident Management

The Group has formulated an incident response mechanism which encompasses seven management 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.

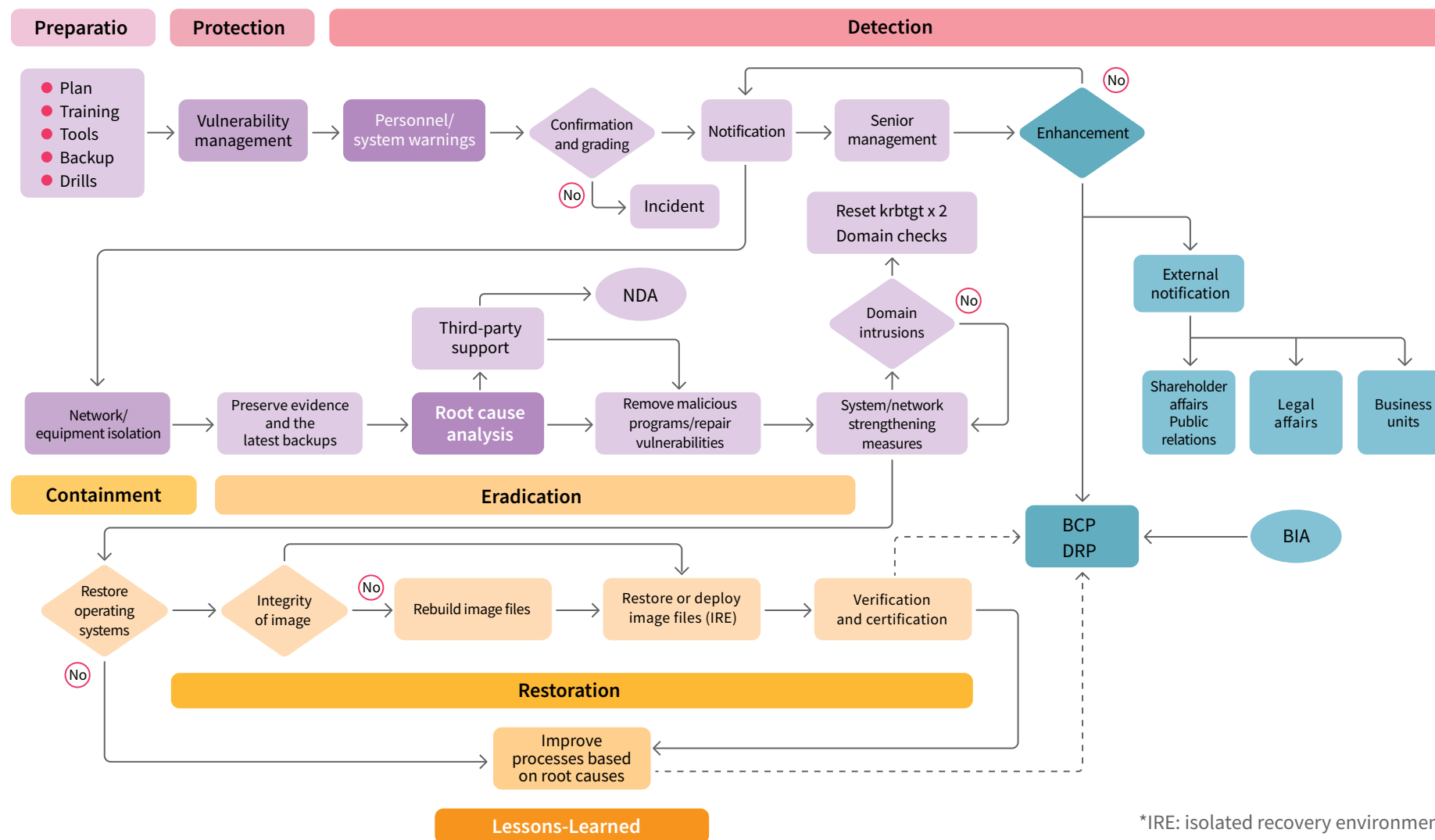
Incident Response Process (Cyberattacks)



Incident Response Mechanisms



Cyberattack Incident Response Procedures



Information Security Training

The Group regularly organizes employee information security training and promotion to strengthen employee information security awareness and ensure compliance with information security regulatory requirements in accordance with Group information security management regulations. Dedicated information security personnel are required to receive at least 14 hours of training each year.

The information security department strengthens employee information security awareness through four social engineering and phishing email drills each year, one information security week event (information security awareness promotion activities and training) each year, and non-periodic newsletters.

Protection of Customer Privacy

The Ennostar Group emphasizes security and privacy of all stakeholders, including internal employees, external clients (encompassing customers, suppliers/contractors, or collaborating business partners), and operational information assets. We promote Group-wide information security management

systems and have established Group information security policies aligned with international ISO 27001 standards to serve as a basis for information security management. Group factories in Taiwan have passed ISO 27001 international information security management certifications to protect corporate trade secrets and third-party confidential information. All confidential information and third-party confidential information are handled in accordance with the “Information Classification Protection Management Regulations” and “Trade Secrets Management Regulations.”

Privacy Protection Policies

The official Group and subsidiary websites have all disclosed information security and privacy protection policies which encompass applicable scopes for privacy protection policies, data collection, data protection, data usage, use of linked websites, personal data corrections, use of cookies, and revisions to privacy protection policies. We also organized related announcements and training programs to demonstrate our commitment to protecting customer privacy and confidential information, ensuring protection of personal data and privacy for suppliers, customers, employees, and website visitors.

Privacy Protection Measures

Referenced protocols	Information system acquisition, development, and maintenance management processes and procedures	<ul style="list-style-type: none"> Sensitive testing data should be accessed only by system administrators. Encryption mechanisms should be used when transmitting sensitive information to external sources and transmission information (including transmission sources, recipient address, transmission time, and transmission results) should be recorded.
	Information security incident management processes and procedures	<ul style="list-style-type: none"> Handling results for information security incidents are regularly compiled and posted on internal websites without compromising personal privacy and business confidentiality, detailing incident causes, processes, handling methods, improvements, precautions, and recommendations to serve as a reference for information security promotion and prevention of information security incidents.
	Information asset management processes and procedures	<ul style="list-style-type: none"> Systems containing sensitive data shall be governed by minimum necessity principles, and appropriate control mechanisms should be established. Apart from instances where plaintext displays are required for identity verification or business needs, all sensitive data in information systems should be masked, and audit logs should be retained. To ensure that sensitive personal data is encrypted and protected during transmission and storage, it is advisable to implement data masking, pseudonymization techniques, or anonymization techniques at various levels to limit the identifiability of sensitive data. Pseudonymization or anonymization techniques can conceal personally identifiable information (PII), the true identities of data subjects, or other sensitive information, breaking links between identifiable data and the identities of PII subjects or connections to other sensitive information.



Please refer to https://www.ennostar.com/privacy_policy for the Group's privacy policy.

The Group only collects private personal information within the necessary scope and for the purposes specified in consent forms and “Privacy Policies” in accordance with personal information management regulations; we do not use such information for purposes inconsistent with the original intent.

Ennostar and important subsidiaries have all clearly defined confidential information and related operational procedures according to ISO 27001 Information Security Management System standards, and have also established and implemented various information management processes to ensure that customer information is handled accurately and securely. The Ennostar Group has formulated Group information security management regulations, access control management processes and procedures, and information security management processes and procedures. Our subsidiaries have also established document formulation, review, approval, access authorization (limitation) standards; record management procedures; electronic data storage guidelines; contract management regulations; information classifications and protection management regulations; and trade secret protection regulations.

In 2024, the Group received no complaints relating to infringements of client privacy rights or client information losses, and was not involved in any customer privacy violation incidents associated with judicial investigations, rulings, and government penalties.



We implement clear measures for protection of customer privacy and confidential information. Apart from specifying confidentiality obligations during and after employment in employee contracts, we have also established various operational procedures to protect confidential and personal data that effectively safeguard the security of corporate, customer, and third-party confidential information, and prevent leakages of critical information. We also respond to privacy protection requirements by ensuring that the collection, handling, and use of personal information adhere to Taiwan’ s Personal Data Protection Act and related regulations and competent authority requirements. We have formulated and announced personal data security protection and security policies as well as related management regulations to serve as a guiding principle for personal data protection, and continuously advance information security through cross-departmental collaboration.

The Group attaches great importance to customer privacy and has adopted appropriate and effective management measures to prevent leakages of confidential customer information, including encoding customer identities to avoid accidental disclosure during information transmissions. Customer codes must be marked on letters sent to customers, and our system inspects 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. To protect information client information, companies that 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.

Apart from annual privacy protection education and training for all employees, the legal affairs department also delivers non-periodic newsletters on legal compliance to all Group employees to strengthen employee awareness of social and economic regulations. Due to recent amendments made to the “Personal Data Protection Act,” the Ennostar legal affairs department launched the “Introducing Personal Data Protection Act” online course for all Group employees in 2024.

The Ennostar Group firmly upholds privacy and information protection commitments to clients and other business partners, using ISO 27001 international information security standards to formulate management regulations and establish related prevention measures; we also conduct internal and external ISO 27001 management system audits each year. Looking to 2024-2025, we will continue to actively ensure that corporate and client privacy and information are appropriately protected through education and training, regulation tracking and promotion, supplier management, provision of reporting channels, self-assessments, and audits to maintain competitive advantages for us and our clients.

Responsible Supply Chain*

Corresponding SDGs



Material Topic	Sustainable Supply Chain			Base year: 2021
Indicators**	Achievements in 2024	Target for 2024-2025	Target for 2026	
Response rate on ESG development surveys for key suppliers	✓ 100%	100%	100%	
Number of high-ranking key suppliers who implement energy and carbon reduction measures	✓ 11 A+B suppliers; 39 C+D suppliers	12 A+B suppliers; 36 C+D suppliers	15 A+B suppliers; 35 C+D suppliers	
Number of high-ranking key suppliers who use renewable materials	✓ Renewable packaging materials 24 A+B suppliers; 3 C+D suppliers	Renewable packaging materials 12 A+B suppliers; 7 C+D suppliers	Renewable packaging materials 17 A+B suppliers; 11 C+D suppliers	
	✓ Renewable packaging materials 9 A+B suppliers; 1 C+D suppliers	Renewable packaging materials 3 A+B suppliers; 10 C+D suppliers	Renewable packaging materials 6 A+B suppliers; 7 C+D suppliers	
Supplier ESG guidance meetings	✓ 1 event	≥ 1 event	≥ 1 event	
Supplier ESG exchange activities	✓ 1 event	≥ 1 event	≥ 1 event	
Number of suppliers that underwent ethical and human rights audits	✓ 3 suppliers	≥ 2 suppliers	≥ 4 suppliers	
Number of suppliers that underwent environmental health and safety audits	✓ 6 suppliers	≥ 4 suppliers	≥ 4 suppliers	
Proportion of local suppliers	✓ >95%	≥ 85%	≥ 85%	
No usage of conflict minerals	✓ 100%	100%	100%	

* The reporting scope for quantitative data in the responsible supply chain section mainly encompasses factories in Taiwan, and additional notes are provided for data that encompass factories in China. We plan to expand reporting scope to factories in China starting from 2025.

** Apart from the last indicator, which is applicable to the whole Group, all other indicators encompass factories in Taiwan.

Supplier Overview

The Group's procurement targets are primarily categorized into raw materials, expenses, machinery, and facility engineering. Machinery and equipment are sourced from foreign suppliers, so are difficult to incorporate in our management scope, and the management scope is not applicable for facility engineering. Therefore, we focused on selection of "spare parts" suppliers in the raw materials and expense categories, as these suppliers account for a significant portion of procurement amounts. Our main raw materials and components include sapphire substrates, gallium arsenide substrates, special gases, metals, brackets, and LED motherboards.

In 2024, we worked with more than 1,746 suppliers around the globe. To ensure that suppliers adhere to our sustainability requirements, all suppliers across all procurement categories have to sign a Commitment to Supplier Social Responsibilities and undergo related risk evaluation mechanisms. 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.



Supplier Management

Supply Chain Management Strategies

Aspect	Management Approach
1 Improve supplier sustainability influence	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.

Improving Supplier Sustainability Influence and Risk Management

Compliance Principles

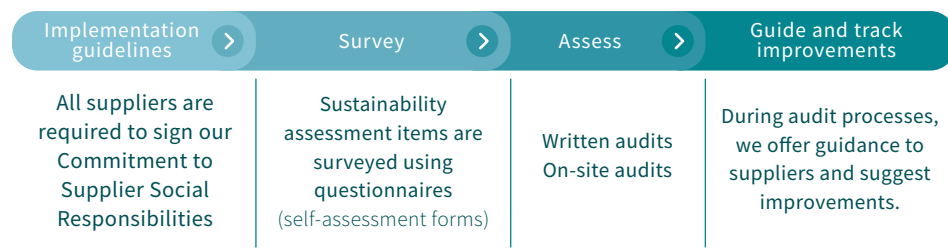
The Ennostar Group has established supplier/contractor codes of conduct and requires all collaborating vendors to sign an “Integrity Commitment Statement” and “Commitment to Supplier Social Responsibilities” for continued supplier management.

The Group’s two main subsidiaries (EPISTAR and Lextar) have taken the lead in incorporating ethical and human rights codes of conduct. Apart from establishing corresponding factory regulations, we also implement these practices on related departments, all suppliers, and all contractors. All raw material suppliers and contracts that need to comply with ethical and human rights codes of conduct, including labor agencies, waste disposal services, and cleaning contractors must sign required documents associated with human rights and ethical codes of conduct. Additionally, the Group has incorporated internal ISO 9001 and IATF 16949 standards for supplier assessment, management, review, audit, evaluation, improvement guidance, continued management, and requirement of compliance with ethical and human rights codes of conduct as well as HSF regulations. Our supplier evaluation indicators include written documentation regarding incorporation of ISO 14000, ISO 45001, and ISO 14064 standards.

Sustainability Assessment for New Suppliers

Scope of implementation	Assessment	Assessment results
Key material suppliers	<ol style="list-style-type: none"> Assess whether procurement, quality, and finances comply with requirements using supplier evaluation requirement forms. 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 approved suppliers after assessment results show they adhere to our standards, and we require our suppliers to sign a Commitment to Supplier Social Responsibilities.

Evaluation of Supplier Risks



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 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	Written surveys with targeted sustainability risk items are distributed to key suppliers	Supplier financial risks, supply shortages, level of local production, and use of renewable materials

Supplier Evaluations

Supplier Evaluation Aspects



The Group's main evaluations for suppliers include quality, ethics and human rights, environmental health and safety, and ESG evaluations.

Quality Evaluations

The Group's 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 in accordance with the "Supplier Management Processes" and "Supplier Evaluation Procedures" ; on-site audits are also conducted for specific suppliers. 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.

Ranking method

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 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

Guidance on deficiencies

Our audit team provides guidance for major deficiencies and non-conformities on supplier audit items, fully communicates with suppliers to determine implementation difficulties, and assists suppliers in implementing improvements.

* Group subsidiaries use different supplier ranking systems

Evaluations	Internal evaluations	On-site audits
Implementations in 2024	<ul style="list-style-type: none"> Target: Suppliers that conducted transactions with us during the evaluation period 	<ul style="list-style-type: none"> Number of suppliers evaluated: 4 Audit results for 2024 One supplier was found to have major negative impacts; we have provided recommendations for improvement and continue to track supplier improvements.

Ethics and Human Rights Evaluations

The Group's ethical and human rights audits are conducted by a cross-departmental team composed of personnel who have passed training for ethical and human rights audits; audits encompass labor, ethical, health and safety, environment, and management systems.

Evaluations	Internal evaluations	On-site audits
Implementations in 2024	<ul style="list-style-type: none"> Number of suppliers evaluated: 67 	<ul style="list-style-type: none"> Number of suppliers evaluated: 4 Audit results No suppliers were found to have major negative impacts.

Environmental Health and Safety Evaluations

To ensure appropriate management of EHS 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 using written assessments based on our EHS checklist; if results fail to meet required standards or if a supplier has incurred a major industrial safety incident within the past year or is found 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.

Evaluations	Internal evaluations	On-site audits
Implementations in 2024	<ul style="list-style-type: none"> Number of suppliers evaluated: 67 	<ul style="list-style-type: none"> Number of suppliers evaluated: 14 One supplier was found to have major negative impacts; we have provided recommendations for improvement and continue to track supplier improvements.

ESG Evaluations

The Group has conducted annual ESG written self-assessments of factories in Taiwan since 2023. In 2024, we expanded our evaluation scope to include five topics: energy and carbon reduction, use of renewable materials, local production ratio, water resource management, and biodiversity awareness. We rank suppliers based on self-assessments results and announce survey results at our annual supplier sustainability conferences so suppliers can see their own rankings.*

Category	Definition	Amount
First-tier suppliers	Raw material and component suppliers	563
First-tier key suppliers	Raw material suppliers incurring the top 70% of transaction amounts and component suppliers incurring the top 70% of transaction amounts**	61

Evaluations	Written self-assessments	
Implementations in 2024	<ul style="list-style-type: none"> Number of suppliers evaluated: 64 Ranking results 	

	Energy and carbon reduction surveys	Renewable material usage surveys
Number of A+B suppliers	11	Renewable packaging materials: 24 suppliers Renewable materials: 9 suppliers
Number of C+D suppliers	39	Renewable packaging materials: 3 suppliers Renewable materials: 1 supplier

Starting in 2024, the Group commenced coaching and collaborations on improvement implementation based on energy and carbon reduction evaluation results for the previous year. Energy and carbon reduction surveys helped us 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. We encourage suppliers to carry out ESG plans and strengthen green supply chains. In 2025, the Group plans to add bonus points on ESG quality evaluations for suppliers that perform well on these aspects.

* Water resource management and biodiversity awareness surveys were new topics added in 2024.

** Refers to the top 70% of total procurement amounts for the previous year.

Supplier sustainability capability guidance plan: Carbon inventory workshop

To expand our positive influence and join forces with suppliers in creating mutual benefits, we hosted the first supplier carbon inventory workshop in 2024 targeting Group raw material/component suppliers that incurred the top 70% of procurement amounts in the previous year as well as suppliers that were interested in but had not yet conducted carbon inventories, guiding these suppliers in conducting carbon inventories. A total of 9 suppliers attended this workshop (accounting for around 24% of procurement amounts for the previous year) and there were a total of 23 participants.

Conflict Mineral Management *

Prohibit Use of Conflict Minerals

The Ennostar Group has publicly released a “Statement on Responsible Sourcing of Minerals” and announced that all subsidiaries implement responsible procurement. 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. We also require that products supplied to the Ennostar Group by suppliers do not use the aforementioned conflict minerals and continue to conduct due diligence surveys on conflict mineral use in existing suppliers to increase information transparency of smelters/refineries.

Due Diligence

The Group conducts reasonable due diligence on suppliers. Suppliers are required to sign the “Commitment of Suppliers to Prohibit Use of Conflict Minerals” and use mineral sources that comply with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas or an equivalent due diligence framework. Only suppliers that meet these standards can be included in our approved supplier list, and suppliers must complete 100% of annual conflict minerals surveys in accordance with OECD and RMI requirements, ensuring that all raw materials are sourced from industry-recognized, conflict-free origins as we work with our supplier partners in upholding our commitment to social and environmental sustainability.

All suppliers of metal plating used in our production processes follow OECD and RMI organizational procedures. Each year, we complete 100% of due diligence procedures and conflict mineral surveys; collect CMRT, EMRT, and PRT reports; and provide these reports in accordance with customer requirements to ensure that 100% of products used by our customers do not contain conflict minerals. To strengthen management of conflict minerals, the Group conducts on-site ethics and human rights audits on at least one metal supplier each year.

* Statements on conflict mineral management include our subsidiaries in China

** Statements on local procurement strategies and achievements include our subsidiaries in China

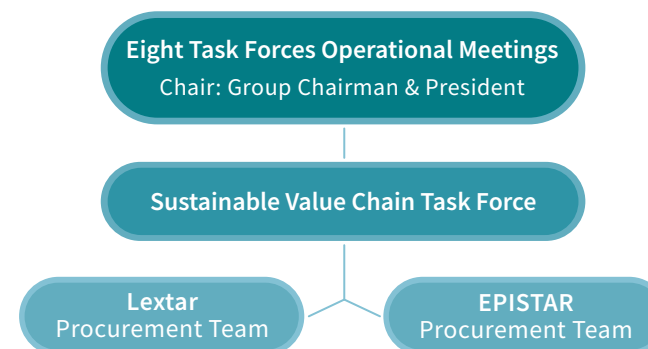
Commitments	Due diligence	Verification
<ul style="list-style-type: none"> Issued Statement on Responsible Sourcing of Minerals Suppliers are required to sign the “Commitment of Suppliers to Prohibit Use of Conflict Minerals” before they can be included in our approved supplier list. 	Collect CMRT, EMRT, and PRT reports and conduct due diligence procedures each year in accordance with OECD RMI procedures	Provide CMRT, EMRT, and PRT reports to clients to confirm that our products are free from 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 2024, local suppliers accounted for more than 90% of all Group suppliers and local procurement amounts accounted for more than 85% of total procurement. In future, we will continue to increase local procurement amounts to reduce carbon footprints from procurement and to achieve sustainable procurement goals.

Build Green Supply Chains

The Group established the Sustainable Supply Chain Task Force in the third quarter of 2022. The task force is led by a senior executive from our main subsidiary, and guides cross-corporation teams in implementing Group projects and strengthening promotion of sustainability management in Group supply chains. The task force officially commenced operations in 2023 and makes direct reports to the Group chairman and president every quarter at task force operations meetings. In 2025, the management scope was expanded to factories in China.



Green supply chain policies are led by the sustainable supply chain task force, which works with supply chain partners in reducing carbon emissions, increasing renewable energy usage, and strengthening supply chain resilience, enabling us to become a benchmark of sustainable value chains in the industry. We formulated three axes and a five-year plan based on this strategy:

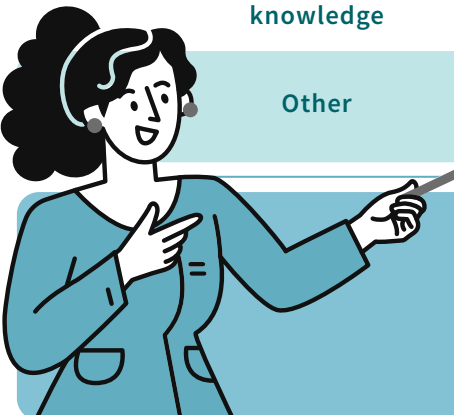
Three main axes

Focus	Description	2025 ESG plan
Sustainability awareness	Ensure that suppliers adhere to government environmental protection laws and EHS requirements	<ul style="list-style-type: none"> Optimize supplier ESG rankings Host supplier sustainability conferences and establish supplier awards Host carbon inventory workshop for key suppliers Gradually implement SBTi Scope 3 carbon reduction plans
Supplier rankings	Prompt suppliers to conduct carbon inventories and implement carbon reduction plans	<ul style="list-style-type: none"> Prompt suppliers to conduct carbon inventories and implement carbon reduction plans Establish supplier surveys/data collection/digital self-assessment system and database Formulate carbon reduction plan
Ethics and human rights	Require suppliers to comply with regulations and policies for conflict minerals, as well as RBA guidelines	<ul style="list-style-type: none"> Assess feasibility of incorporating third-party audit units into supplier audits Sustainable supply chain management strategy systemization/documentation

ESG Training for Procurement Personnel

The Group continues to provide ESG education and training that enhances sustainability awareness and capabilities of procurement personnel.

Type	Courses in 2024
Carbon knowledge	Carbon reduction cheat sheet, SBTi net zero carbon reduction, climate change adaptation
Other	Circular economy practices and case studies, 2024 Ennostar Group online courses promoting ethical and human rights and ethical policies



Five-year plan

2022 Q4 - 2023	2024 - 2025	2026 - 2027
<p>Align Management Items</p> <p>ESG surveys/evaluation rankings</p> <ul style="list-style-type: none"> Individual subsidiaries <ul style="list-style-type: none"> Amend original regulations Compile shared items Selection mechanism <ul style="list-style-type: none"> Questionnaire design/collection Formulate ranking system 	<p>Refine Management Items</p> <p>Track vendor ESG progress</p> <ul style="list-style-type: none"> Item completion, and enhancement or addition of execution details Supplier ESG classification, evaluation, and continued progress tracking Sustainable supply chains <ul style="list-style-type: none"> Documentation of green supply chain strategies Data systemization Participation in external competitions 	<p>Continued Process Management</p> <p>Vendor ESG management</p> <ul style="list-style-type: none"> Management Items <ul style="list-style-type: none"> Continued updating of vendor ESG progress Management by numbers/detailed classifications Expand tracking to Class A vendors Utilize information systems to manage vendor classifications Become III-V semiconductor sustainable supply chain benchmark company

Supplier Exchanges and Engagement

2024 Supplier Sustainability Conference



Number of
participating
suppliers

57
key suppliers

The Group invited key suppliers to learn about the Ennostar Group's ESG strategies, carbon reduction pathway plans, and net zero emissions goals, as well as supplier coaching plans. A total of 57 suppliers and 106 participants attended the meeting. During the conference, we shared international ESG trends and explained ESG evaluation results to our suppliers, and reiterated the Ennostar Group's commitment to SBTi carbon reduction targets, joining forces with our supply chain on supplier carbon reduction targets and plans.

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

Supplier sustainability conference



3

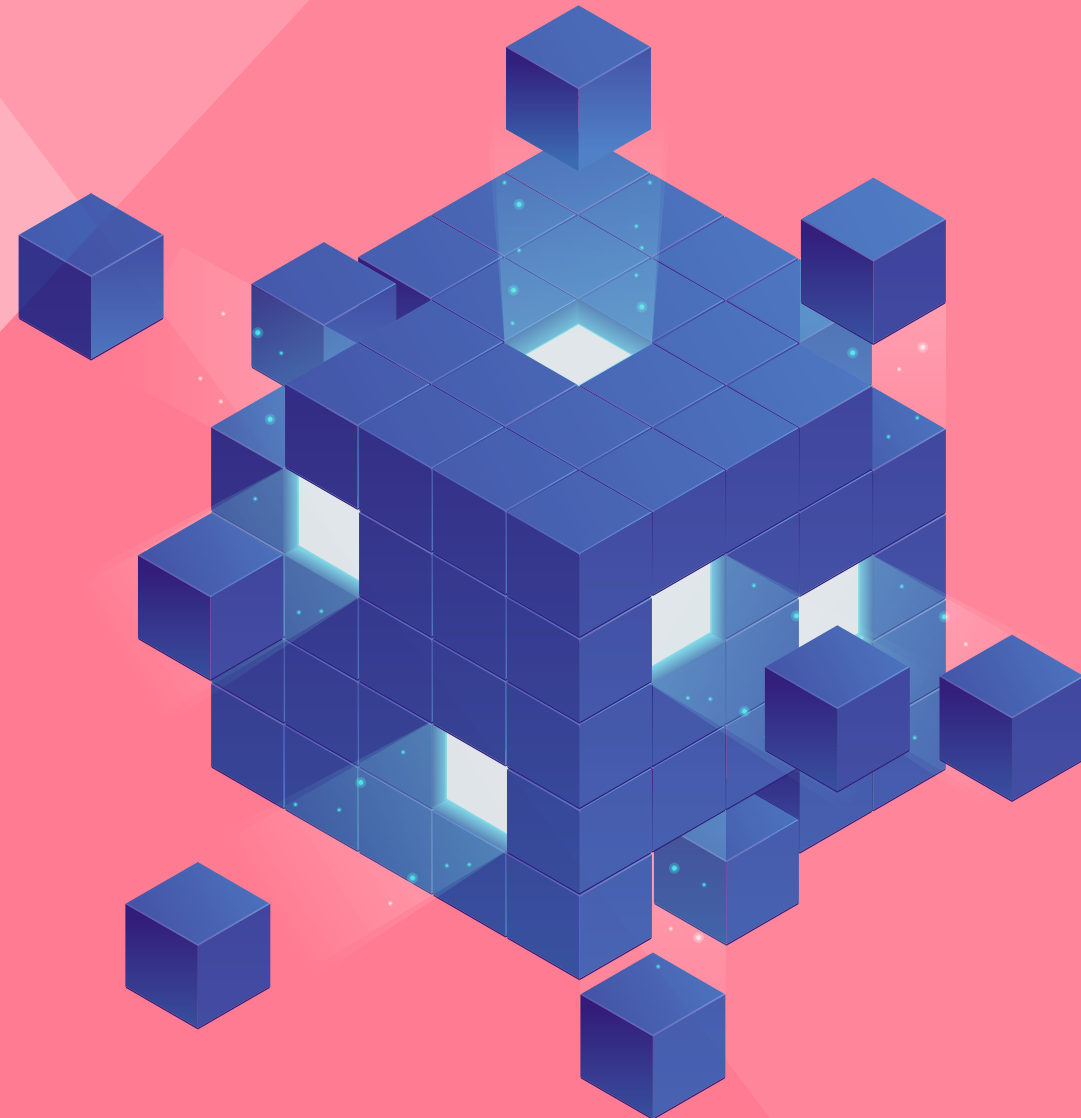
Innovation and Growth

3-1 Innovation Management and Smart Transformation

- 3-1-1 Innovation and R&D
- 3-1-2 Management of Intellectual Property Rights

3-2 Products and Services

- 3-2-1 Product Quality and Safety
- 3-2-2 Customer Relationship Management

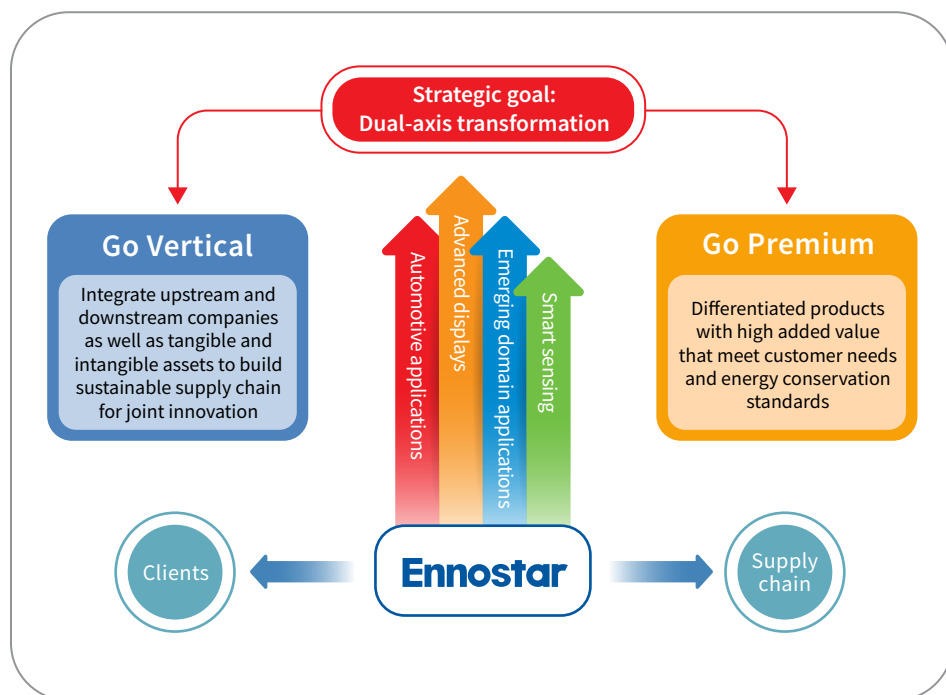


Innovation Management and Smart Transformation

Corresponding SDGs



Material Topic	Innovation Management and Smart Transformation		Base year: 2021	
	Indicators	2024 Achievement	Target	Targets for 2025 and beyond
	R&D investment to revenue ratio at the Group	9.97%	> 7%	> 7%
Responsible unit	Innovative technology task force, R&D department, and intellectual property rights department			



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 formed visions and long-term goals for all technologies, as well as incorporated “innovation” in all stages of product and service production from development to manufacturing through full resource investment and rigorous quality management.

Ennostar’s business strategy involves “dual-axis transformations,” with one axis being “Go Premium” (creating added value), developing higher gross margins, diversified products, and meeting client demands to achieve energy conservation and safety goals as well as focusing on innovation and R&D in automotive applications, advanced displays, smart sensing, and new applications. The other axis, “Go Vertical” (strengthening vertical integration and exploring new domains), integrates upstream and downstream vendors as well as tangible and intangible assets. Both transformation axes operate concurrently to establish a sustainable value chain and jointly create innovation value in products.

Technology

LED upstream epi-wafers and chips

EPISTAR has six major visions: Performance enhancement, carbon reduction, low-carbon manufacturing, mercury light replacement, social care, and sustainable management. EPISTAR adheres to the core philosophy of “providing clients with the most efficient integrated solutions through energy-saving, eco-friendly materials and processes” ; and has formulated three management strategies (“market positioning,” “professional innovation,” and “innovation benefits”) and two perspectives (“professionalism” and “innovation”) based on customer problem fit.

Visions and Strategies



Market positioning

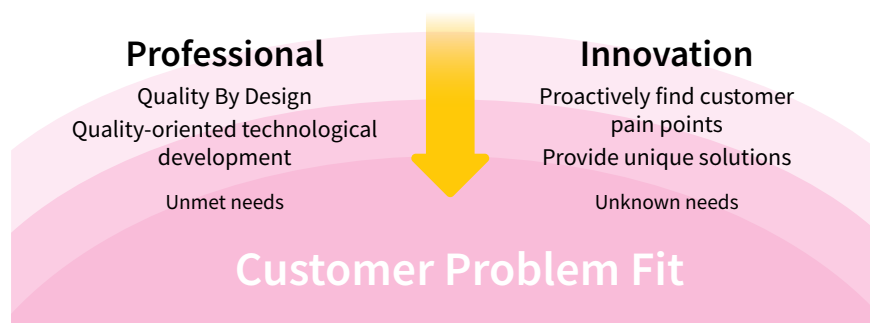
- Enhance and strengthen original markets
- Create new market applications

Professional innovation

- Refine existing products and technologies
- Develop new products
- Develop new technology platforms

Innovation benefits

- ESG benefits
- Satisfy customers and increase satisfaction rates
- Patent positioning/trade secrets



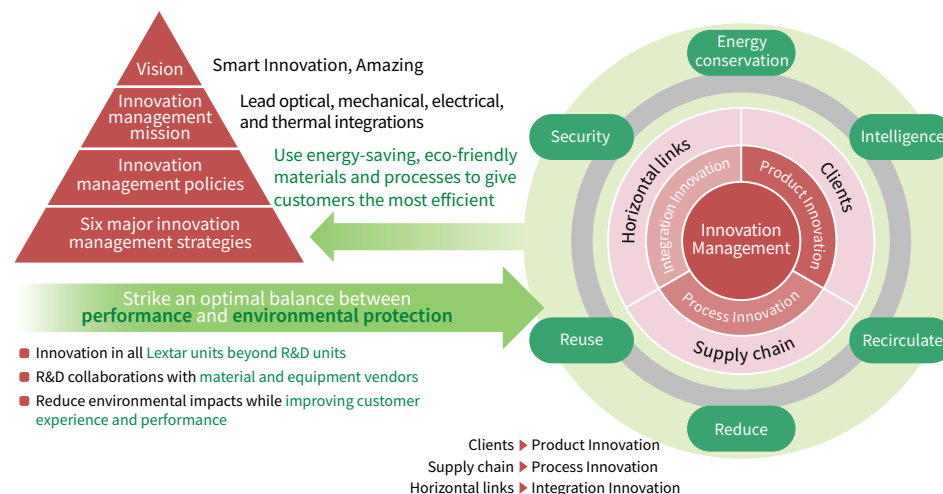
Technology

LED downstream packages and modules

Lextar has embraced the vision “Smart Innovation, Amazing Life,” and aims to enhance quality of life through technological innovation. To achieve this vision, Lextar has committed to an innovation management mission of “becoming a leader in integrated light, mechanical, electrical, and thermal technologies” and launched an innovation management policy to provide clients with the most efficient integrated solutions using energy-conserving, eco-friendly materials and processes. This commitment extends to all units in addition to R&D units, with a focus on applying cutting-edge technology in products and services. Lextar also collaborates with material and equipment suppliers to develop solutions that collectively reduce environmental impacts, enhance client experiences, and improve performance. We not only focus on product performance, but also emphasize eco-friendliness, striving to strike the best balance between the two. We established six innovation management aspects (energy conservation, intelligence, reduction, reuse, recirculation, and security) which drive continued pursuit of innovation technology and service breakthroughs to create an eco-friendly future.

Introduction of new products/new processes not only represents progress in technological innovation, but also shows a proactive response to future market demands, enabling Lextar to maintain a leading position in constantly changing markets. Lextar also actively promotes eco-friendly developments while improving market positioning and growth in sales.

Visions and Strategies



R&D Product Focuses in 2024

The Ennostar Group leverages expertise in III-V compound semiconductor optoelectronic materials to focus on cutting-edge products and technologies in advanced displays, automotive applications, and intelligent sensing.

Advanced Displays: Non-Near-Eye Displays



Mini LED COB backlight application in laptops

Due to advances in new media, creators are increasingly seeking out high-spec laptop screens that can enhance the precision, efficiency, and effectiveness of their work. Laptops with Mini COB backlights have high color gamut, high brightness, and high contrast, so can display colors and details accurately, enhancing work experiences for creators and ensuring the quality of their work.

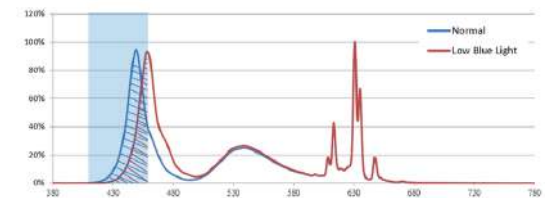
- Blue light direct-lit backlight modules achieve high color gamut, high brightness, and high contrast display effects.
- Equipped with 2000-level local dimming technology that enables local dimming zones and enhanced picture detail while reducing power consumption for greater energy conservation.



Low blue light backlights applied to screens

Lifestyle changes have increased demand for and extended usage times of displays in people's daily lives. Modern users are therefore more focused on visual health, so low blue light products simultaneously meet user health and professionalism demands.

- Low blue light backlights applied to 23.8-inch screens are compliant with TÜV Rheinland Level 2 blue light standards, reduce eye fatigue, and ensure efficiency and comfort even after long-term use.



Smart displays

Flourishing developments in AIoT mean that consumer products must become more intelligent to meet consumer demands. The human-machine interface serves as a very important communication channel as transparent and flexible color displays provide designers with more space to design unique products.

- Use of flexible transparent substrates allows for displays of colorful dynamic images and static privacy which can be applied to consumer electronics with customized curvature, giving products a unique and stylish appearance.
- Special pixel arrangements combined with proactive IC controls can reduce pixel consumption and extend service life.



QD LED backlight applied to 32" display

These displays are characterized by high contrast, low energy consumption, and easy integration, so have been widely adopted and are increasingly being used in various domains, including education, smart home appliances, out-of-home advertisements, and smart retail. These displays align with ESG trends as they reduce energy and paper consumption compared with traditional technologies, and combined use of Ennostar's QD LED technology further strengthens display color and brightness.

- QD LED applications strengthen display color, brightness, and energy conservation, achieving a wide color gamut and presenting images more realistically in different environments.



Micro LED

Micro LED technology enables manufacturing of smaller and lighter displays equipped with modular characteristics that continue to be favored by various markets. Micro LED applications in the high-end display market are continuously expanding as Micro LED technological capabilities improve and manufacturing costs decrease, with application scope steadily expanding from non-transparent indoor/outdoor public information displays (PIDs), large consumer televisions, wearable devices, and transparent screens gradually being incorporated in transportation vehicles.

6" COW

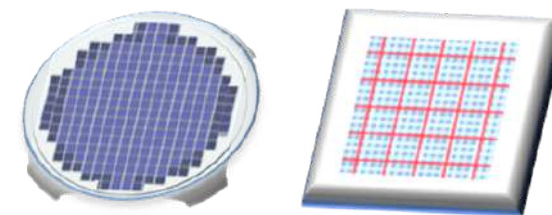
- Micro LED COW technology provides high wavelength uniformity and high efficiency that improves color consistency and brightness of Micro LED end products.



Wavelength (nm)	R: 620, G: 530, B : 460
Chip size (μm)	13x28

COC1+

- COC1+ is an important Micro LED technology that utilizes AI classification to achieve high uniformity, ensuring the quality of Micro LED displays.
- This technology strengthens production efficiency and product quality for display manufacturers without need for adjusting equipment or existing technology, thereby shortening production times.



i-Pixel® & i-Pixel+ TM



- Our pioneer "low-carbon process" wafer-level packaging technology integrates Micro LEDs and Micro ICs into a single 0202 RGB package, converting our exclusive patented i-Pixel® driver from passive to proactive (i-Pixel+ TM), fully leveraging the low energy consumption characteristics and splicing advantages of LED for use in high brightness transparent displays.



Spacing (mm)	0.937
Resolution (pixel)	1080 x 1920
Size (inch)	80

Spacing (mm)	0.68
Backlight	Glass
Resolution (pixel)	160 x 320
Brightness (nits)	2000
Aperture ratio	75%

Advanced Displays: Near-Eye Displays



Virtual Reality (VR)

Edge-lit backlights combined with quantum dot (QD) technology

- **Enhanced color performance:** QD backlight technology improves display color performance through the use of quantum dot materials, presenting a wider color gamut and better color saturation.
- **Enhanced contrast and brightness:** Compared with traditional LED backlights, QD backlights can effectively enhance display contrast and brightness.
- **Energy conservation and eco-friendliness:** QD backlights enable higher energy efficiency, lower energy consumption, and lower carbon emissions compared to traditional white LED backlights, aligning with current green and eco-friendly trends.



Mini LED backlight

- **Excellent local contrast:** Mini LED backlight technology allows for more local dimming zones, enabling higher local contrast, enhanced detail, and better sense of depth.
- **Long lifespan and stability:** Compared to Micro OLED, Mini LED backlights have a longer lifespan, more stable performance, and no screen burn-in, ensuring uniformity and durability of VR display effects.

Augmented Reality (AR)

High uniformity 8" GaN on Si epitaxial chip (LEDoS)

- To meet the demands of AR displays, Ennostar adopted a technological combination of high PPI LED arrays and CMOS control ICs. Our GaN on Si LED chip technology provides clients with a perfect solution that achieves seamless bonding with Si-based CMOS.
- Ennostar combines blue LEDs with QD color conversion technology to create display technologies with high resolution and high color saturation, providing users with an enhanced visual experience.

MAC (Monolithic Array Chip)

- **Reduce die street width**
Due to the precision limitations in client-side mass transfers, current Micro LED technologies only allow for die street widths of 6 μm , but the MAC (Monolithic Array Chip) enables a width of 1 μm , effectively increasing luminous areas.
- **Significantly increased die numbers**
Compared to the similarly sized 2040 Flip chip, the numbers of dies on MACs are increased by nearly threefold due to the reduced die street width and integration of three colors onto a single chip, allowing clients to obtain higher die output, thereby increasing production and efficiency.
- **Good electrical conductivity**
Blue light is propagated more efficiently than red light for Micro LEDs, but MACs utilize blue light combined with red quantum dots to emit light, resulting in significantly better propagation. Compared with native red light, MACs exhibit lower V_f (forward voltage) under high currents, which further enhances efficiency and performance.

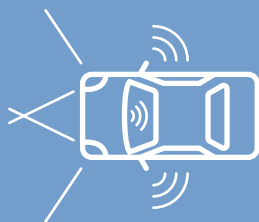


Vertical Micro LED chip

- **Minimized chip size**
As PN Pads need to be located on the same side for flip-chip Micro LEDs, chip sizes are limited, but adoption of a vertical chip design places the Pad at the top and bottom of the chip to minimize chip size.
- **Optimal current diffusion effect**
The vertical design has inherent advantages in that it can carry higher currents and enable better current diffusion effects compared to other chips. Furthermore, vertical chips can overcome issues of insufficient efficiency in some red light flip chips, providing reliable support for product performance.



Automotive Applications



Automotive displays

55" full-array local dimming automotive display panel

- In response to rising demand, our full-array local dimming backlight provides high brightness and high contrast for in-vehicle displays, enabling reliability and low power consumption. Additionally, the displays can be flexibly adapted to curved surfaces and special shapes for different vehicle models.
- The direct-lit white light panel is paired with a large-area backlight design to produce high-quality images with high brightness and high contrast under excellent high-intensity light source technology.



Number of Mini LEDs (Dome Lens CSP 1010)	2560
Number of zones	1 zone for each Mini LED
Curvature	3,000
Color gamut	> 85%
OD (mm)	2.5

17.3" transparent Micro LED display

- Transparent Micro LED displays offer superior penetration and brightness compared to OLED displays, clearly displaying images under various driving scenarios involving strong light exposure and darkness without impacting images behind displays, enabling drivers to safely and clearly read vehicle information. Transparent Micro LED displays can also be applied to passenger cabin environments, providing high-quality entertainment experiences. The introduction of Micro LED screen technology not only enhances driving safety, but also enriches in-car entertainment options, opening up possibilities for smart automotive cabins.
- Additionally, the flexibility and energy-saving features of Micro LED screens are well-suited for the automotive market. The smaller sizes and lightweight properties enable flexible application in complex automotive environments, while the relatively lower power consumption of Micro LEDs offer energy conservation benefits in electric vehicles, helping to extend battery life and improve overall energy efficiency.
- Micro LEDs are increasingly being used in the automotive market and offer great potential for development. This advanced display technology not only enhances functionality in smart cabins, but also provides a safer and more enriched driving experience for drivers and passengers.

- Penetration rate exceeds 65%
- Brightness can reach 2000 nits
- The extremely small chip size meets flexible and lightweight demands of interior space designs.
- Low consumption light source

Chip size (μm)	20 x 40
Backdrop	TFT
Color	RGB
Resolution (pixel)	1,280 x 720
Penetration rate	≥ 60%
Color gamut	>110% NTSC



Automotive Lighting

Adaptive driving beam (ADB)

- Matrix LED design and high-performance LED lighting with individual control.
- The glare-free high beam prevents headlights from directly shining on other road users, and can also project images or text to inform road users about driving conditions.



Mini RGB LED matrix car lights

- Front white light/full-color display**
 - High brightness, high contrast, high grayscale
 - The white light front vehicle emblem display is paired with RGB daytime running light applications to enhance visibility and increase road safety.
- Rear red light display**
 - 628-636 nm deep red wavelength tail-light display uses automotive-grade LED modules that provide high brightness, high contrast, and high grayscale to enhance visibility and increase road safety.
 - Mini LEDs support high-pixel area dimming and dynamic adjustments of display patterns based on driving scenarios, enhancing visibility of rear-approaching vehicles and reducing accident risks. When vehicles are stationary, the display function is activated and used to convey vehicle information.



車前全彩顯示

+

白光顯示

+

車前全彩顯示



Eye protection reading lamps

- Solar spectrum-like lighting or high light source efficiency lighting offers sufficient illuminance and uniformity, is glare free, and enhances interior reading conditions.
- The solar-like spectrum provides better color authenticity, reduces eye fatigue, and makes colors look more natural.



Automotive Sensing

Increases in global traffic volumes have brought attention to safety issues. As automobile manufacturers continue to upgrade safety features, vehicle sensors are beginning to play a more important role. LED/VCSEL with high-efficiency light sources and flexible control systems can accurately sense distances and positions, and enable support for autonomous driving technologies and intelligent transportation systems. Ennostar is committed to developing advanced optoelectronics that enhance driving safety and efficiency. Our products include driver monitoring systems (DMS), gesture control, facial recognition, and LiDAR distance sensors which make vehicle operations more intuitive and smooth, enhancing driver safety.

Infrared components applied to Driver Monitoring System (DMS)

- Uses high-sensitivity infrared sensor technology with light sources 5-10% brighter than industry competitors. The DMS can identify and track driver position, posture, and eye movements, providing more efficient and safer solutions for smart automotive applications.
- Rectangular lighting with no blind spots that offers customized and optimized optical design for different vehicle models, cabins, and driving scenarios.
- Weak red exposure infrared light source contains 1/3 red light, reducing visual interference for drivers and effectively enhancing their focus and vigilance on the road, thereby improving driving safety.

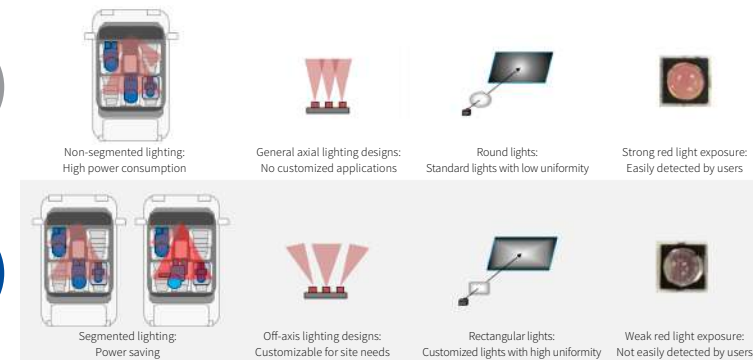


Infrared LED	wavelength(nm)	940
	FoV(D)	50/80
	Optical power(W)	1.5

Infrared VCSEL	wavelength(nm)	940
	FoV(D)	60x45/72x58
	Optical power(W)	3.4

General products

Ennostar



Gesture control

- Pairs high-precision ToF technology with infrared light sources to identify driver hand gestures, allowing drivers to interact with their vehicles, enhancing convenience and safety when driving.
- Ennostar's infrared LEDs and VCSELs feature industry-leading brightness, response speeds, and high-performance characteristics which ensure that gesture recognition systems receive sufficient light source energy, enhancing recognition accuracy and stability.
- The weak red exposure of the infrared light source provides drivers with a dimmer experience that does not impact their vision, effectively enhancing driver focus and vigilance on the road while further enhancing driving safety.



Infrared LED	wavelength(nm)	940
	FoV(D)	50/80
	Optical power(W)	1.5

Infrared VCSEL	wavelength(nm)	940
	FoV(D)	110x85
	Optical power(W)	3.2/6.9

Smart Sensing



Biosensing

Due to technological advancements and rising health awareness, the diverse functions offered by smartwatches have attracted a wide consumer base and the smartwatch market continues to grow. Additionally, innovative smart rings also offer different device options to meet user demands.

PPG sensor modules applied in smartwatches and smart rings

- PPG sensors in watches use high-brightness LED light sources, which can accurately and continuously monitor user physiological data, including heart rate, blood oxygen, blood sugar, and blood pressure, while reducing power consumption by more than 10%.
- High-sensitivity PD reduces device power consumption, ensuring stable and reliable data collection and quick response times, achieving more precise measurements.
- The new PPG technology uses SWIR LED to achieve non-invasive blood glucose monitoring, eliminates the need for blood extraction, and provides a painless and convenient monitoring method.



Size(mm)	Tx:2.4x2.4x0.6mm Rx:2.5x2.2x0.6mm (SWIR)Tx:2.2x1.8x0.6mm (SWIR)Rx:2.0x1.8x0.6mm
Wavelength	530/660/940/for 3in 1 Tx 400~1000nm for Rx 1050/1350/1450/1550nm for SWIR TX 900~1700nm for SWIR RX

Heart rate variability (HRV) analysis application system (medical equipment software)

- Ennostar's medical-grade heart rate variability application software enables measurements on a mobile phone and can assess autonomic nervous system conditions, providing effective tracking during psychiatric treatment processes and helping to enhance public awareness of personal mental health.
- This product was developed by an Ennostar subsidiary and has obtained a TFDA medical device license.
- Clinical trials revealed that measurements taken using this software were 95% consistent with electrocardiogram data.

Proximity switch sensing applied to wireless headphones

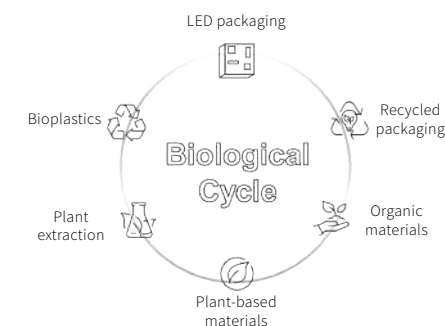
- Apart from LED chips, Ennostar also produces the industry's smallest integrated PPG sensor SIP for TWS earphones, offering heart rate, blood oxygen, and temperature measurement functions while maintaining the appearance and comfort levels of normal earphones.
- The Proximity Sensor effectively reduces power consumption in Bluetooth earphones, extending usage time and providing a better consumer experience.



Size(mm)	2.5x2.0x0.55
Wavelength	530/660/940/nm for LED 400~1000nm for PD

Sustainable materials (Bioxtar™) applied to wearable devices

- Bioxtar™ is the world's first LED package product extracted from plant materials and has a bio-based content of over 30%.
- ESG product:** The first LED product to have a biological cycle.
- We overcame operability and optical transparency challenges associated with packaging processes for bio-based materials and successfully developed an LED product with mass production capability and high transparency.



wearable devices

Bioxtar™	Product	Petrochemical adhesive material
0.0302 Kg CO ₂ e	Single-use carbon emissions	0.1208 Kg CO ₂ e
100%	Reverse current	100%

Smart Home Applications



Smart Home Applications

Smart doorbell

- IR LED and sensors enable smart doorbells to capture images in dim light or nighttime environments, and provide clear nighttime surveillance effects, allowing users to ensure home security at all times.
- Industry-leading brightness and wide viewing angles that provide farther and wider infrared illumination range, ensuring that security devices maintain clear surveillance images at night or in dimly lit environments for better nighttime monitoring and security identification reliability and performance.
- The wide-angle solution adopted an asymmetric light mode with 20% better uniformity compared to competitors that provides a wider infrared illumination range and high image quality.



Infrared LED	Wavelength (nm)	940
	Visible Light Range (D)	120/150/140x120
	Optical Magnification (W)	1.5

Innovation and R&D Management

We maintain innovation and R&D momentum through subsidiary R&D strategic management and the horizontally integrated Innovation Technology Task Force (one of our eight Group Task Forces) which responds to Group and subsidiary needs.

Innovative Technology Task Force

The Innovation Technology Task Force strives to execute research and development projects based on existing optoelectronics technologies that align with environmental, social, and corporate governance (ESG) goals. We adhere to core 3R (Reduction, Replacement, Recovery) principles and incorporate low-carbon energies to achieve our dual goals of eco-friendly sustainability and technological innovation.

The Innovation Technology Task Force continues to explore R&D strategies with market potential and eco-friendly benefits that align with the Ennostar Group's development blueprint, including:

- **Material recycling technologies:** Enhance recycling rates of optoelectronic materials to reduce resource waste and environmental burdens.
- **Reuse plans:** Develop technologies that can extend component lifespans to reduce production and disposal costs.
- **Low-carbon energy applications:** Introduce energy conservation technologies to optimize process energy efficiency and reduce carbon emissions.

These innovative strategies not only enhance corporate competitiveness, but also proactively respond to global sustainable development trends, laying a solid foundation for future developments in the green optoelectronics industry.

Implement ESG ROI assessment mechanisms to drive data-based sustainability technological decisions

The Group officially introduced the ESG ROI (Return on Investment) assessment mechanism in 2024 and used data analytics to evaluate investment benefits of new ESG technologies, ensuring that our sustainable development strategies balance eco-friendly benefits and economic values. We use the Technology Readiness Level (TRL) assessment methodology and adopt diversified decision-making mechanisms for different stages of technological development.

- **TRL stages 1-4:** Focus on technological R&D and proof of concept; ROI is not calculated during these stages to ensure that innovative technologies have ample space for exploration and experimentation.
- **TRL stages 5-9:** We incorporate ESG ROI assessment mechanisms when technologies enter experimental verification and scaling phases, using data analysis to assess investment returns and ESG impacts, ensuring the practical value of our technology.

Unlike traditional ROI assessments, ESG ROI assessments not only consider financial investments and returns, but also incorporate “carbon reduction benefits” in assessment indicators, ensuring that new technologies can effectively reduce carbon footprints and align with global net zero trends. The Innovation Technology Task Force also calculates carbon reductions (tCO₂e) from technology incorporation and converts these reductions into economic benefits to quantify ESG value. ESG ROI assessment mechanisms make it possible for the Ennostar Group to accurately select sustainable technologies with high potential that enable us to make substantial contributions to environmental sustainability and social responsibilities while pursuing innovation.

■ 2024 Innovation Technological Forum: Clean Technology Outlook

The Innovation Technology Task Force hosts an Innovation Technology Forum every year, inviting industry leaders and experts to share cutting-edge ESG technologies and development trends. In 2024, we focused on the theme of “Clean Technology Outlook” and concentrated on the latest green energy and low-carbon technologies, exploring how to integrate clean technology into corporate internal operations to achieve sustainable transformation.

We invited leading global clean energy and technological suppliers to the forum, including:

- **Taiwan TÜV Rheinland:** Shared information on verification processes and standards related to clean technologies.
- **Bloom Energy:** Introduced efficient fuel cell technology to aid low-carbon transformation.
- **Asia Hydrogen Energy:** Explored hydrogen energy applications in corporate energy management and carbon reduction.
- **Asia An Technics:** Shared information on circular usage of waste ammonia and other circular economy technologies to create new possibilities for clean energy development.

The Innovation Technology Task Force not only promoted cross-disciplinary technological exchanges through this forum, but also proactively assessed the feasibility of applying clean technologies within the Ennostar Group, including by:

- Introducing low-carbon energy technologies to reduce carbon emissions
- Assessing facility fuel cell and hydrogen energy applications.
- Integrating clean technologies with process optimizations.



We will continue to focus on clean technology developments through technological collaborations and internal pilot plans that advance the Group toward net zero goals and create a win-win situation for environmental sustainability and corporate competitiveness.

EPISTAR R&D Meetings

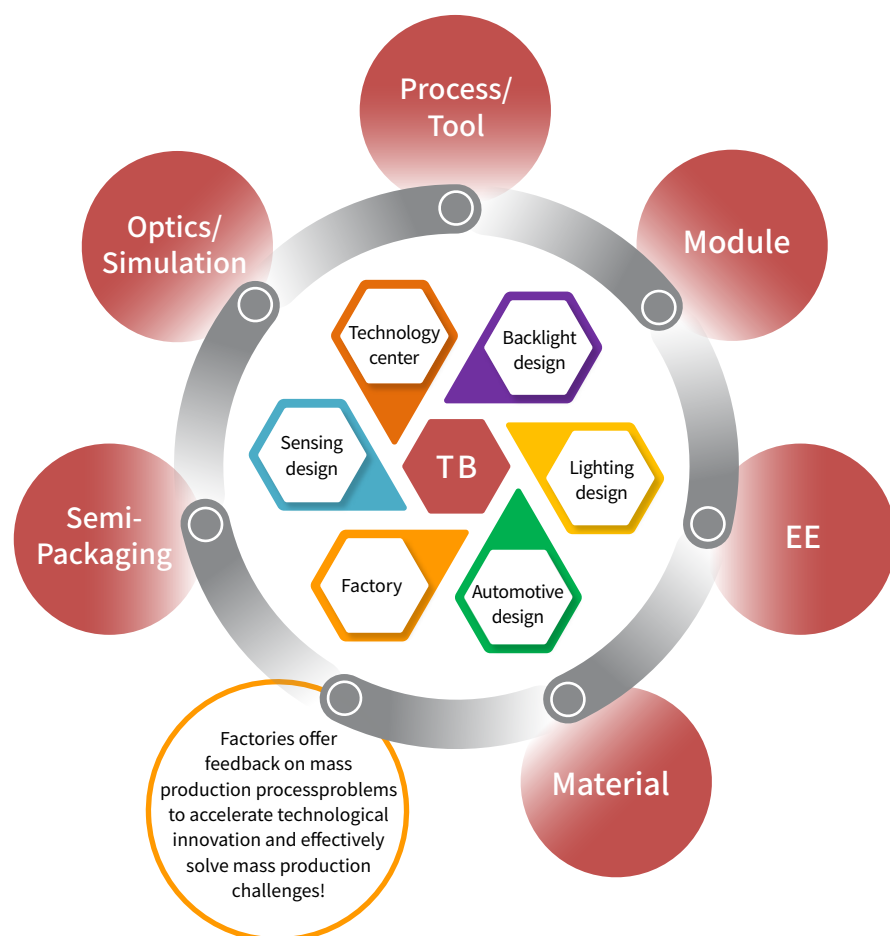
EPISTAR manages innovation and R&D progress and performance through various meetings and cross-department collaborations to ensure corporate innovation capacity.

Management Mechanisms	Operations
R&D center project task force meetings (Participants: Center executives/Group executives/department executives)	Regularly review progress and target achievement rates of each development project.
Patent review meetings (Participants: Center executives/Group executives/senior PM directors/intellectual property rights management office)	Regular review of patent proposals
EPS patent management system	Management of Ennostar patents
Trade secrets management system	Management of Ennostar trade secrets
Monthly ESG Committee meetings	Regular review of overall target achievement rates

Lextar Technology Committee

Lextar allocates R&D units based on product characteristics, so has relatively few channels for horizontal communication and sharing, making it difficult to form a cross-domain innovation mindset. In addition to management through daily quality meetings, we also established the Lextar Technology Committee which is chaired by the Vice President of the Technology Center. The Committee aims to horizontally

integrate internal product development and facility teams, promote sharing of technologies and experiences, and establish a technological knowledge system and a complete technology information database. Facility representatives attend Committee meetings to provide valuable feedback that enables problem-solving in mass production processes and cross-departmental collaborations accelerate technological innovation and effectively solve mass production challenges, thereby integrating Lextar's internal technological resources, establishing emerging management systems and operational mechanisms, and strengthening sustainable competitiveness. The Technology Committee covers six core key technology aspects: Process/Tool, Optics/Simulation, EE, Material, Module, and Semi-Packaging, covering key technological fields, fully integrating technological resources and promoting progress and innovation.



In-depth collaborations across various aspects further strengthen our technological capabilities, enhance market competitiveness, and drive long-term growth.

Every year, Lextar's Technology Committee selects outstanding colleagues that have made excellent contributions to the Committee and commends their outstanding performance in technological innovation and implementation. Selection of outstanding technological talent and recognition of colleagues who excel in technological innovation and problem solving inspire more employees to proactively invest in technological innovation and implementation.

Innovation and R&D Project Highlights in 2024

Epi Wafers and Chips

Project Highlights

1. BLU/Lighting/Auto continued performance enhancement

Achieved

2. Sensing

- Sensor components continued performance enhancement

Achieved

- Launch InGaAs PD products in international markets

Passed client verification and launches in international markets scheduled for 2025

- Continued development and mass production of thinner wearable products

In development

- Technological developments on new sensor product

In progress

3. UVC products

- UVC products continued performance enhancement

Achieved

- Development of UVC short wavelength technologies

Achieved

4. μ LED

- μ LED continued performance enhancement

In development

5. Continued refinement of existing technologie

Project	Description	Key Achievements in 2024
Arsine usage for near-infrared LED reduced (AsH ₃ reduce for NIR LED)	Short-wave infrared LED epi wafers are mainly composed of aluminum gallium arsenide, and arsine is used as the main source of arsenic between epi layers during epitaxy. To ensure epi layer quality, MOCVD* epitaxy uses higher V/III ratios ([AsH ₃]/[TMGa+TMAI]), but as arsine is expensive and arsenic is a hazardous substance, reducing arsine usage not only lowers costs, but also decreases the amounts of waste arsenic.	In 2024, optimization of near-infrared LED products reduced arsine gas consumption by 54% and generated the following benefits: <ul style="list-style-type: none"> ● Reduced carbon emissions by 2,022 tCO₂e/year ● Reduced production costs by NT\$120 million/year ● Increased product power conversion efficiency by 9.6%, which is expected to help end products reduce 920,000 kWh of electricity consumption, equivalent to a reduction of 455 tCO₂e each year. Our product characteristics are superior to our competitors and have been validated by clients. We expect the sales volume of our infrared light series products to increase by 15% in 2025.
Mini backlight product (PD0916@5mA, Wd 450nm)	The EPI** team achieved a 2% brightness enhancement through continuous improvement and optimization, while the technological team focused on DBR*** development and achieved a 3% brightness enhancement. The product team collaborated with EC MIE to introduce new EPI and DBR products, optimizing product performance through cross-team collaboration.	Joint efforts from the RD EPI, product, technology teams and EC MIE enabled us to achieve our PD09D 2024/Q4 15.5 mW power goal.
Recycled GaAs substrates	GaAs substrates are primarily used by epis on factory quaternary products. Effective removal of surface epitaxial layers on scrapped epi wafers enables recycling of GaAs substrates, reducing costs from new substrate procurement and waste disposal, creating environmental benefits.	<ul style="list-style-type: none"> ● Reduced purchases of 2,000 GaAs substrates over the year, saving NT\$800,000 in expenditures ● Reduced processing cost from 2,500 waste GaAs substrates ● Reduced carbon emissions and wastewater disposal of 2,500 waste GaAs substrates
WPE***** improvement on BF***** lighting products, reducing energy consumption	The R&D department continued to optimize our original 450 nm products with a WPE of around 73.7%, adjusting epitaxial structures to improve quantum well luminous efficacy and improving current dispersion capacities at high current densities, while also incorporating new technical platforms on the chip production side to improve external luminous efficacy, reducing the energy consumption of our BF/PEC***** automotive applications to meet corporate ESG standards.	<ul style="list-style-type: none"> ● Improved external luminous efficacy WPE≈74.5% ● Reduced energy consumption of BF/PEC automotive end products
Reduced BF product substrate thickness	The A7 blue light epitaxial wafer substrate is considered a specialized chip within the industry due to its thickness (800 um), leading to significantly higher raw material costs. To reduce epi production costs, we changed to a 660 um substrate and our RD/engineering/production came together to maintain current performance and quality, thereby increasing product margins.	<ul style="list-style-type: none"> ● Reduced substrate thickness and lowered raw material prices ● Shortened process grinding times ● Effectively reduced related epi/process costs
Reduced display epi wafer run time	Demand for RGB displays are increasing year by year. Faced with price-cutting tactics adopted by external competitors and clients, we strive to maintain profitability without expanding facilities, shortening production schedules as necessary to increase production capacity while maintaining blue light epi wafer characteristics. We also reduce production costs and the amount of carbon emissions generated by each epi wafer to create mutual benefits.	<ul style="list-style-type: none"> ● Increased production capacity ● Decreased product unit carbon emissions ● Reduced total epi costs

* MOCVD: Metal Organic Chemical Vapor Deposition, a type of semiconductor epitaxial process equipment

** An abbreviation of epitaxy, referring to the semiconductor epitaxial process.

*** DBR: Distributed Bragg Reflector (DBR), a structure in LED components that reduces optical losses and increases luminous efficacy.

**** WPE (wall-plug efficiency) refers to the energy conversion efficiency of a system converting electricity into optical power.

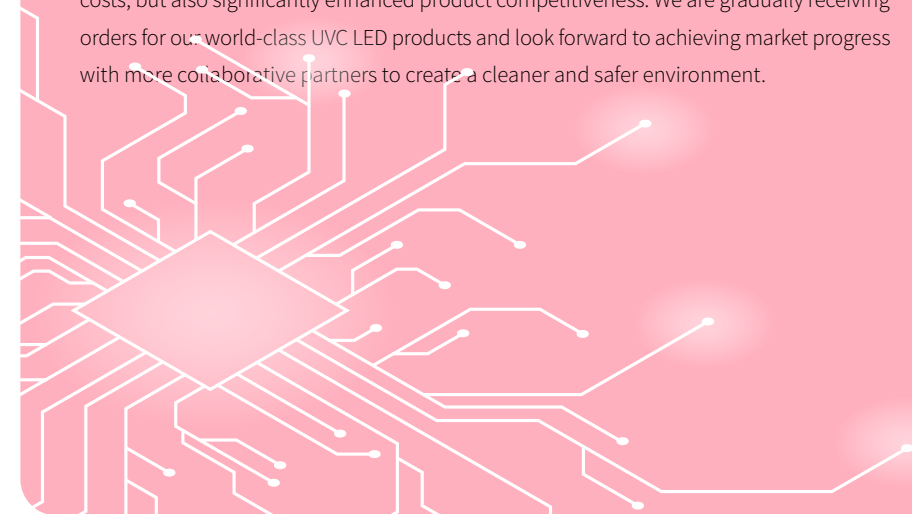
***** Blue light illumination product

***** BF/PEC BF: Horizontal LED product; PEC: Flip-chip LED product

Featured Highlight

660 nm Flip-Chip Development Applied to High-Efficiency Wearable Devices

Due to increasing global public health and safety needs, market demand for UVC LED (a core technology for sterilization and disinfection) continues to grow. However, maintaining high performance and high reliability of UVC LEDs has always posed a key challenge when expanding product applications, with primary goals being increasing light output power, reducing light attenuation, and extending service life. EPISTAR has focused on development of UVC LED technologies for many years, collaborating closely with multiple facilities to optimize technology and upgrade products based on market demands. Our R&D team successfully enhanced the optoelectronic conversion efficiency and reliability of LEDs through innovative epitaxial structure optimization and chip design.* Following continuous collaborations and technological exchanges, we successfully increased product brightness to industry-leading levels while significantly reducing light decay rates and extending product lifespans. This not only effectively reduced consumption costs, but also significantly enhanced product competitiveness. We are gradually receiving orders for our world-class UVC LED products and look forward to achieving market progress with more collaborative partners to create a cleaner and safer environment.



* We used chip power to improve wall plug efficiency (WPE) by 8%, meeting project goals and client demands, and reduced reliability failure rates from 10% to 1%. Power reliability was maintained at >L70@15k hours, 350mA, Tj85=85°C.

Packaging and Modules

Project

Sustainability optimizations in new production pipelines: Reducing chemical usage and VOCs

Actions and achievements

I. Current conditions and challenges

Lextar established a new production process in 2023 and estimated that chemical consumption will reach 1,461L per year at full capacity, with VOC (volatile organic compound) emissions amounting to 151L per year. However, total chemical consumption significantly increased following trial production in 2024 due to product design and process adjustments, and VOC emissions also rose accordingly, resulting in a higher carbon burden on the environment and significantly increasing carbon exchange costs.

We set the following goals to achieve environmental sustainability:

- Reduce chemical consumption by 70%
- Reduce total VOC emissions by 70%
- Reduce carbon exchange costs and improve equipment operating efficiency

II. Improvement measures

We implemented the following four key improvement measures in response to challenges from increased chemical usage and VOCs emissions:

1. Introduced ACE single-slot acid discharge to reduce evaporation

- Optimized acid liquid recycling mechanisms, reduced process chemical evaporation volumes, and lowered VOC emissions.
- Reduced unnecessary acid solution consumption to improve material utilization rates.

2. Established additional electric air valves to reduce emissions

- Dynamic adjustment technology for air valves: Automatically adjusted exhaust flows according to production line demands to avoid excessive emissions.
- Reduced equipment operational loads to improve energy consumption efficiency.

3. Modified machinery programs to reduce consumption of NMP (N-Methyl-2-pyrrolidone)

- Optimized process parameters to reduce NMP consumption and lower environmental impacts.
- Reduced employee exposure risks to enhance workplace environment safety.

4. Introduced regenerated carbon to extend carbon exchange cycles

- Used carbon regeneration technologies to extend carbon exchange cycles from 9 weeks to 12 weeks, reducing carbon material waste.
- Reduced costs of VOC treatment and improved activated carbon usage efficiency.

Key achievements in 2024

III. ESG financial benefits and environmental impacts

■ Main environmental benefits

- Chemical consumption was reduced by 68.8% (original estimated consumption 14,269L/year reduced to 4,452L/year)
- VOC emissions were reduced by 75.4%
(Following improvements, actual monitored VOCs amounted to 136L/year with an operating rate of 55.2%. Estimated emissions at 100% operating rate amount to 947 L/year. Therefore, VOC emissions would be 552.7L at the actual monitored operating rate of 55.2%, achieving an improvement rate of 75.4%)
- Extended carbon exchange cycle from 9 weeks → 12 weeks, reducing carbon exchange frequencies and carbon emissions.

■ Financial benefits

Based on a production capacity of 1,000 pcs/month, our improvement measures are expected to generate the following energy conservation benefits:

Indicator	Before	After	Reduction	Cost savings (year)
Chemical consumption	14,269L	4,452L	-9,817L	Around NT\$1.2 million
VOC emissions	552.7L	136L	-417.7L	-
Carbon cycle exchange	9 weeks	12 weeks	+33%	Around NT\$420,000
Total cost savings	-	-	-	NT\$1.62 million/year

■ Calculation formulas

1. Chemical cost savings = (Reductions in chemical usage ÷ Amounts used before improvement) × Original annual chemical costs
2. Carbon replacement cost savings = (Proportional extension of carbon exchange cycle) × annual carbon exchange costs

■ Green Manufacturing and Making Strides Toward a Sustainable Future

We implemented sustainability optimizations on our new production process line, successfully reducing chemical consumption by 68.8% and VOC emissions by 75.4%, and enhancing carbon exchange efficiency through intelligent management, saving approximately NT\$1.62 million in annual operational costs. These improvements reduced environmental load and enhanced market competitiveness while balancing production performance and ESG goals. We will continue to invest in green technological innovations and implement low-carbon manufacturing, resource recycling, and smart energy management to make strides towards a more eco-friendly and efficient future.

Project

Cassette cleaning, recycling, and reuse

Actions and achievements

I. Sustainable manufacturing and circular economy

In order to achieve environmental sustainability and resource optimization, we introduced a cassette cleaning and recycling mechanism to reduce consumption of disposable materials, enhance cassette lifespans, and create a circular economy model. This mechanism effectively reduces consumption of raw materials, decreases waste production, and alleviates environmental burdens.

II. Cassette cleaning and recycling mechanisms

Cassettes are traditionally discarded directly after use due to pollution or wear, leading to resource wastage and environmental burdens. Our cleaning and reuse technologies extend cassette lifespans, reduce raw materials consumption, and lower manufacturing costs.

Key achievements in 2024

Environmental benefits

- ♻️ **Reduced raw material consumption:** Cassette reuse reduced emissions from material consumption by 0.888 tCO₂e over the year.
- ♻️ **Reduced waste generation:** Decreased scrapping rates of single-use cassettes, alleviating environmental burdens.
- ♻️ **Reduced carbon footprint:** Lowered energy consumption and carbon emissions required for production of new cassettes.

Financial benefits

- Cost savings on raw materials: Reduced procurement of new cassettes, saving NT\$3.645 million over the year.

Green manufacturing and sustainable management

By cleaning and recycling cassettes, we successfully integrated circular economy concepts into production processes, reducing resource consumption, minimizing environmental impact, further enhancing material recycling rates, achieving an eco-friendly and efficient production model, and contributing more value toward a sustainable future.

Achievement Highlights

2024 Innovation Benefits, Promotion, and Collaboration

Jointly completed special product design with IC design house 【Energy conservation】

Micro ICs are small and have different requirements than LEDs and semiconductors. Lextar collaborated with an IC design house to complete an active IC design with integrated lighting and driver components. Therefore, an external signal is all that is needed to drive and light ICs, reducing energy consumption by 20% compared to passive ICs.

Jointly completed special process design with process equipment suppliers 【Energy conservation】 【Reduction】

Micro LEDs use mass transfers (surface transfers) to replace traditional single transfers, which increases production capacity by 1,000 times and reduces electricity consumption required during processes. However, cutting-edge technologies need corresponding cutting-edge equipment, so Lextar collaborated with an equipment manufacturer to develop mass transfer equipment designed to meet Lextar's mass production demands.

Worked with clients to obtain international labels and certifications 【Energy conservation】 【Security】

Lextar's LED components align with backlight client designs and US ENERGY STAR standards, and Lextar worked with clients to design sensor products that align with the EU Energy Efficiency Directive. Lextar also worked with clients to design eye protection desk lamps with no blue light hazards that obtained IEC66778 RG0 blue light certification.

Collaborated with clients to adjust product structure 【Energy conservation】 【Reduction】

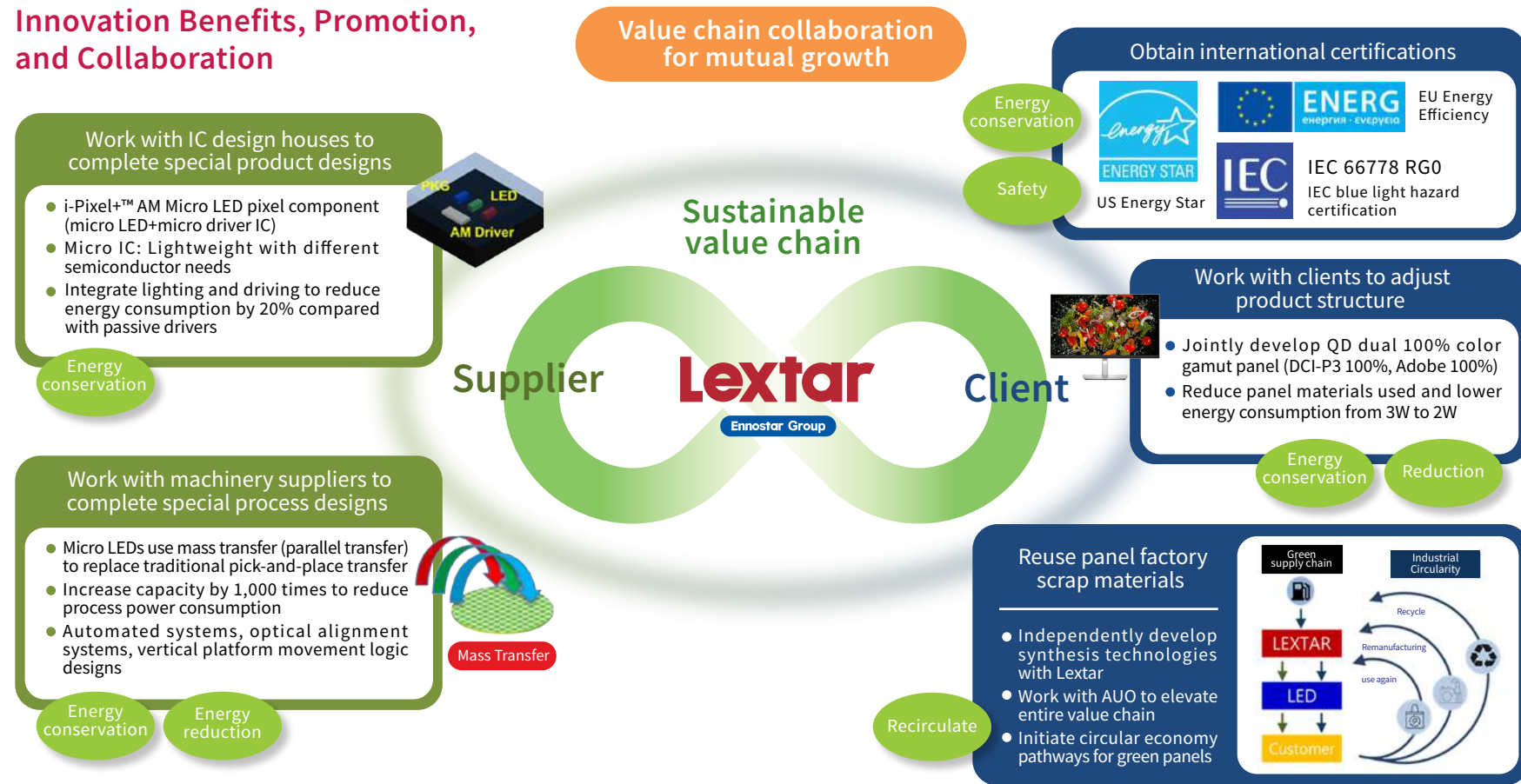
QD LED applications required display panel clients to panel structures. Lextar worked with display panel clients to jointly develop QD dual 100% color gamut panels (DCI-P3 100% and Adobe 100%) that leveraged QD ultra-wide color gamut properties, which reduced display panel materials usage, and lowered LED energy consumption from 3W to 2W.

Recycling of waste materials from display panel facilities 【Industrial recycling】

Lextar began collaborating with AUO and related supply chains in 2023, and established an industry-academia collaboration with National Taiwan University that is working to combine waste materials from display panel factories with Lextar's independently developed special synthetic technologies to develop innovative and differentiated green display panel materials that link material and display panel vendors. We hope our collaboration with AUO will drive our entire value chain and pave the way for a circular economy in green display panels.



Innovation Benefits, Promotion, and Collaboration



Assessment Mechanisms for Product Design Risks

The Ennostar Group adheres to rigorous management processes when developing new technologies to ensure that R&D achievements meet market demands and technological standards. We conduct feasibility assessments before projects commence and ensure that technological routes are reasonable and feasible through market research and technological analysis. During development processes, we strictly implement risk management procedures; identify potential technology, regulatory, and market risks; and formulate response strategies.

In terms of quality monitoring and management, EPISTAR adopts a milestone review mechanism during development progresses and utilizes quality management methods such as FA/CA/OCAP procedures to ensure that expected goals are achieved at each stage. We implement data analysis, tests, and verifications; incorporate DRBFM/FMEA/CP management methodologies; assess technological stability and product feasibility; and have established a feedback mechanism so we can quickly adjust development directions.

In terms of operational risks, we implement compliance reviews to ensure that our new technologies meet regulatory requirements, protect technological innovations using patent strategies, and conduct

cost-benefit analyses to ensure optimal allocation of development resources and reduce financial risk. Finally, we ensure successful utilization of new technologies and market competitiveness through rigorous management and continuous monitoring.

To ensure that product designs meet client demands and achieve the highest quality and reliability standards, Lextar divides product design planning into five stages, with systematic risk evaluation and management mechanisms incorporated into each stage to reduce potential risks and ensure success and stability in product development.

Systematic Risk Assessment Ensure High-Quality Designs and Mass Production Feasibility

The design risk evaluation mechanisms in these five stages enable us to identify and manage potential risks at various stages of product development, thereby ensuring design quality, process stability, and long-term reliability while meeting environment (E) and quality governance (G) requirements, enhancing product competitiveness and providing clients with better and more sustainable product solutions.

● DFMEA risk assessment and management

- **Risk assessment target:**
 - Identify design defects and potential failure modes to ensure that products meet reliability and safety requirements at the design stage.
- **Key assessment elements:**
 - **DFMEA (Design Failure Mode and Effect Analysis):** Assess possible failure modes and impacts, and plan prevention and improvement measures.
 - **DRB (Design Review Board):** The Design Review Board confirms that DFMEA results and corresponding countermeasures meet all requirements before proceeding to the next stage.

● Process capabilities and final reliability testing

- **Risk assessment target:**
 - Ensure process stability, verify mass production feasibility, and complete final reliability testing.
- **Key assessment elements:**
 - **MSA (Measurement Systems Analysis):** Confirm accuracy of measurement equipment and methods to ensure the reliability of quality monitoring.
 - **SPC (Statistical Process Control):** Monitor production variations using statistical data to ensure stable production.
 - **Final QRA tests:** Products must pass final reliability tests before they can officially enter the mass production stage.



● Product feasibility assessment

- **Risk assessment target:**
 - Confirm feasibility of product technologies to avoid major issues in subsequent design and manufacturing stages.
- **Key assessment elements:**
 - **Analysis of market and client demands:** Confirm whether product specifications and functions meet market and client requirements.
 - **Technological feasibility analysis:** Assess technological challenges and possible process limitations.
 - **Risk forecasting:** Conduct preliminary identification and preventive measures for risks that may impact product development.

● Early process capabilities and reliability testing

- **Risk assessment target:**
 - Confirm that designs meet specifications and verify production capabilities to ensure stability for mass production in the future.
- **Key assessment elements:**
 - **Early-stage process capability analysis:** Assess trial production feasibility and confirm whether the key process parameters are stable.
Approval of material samples: Confirm that materials meet specifications to avoid supply chain variations and quality impacts.
 - **RFMEA (Reverse Failure Mode and Effects Analysis):** Identify possible process risks to ensure manufacturing stability.
 - **QRA (Quality & Reliability Assurance) testing:** Ensure that products meet durability and lifespan requirements; products must pass QRA tests before they can proceed to the next stage.
 - **EV (Engineering Validation)** and functional safety tests must be conducted on automotive products to ensure that they meet automotive standards.

● ORT verification mechanisms

- **Risk assessment target:**
 - Continue to monitor product quality and reliability to reduce long-term operational risks.
- **Key assessment elements:**
 - **ORT (Ongoing Reliability Tests):** Conduct regular reliability tests to monitor long-term product performance and ensure stable quality.
 - **Process optimization and continuous improvement:** Analyze production data to further optimize processes, enhancing yield and reliability.

Green Designs

We are fully aware that it takes time for product innovations to achieve sustainability. In future, we will continue to work toward our dual goals of “innovation application” and “efficiency improvement,” improve safety aspects, enhance product applications, and strengthen product carbon reductions and energy efficiency.

Product	Actions
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. We use Mini POB/COB technologies and QD technologies to improve PKG brightness, thereby reducing power consumption and carbon emissions of end products
ADB	We collaborated with Inova Semiconductors to incorporate ISELED and ILAS technologies in Lextar’ s Smart LEDs. Each Smart LED package contains LED chips and a driver IC in a value-added module. Apart from driving LEDs, the driver IC has built-in data calibration capabilities and uses ILAS technology to synchronously transmit large amounts of signals and commands. This enables color calibration and temperature compensation within modules, and addresses previous pain points associated with time-consuming light source adjustments, significantly enhancing product performance and providing clients with high-quality and cost-optimized solutions.
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 low energy consumption concepts in product designs and strives to reduce carbon emissions generated by products. In 2024, our applications in lighting, backlights, automobiles, sensors, and rapid-charging end products reduced average annual power consumption by 499 million kWh and carbon emissions by 246,500 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.

End products	Energy savings from end products (million kWh/year)			Energy unit (MJ)	Carbon reductions (tCO ₂ e)
	EPISTAR	Lextar	Total energy savings across the Group		
Lighting	94.51	20.16	114.67	412,602,693	56,646
Backlight	107.51	238.51	346.02	1,245,060,799	170,934
Automobile	37.72	-	37.72	135,725,613	18,634
Sensors	0	0.49	0.49	1,759,421	242
Rapid charging	0	-	0.00	-	-
Other	0	-	0.00	-	-
Total	239.74	259.16	498.90	1,795,148,525	246,455

- Annual energy savings were estimated based on actual shipment volumes and number of end products on the markets in 2023. Formula for calculation: Energy savings (kWh) = Power savings (kW/pcs) * Number of products (pcs) * Hours of usage per year (H).
- Products for 2023 were used as a baseline for comparing electricity-saving efficiency in 2024.
- Under the Ennostar Group’ s integrated production model, Lextar uses chips produced by EPISTAR; we have deducted electricity savings from use of EPISTAR chips to avoid double counting.
- Heat value = 860kcal/kWh; heat generated per kWh (MJ) = 860 (kcal/kWh) * 1000 (cal/kcal) * 4.184 (J/cal)/1,000,000 (J/MJ); calculated using the electricity coefficient of 0.494 kg CO₂e/kWh released by the Ministry of Economic Affairs Energy Administration in 2023.

Smart Manufacturing and Sustainable Transformations

Lextar initiated smart manufacturing in 2019 starting from “process simplification” and “automation,” then gradually developing “systematic” and “smart” applications for continued optimization of manufacturing efficiency and product quality. We also proactively introduced sustainable manufacturing concepts, executing green production and reducing environmental impacts through two core strategies: intelligent energy consumption management and low-carbon transformation.

Smart Manufacturing Developments

Process simplification

Optimized production procedures to reduce unnecessary processes and resource waste.

Automation

Introduced automated equipment to improve production efficiency and reduce manual intervention.

Systematic applications

Established a data management platform to enhance visibility of production processes and decision-making efficiency.

Smart applications

Applied AI and big data technologies to optimize production scheduling and equipment management.

In 2024, Lextar’s iMFG smart manufacturing completed development of the PKG Smart Eagle Eye system, construction of automation lines, and incorporation of smart packaging and smart logistics technologies. Lextar improved production efficiency and achieved ESG goals through intelligent energy consumption management and low-carbon technologies. We will continue to integrate smart manufacturing and sustainable manufacturing, creating higher eco-friendly and economic values for the industry.



Project

PKG Smart Eagle Eye

Actions and achievements

Zhunan Plant successfully incorporated Lextar’s self-developed AI in AOI inspection machine

Key achievements in 2024

- Uploaded first batch of part numbers, reducing part number error rate by 8%
- Error rate of dispensing products was reduced by 1%
- Error rate on lens products were reduced by 2% after AOI+AI integration (segment tolerances can impact chip imaging)
- Visual inspections were reduced from 100% to 10%, freeing up 3 visual inspection personnel, and reducing labor costs by approximately NT\$1.98 million per year.
- Personnel need to conduct visual inspections following AOI screening, which increases leakage and customer complaint risks; AOI+AI incorporation can prevent abnormal leakages and reduce the likelihood of customer complaints.
- 2024 PKB yield improved by 0.2%

Project

Vehicle integration: Automated automotive production line benefits

Actions and achievements

Integrated transportation vehicles to reduce the number of vehicles used by AT automotive 2 SMT production lines/3 products from 15 types to 3 types, effectively enhancing production efficiency

Key achievements in 2024

- Reduced manpower demands: Automated equipment increased automation levels of production lines.
- Transportation efficiency improvement: AMR (PKG automotive line smart logistics system) can transport multiple vehicles at once, reducing handling time when there are many vehicles and lowering transportation frequencies.

Project

Establishment of automated automotive production lines

Actions and achievements

- Established a dedicated one-stop, highly automated automotive production line with full-line integration of automation equipment, and introduced systematic one-click machinery switches, error-proofing system, central monitoring system, and full-site data traceability.

Key achievements in 2024

- Introduction and integration of automated processes streamlined the workforce and freed up 24 people, eliminating human-induced errors during production processes, and reducing the scrap rate from human-induced defects by 0.5%. Real-time monitoring of production processes allowed for complete traceability of abnormalities and product information.
- SMT raw material intensity (tons/KK ea) decreased by 17% compared to 2022, dropping from 0.0367 to 0.0304, exceeding our goal by 10%.

Actions and achievements

Key achievements in 2024

- Standardized distribution of consumables, increased cassette reuse cycles from 3 times to 5 times, introduced general-purpose lens feeders, implemented partial recycling for cardboard boxes, improved printer air knives, added dual mounters to enhance line capacity, and centralized production.

- SMT product unit energy consumption (kWh/KK ea) decreased by 6.24% compared to 2023, dropping from 3,836 to 3,596, exceeding our goal by 3%.
- Reduced carbon emissions by 17%, achieving our goal of reducing carbon emissions by 10%

Project

Chuzhou PKG smart automotive packaging line
(three-in-one equipment & AMR system)

Actions and achievements

Key achievements in 2024

- Three-in-one monitoring system encompassing intelligent PKG automotive line equipment + energy and carbon reduction + production monitoring (die bonding & wire bonding & main dispensing equipment), with the following main functions:
 - Energy and carbon reduction** → effective reduction from intelligent control of CDA flow, achieving energy conservation and reducing energy consumption;
 - Production monitoring** → Automatic LOT loading and unloading
 - Equipment alarm and shutdown notifications are sent to the PDA terminal (increasing single equipment OEE% by 2%);
 - Equipment intelligence** → Smart packaging (Smart logistics AMR system implementation);
- Phased implementation of PKG smart logistics automotive line (AMR system)

Phase 1: Automotive line WB plasma AMR (Completed)

- Developed WB material request system to enable PDA material requests and generation of production tasks;
- Developed shelf management system to achieve transparency and systematization of material storage information in the plasma area;
- Upgraded plasma cleaning machine by incorporating IoT module that enables machine status monitoring and allows the system to automatically open doors, close doors, and start equipment.
- Developed information interaction interface between MES, plasma machines, and AMR mobile collaborative robot systems to achieve information exchange, control, and feedback;

- Energy conservation: Reduced CDA energy consumption
- Waste reduction: Reduced use of label paper (58,281 sheets per year) and thermal transfer ribbons (39.2 kg), according to annual BP.
- Improved production efficiency: Increased equipment OEE% by 2%;
- Reduced labor costs: Plasma AMR freed up 2 people + WB AMR freed up 8 people = 10 people, amounting to NT\$4.32 million per year;
- Quality improvement (reduced human-induced errors): Plasma AMR saved NT\$1.1 million/-year (compensation for customer complaints) + WB AMR is expected to save NT\$420,000/-year (line loss/scrap improvement) = NT\$1.52 million/year;
- Intangible values: Smart automated processes enhance our corporate image and client satisfaction, improving quality, product reliability, and client trust.

Actions and achievements

Key achievements in 2024

- Introduced AMR mobile collaborative robots to achieve autonomous movement and positioning within designated areas, and used robotic arms for material handling; We built the unmanned WB plasma AMR system by implementing the aforementioned projects: Production tasks are generated by the PDA material request system and sent to the AMR for automatic execution, which enables the AMR to automatically collect materials, transport them to the plasma cleaning machine for automatic loading, and automatically close machine doors and start processes. After cleaning, materials are placed on designated shelf storage locations.

Phase 2: Automotive wire WB AMR (In development)

- Utilized three-in-one WB system encompassing machine status monitoring, MES log on/log off, and CDA automatic control switch functions to monitor materials and trigger material requests;
- Designed a smart material transfer platform to flip rotating magazines, attach/detach ear covers, and open/close stop levers;
- Designed mechanical arm with head-mounted gripper for WB machine ports to achieve loading and unloading procedures in confined spaces;

We built the WB AMR system by implementing the aforementioned projects to transport plasma produced materials to corresponding WB machines, where the smart material transfer platform flips rotating magazines, attaches ear covers, and opens stop levers. The AMR then transports and loads materials on WB machines. Material MES log on is completed through the three-in-one WB system. After WB production, the AMR moves materials to the smart material transfer platform, which flips rotating magazines, detaches ear covers, and closes stop levers.









Phase 3: Smart material shelves (Planned)

Smart warehousing management system which controls temperature, humidity, and nitrogen levels.

Phase 4: Oven AMR (Planned)**Phase 5: Full process AMR integration (Planned)**

- Energy conservation: Reduced CDA energy consumption
- Waste reduction: Reduced use of label paper (58,281 sheets per year) and thermal transfer ribbons (39.2 kg), according to annual BP.
- Improved production efficiency: Increased equipment OEE% by 2%;
- Reduced labor costs: Plasma AMR freed up 2 people + WB AMR freed up 8 people = 10 people, amounting to NT\$4.32 million per year;
- Quality improvement (reduced human-induced errors): Plasma AMR saved NT\$1.1 million/-year (compensation for customer complaints) + WB AMR is expected to save NT\$420,000/-year (line loss/scrap improvement) = NT\$1.52 million/year;
- Intangible values: Smart automated processes enhance our corporate image and client satisfaction, improving quality, product reliability, and client trust.

Industry, Government, and Academia Innovation Collaborations

Mode of industry-academia collaboration	Description
Development of cadmium-free QD materials and LED applications 	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. Stabilizing technology for novel broad-spectrum infrared phosphors. 2. Mass production and synthesis technologies for phosphors.
PPG bio-sensing prototype development and research (1/2) 	1. PPG measurement technology and signal processing research platform. 2. Established quality tests for deep-learning PPG.
Technological development of advanced microchip mass array transfer devices 	1. Micro IC tether process development 2. Developed autonomous tether micro IC patent
National Science and Technology Council industry-academia collaboration project: Foveated Learned Image Perceptual (FLIP) research 	1. AI model (FLIP) image quality assessment 2. Enhances image resolution, facilitates AI learning, and implement applications into other projects as appropriate.
PCSEL development 	<ul style="list-style-type: none"> Uses nanoimprint lithography to create photonic crystal nanostructures to enable light lasing. Expected benefits: <ul style="list-style-type: none"> Wavelength 900-1100 nm & far-field divergence angle <3 kWh; Short pulse high current component characteristics (Peak optical power ≥ 1.0 W @ 10 A)
Used AAO masks to prepare sub-micron patterns that improved light extraction efficiency of nitride LEDs 	<ul style="list-style-type: none"> Development of non-contact μ-LED electrical measurement platform Establishment of photovoltaic, non-contact, sensor film process technologies
Industrial LED technological consultation and development 	<ul style="list-style-type: none"> Provided industrial technological guidance and future research directions Shared academic and industry information Supported development of ESG-compliant products and consulted on designs to enhance LED optoelectronics efficiency

Management of Intellectual Property Rights

Material Topic	Innovation Management and Smart Transformation				Base year: 2021
Indicators	2024		Target for 2025	Target for 2026	
	Achievement	Target			
Number of patent applications per year *	325 patents/year	264 patents/year	265 patents/year	265 patents/year	
Number of trade secrets registered/year **	1244 patents/year	920 patents/year	920 patents/year	920 patents/year	
Green intellectual property rights	Proportion of green patents: 86% Proportion of green trade secrets: 42%	Proportion of green patents: 30% Proportion of green trade secrets: 30%	Proportion of green patents: 30% Proportion of green trade secrets: 30%	Proportion of green patents: 40% Proportion of green trade secrets: 40%	
Responsible unit	Smart enterprise team, innovative technology task force, R&D and intellectual property rights department				

The Ennostar Group believes that protection of patents and trade secrets is a key corporate strategy. Protection of intangible assets not only helps us maintain our rights, but is also necessary for enhancing corporate competitiveness. To establish comprehensive protections for intellectual property rights, the Group established 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 also 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 EPISTAR is scheduled to obtain certification in 2025.***

* Patent applications refer to patent proposals that have been reviewed and approved by corporate units and submitted to the intellectual property offices of various countries.

** Registered trade secrets refer to trade secrets that have been registered in our trade secrets management system.

*** Certificate is valid until the end of 2025.

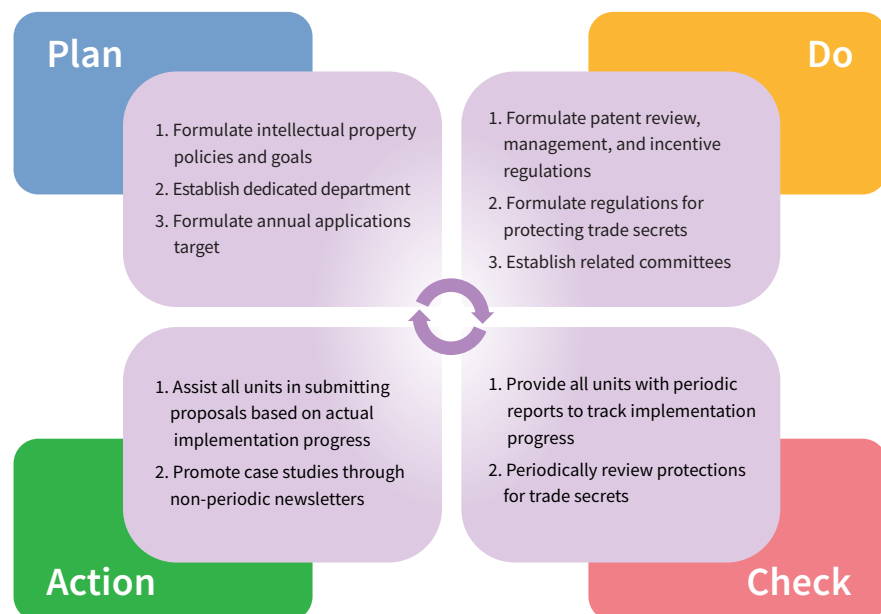
**Management
strategy**

1. Appropriate intellectual property strategies
2. Strengthened awareness of protection measures for intellectual property rights
3. Close alignment with corporate R&D strategies and business strategies to achieve operational goals

**Management
target**

1. Maintain R&D and innovation capacity to ensure brand leadership of technological products
2. Protect intangible corporate assets to effectively control operational risks
3. 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 using PDCA cycles and intellectual property management systems to ensure that the R&D and production achievements of our colleagues are appropriately protected so we can maintain corporate competitiveness, and prevent leakages of important Group and company information.

**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 procedures, using appropriate resources to maintain the effectiveness of our corporate intangible assets.

**Management and
registration of
trade secrets**

Our major subsidiaries have gradually completed establishment of trade secret management systems, enabling 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

We research 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 planning department checks whether said materials inadvertently reveal trade secrets or infringe upon the copyrights and trademarks of others.

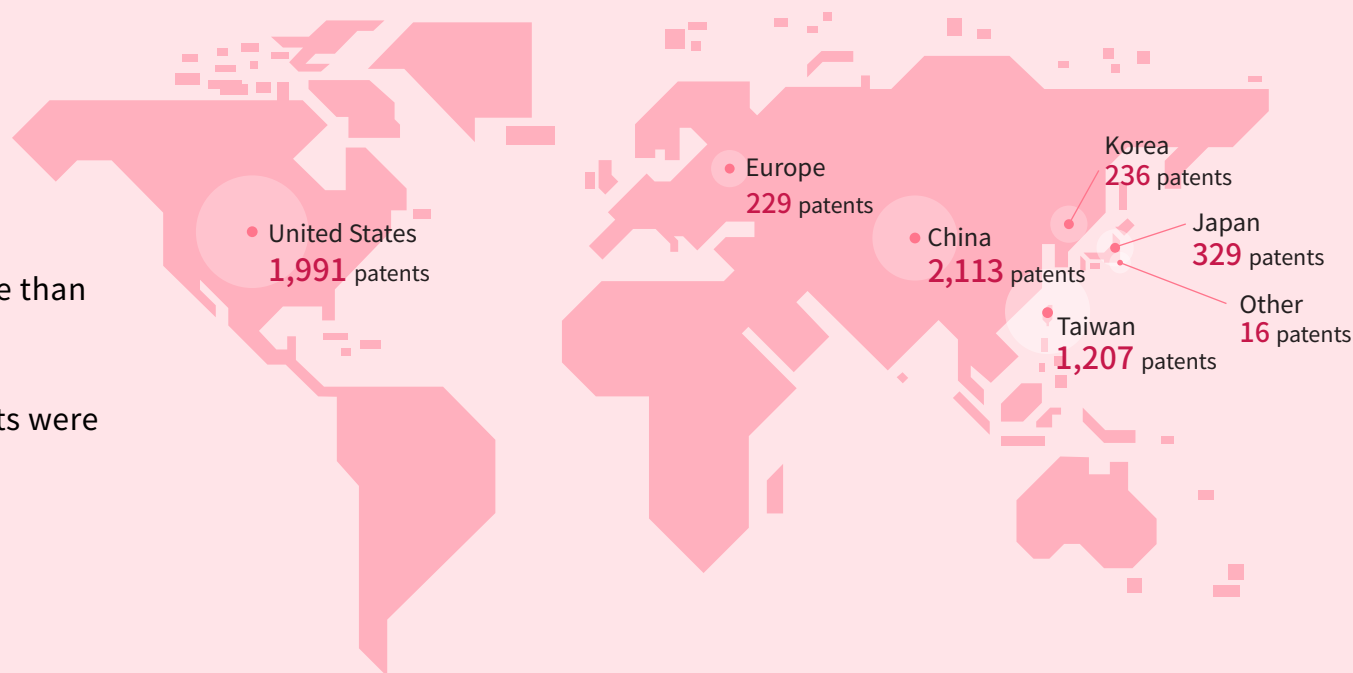
We gathered highly integrated Group resources to continue upgrading Micro LED technologies and worked with supply chain partners to jointly popularize Micro LEDs and secure a leading position in the Micro LED industry for Taiwanese supply chains. The Ennostar Group attaches great importance to intellectual property rights and actively develops innovative technologies. We have also obtained comprehensive 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 calibration and repair of display modules. 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 2024, the Ennostar obtained a total of 273 approved patents around the globe, bringing the cumulative total of approved global patents to 6,121 patents



The Group holds more than
6,121 patents

A total of **273** patents were
approved in 2024

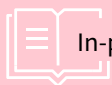


Additionally, we also provide all employees with education and training related to protections for trade secrets through trade secret competitions, internal newsletters, and online courses, bringing attention to our protections for intellectual property rights and trade secrets.

In 2024, the Ennostar conducted 4 trade secrets education and training sessions:

Basics of legal compliance module:

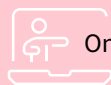
Patent application
and search practices



In-person

New employee orientation training:

Trade secrets



Online

Legal compliance module:
Responding to client/
supplier patent issues



In-person

Legal compliance module:
Understanding intellectual
property rights



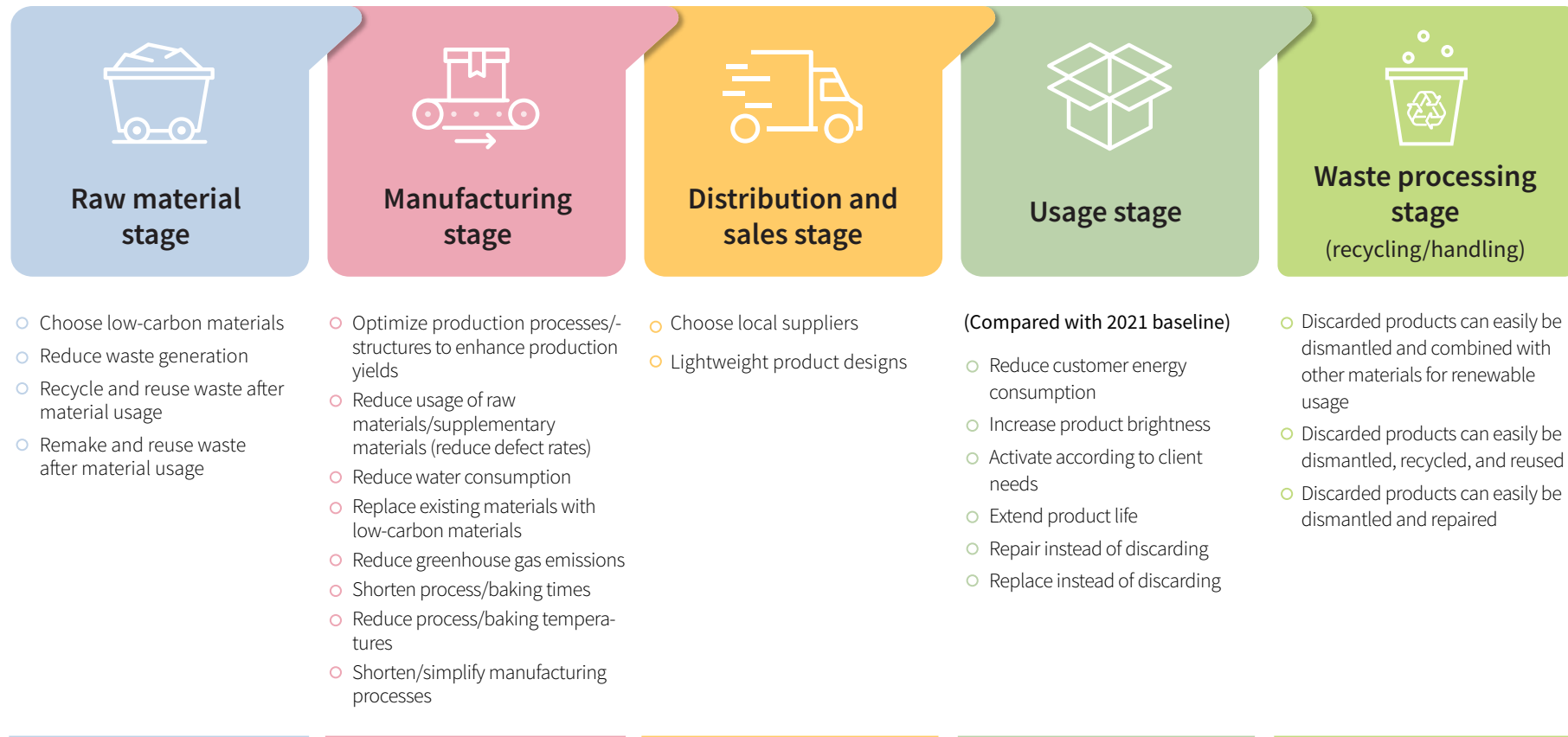
In-person

Green Patents and Green Trade Secrets

The Group introduced green patents and trade secrets in 2023, using product life cycle thinking (LCT) to define the scope of green patents and trade secrets. In 2024, we began investigating green patents and trade secrets; a total of 92 (86%) green patent proposals have been reviewed and 521 (42%) green trade secrets have been registered.

- **Definition and benchmarking:** Recognition principles through classified through life cycle assessment (LCA)
- **Benchmarking alignment:** Determined by the Chairman after inventor reports at patent review meetings
- **Promotion and strengthening:** Online lesson plans, employee training, and weight adjustments

Lextar has incorporated introduction of green products into basic training courses for new employees; 100% of new employees completed related education and training.



Products and Services

Corresponding SDGs



Product Quality and Safety

Material Topic	Product Quality and Safety						Base year: 2021
Indicators	Applicable Scope	2024		Target for 2025	Target for 2026	Target for 2030	
		Achievement	Target				
Ratio of products complying with international environmental protection regulations such as RoHS and REACH SVHC	EPISTAR, Epicrystal, Episky, Can Yang Lextar	✓ 100%	100%	100%	100%	100%	
100% green product compliance *	Lextar	✓ 100%	100%	100%	100%	100%	
Number of return incidents from end markets **	Lextar, Lextar Electronics	✓ 0	0	0	0	0	
Number of customer complaints associated with HSF abnormalities ***	Epicrystal, Episky, Can Yang	✓ 0	0	0	0	0	
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 continued improvement of our products and services. We constantly seek out opportunities, identify problems, and explore innovative solutions through continued improvement activities. We believe that everyone can be a guardian of quality and 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 comprehensively optimized test coverage rates and test detection capabilities to curb production and outflow of defective products, and also strengthened process capabilities to enhance process stability and precision while continuing to reduce product quality

risks to ensure that our products and services meet the highest quality standards and continue to meet client needs and expectations.

The Group has obtained external certifications for ISO 9001 and IATF 16949 quality management systems. Lextar and Lextar Electronics have obtained ANSI/ESD S20.20, and respectively obtained external ISO 26262 and ISO/IEC 17025 certifications. Lextar and Lextar Electronics introduced VDA 6.3 in 2024, conducting internal and external education and training, including training for 44 employees who went on to obtain VDA internal auditor certificates, thereby strengthening automotive product management. Lextar and Lextar Electronics also simultaneously executed digital and smart facility management, leveraging departmental collaboration to integrate smart quality management into product lifecycle processes. Smart controls enable effective management of quality abnormalities and management optimization to maximize benefits. Our long-term plans promote equipment leveling/dedicated line production, and we continue to refine international automotive industrial standards and optimize the quality of automotive products.

* Indicator: 1. 100% of Lextar products have completed and passed ROHS tests; 2. We completed 100% of client green product surveys and provided feedback within the time limits requested by clients.

** Formula for calculation: Number of abnormal returns/Monthly shipments

*** Formula for calculation: Number of HSF incidents/Number of cases per year

Achievement Highlights

Lextar Electronics:

Established and executed automotive system to respond to changes in client and market demands: Automotive product project

1. Confirm discrepancies on standard ID lists: In May 2024, one of our clients required Lextar Electronics's COB project to meet an EU end client's 36 Group Standards (GS). All technologies, processes, quality standards, and systems were required to meet German Association of the Automotive Industry (VDA) standards. The QM immediately coordinated team members to translate and deconstruct each of the 36 Group Standards, and compare them to our existing systems (IATF16949). Product initiation and process management were based on original consumer product mindsets. Personnel capabilities and methodologies were changed to support full iteration and upgrading of automotive parts to align with VDA standards.
2. Established standard templates associated with benchmark project: QM team members conducted discussions and established a benchmark automotive product project. Core personnel from units involved in product initiation and production line establishment implementation were selected as seed personnel to conduct training and coaching. We achieved comprehensive incorporation of automotive systems through setting benchmarks, replicating and promoting benchmarks, and achieving full integration to meet constantly changing client and market demands. We collaborated with TÜV Rheinland (Shenzhen) in July 2024 to organize a series of training courses (quality awareness in senior executives, VDA6.3, APQP, CP, PFMEA, SPC, 8D, and error-proofing), orient our automotive system toward client needs, and provide identification and coaching support for 8 processes (client demand reviews, new product development, procurement management, production and manufacturing, client services, quality control, abnormality management, and audit processes).

This project not only attracted and retained major clients, but also enhanced our corporate and product image, leading to a subsequent increase in orders and sales of high value-added automotive parts, fulfilling our strategic goals.

Hazardous Substances Management

We guarantee product and service health and safety not only to comply with laws and regulations, but also to fulfill our commitment to clients, the environment, and society. We use rigorous quality management processes to ensure that our 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

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 2024.

New Product Verification

New product series are required to complete all hazardous substance 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 and client Hazardous Substance Free (HSF) requirements before mass production. We developed 342 new products in 2024 and completed hazardous substance verifications for all products (100%).

Management Processes for Hazardous Substances

The Group regularly reviews products in product proposals, and Group 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 each month to ensure compliance of product components. RoHS controlled substances in our product lines are annually verified by commissioned laboratories which hold ISO 17025 certification, and we survey material compliance of suppliers one month after official announcement of RoHS and REACH SVC laws and regulations.

The Ennostar Group reports on product quality indicators at quality meetings every month, and management of hazardous substances, customer health and safety, and other related indicators are reported at monthly ESG working group meetings.

We have established the "Regulations for Management of Prohibited and Restricted Substances" to manage prohibited and restricted hazardous substances of customer concern. All product processes (R&D, manufacturing, production, storage, shipment) and raw material suppliers comply with hazardous substance regulations such as RoHS, REACH SVHC, international environmental laws, and customer regulatory requirements. We began implementing management for hazardous substances in 2009, and have established Hazardous Substance Free (HSF) policies and HSF goals. We identified risks related to hazardous substances in client needs, regional regulations, products, and processes, and manage necessary procedures and objectives accordingly while also providing necessary resources to ensure understanding and management of products and processes. Each year, we evaluate the effectiveness of compliance with hazardous substance regulations and customer HSF requirements to ensure that our products meet relevant regulations and customer standards for restricted and prohibited hazardous substances.

The Group's management measures 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 Substance 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

Periodically/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

Product Labeling Regulations

Products sold by EPISTAR and Lextar to different regions undergo testing and are labeled in accordance with the requirements of their exporting 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:

- Product name, model, part number, batch number, quantity, production date, and production location
- Green product labels such as RoHS, Green Product, and HSF (text or graphics)
- 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 2024, and none of our products were banned, recalled, or violated regulations relating to product marketing and communications (including advertisements, promotions, or sponsorships).

Customer Relationship Management

Material Topic

Maintaining Customer Relationships

Indicators	2024		Target for 2025	Target for 2026	Target for 2030
	Achievement	Target			
EPISTAR average client satisfaction score* (Including Episcrystal, Episky, Can Yang)	80	80	81	82	84
Lextar customer satisfaction rate** (Including Lextar Electronics)	Lextar 86.7%*** Lextar Electronics 94.6%	90%	94%	94%	96%

Responsible unit

Quality assurance and business units at all Group subsidiaries.

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, precise 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.

* The survey period spanned from the second half of the previous year to the first half of the current year.

** Formula for calculation: Number of clients with an average project score of ≥ 3.5 points/Number of clients who provided scores

*** Most clients stated that prices are relatively high and billing cycles are relatively short; relevant personnel have been informed.

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.

Our customer service units track progress through meetings prior to annual customer satisfaction surveys; after annual customer satisfaction surveys, senior managers report survey results and propose solutions for continued improvement. We adjusted resources and optimized client communication based on the results of previous surveys, so successfully improved overall satisfaction rates in the 2024 survey and received feedback that our client communications were superior to our competitors. Lextar directly responds to client needs and improvement & verification requirements through regular QBR (quarterly business representative) meetings. We will continue to optimize client service processes, adjust resources, and refine management to enhance client satisfaction.

Customer satisfaction survey results were 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 and business and quality units) for review. Prevention and correction measures proposed by other internal units are also included in customer satisfaction survey result reports. Survey results are reported at internal supervisor and senior executive meetings, and are submitted to the president for review and discussion of improvement strategies. Related units implement respective improvements or adjustments based on meeting resolutions.

Customer satisfaction survey results are used as a reference for corporate strategy planning and continued improvements to meet actual customer needs and to improve corporate competitiveness.

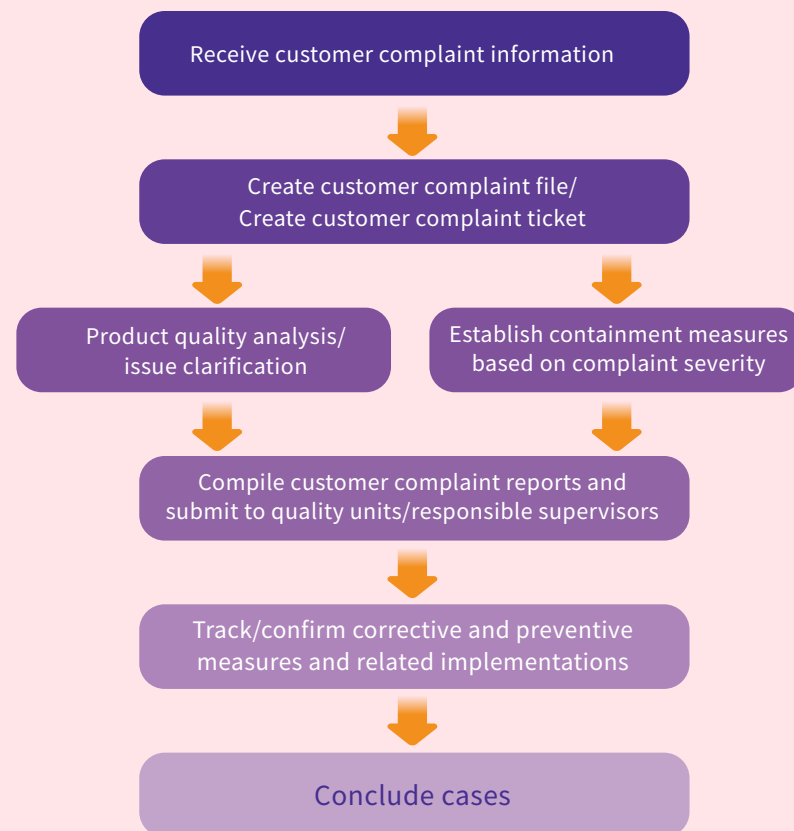
Customer Complaints and Return Policies

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 problem details, immediately notify 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 results 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 associated 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 2024. The effectiveness of all countermeasures for customer complaints have been confirmed.

Client Complaint Handling Process Diagram



* 1. Satisfaction surveys at EPISTAR, Lextar, and Lextar Electronics were distributed to major clients.

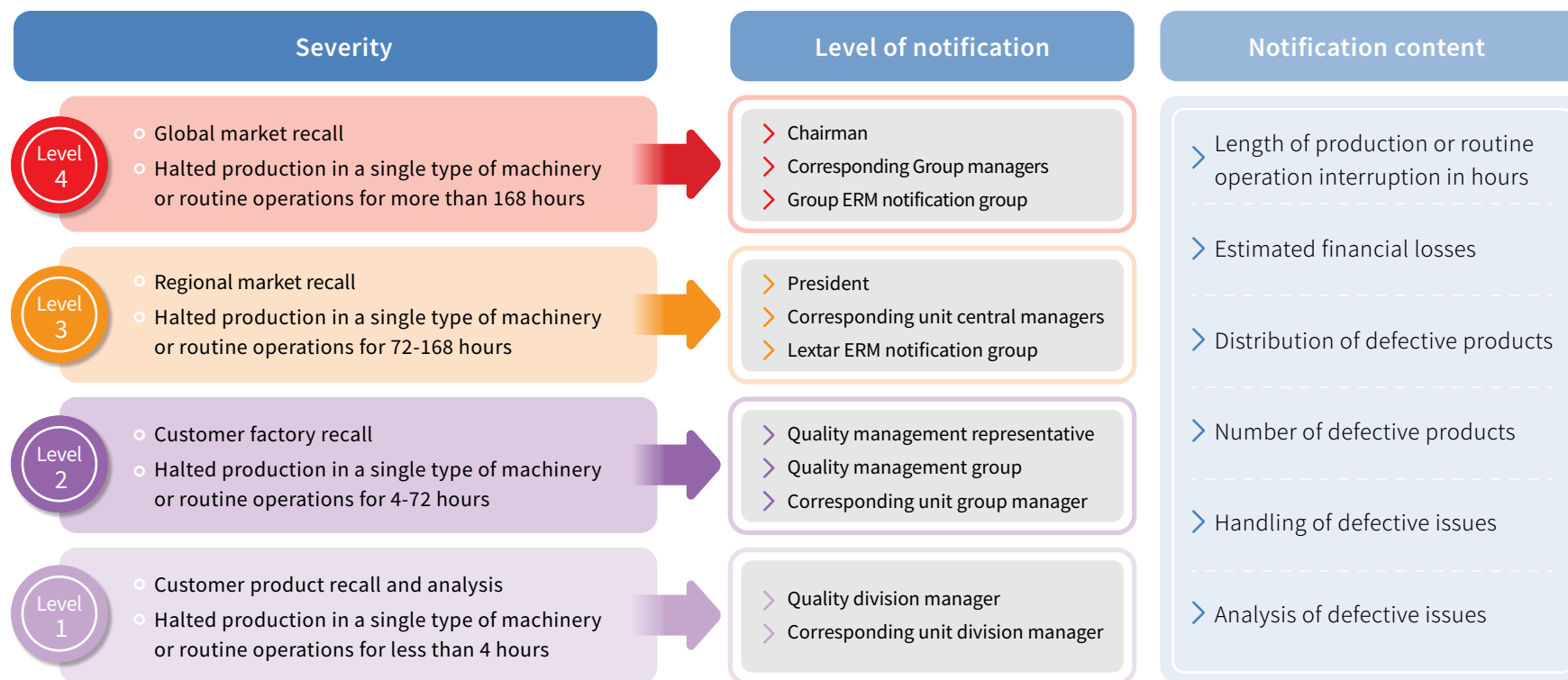
2. Major client selection criteria: Clients who previously conducted transactions with us were assessed and selected based on client product applicability, sales volumes, and potential for collaboration. Clients are discussed and jointly selected by the quality assurance

Product Recall Management

Product quality abnormalities cause significant losses for customers and raise customer concerns associated with validity of product life. Therefore, all 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, thereby reducing customer impacts from quality abnormalities. No product recalls from major abnormalities occurred at the Group in 2024.*

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 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 risks of Level 2 and above. The president must be notified within 2 hours for regional market recalls caused by market risks of Level 3 and above. The chairman must be notified within 2 hours for global market recalls caused by market risks of Level 4 and above.



* 1. EPISTAR definition: Recall incidents for proactively discovered abnormalities

2. Lextar/Lextar Electronics definition: Incidents involving client production line downtime, material shortages, compensation, special applications (such as automotive applications).

4

Green Operations

4-1 Climate Actions

- 4-1-1 Low-Carbon Transformation Blueprint
- 4-1-2 Domestic and International Climate Initiatives
- 4-1-3 Task Force on Climate-Related Financial Disclosures (TCFD)
- 4-1-4 Greenhouse Gas Management
- 4-1-5 Energy Management

4-2 Environmental Management

- 4-2-1 Water Resource Management
- 4-2-2 Waste Management
- 4-2-3 Circular Economy
- 4-2-4 Air Pollution Prevention



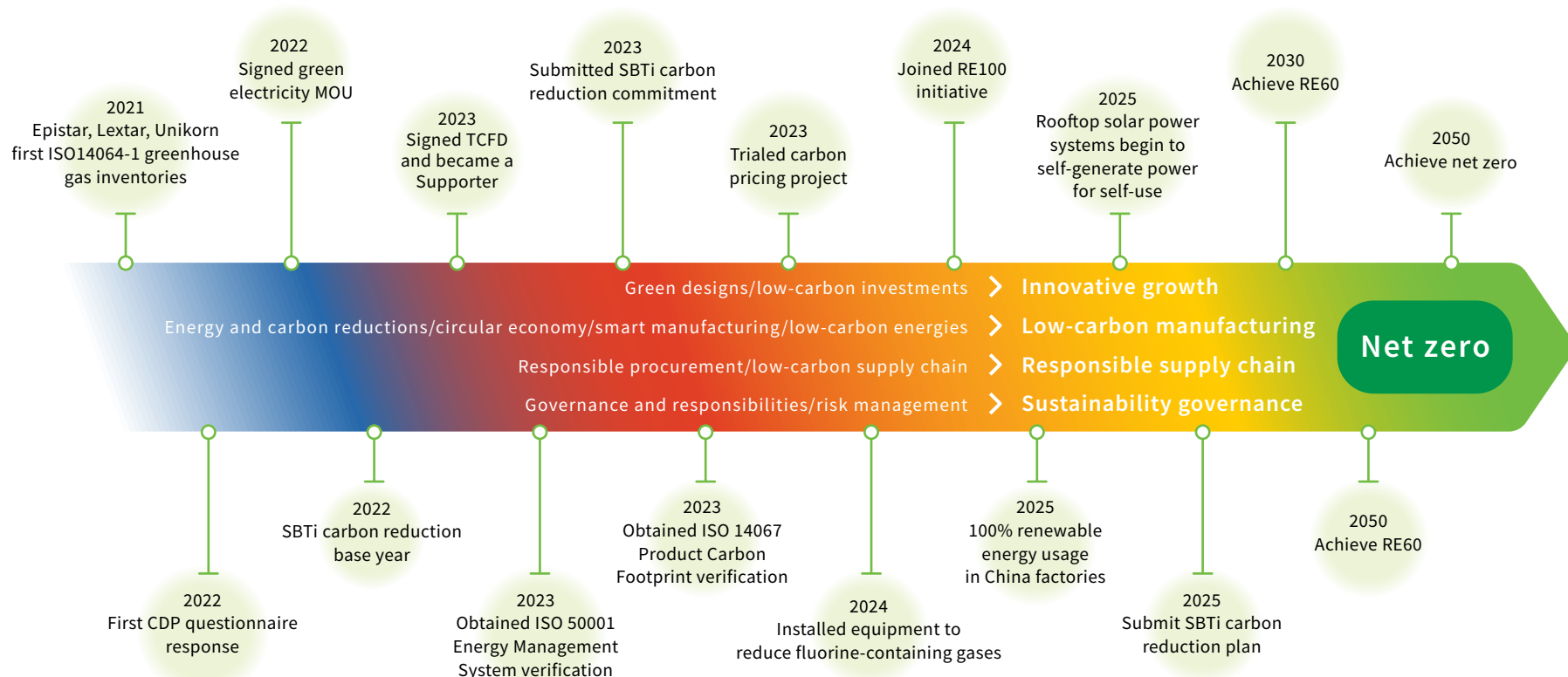
Climate Actions

Corresponding SDGs



The Group is fully aware that corporate operations are intertwined with environmental considerations. We therefore listed climate actions and environmental management as core concerns, and our major subsidiaries have all established environmental management policies. We also established a low-carbon transformation blueprint for the entire Group and signed on to join the RE100 initiative led by The Climate Group and the Carbon Disclosure Project, pledging to achieve 60% renewable energy usage across the Group by 2030 and 100% renewable energy usage by 2050. We also implement comprehensive management of water resources, waste, air pollutants, and biodiversity to demonstrate our environmental sustainability.

Pathway to Net Zero Emissions



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.

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 actively participates in international initiatives and has formulated comprehensive net zero pathways and blueprints to strengthen internal carbon reduction actions. In 2023, we officially joined SBTi 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 target. Using 2022 as the base year, the Ennostar Group established targets to reduce 50.4% Scope 1 and Scope 2 greenhouse gas emissions by 2032, and pledged to achieve net zero emissions across the Group by 2050. In 2024, the Group joined the RE100 initiative and pledged to achieve 60% renewable energy usage by 2030 and 100% renewable energy usage by 2050.

Carbon Reduction Strategies

Ennostar Group carbon reduction strategies include:

1. **Reduction of fluorine gases:** The Ennostar Group reduced CF4 usage in production processes, has installed scrubbers to reduce fluorine gases, and expects to reduce fluorine gas emissions by 90%.
2. **Green energy usage:** The Ennostar Group has installed solar power equipment at all factories and actively purchases green energy agreements and renewable energy certificates to increase renewable energy usage proportions. Our factories in China began using 100% of green energy in 2025, which we expect will raise the Group's overall renewable energy usage proportion to 43%.
3. **Energy conservation measures:** The Ennostar Group continues to improve lighting, air-conditioning, equipment and systems, and process efficiency to conserve energy.

COMPANY
NEAR-TERM TARGET
NET-ZERO TARGET
ORGANIZATION TYPE

Ennostar Inc.
Taiwan, Province of China, Asia

COMMITTED

Company
View more



Organizational Greenhouse Gas Inventories

In 2024, the Ennostar Group conducted organization-wide carbon inventories and all subsidiaries passed ISO 14064-1 third-party verifications. These carbon inventories encompassed all Group operations to ensure accuracy of emissions data, and enabled better identification and management of emission sources for formulation of effective carbon reduction strategies.

Product Carbon Inventories

The Group conducted product carbon inventories to assess carbon footprints across product lifecycles, gain a better understanding of carbon emissions over all product stages from raw material procurement, production, transportation, usage, and waste treatment to enable formulation of targeted carbon reduction strategies. In 2024, we completed carbon inventories for 2 products and passed external third-party verification. Inventory results are shown below:

Product		LED chip	LED light strip
System boundary		Business-to-business (B2B)	
Declared unit		1 pes	1 pcs
Raw material acquisition stage	Carbon emissions (kg CO ₂ eq)	40.01	0.3560
	Emissions ratio	66.07%	55.84%
Manufacturing and production stage	Carbon emissions (kg CO ₂ eq)	20.54	0.2816
	Emissions ratio	33.93%	44.16%
Carbon emissions per functional unit (kg CO ₂ eq)		60.55	0.6375

ISO 50001 Energy Management System Incorporation

In 2024, three Ennostar Group factories (Lextar, Lextar Electronics, and Epicrystal) passed independent third-party ISO 50001 Energy Management System verifications. These factories incorporated this energy management system to enhance energy efficiency and reduce energy waste, thereby lowering carbon emissions. We plan to gradually introduce this energy management system to our other factories in 2025-2027 to strengthen energy conservation and carbon reduction, and to meet client low-carbon requirements.

Ennostar Carbon Blueprint and Implementations

Carbon Blueprint

Establish baseline

ISO 14064-1

ISO 50001

ISO 14067

Carbon reduction strategies

Innovative
GrowthLow-Carbon
ManufacturingResponsible
Supply ChainSustainable
Governance

Carbon reduction measures

Industry-academia collaborations/supplier collaborations/
peer alliances/cross-industry collaborations

Green Designs

Energy-saving products
Material development
Material reduction

Energy and Carbon Reductions

Increase electricity
usage efficiency
System equipment
enhancements

Circular Economy

Organic solvent recycling
Exhaust gas recycling
Hazardous substances recycling
Metal material recycling/
reductions
Incorporate new wastewater
processing materials

Low-Carbon Supply Chain

Supplier surveys
Supplier training

Governance and Responsibilities

Join climate alliances
Internal Carbon Pricing

Low-Carbon Investments

Stable investments
Market analysis

Low-Carbon Energy

Renewable energy
procurement
Renewable power
installations

Smart Manufacturing

Clean production
I report

Responsible Sourcing

Low-carbon procurement
Local procurement

Risk Management

Incorporation of
management systems

Targets

SBTi

RE100

Carbon neutrality

Net zero

ESG Committee/periodic tracking and review

Disclosures

TCFD

CDP

ESG
reportsCorporate
websiteSocial
media

Stakeholders

NGO

Domestic and
international
governments

Clients

Suppliers/
contractorsInsurance
companiesShareholders/
investors

Baseline Establishment

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

Carbon Reduction Strategies

The Group has 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 and used in combination with industrial, government, academic, supplier, and other external resources to facilitate our path toward net zero.

The Group incorporated carbon reduction and energy conservation performance into long-term incentive plans for senior executives starting in 2024, using three-year contracts paired with shareholding trusts to ensure accountability in environmental management.*

Carbon Reduction Measures

We utilize green designs that continue to improve and enhance product efficiency, quality, and lifespan so our products can be more eco-friendly over all lifecycle stages. We also protect corporate intellectual properties and maintain high levels of competitiveness through management of patents and trade secrets that strengthen our resilience for innovative corporate growth, and have established green patent and trade secret mechanisms to encourage green design proposals.

The Group continues to focus on external low-carbon technologies and has established a technology innovation task force to implement ESG ROI assessment mechanisms, analyze investment returns on ESG technologies, and continue to explore and develop sustainable and innovative technologies that provide both environmental and economic benefits.

Carbon inventory results showed that electricity usage is one of our main carbon emission sources. We continue to implement external third-party ISO 50001 verifications for all factories in tandem with PDCA management cycles to enhance energy efficiency, reduce energy costs, and lower product carbon footprints.

We joined forces with external partners to achieve circular economy aims and ensure appropriate and eco-friendly handling of waste, working with suppliers to assess feasibility of waste recycling and reuse. We recycle organic solvents, enable reuse of waste ammonia by downstream suppliers, and recycle and reduce waste metals and hazardous substances to improve waste utilization, greatly decreasing the amount of waste discharged into the atmosphere, water, and soil.

To lower carbon footprints, we incorporated local procurement measures into our procurement strategies and increased local supplier proportions. We have also continued to conduct supplier surveys. In 2024, we hosted our first supplier carbon reduction workshop in addition to our annual supplier conference to gather our supplier partners for ESG education and training, to help them understand the Ennostar Group's carbon reduction goals and invite them to jointly achieve carbon reductions in our supply chain. In terms of smart manufacturing, we established a digital system to collect and manage data which is scheduled to be launched over several stages in 2025. This system will effectively inventory carbon emissions generated during all activities and processes, 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 and respond to domestic and international regulations associated with carbon fees/carbon taxes. The Group incorporated internal carbon pricing (ICP) mechanisms and launched a pilot project in 2023 which adopted the shadow price model and used the initial price proposed by the Ministry of Environment (NT\$300/ton) to incorporate carbon costs into our decision to install fluorine scrubbers, ultimately shortening the installation timeline from 4 years to 2 years. In this project, carbon costs were incorporated into our business processes to promote full internal assessment and management.

Targets

The Group has formulated company-wide short, medium, and long-term greenhouse gas reduction and management guidelines. We plan to submit SBTi carbon reduction plans in 2025. In terms of green energy, we have installed rooftop solar power systems on our factories and converted these to self-generation for self-use in 2025. We also actively purchase renewable energies and renewable energy certificates, and are gradually increasing our renewable energy usage as we continue to implement our sustainable energy transformation plans. The Group officially joined the RE100 renewable energy initiative in December 2024, pledging to achieve 60% of renewable energy usage by 2030 and 100% of renewable energy usage by 2050.

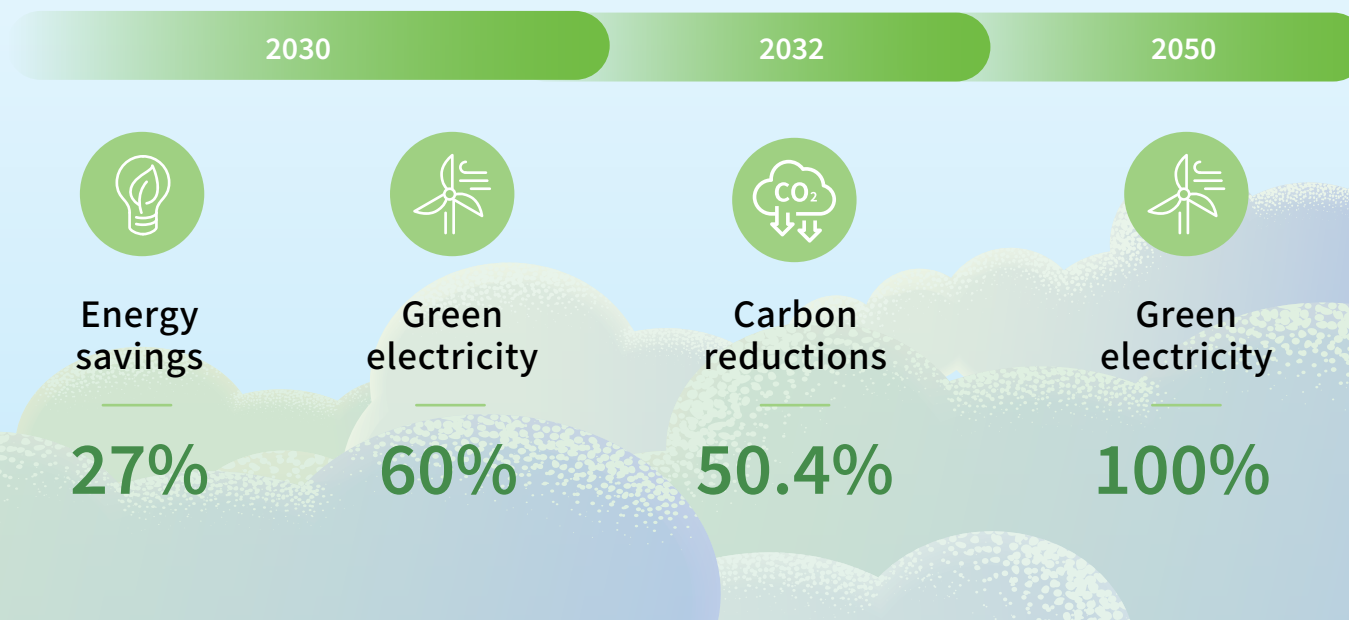
Tracking and Review Mechanisms

The Group's highest governance unit for climate actions is the Board of Directors and the Corporate Sustainability and Risk Management Committee which has been established under the Board. The ESG Committee regularly tracks progress on all carbon reduction targets within the Group and reviews implementations of all energy conservation and carbon reduction projects to ensure that the Group is effectively lowering carbon emissions, demonstrating our commitment to mitigating climate change and protecting natural environments as we strive to achieve net zero targets.

* For more information on long-term senior executive incentive plans, please refer to 5-1-2 Talent Attraction and Retention

Disclosures

We actively disclose our climate actions through sustainability 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 the Ennostar Group's net zero pathways. We also participate in various international evaluations. In 2024, our CDP climate change survey received a B ranking. In future, we will continue to spread our influence and work with internal and external stakeholders to build a sustainable environment.



Domestic and International Climate Initiatives



Initiative	Description
Taiwan Climate Partnership	The Group chairman and president chairs the Taiwan Climate Partnership. In 2022, the Group became one of the founding members of the Taiwan Climate Partnership, demonstrating our commitment to energy conservation and carbon reduction as we work to grow alongside our industrial supply chain and make strides toward RE100 and EV100 goals.
Task Force on Climate-Related Financial Disclosures	Ennostar senior executives signed Task Force on Climate-Related Financial Disclosures; the Group became a TCFD supporter and regularly issues independent TCFD reports.
Science Based Targets initiative (SBTi)	We officially submitted a Letter of Commitment in November 2023 and are making strides toward net zero emissions in 2050.
RE100 renewable energy initiative	We officially joined the RE100 initiative in December 2024.

Task Force on Climate-Related Financial Disclosures (TCFD)

The Ennostar Group's Corporate Sustainability and Risk Management Committee, which has been established under the Board, is responsible for tracking and reviewing management of sustainability issues within the Group, and also monitors climate change projects. We used the TCFD framework to formulate response measures for identified risks and opportunities, and have established solar power generation systems, signed renewable energy MOUs, increased renewable energy consumption and reduced power shortage risks, and established diverse water resource plans to reduce production and operational impacts. We continue to take advantage of market 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. The Group began issuing annual independent TCFD reports in 2024; please see our corporate website for more information.

I. 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	Assume that carbon fees in 2030 are aligned with international prices and are increased to NT\$1,200/ton
Voluntary agreements	Mandatory use of renewable energies	<ul style="list-style-type: none"> ● Achieve SBTi targets ● Achieve RE100 targets
Low-carbon technology transformations	Failure to meet the absolute carbon reduction targets of customers causing declines in the number of orders	Failure to meet the absolute carbon reduction targets of customers results in a decreased number of orders
Changes in raw material prices	Suppliers raise raw material prices due to carbon taxes	Assume that carbon fees are fully levied in 2030 and raw material prices rise by 10%
Extreme rainfall	Direct or indirect disasters caused global or regional extreme rainfall or drought	Continued emission of greenhouse gases by all countries around the world will increase the proportions of strong typhoons by 100% from 2040-2065. Therefore, we assume that typhoons would damage overhead power lines, resulting in a higher frequency of power cuts.
Water stress (water shortages)	Global or regional climate change impacts incur negative impacts on water resource volumes and quality.	Continued emission of greenhouse gases by all countries around the world will increase temperatures by 2.4 °C during 2040-2065, and we assume that consecutive days without rainfall will reach 65 days.

II. 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	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 tCO ₂ e would incur carbon taxes, and 25,000 tCO ₂ e would be set as a threshold value	<ol style="list-style-type: none"> 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 carbon reduction initiatives ● SBTi initiative	We responded to corporate carbon reduction trends by joining SBTi in 2023 and set science based carbon reduction targets to meet possible future market carbon reduction requirements and prevent our orders from being affected due to ineffective carbon reduction achievements.	Group-wide ISO 14064 greenhouse gas inventories must be conducted to identify carbon emission sources
Policy and legal	Voluntary agreements	Join international carbon reduction initiatives ● RE100 initiative	<ul style="list-style-type: none"> ● The Group joined RE100 in 2024 ● Renewable energy usage should account for 60% of the Group's total purchased electricity usage by 2030 ● Renewable energy usage 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 	<ol style="list-style-type: none"> 1. Implement plans related to energy management and green energy purchases 2. Plan to install local scrubbers to reduce fluorine gases and implement other carbon reduction measures 3. Implement plans related to energy management and green energy purchases
Market	Changes in raw material prices	Suppliers may raise raw material prices due to carbon taxes	Carbon fee levies may cause the prices of key materials to rise by 10%	<ol style="list-style-type: none"> 1. Evaluate low-carbon and renewable alternatives for raw materials 2. Change product designs to reduce demand for specific raw materials 3. Recycle and reuse packaging materials 4. Localize procurement to reduce transportation emissions 5. Avoid single supplier sources to diversity risks and increase bargaining power
Technology	Low-carbon technology transformations	Failure to meet the absolute carbon reduction targets of customers will result in a decreased number of orders	In response to market carbon reduction requirements, we are working to reduce product carbon emissions, which increased related investment costs	Meet product design targets aligned with client milestones Low-carbon lifestyle trends have enhanced product energy consumption requirements, so products that fail to meet Energy Star regulations may affect consumer behaviors and results in loss of client orders

Aspect	Indicator	Challenges and risks	Current conditions	Transition risk adaptation action plans
Transition Risks				
Acute	Extreme rainfall	Global or regional extreme rainfall or drought could cause direct or indirect disasters.	Power cuts may affect production and emergency power supplies are required during blackouts to accelerate recovery times for production lines; the most recent power supply abnormality which occurred in 2017 due to problems at Tunghsiao Power Plant affected some factories for up to 4 hours (two power cuts which occurred an hour apart and associated recovery times)	<ol style="list-style-type: none"> 1. Maintain availability rates of production machinery and ensure wafer start capacity so products can be completed on schedule 2. Ensure that oil tanks are fully fueled and maintain communications with diesel vendors so tanks can remain fully fueled at all times
Chronic	Water stress (water shortages)	Global or regional climate change impacts incur negative impacts on water resource volumes and quality.	<ol style="list-style-type: none"> 1. We have established backup water tanks for production emergencies 2. Insufficient water supplies can be supplemented using purchased water 	<ol style="list-style-type: none"> 1. Formulate and continue to implement water conservation goals 2. Develop technology for recycling of process water 3. Prepare and manage contracts for water trucks

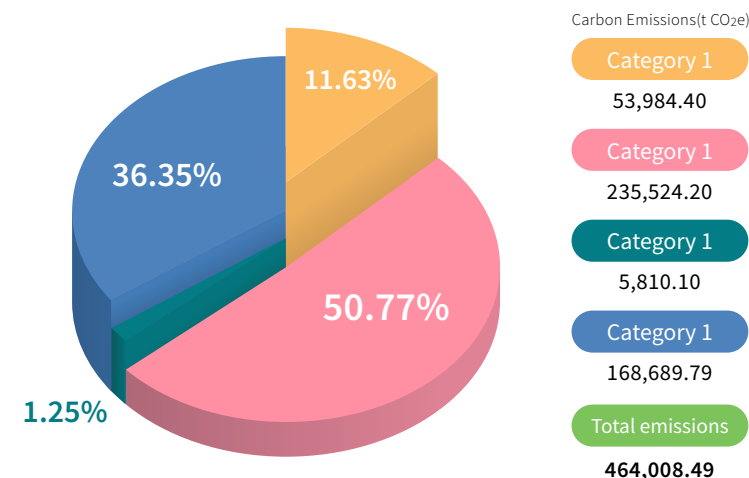
III. Analysis of financial impacts from climate change (opportunities)

Aspect	Indicator	Challenges and risks	Current conditions	Transition risk adaptation action plans
Resource Efficiency	Recycling and reuse	<ol style="list-style-type: none"> 1. Promote circular economy concepts for waste 2. Recycle shipping and packaging materials 	<ol style="list-style-type: none"> 1. Organic waste liquid was converted into alternative fuel for use by co-generation power plants Solid recovered fuels (SRF) in factories 2. Work with PMs/factories to recycle packaging materials 	Reduce shipping procurements by NT\$450,000
Resource Efficiency	Adopt more efficient transportation methods	Localize material production	<ol style="list-style-type: none"> (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 	<ol style="list-style-type: none"> (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	Maximize water recycling rates by reusing concentrated water in cooling towers and increasing water recycling rates every year	We plan to invest NT\$675,000 in various projects.
Market	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.

Greenhouse Gas Management

The Group's greenhouse gas emissions include direct emissions, indirect emissions associated with energy, 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 mainly stem from purchased electricity. Other indirect emissions stem from product and material transportation, supplier production, employee travel, waste treatment, and employee commutes.

The Group's total greenhouse gas emissions for 2024 amounted to 464,008.49 tCO₂e, a decrease of 289,508.59 compared to the previous year. Direct greenhouse gas emissions from our main subsidiaries EPISTAR and Lextar were reduced by 4.64% compared to the previous year. The Group's greenhouse gas emissions mainly stem from indirect emissions associated with energy from electricity usage, which accounted for 50.77% of Group emissions; the second highest source of emissions was Category 1 direct emissions, which accounted for 36.35% of Group emissions. We gained a comprehensive understanding of Ennostar emissions in all categories through ISO 14064-1 inventories, and set reduction targets and measures accordingly.



Greenhouse Gas Emissions and Management

Greenhouse Gas Type	Carbon Emissions (tCO ₂ e)	Reduction Measures	Boundaries
Category 1 Direct greenhouse gas emissions	53,984.40	Gradually installed local scrubbers which contain equipment to reduce fluorine gases and achieve carbon reduction benefits	All factories encompassed in sustainability reports
Category 2 Indirect greenhouse gas emissions	235,524.20	<ul style="list-style-type: none"> 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	5,810.10	-	
Category 4 Indirect emissions from products used	168,689.79	Reduced raw materials usage	
Greenhouse gas emission intensity (t CO₂e/NTD thousand yuan)	0.0119	(Category 1+ Category 1) Annual carbon emissions/Annual turnover	

Please refer to Appendix I [Environmental Data] for more information on the Group's greenhouse gas emissions in 2024

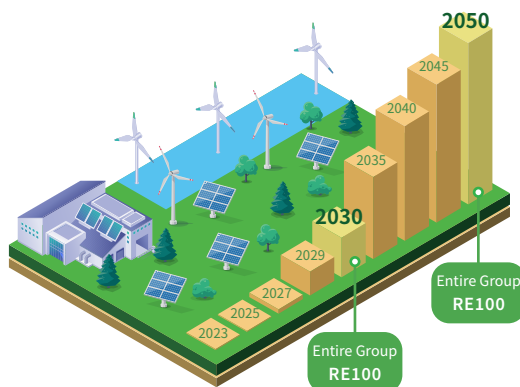
Energy Management

Material Topic	Energy Management				
	Base year: 2021				
Indicators	Achievement	2024 Target	Target for 2025	Target for 2026	Target for 2030
Annual electricity savings	✓				
Proportions of factories which have set up self-generated solar power for self-use	13%	6%	9%	12%	27%
Number of factories which passed third-party ISO 50001 Energy Management System verification	0%	100%	>80%	100%	100%
	3	2	5	10	15
Renewable energy usage ratio	2.57%	1%	43%	43%	60%

Note 100% of factories have established self-generated solar power for self-use as of the first quarter of 2025

Ennostar Renewable Energy Blueprint

The Group joined the RE100 initiative led by The Climate Group and the Carbon Disclosure Project in response to the government's 2050 net zero pathway goals and to exert corporate influence, pledging to achieve 60% renewable energy usage by 2030 and 100% renewable energy usage by 2050.



We formulated and adopted the following four action plans to achieve our 100% renewable energy commitment:

1. Actively signed power purchase agreements: All of our factories in China achieved 100% renewable energy usage starting in 2025, and we estimate that the Group's overall renewable energy ratio will reach 43% as a result. Our factories in Taiwan continue to sign power purchase agreements (PPAs) and aim to gradually increase use of renewable energy starting in 2027 to achieve our goal of 100% renewable energy usage by 2030.

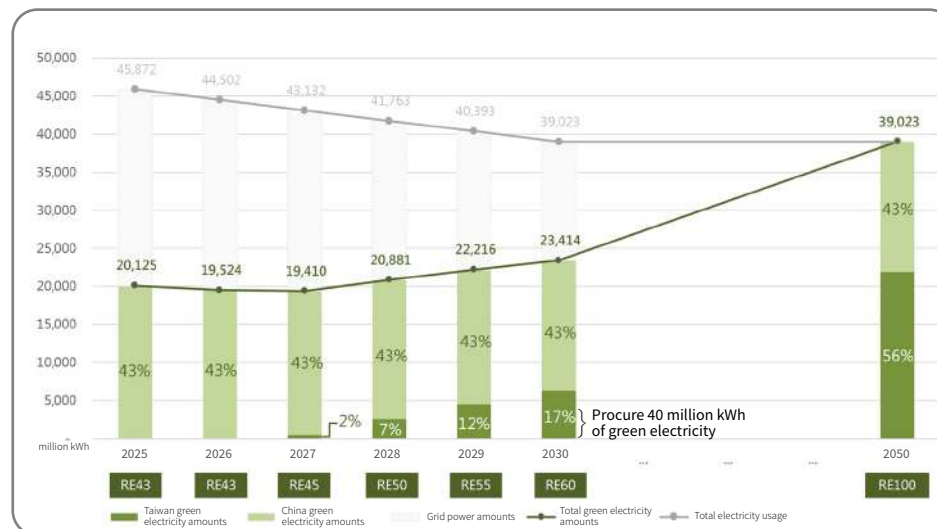
2. Rooftop solar power installations self-generated for self-use: Completed installation of rooftop solar power equipment in Taiwan factories with installed capacity of 1,285.615 KWp; 1,494,572 kWh of electricity was sold in bulk to Taiwan Power Company in 2024, and all wholesale contracts will be converted to self-generation for self-use in 2025.

3. Voluntary energy conservation: The Group set 2022 as a base year for formulating energy-saving targets and aims to reduce 27% of electricity usage by 2030. The Group promotes energy management and energy conservation actions by improving chiller systems, compressed dry air (CDA) systems, air-conditioning systems, lighting systems, other factory systems, and process efficiency. We also incorporated the ISO 50001 Energy Management System to establish energy usage baselines for factory systems, identify unit energy consumption levels, and define energy-saving opportunities. In 2024, three of our factories passed external third-party verifications and we plan to incorporate this energy management system across all factories starting in 2025.

4. Purchases of renewable energy certificates (RECs)

The effects of global climate change and warming effects are becoming more significant every day. We joined the RE100 initiative to demonstrate our commitment toward net zero targets and also adopted climate actions as part of our contributions to sustainable development and environmental benefits.

Group 2025-2030 RE60 Pathway



2023-2030 Renewable Energy Investment Plans

Year	Targets	Actual/Expected Benefits	Resources Invested
2023	Install 633 KWp rooftop solar power generation systems in factories (Epistar H1/S1/S3)	Generated NT\$3.1 million in revenues by selling factory rooftop solar power to Taiwan Power Company in 2023-2024	We expect to invest a total of NT\$806 million from 2023-2030
	China: Lextar Electronics 3,648 KWp (Chuzhou) *1	Power generated by solar photovoltaic systems in Lextar Electronics (Chuzhou) factories: 4,521,000 kWh *2	
2024	Factories in Taiwan sold 1,285.615 KWp in bulk to Taiwan Power Company and applied to convert wholesale contracts into self-generation for self-use (EPISTAR: 1022.725KWp/Lextar: 262.89 KWp)	Sold a total of 1,494,572 kWh in bulk	
	China: Lextar Electronics 3648 KWp (Chuzhou) *1	Power generated by solar photovoltaic system in Lextar Electronics (Chuzhou) factories: 4,182,480 kWh *3	
	Epicrystal externally purchased green energy	Total: 7,424,000KWh (7,424 certificates)	
2025	Taiwan: Installed solar energy systems and self-generated 1360.24KWp for self-use (EPISTAR: 1097.35KWp/Lextar: 262.89 KWp)	Expected self-generated for self-use: 1,700,000 kWh/year	
	Signed CPPA and expect to begin imports in 2027 100% renewable energy usage in China	<ul style="list-style-type: none"> Expect to begin imports of 40 million kWh/year in 2027 RE100 in China and RE43 across the Group 	
	Epicrystal/Episky/Can Yang completed establishment of factory energy storage systems *4	Expected power generation: 3,704,000 kWh/year	
2027~2030	Group RE60 by 2030	Expect to purchase 234 million kWh/year and reduce carbon emissions of 117,072 tCO ₂ e/year by 2030 *5	

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

*2 Lextar Electronics (Chuzhou) rooftops were leased to third parties for installations and generated power was sold back to the factory for self-use; a total of 3,521,000 kWh was generated in 2023

*3 Our Chuzhou factory purchased renewable energy generated from third-party installations for factory self-use; a total of 4,182,480 kWh was generated in 2024

*4 Epicrystal/Episky/Can Yang plan to rent out rooftops and parking lots for third-party installations

*5 Electricity carbon emissions coefficients in Taiwan were 0.494 kg CO₂e in 2024 (this coefficient was used to calculate emissions for 2023-2030)

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. Solar photovoltaic generated power: 0.079kg CO₂e=0.502 kg CO₂e

*6 Solar power installed capacity: 33,500 kWh. In Taiwan, we expect to purchase 100 million kWh at NT\$1.84/kWh from 2027-2030; in China, we expect to purchase 1.14 billion kWh at RMB 0.4/kWh (exchange rate: 1 RMB=4.5 TWD) from 2025-2030

Energy Usage








The Group's energy consumption is mainly composed of purchased electricity, which accounts for 97.43% of all energy usage. Renewable energy accounts for 2.57%, and diesel and natural gas make up the remainder. Therefore, our energy conservation strategies are mainly concentrated on lowering electricity consumption. The Ennostar Group's total energy consumption for 2024 amounted to 1,670,162 (GJ), an 8.05% decrease compared to 2023. In future, we will continue to strengthen energy management to meet our RE100 goal.



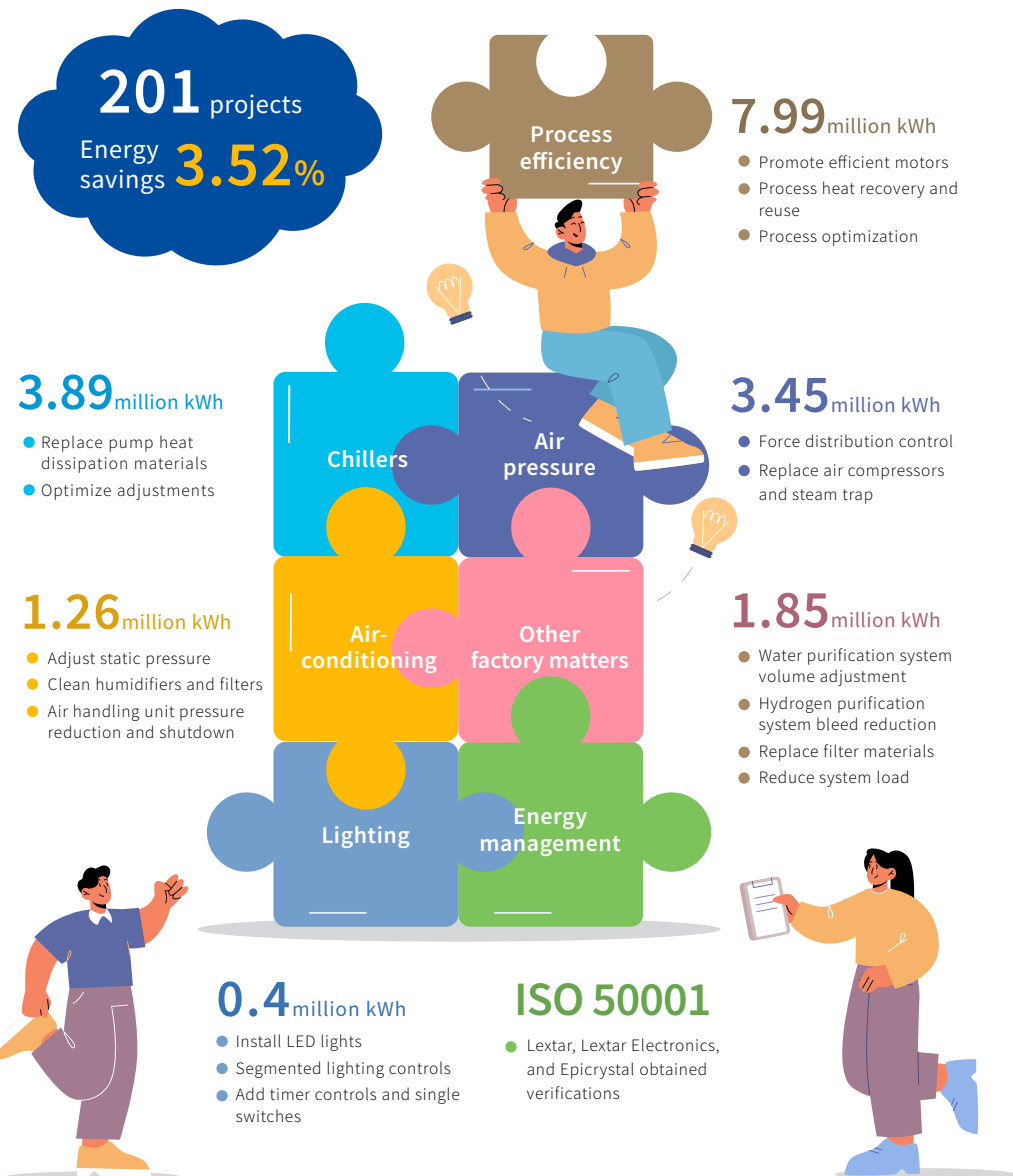
Please refer to Appendix I [Environmental Data] for information on the Group's energy consumption in 2024.

Energy Management and Conservation Actions

The Group implements energy management and conservation through seven aspects, including improvement of chiller systems, compressed dry air (CDA) systems, air-conditioning systems, lighting systems, other factory systems, and process efficiency, and also incorporated the ISO 50001 Energy Management System. In 2024, we reduced electricity consumption by 18.84 million kWh and reduced carbon emissions by 9,327 tCO₂e.

Aspect	Achievements in 2024	Improvements Implemented in 2024
 Chiller system	Reduced power consumption by 3.89 million kWh and 1,926 tCO ₂ e of carbon emissions	<ul style="list-style-type: none"> Added variable frequency drives Replaced aged equipment and improved operational efficiency
 Compressed dry air (CDA) systems	Reduced power consumption by 3.45 million kWh and 1,708 tCO ₂ e of carbon emissions	<ul style="list-style-type: none"> Pressure reductions Replaced aged equipment and improved operational efficiency
 Air-conditioning systems	Reduced power consumption by 1.26 million kWh and 624 tCO ₂ e of carbon emissions	<ul style="list-style-type: none"> Adjusted wind strengths Lowered temperature of heat discharge pipes Replaced aged equipment and improved operational efficiency
 Lighting systems	Reduced power consumption by 0.4 million kWh and 198 tCO ₂ e of carbon emissions	<ul style="list-style-type: none"> Reduced lighting equipment and replaced existing lights with LED lights Installed segmented light controls in production areas
 Other factory systems	Reduced power consumption by 1.85 million kWh and 916 tCO ₂ e of carbon emissions	<ul style="list-style-type: none"> Adjusted exhaust gases Replaced aged equipment and improved operational efficiency
 Process efficiency improvements	Reduced power consumption by 7.99 million kWh and 3,955 tCO ₂ e of carbon emissions	<ul style="list-style-type: none"> Optimized factory systems, standby equipment, and management of equipment shutdowns Centralized production on pipelines
 ISO 50001 Energy Management System		<ul style="list-style-type: none"> Three factories completed external third-party verifications

2024 Energy-Saving Achievements



Environmental Management

Corresponding SDGs



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.

Water Resource Management

Water consumption at all subsidiaries for 2024 are shown in the table below. As EPISTAR had the highest water withdrawal volumes and water consumption volumes, it became our first subsidiary to establish indicators and implement related management measures; the remaining subsidiaries will gradually develop related measures in accordance with Group plans.

Material Topic		Water Resource Management					Base year: 2023	
Indicators	Applicable Scope	2024		Target for 2025	Target for 2026	Target for 2030		
		Achievement	Target					
Diverse water sources	EPISTAR	2	2 (Tap water/ rain water)	2	2	2		
Process water recycling rate	EPISTAR	80.7%	82.3%	83.3%	83.3%	85%		
Factory water recycling rate	EPISTAR	70.5%	70.0%	70.5%	70.5%	75%		
Improvements in process wastewater recovery rate	Lextar	36%	30%	50%	73%	75%		

Subsidiary	EPISTAR	Lextar	Epicrystal	Episky	Can Yang	Lextar Electronics
Water withdrawal (million liters)	1,663.32	120.84	363.37	466.28	266.90	94.56
Proportion of total water withdrawal at the Group (%)	55.90	4.06	12.21	16.67	8.97	3.18
Water consumption (million liters)	612.46	12.08	102.05	84.01	97.26	51.95
Proportion of total water consumption at the Group (%)	63.81	1.26	10.63	8.75	10.13	5.41

Water Resource Management Strategies

Short-term 2025

- Purchase Hsinchu desalinated sea water for use in Hsinchu Science Park factory/import Southern Taiwan Science Park Anping reclaimed water into Southern Taiwan Science Park factory: Continue to participate in meetings convened by government institutes and make rolling adjustments of agreement terms.
- **Process water recycling rate:** Establish water usage baselines for each plant, regularly review rationality of water consumption, and determine usage trends.
- **Factory-wide water recycling rate:** Allocate annual budgets based on factory water recycling plans.

Mid-term 2026~2027

- Purchase desalinated sea water for use in Hsinchu Science Park factory/import reclaimed water into Southern Taiwan Science Park factory: Utilize water during water shortages.
- **Process water recycling rate:** Establish water usage baselines for each plant, regularly review rationality of water consumption, and determine usage trends.
- **Factory-wide water recycling rate:** Allocate annual budgets based on factory water recycling plans.

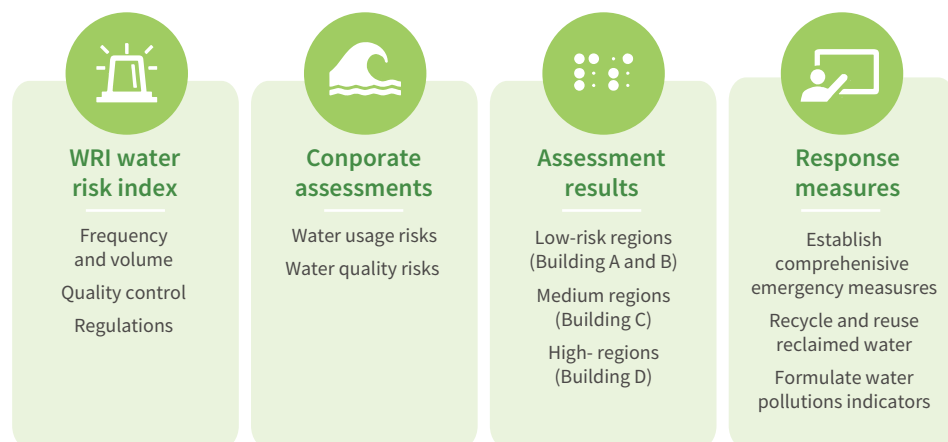
Long-term 2030 and beyond

- Purchase desalinated sea water and import reclaimed water into factories: Stabilize water supplies.
- **Process water recycling rate:** Establish water usage baselines for each plant, regularly review rationality of water consumption, and determine usage trends.
- **Factory-wide water recycling rate:** Allocate annual budgets based on factory water recycling plans.

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.

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 conducts monthly reviews of water resource management indicators, as well as introductions, assessments, and applications associated with reclaimed water and desalinated sea water. We plan to utilize desalinated sea water and reclaimed water after 2030 (purchase desalinated sea water for use at Hsinchu Science Park factory/import reclaimed water from Southern Taiwan Science Park Anping into Southern Taiwan Science Park factory) to ensure we have adequate water resources and to lower water resource risks.

Please see the following table for Group water sources



Tap water					(Unit: million liters)	
2021	2022	2023	2024			
3,165	3,492	3,060	2,975			

Water trucks				
2021	2022	2023	2024	
0	0	0	0	

Rainwater				
2021	2022	2023	2024	
10	13	11	16	

Groundwater				
2021	2022	2023	2024	
0	0	0	0	






Subsurface water				
2021	2022	2023	2024	
0	0	0	0	

Desalinated sea water				
2021	2022	2023	2024	
Scheduled to be used after 2030				

Reclaimed water				
2021	2022	2023	2024	
Scheduled to be used after 2030				

According to the "Water Resource Risk Assessment Tool" developed by the World Resources Institute, the main areas where our operations are located in Taiwan have Low to Medium water stress, indicating that Ennostar's water usage does not cause significant impact to ecological environments. However, Epicrystal's factories in China are located in Changzhou, Jiangsu, an area with High water stress. 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

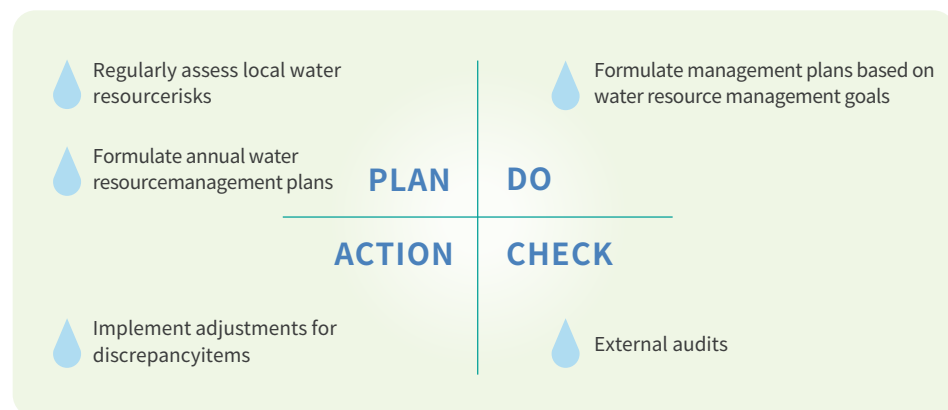
Water restriction level Water supply	 Blue Stable supply	 Green Stable supply	 Yellow Water pressure reductions	 Orange Water pressure reductions	 Red Regional water rationing
Government measures	Routine management	<ol style="list-style-type: none"> 1. Water condition reminders 2. Water source adjustments and measures 	<ol style="list-style-type: none"> 1. Reduce water pressure during off-peak and specific periods 2. Suspend water supply for irrigation, landscaping, and cleaning 	<ol style="list-style-type: none"> 1. Suspend water supply for fire hydrants and rooftop discharge 2. Reduce supply to large users surpassing 1000 cubic meters 	<ol style="list-style-type: none"> 1. Regional water rationing or timed suspension of water supply 2. Fixed water supply locations
Corporate response measures	Routine management	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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 platinum 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 	Adjustments in production capacities

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 are treated by the Wunan Sewage Treatment Plant; industrial wastewater containing nitrogen and phosphorus is treated by the Wunan Reclaimed Water Plant.	Wunan River
Episky	Xiamen Factory	Tingxi Reservoir	Our factories are located in the Torch Hi-Tech Industrial Development Zone (Xiangnan) and wastewater is treated by the Xiangnan 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 cycle, 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.

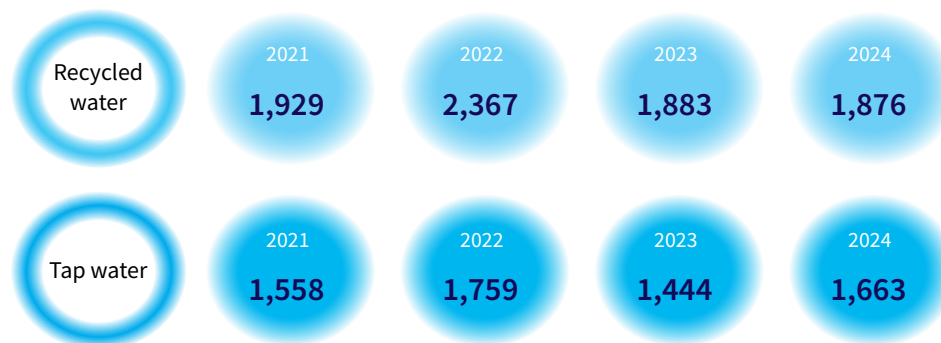


EPISTAR tracks water balance diagrams each month to monitor water consumption, identify water-saving opportunities, and implement effective management while filing required information for each science park.

EPISTAR's seven main factories in Taiwan recycle and reuse large amounts of water each year and recycled a total of 1,876 tons of water in 2024.

Water consumption at EPISTAR's seven main factories

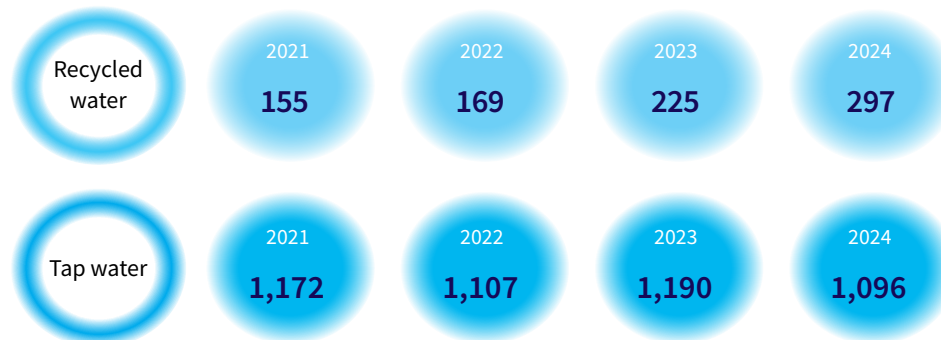
(Unit: thousand tons)



Management of monthly water balance diagrams was expanded to our subsidiaries in China (Epicrystal, Episky, Can Yang) in 2021. EPISTAR's Chinese subsidiaries recycled a total of 297 thousand tons in 2024.

Water consumption at EPISTAR's factories in China

(Unit: thousand tons)



Water Conservation Cases

Project title

Project duration

Project boundaries

Project description and quantitative performance

Wet scrubber wastewater recycling

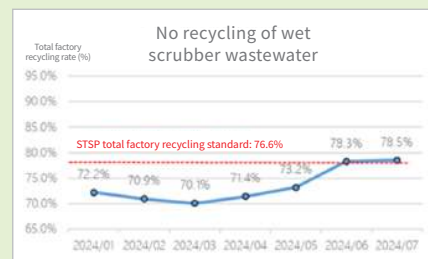
Introduced September 2024

S1

- EPistar began by filing monthly science park water balance diagrams to find sources of water for recycling and reuse, then implemented engineering improvements and optimized adjustments to enhance process water recycling rates and factory water recycling rates. These measures were implemented at S1 and S3 (incorporated in May 2024). We worked with third-party science park partners in declaring, managing, and reviewing measures to increase process water recycling rates and factory water recycling rates, actively promoting policies to increase reuse of reclaimed water sources.

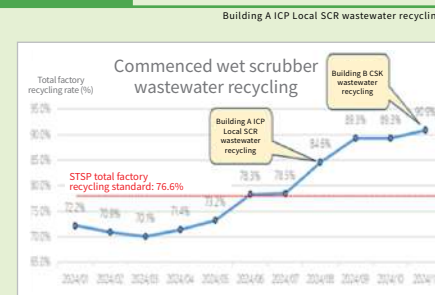
- Recycled volumes: 3,293 tons/month
- Actual achievements from September to December 2024: 13,172 m³; NT\$322,719
- Expected annual benefits: 39,517 m³; NT\$968,158

Before



Total factory recycling rate in January 2024 was 72.2% without wet scrubber wastewater recycling

After



Total factory recycling rate from August-November was 90.9% following wet scrubber wastewater recycling

Project title

Project duration

Project boundaries

Project description and quantitative performance

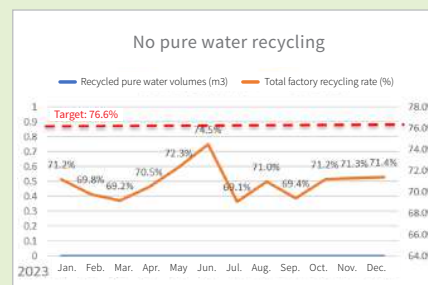
Incorporated pure water systems in process wastewater recycling processes

Introduced May 2024

S3

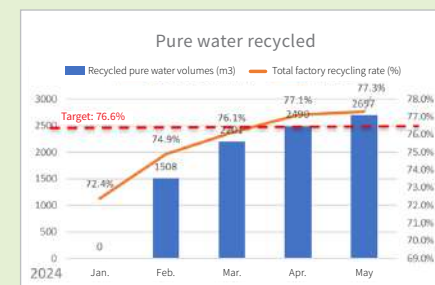
- Incorporated pure water system in process wastewater recycling processes to increase water recycling rates
- Recycled volumes: 3,428 tons/month
- Actual achievements from May to December 2024: 27,425 m³; NT\$671,913
- Expected annual benefits: 41,138 m³; NT\$1,007,869

Before



Average monthly recycled water volume: 0 m³/month
Average monthly tap water consumption volume: 17,490 m³/month
Total monthly fees: Expenditures NT\$218,625/month (17,490 m³ * NT\$12.5 water fees)

After



100% recycled water volumes in May: 2,697 m³/month
Wastewater treatment fee: NT\$12/m³, tap water fee: NT\$12.5/m³
Expenses saved per ton of tap water: NT\$24.5/m³
Energy conservation savings were NT\$792,918/year (2,697 m³/month * NT\$24.5/ton * 12 months)

Project title

Received Excellent Water Conservation Enterprise award

- EPISTAR participated in the science park administration 2024 water conservation enterprise competition and received the Excellent Water Conservation Enterprise award

Description

Segregation Based
on Wastewater
Classification

- Gallium, arsenic, fluorine/iron, and acid and alkaline wastewater
- Inorganic wastewater, organic wastewater, polishing wastewater, and fluorine wastewater
- Domestic wastewater

Wastewater
Treatment and
Prevention

- 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 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.

Wastewater
Monitoring and
Optimization

- We have established equipment at wastewater plant outlets to monitor water quality (acid and alkaline levels) and water volumes so that we can carry out appropriate responses if abnormalities occur.
- All factories are required to undergo inspections of effluents and raw water every six months 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.

Waste Management

Material
Topic

Waste Management and Circular Economy

Base year: 2021

Indicators	Applicable Scope	2024		Target for 2025	Target for 2026	Target for 2030
		Achievement	Target			
Increase in waste reuse ratio	EPISTAR	78.51%*	75%	76%	77%	78%
Number of waste materials converted to recycled materials	EPISTAR	2	1	3	5	6
Reuse ratio increased by 3% compared to base year	Lextar	52%	48%	51%	54%	54%
Zero major environmental pollution incidents	Entire Group	0	0	0	0	0

* Declines in production capacity and factory process integrations led to removal of some epitaxy processes, resulting reduced ammonia water recovery volumes.

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 residues 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 personnel 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 2024.

Implementation results for the waste materials converted to recycled materials indicator shown in the table above encompass foam recycling and SRF waste reuse measures implemented in factories in 2024; we also completed assessments regarding the feasibility of recycling gallium waste and plan to commence implementations in 2025.

All Group factories have established “Waste Management Procedures” and production processes comply with regulations. Waste is classified, managed, and stored based on protocols at each production stage, and is disposed of by qualified vendors 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.

The Group balances economic activities and environmental ecology by inventorying and recording output volumes and handling methods for different types of waste, and continues to identify waste reduction and reuse opportunities in all production processes. For example, we seek out potential collaborating vendors for waste recycling and reuse technologies to increase recycling rates and reduce non-recyclable waste which is handled using incineration, solidification, or landfill. We collaborate with industry, government, and academic institutes to convert waste into new materials and resources; incorporate green design concepts and improved processes; and recycle and reduce organic solvents, exhaust emissions, and metals while working with suppliers to assess feasibility of recycling measures for hazardous substances. We use sustainable raw materials, reduce material consumption, and enhance product yields to lower production costs and enhance eco-friendliness of production processes. We also continue to implement waste classification, waste recycling, and packaging material reuse measures to reduce waste, and utilize the PDCA cycle for continued improvements.

Circular Economy

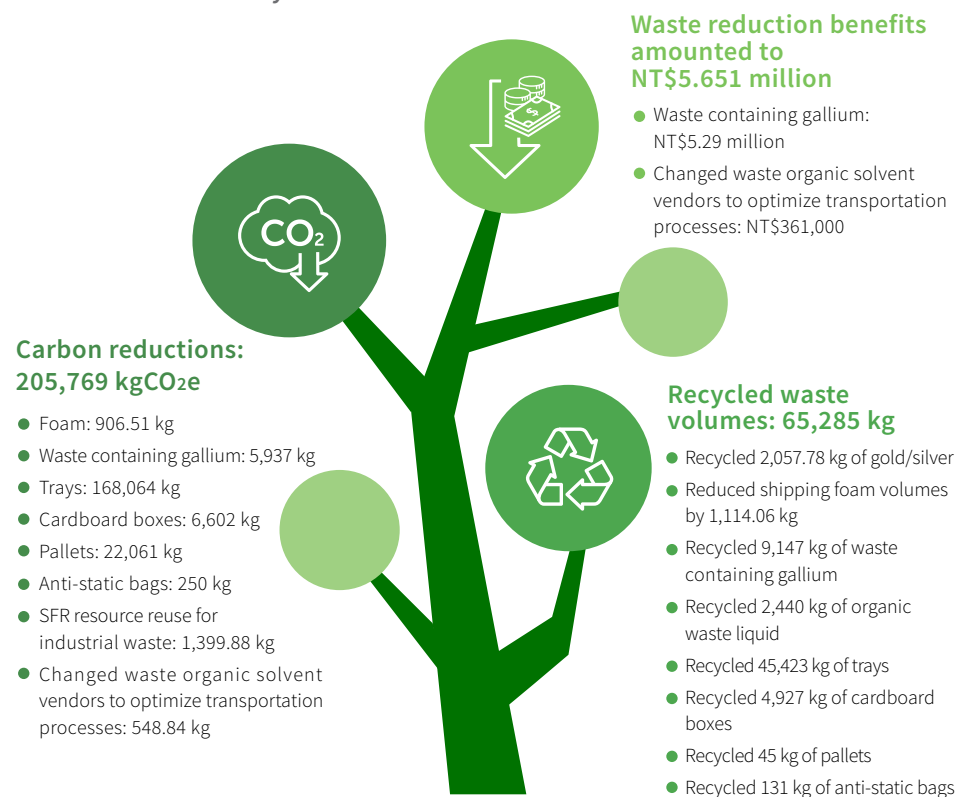
In the face of growing global concern for circular economy issues, the Group actively promotes Group-wide strategies and goals under a “zero waste” blueprint. Our strategies include increasing conversion rates of general industrial waste, reducing incineration and landfill volumes, and working with manufacturing departments to improve front-end factory throwing rates as well as 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.

The Group did not incur any violations of environmental laws associated with waste in 2024.

EPISTAR, Unikorn, Epicrystal, Episky, and Can Yang recycle gold (Au) and platinum (Pt) used in manufacturing processes; the overall recycling rate reached 92.08%:

	Recycled Volumes in 2024 (kg)	Recycling Rate in 2024 (%)	Recycling and Reuse Rate in 2024 (%)
Gold	1,860.551	92.3%	100%
Platinum	197.226	90.0%	100%

2024 Circular Economy Benefits



Please refer to Appendix I [Environmental Data] for statistical information on waste

Circular Economy Cases

Project title

Project
durationProject
boundariesProject
description and
quantitative
performance

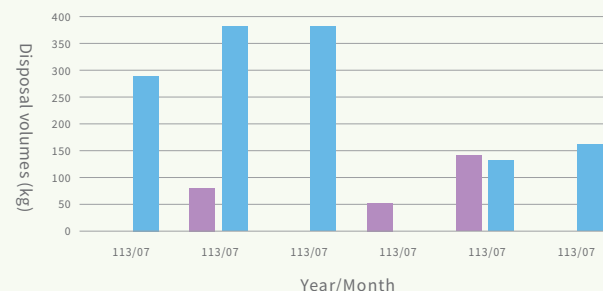
Convert foam waste into plastic pellets for reuse

2024/01/01~2024/09/30

S1、S3

- The disposal method for factory foam waste was changed from incineration to reuse through appropriate factory classification and management; 100% of waste foam materials were reused. In 2024, we reused 1,114.06 kg of foam materials and reduced 906.51 kgCO₂e of greenhouse gas emissions generated during incineration processes.
- Before:**
Our factories use large amounts of bulky foam materials each month, which are recycled and sent to incineration plants (dioxins may be generated during the incineration process)
- After:**
Recycled and reused foam materials to change material lifecycles and adhere to eco-friendly and plastic reduction principles

Converted foam waste into plastic pellets for reuse



Foam form



Project title

Project
durationProject
boundariesProject
description and
quantitative
performance

Changed disposal method for gallium waste from landfill to recycling and reuse

2024/04/01~2024/12/31

N5、N6、N8、H1、S3

- The disposal method for factory waste such as arsenic wastewater, cutter wastewater sludge, cutter filter cartridges, filter bags, and high-temperature furnace slag was converted from solidification and landfill treatment to gallium recovery, reducing costs required for solidification and landfill, generating benefits from recovery of precious metals (gallium), and lowering greenhouse gas emissions generated during solidification processes. Overall recycling benefits amounted to NT\$5.29 million and total carbon emissions amounted to 5,937 kgCO₂e. The Ennostar Group is the first enterprise in the LED industry to recycle and reuse gallium from sludge.

Waste containing gallium:

Equipment



Factory Affairs



Project title

SFR resource reuse for industrial waste

Project
duration

2024/01/01~2024/12/31

Project
boundaries

S1、S3

Project
description and
quantitative
performance

- General industrial waste in factories that could be used for SRF were collected and stored for reuse instead of being incinerated and landfilled, reducing greenhouse gas emissions from incineration and landfill processes. Total carbon reductions amounted to 1399.88 kgCO₂e.

Project title

Changed waste organic solvent vendors to optimize transportation processes

Project
duration

2024/04/01~2024/12/31

Project
boundaries

S1、S3

Project
description and
quantitative
performance

- We implemented preliminary second source plans for factory waste liquids with high heat values, including sample confirmation, sample testing, and assessing vendor feasibility, before ultimately signing a collaboration agreement. Apart from reducing greenhouse gas emissions generated from transporting waste and achieving carbon reduction benefits, this second source supplier was located within the same science park, enabling waste traceability and sustainable management (waste with high heat values was used for supplemental fuel). Overall project cost savings amounted to NT\$361,000 and total carbon emissions amounted to 548.84 kgCO₂e.

Project title

Factory organic waste liquid was converted into alternative fuel for use by co-generation power plants

Project
duration

2024.1~2024.12

Project
boundaries

Zhunan Facility

Project
description and
quantitative
performance

- 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.
- The recycling rate for organic solvents in 2024 was 22.72% (2.44 tons/10.74 tons)

Project title

Recycling rates for general industrial waste in factories

Project
duration

2024.1~2024.12

Project
boundaries

Lextar Electronics

Project
description and
quantitative
performance

- General industrial waste in factories, which was previously incinerated, is now processed using SRF 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 60.29% from January to December in 2024

Description

- Many incineration plants are reaching the end of their service lives and often require long maintenance periods when general industrial waste needs to be stored in factories. Therefore, Lextar's Zhunan Factory collaborated with waste handling vendors and assessed the feasibility of using SRF treatments to process general industrial waste when the Taiwanese government was promoting SRF policies. We worked with various units to contact vendors for sampling analysis, establish waste information for factories, and further classified and collected general industrial waste depending on whether they were suitable for SRF treatment. We completed the first in-factory general industrial waste SRF treatment process in October 2023, and our recycling rate for general industrial waste rose from 0% to 60.37% from October 2023 to December 2024, effectively increasing reuse rates for general industrial waste.

Project
duration

2024.1~2024.12

Project
boundaries

Lextar Electronics

- Recycled and reused packaging materials used by five clients in Suzhou, reducing 196,977 kgCO₂e of carbon emissions

Project
description and
quantitative
performance

Year	Recycled item	Expected waste reductions (kg)	Carbon emission volumes (kgCO ₂ e)	
2024	Tray	45,423	168,064	Polystyrene (PS)
	Cardboard boxes	4,927	6,602	Paper/paper containers/corrugated cardboard boxes/AB corrugated cardboard boxes (double wall, two flutes)
	Pallets	45	22,061	Wooden plywood boards
	Anti-static bags	131	250	Low-density polyethylene (LDPE)

Air Pollution Prevention

Material Topic

Air Pollution Management

Base year: 2021

Indicators	Applicable Scope	2024		Target for 2025	Target for 2026	Target for 2030
		Achievement	Target			
Number of major environmental regulation violations *	Entire Group	0	0	0	0	0
Cumulative number of replaced or upgraded control equipment	EPISTAR	5	5	5	6	6
Process efficiency of existing VOC equipment increased by 90% or emission concentration <14 ppm	EPISTAR	>90% or <14 ppm	>90% or <14 ppm	>90% or <14 ppm	>90% or <14 ppm	>90% or <14 ppm
Process efficiency of new VOC equipment increased by 95% or emission concentration <10 ppm	EPISTAR	NA Not yet initiated	>95% or <10 ppm	>95% or <10 ppm	>95% or <10 ppm	>95% or <10 ppm

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.

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.

* Major violations were defined as incidents which incurred fines of more than NT\$1 million.

Project title

Project duration

Project boundaries

Project description and quantitative performance

Backup wet scrubber for VOC treatment system installed at N2

2024/1/1 ~ 2024/12/31

Backup VOC wet scrubber at N2

- Additional restrictions on VOCs in the “Air Pollution Control and Emissions Standards for the Semiconductor Industry” meant that our backup activated carbon adsorption tower could no longer comply with regulatory requirements during routine maintenance and repair periods for current processing equipment. Therefore, we assessed installation of new VOC wet scrubbers to meet regulatory restrictions during equipment backup periods.



Please refer to Appendix I [Environmental Data] for statistical information on air pollution

Project title

Improved TO furnace of VOC backup tower at N8

Project
duration

2024/10/07 ~ 2025/03/24

Project
boundaries

Added TO furnace to VOC FBC system at N8

Project
description and
quantitative
performance

- Suboptimal designs, high energy consumption, electrical risks, and poor conditions of the existing electric oxidation furnace at N8 constituted a long-term concern. We therefore planned to establish a TO furnace in the FBC system to strengthen stability of the oxidation combustion unit and reduce the need to switch to backup activated carbon towers.
- When complete, this project will enhance equipment efficiency and convert equipment fuel from electricity to natural gas, and is expected to save NT\$1,216,976/year.

We set biodiversity as one of the two themes for our first sustainability conference and introduced common animals and plants to our colleagues through the “Making Friends with Nature” lecture as well as DIY activities which helped our colleagues understand the importance of biodiversity through fun activities.

In 2024, we hosted 2 volunteer activities at Hsinchu and Tainan to combine environmental protection and corporate responsibilities, helping our colleagues to better understand biology and ecological conservation as well as practical actions. Water hyacinths are an invasive species which can easily trigger ecological changes in indigenous habitats and make it difficult for water organisms to survive. We led our colleagues in removing 836 kg of water hyacinths from Hsinchu Green Grass Lake and cleared 164 kg of fallen leaves and trash from the trail around the lake, improving water quality, reducing biodiversity threats from external species, and creating better living environments for indigenous organisms. We also exhibited care for coastal ecology by hosting a parent-child tour at Jingzaijiao Tile-paved Salt Fields, leading our colleagues and the next generation in learning about mangrove contributions to ecological environments; we also cleared 1,246 kg of marine waste. This activity reduced damage to marine ecology from waste and conveyed the value of sustainable awareness. We hosted 2 activities responding to SDG 14 and SDG 15, and plans to continue investing related resource in future to strengthen our influence in biodiversity conservation and make corporate contributions to environmental sustainability.

Biodiversity

Taskforce on Nature-Related Financial Disclosures (TNFD)

Apart from climate change and global warming trends, all humans on the planet are simultaneously facing biodiversity losses and natural degradation crises. TNFD is the latest international framework for disclosure of nature-related risks and financial disclosures, which aims to provide a guideline for voluntary corporate disclosures of nature-related impacts and risks. The Ennostar Group actively responds to international trends and pays attention to nature-related and biodiversity issues. We plan to adopt the 4 LEAP procedures (Locate, Evaluate, Assess, and Prepare) under the TNFD framework in 2025 to systemic identify nature-related risks and opportunities as we actively promote management and disclosure of nature-related risks.

Environmental Protection and Education

The Ennostar Group understands that biodiversity is critical for ecological balance and sustainable corporate development. We therefore actively promote environmental protection and education.



For more information on our annual conference, please refer to [Featured Highlight]
Ennostar Annual Sustainability Conference: Together for Better

5

Talent Sustainability

5-1 Talent Management

- 5-1-1 Talent Structure
- 5-1-2 Talent Attraction and Retention
- 5-1-3 Talent Development and Cultivation

5-2 Diversity, Equity, and Inclusion

- 5-2-1 Protection of Human Rights
- 5-2-2 Friendly Work Environments
- 5-2-3 Employee Communication

5-3 Occupational Health and Safety

- 5-3-1 Occupational Health and Safety Management
- 5-3-2 Health Promotion

Talent Management

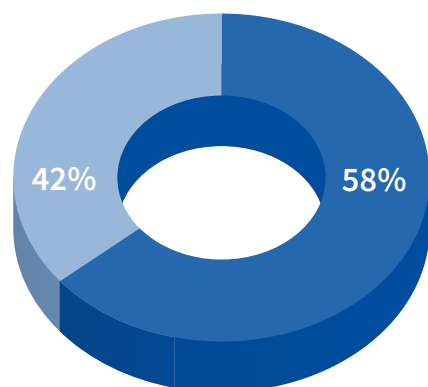
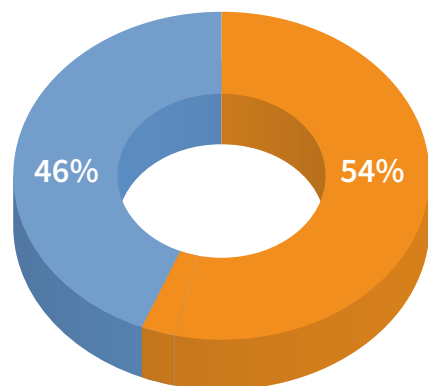
Corresponding SDGs



Talent Structure

Global Personnel Composition

As of year-end 2024, the Group had a total of 7,542 employees in Taiwan and overseas.



Statistics on New Employees

The Ennostar Group had 3,717 new employees in 2024 and the average recruitment cost for each new employee was NT\$8,368.

Category	Total category/group personnel		New employees in 2024 Number of employees
By gender	Female	3,132	1,059
	Male	4,410	2,658
By age	Under 30 years	2,473	2,841
	31-50 years	4,697	855
	Above 51 years	372	21
By region	Taiwan	4,065	303
	China	3,477	3,414

Statistics on Terminated Employees

Category		Number of terminated employees	Turnover rate	Voluntary turnover rate
By gender	Female	1,212	16.07%	14.28%
	Male	2,713	35.97%	33.13%
By age	Under 30 years	2,701	35.81%	35.12%
	31-50 years	1,152	15.27%	11.73%
	Above 51 years	72	0.95%	0.56%
By region	Taiwan *	685	9.08%	4.92%
	China	3,240	42.96%	42.50%

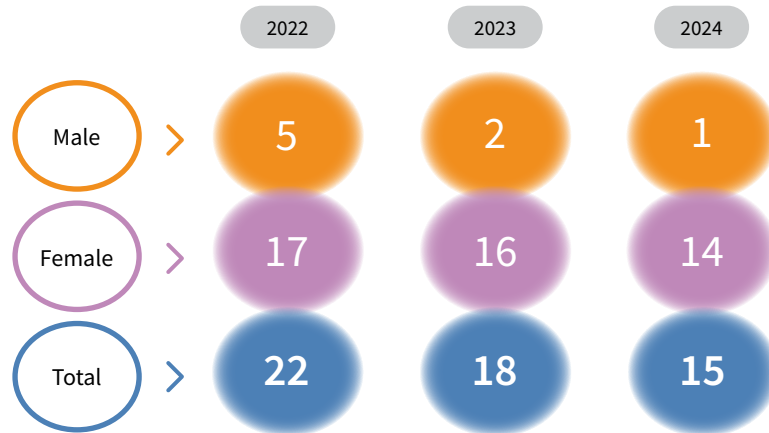
* In 2024, production line adjustments made at EPISTAR affected business conditions for some factories. We made appropriate personnel adjustments and also handled involuntary termination procedures in accordance with law. Although this raised the proportion of involuntary terminations, no labor-management problems occurred due to these involuntary terminations.

Expatriate/Foreign Employees

Category	Male		Female		Total	
	Number of employees	Ratio	Number of employees	Ratio	Number of employees	Ratio
Foreign employees	140	1.86%	467	6.19%	607	8.05%
Expatriate employees	90	1.19%	6	0.08%	96	1.27%
Total	230	3.05%	473	6.27%	703	9.32%

Employment of Indigenous Workers *

The Group respects the cultures of ethnic minorities. To promote cultural inclusiveness, we provide annual ceremonial leave to indigenous employees and encourage 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 skilled people with disabilities. We actively employ workers with disabilities and redesigned work duties to promote friendly workplace environments. Our factories in China also actively recruited workers with disabilities in 2024 in accordance with the Regulations on the Employment of Persons with Disabilities.

* As our factories in China do not employ any indigenous workers, employment data for indigenous workers were taken from factories in Taiwan.

	2021	2022	2023	2024
Male	19	20	22	32
Female	14	23	18	15
Total	33	43	45	47
Proportion of total employees	0.62%	0.52%	0.49%	0.62%

Note Figures for 2021-2022 only encompassed the Taiwan region; figures for 2023 and 2024 encompassed 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, while 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 2024		Male	Female	Total
Application rate 25.54%	A. Number of employees eligible for parental leave without pay in 2024	351	299	650
	B. Actual number of applicants for parental leave without pay in 2024	82	84	166
	Application rate (%)=B/A	23.36%	28.09%	25.54%
Reinstatement rate 86.33%	C. Number of parental leave employees scheduled for reinstatement in 2024	74	65	139
	D. Actual number of parental leave employees reinstated in 2024	69	51	120
	Reinstatement rate (%)=D/C	93.24%	78.46%	86.33%
Retention rate 78.63%	E. Actual number of parental leave employees reinstated in 2023	62	69	131
	F. Number of parental leave employees who continued working for one year following reinstatement in 2023	47	56	103
	Retention rate (%)=F/E	75.81%	81.16%	78.63%

Talent Attraction and Retention

Material
Topic

Group Human Resources Center

Base year: 2022

Indicators	Achievement	Target	Target for 2025	Target for 2026	Target for 2030
Number of new effective talent sources	8 new sources from 2023-2024	8 new sources from 2023-2024	1 source/year	1 source/year	1 source/year
Number of new collaborations with departments in key target schools	7 new departments from 2023-2024	7 new departments from 2023-2024	Add collaborations with 5 new departments each year	Add collaborations with 3 new departments each year	Add collaborations with 3 new departments each year
Employee engagement rate	DL : 65% / IDL : 68%	60%	70%	70%	70%
Employee share ownership trust subscription rate	32%	30%	30%	35%	40%
Fixed salaries reach and are maintained at market levels	P60	P60	P60	P65	P65

Responsible
unit

Group Human Resources Center

Note Due to Group integration, subsidiary talent sources and department collaborations were jointly calculated

We 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. This, combined with Group developments policies, enable us to reach and attract talented students who are still in school through diverse channels and lively social media content that constitutes our employer brand on campus, 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
- Internship program for international students
- Corporate briefings
- Optoelectronics courses
- Technical forums
- New class for overseas compatriot students
- 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



Industry-Academic Collaboration and Diverse Recruitment

The Ennostar 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 so we can 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 to help us build a solid foundation for continued

Expand Talent Source Channels

The Group assessed and identified key target schools and departments for collaboration on talent recruitment, increasing the efficiency of recruitment resources, making talent searches more accurate and effective.

Campus recruitment

Partner schools

National Chiao Tung University, National Cheng Kung University, National Taipei University of Technology, National Taiwan University of Science and Technology, National Central University, National Chung Hsing University, National Sun Yat-sen University, National Chung Cheng University, National Formosa University

Measures

Participated in spring/autumn campus recruitment fairs and recruitment seminars at collaborating schools and departments, invited outstanding alumni to share details of their work and job environments, and organized fun interactive activities such as HR resume checks and capsule toy games to build a brand image as a vibrant and approachable employer as we expanded our talent pool.

Achievements in 2024



In 2024, we participated in **10** campus recruitment activities and received **2,946** resumes.

◀ Campus recruitment:
An alumnus explains job vacancies to students

R&D substitute services

Partner schools

No restrictions

Measures

We actively participated in campus briefing sessions hosted by the R&D substitute services office, invited colleagues currently serving R&D substitute services to share their experiences, promoted job vacancies at key school campus recruitment activities, and invited colleagues who were officially hired after their R&D substitute services had concluded to speak to students about their workplace environments.

Achievements in 2024

A total of 15 R&D substitute service personnel in 2024

A total of 6 R&D substitute service personnel were retained following service conclusion in 2024

Ennostar Group Scholarship Program

Partner schools

No restrictions

Measures

1. Consolidated all scholarships into one Group scholarships to simplify work processes and labor costs, and surveyed potential cultivation targets to strengthen awareness of career development;
2. Hosted lectures and other activities at key schools and departments to introduce our program and application procedures; we reviewed application documents to select outstanding talent and arranged face-to-face interviews with two executives
3. Hosted a meet-and-greet event to help selected students learn more about the Group and our career development programs, creating a communication platform to enhance their sense of belonging at the Group and strengthening industry and academic ties.

Achievements in 2024



In 2024, a total of **194** students submitted applications and **3** new students were successfully recruited; a total of **5** students are currently receiving our scholarships, which amounted to **NT\$830,000** for the year.

◀ Meet-and-greet event for students, career mentors, and HR personnel

Internship program

Partner schools

Measures

No restrictions

1. Produced internship experience videos that were shared to Facebook and other social media sites
2. Hosted corporate briefing sessions, technical lectures, and corporate visits with key schools and departments to introduce our program, job vacancies, and application procedures.
3. HR and unit managers conduct regular interviews to check on intern learning conditions and adjust learning plans as needed
4. Hosted an intern graduation ceremony where student interns showcased their achievements and received recognition from their managers and colleagues, creating positive interactions in talent cultivation and strengthening industry-academia links.

Achievements in 2024

In 2024, a total of **10** students participated in internships and **4** students were from collaborating schools and departments.



▲ Intern graduation ceremony



▲ Internship experience video

Scan the QR code to watch the
internship sharing video



Internal recommendations

Partner schools

Measures

No restrictions

We added a channel for recruiting outstanding talent via internal recommendations to enhance cultural fit within teams, and provided bonuses to encourage recommendations from our colleagues.

Achievements in 2024

In 2024, a total of **15** internally recommended candidates at EPISTAR participated in interviews and **7** were hired, with **5** fulfilling the criteria for recommendation bonuses; a total of **18** internally recommended candidates at Lextar participated in interviews and were hired, with **5** fulfilling the criteria for recommendation bonuses.

Professional courses

Partner schools

Measures

National Chung Hsing University, Soochow University, National Central University (new), National Chung Hsing University (new)

Reduced gaps in academic and practical information for students from key schools and departments, helping them to understand the skills required by the industry.

Jointly formulated and promoted course content and application procedures with key schools and departments, and also organized lectures, corporate visits, and other supplemental activities.

Achievements in 2024



In 2024, we added collaborative programs with **3** departments (Department of Electro-Optical Engineering at National Taipei University of Technology, Department of Computer Science & Information Engineering at National Central University, and Department of Information Management at National Central University) and **17** students signed up for these programs; **60** new students signed up for our existing programs in 2024. In total, **100** students have applied for these programs.

◀ Corporate visit from collaborating school

Recruitment of overseas compatriot students

Partner schools

National Cheng Kung University, National Taiwan University of Science and Technology, National Chung Hsing University, National Chiao Tung University

Measures

Produced bilingual Chinese and English promotional materials and collaborated with the international offices of key schools and departments to host briefing sessions for foreign students. We also participated in recruitment activities for foreign students and expanded our talent pool using the Ministry of Economic Affairs Contact Taiwan platform.

Achievements in 2024

In 2024, we hosted **1** southbound briefing session/lecture and participated in **2** recruitment fairs, reaching **97** people.



▲ National Taiwan University of Science and Technology international talent recruitment activity



▲ Chiao Tung University international talent briefing session

In order to promote our R&D substitute service vacancies, internships, scholarship program, and optoelectronics/information technology programs, our recruitment units utilized the following channels in collaboration with key schools and departments in 2024:

10 talent
recruitment fairs

8 corporate
briefing sessions

15 practical
professional
knowledge
lectures

5 corporate
visits

12 professional
education
program courses

Our subsidiaries in China also launched collaborations with target schools and departments to expand their talent recruitment channels. In 2024, 3 schools in Sichuan were selected for collaboration. We signed agreements with Sichuan Vocational and Technical College, Sichuan Electronic Machinery Vocational and Technical College, and Luzhou Vocational and Technical College, and plan to commence industry-academia collaborations on our order-based training program and talent recruitment in 2025.

Achievement Highlights

EPISTAR social media management

To build an active employer brand, EPISTAR set up a Facebook fanpage to promote interactions with potential talent. Our recruitment team made operational adjustments in November 2022 and showcased corporate operations and talent cultivation measures using rich visual and video content focusing on “campus engagement,” “corporate culture,” “recruitment activities,” and “ESG initiatives.” These posts were shared to other social platforms to expand talent recruitment. A total of 57 posts were published and the average number of views increased from 1,982 views to 2,755 views for each post, with one post reaching 18,421 views. During the first half of 2024, the number of followers on our fanpage officially exceeded 10,000 people, and our posts within those six months received 17,100 views.

Reach



Content interactions



Message contacts



Followers



Social media reach

Future Outlook

Our factories in Taiwan responded to Group development strategies by focusing on promotion of professional courses at target schools and departments to attract and cultivate talent with professional technical skills. We are also actively expanding recruitment of overseas compatriot students to facilitate diverse interactions with professional technical talents.

Our factories in China are also expanding talent sources through school-enterprise collaborations.

1. We are attracting professional talents from vocational high schools for our subsequent developments in the automotive market using order-based training programs and internships. We will be able to establish at least one class in our order-based training program in 2025 and can use this experience in future promotions.
2. For undergraduate-level professional talent, our subsidiaries compiled a list of the top 15-20 universities in each province and aligned talent needs based on existing partnerships, connecting with interested universities that had matching specialties. We sponsored competitive events at these institutions to garner student interest, used remuneration surveys to monitor salary standards for key talents, and established special incentives to attract urgently needed professionals from targeted schools.

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.

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.

Remuneration Policies and Management Systems

The Ennostar Group’s remuneration management 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.

Ennostar 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. 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 Ennostar 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.

To attract and retain outstanding talent, the Ennostar Group formulated short-term and long-term incentive plans based on overall financial conditions, future developments, subsidiary characteristics,

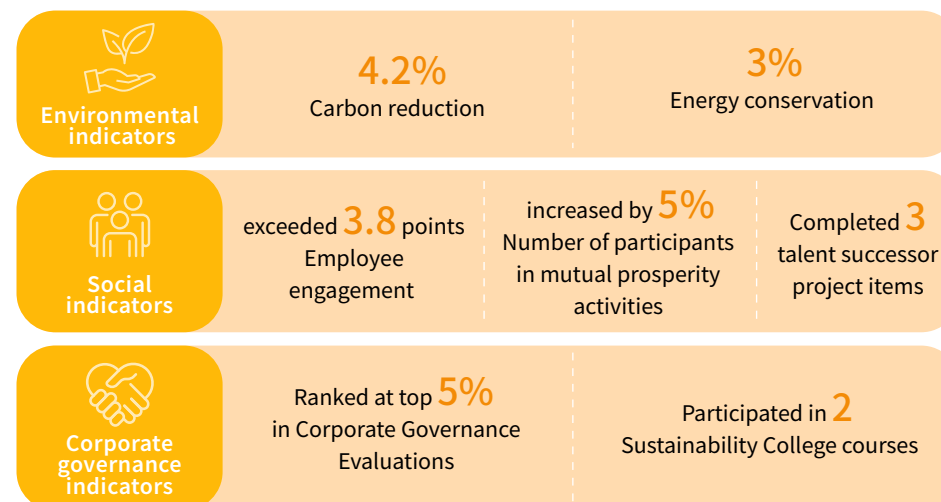
and operational performance. These incentive plans are linked to employee responsibilities and performance so we can reward employees that continue to make contributions.

1. Provide fair and complete salaries and bonuses to employees in accordance with local laws and regulations, and protect employee rights.
2. Link employee performance and contributions with corporate profit distributions to provide appropriate incentives, and share profits with employees.
3. Regularly review remuneration and benefits as well as links with external markets, and participate in salary surveys to determine external salary standards and facilitate suitable adjustments, ensuring that our employee salaries are competitive within the industry.

Long-Term Incentive Plan for Senior Executives

Our incentive plan for senior executives links corporate operations, ESG performance indicators, and individual performance, and also increases shareholder returns. The Ennostar Group began implementing a three-year agreement and shareholding trust in 2024 stipulating competing operational performance indicators compared to peer companies as well as environmental, social, and corporate governance ESG performance indicators and individual performance indicators. Funds are appropriated in accordance with the agreement to purchase corporate shares that are placed in a trust. Upon meeting relevant conditions on the maturity date, incentive shares are calculated based on achievement rates for each indicator.

ESG performance indicators for 2024



* 2022 set as base year

Please refer to Appendix I [Social Data] for more information on the Group’s remuneration and welfare measures in 2024.

Comprehensive Welfare Program

Benefits	Description
Employee care	<ul style="list-style-type: none"> The Group has established an "Employee Relations Department" which integrates care for employee physical and mental health, care for new employees, employee interviews, EAPs, regular health examinations, and free neck and shoulder massages. All factory clinics not only provide regular injury treatment and care functions, but also voluntarily organize a variety of free and paid health checks, health consultancy lectures, fitness checks, smoking cessation activities, and weight loss events, as well as flu vaccination subsidies, regular in-factory medical consultations from professional physicians, and other health management activities.
Festival bonuses	<ul style="list-style-type: none"> We provide birthday and festival bonuses to our colleagues every year.
Employee insurance	<ul style="list-style-type: none"> Labor insurance, national health insurance, and group insurance (including life insurance, casualty insurance, hospitalization insurance, and accident medical insurance).
Emergency relief	<ul style="list-style-type: none"> We provide timely and appropriate financial support to employees and their families when major incidents significantly impact their economic welfare.
Diverse activities	<ul style="list-style-type: none"> We host a variety of diverse activities such as puzzle competitions, festive activities, family days, sports month activities, parent-child activities, celebrity lectures, Christmas parties, and year-end banquets so our colleagues can relieve stress during their free times. These different activities convey our corporate culture and enable our colleagues to understand how much we care about each individual.
Friendly workplace environments	<ul style="list-style-type: none"> We have established a fitness and leisure area, dance studio, and billiards and table tennis facilities that our colleagues can use free of charge. We have also established well-equipped clinics and lactation rooms. Our factories have convenience stores, coffee shops, spacious and comfortable dining environments, and diverse employee meal combinations.
Flexible benefits	<ul style="list-style-type: none"> Employee welfare committee points can be used for employee trips, tickets to recommended venues, and other group activities. We have established a movie ticket platform to help our colleagues enjoy their free time when on leave. We provide wedding bonuses, childbirth subsidies, childcare subsidies, funeral & burial benefits, and hospitalization condolence payments.
Volunteer leave	<ul style="list-style-type: none"> We provide employees with one day of paid volunteer leave each year to encourage social participation.
Engagement leave	<ul style="list-style-type: none"> We provide one day of paid leave for engagements

Benefits	Description
Family care	<ul style="list-style-type: none"> Factories in Taiwan: NT\$2,000 wedding bonus and NT\$3,600 childbirth bonus for each child. Factories in China: 200-300 (RMB) wedding bonus and 200-300 (RMB) childbirth bonus for each child. (differs for each location)
Childcare subsidies (Factories in Taiwan)	<ul style="list-style-type: none"> Apart from statutory childcare leave, the Group added childcare subsidies for children aged 2-6 years old starting from 2022 to reduce economic stress on employees requiring childcare. Employees with children aged from 2-6 years enrolled at government-registered kindergartens and childcare centers receive subsidies of NT\$1,800 for each child every semester. Employees can apply for childcare subsidies twice (two semesters) each year and receive a total of NT\$3,600 for each child. If both parents work at the Group, they can both apply for subsidies. In 2024, 504 employees applied for childcare subsidies amounting to a total of NT\$907,200.
Childbirth subsidies (Factories in Taiwan)	<ul style="list-style-type: none"> The Group provides childbirth subsidies to ease economic burdens on new parents and encourage childbirth. All employees can apply for these subsidies and receive NT\$3,600 for each newborn (NT\$7,200 for twins). In 2024, 68 employees applied for childbirth subsidies amounting to a total of NT\$244,800.
Employee share ownership trust (Factories in Taiwan)	<ul style="list-style-type: none"> All subsidiaries in Taiwan established employee share ownership trusts so employees could share 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.
Retirement benefits	<ul style="list-style-type: none"> To fulfill social responsibilities and stabilize employee post-retirement lives, the Ennostar Group has established the "Retirement Regulations for Appointed Managers and Directors Concurrently Serving as Workers" and the "Employee Retirement Regulations." We appropriate retirement, medical, pension, and other social insurance funds for each employee and also require actuaries to submit reports each year to ensure that sufficient funds are being appropriated for employee rights. <ol style="list-style-type: none"> Pension reserves appropriated in accordance with the Labor Standards Act We appropriate 2% of salaries each month to a pension fund and makes deposits to a dedicated Bank of Taiwan account set up by the Supervisory Committee of Labor Retirement Reserve. Pensions appropriated in accordance with the Labor Pension Act We appropriate 6% of salaries each month to individual pension funds based on employee pension tiers. Apart from fixed corporate contributions, employees can voluntarily contribute up to an additional 6% and enjoy tax benefits.

Employee Welfare Committee (Taiwan)

The Ennostar Group established the Employee Welfare Committee to care for employee needs, maintain harmonious labor-management relations, and encourage employees to engage in recreational and leisure activities. Committee representatives from each department are selected through nomination or election based on personnel proportions in each department. The Committee convenes every quarter to determine employee welfare policies and plan employee activities. The Employee Welfare Committee aims to improve employee well-being by planning, implementing, and supervising welfare measures, and by promoting welfare measures that meet employee needs so that employees can balance their work and family responsibilities while being physically and mentally healthy.

The Employee Welfare Committee is composed of the chairman, deputy chairman, committee members, executive secretary, and other executive staff, each responsible for different duties and ensuring smooth Committee operations. The chairman coordinates agenda items and leads all committee members in making decisions. The deputy chairman assists the chairman in implementing Committee plans and supervising meeting progress. Committee members are elected by employees or designated by the Group, and are responsible for reviewing and voting on important issues. The executive secretary is selected by the Group to help the chairman handle routine meeting matters and carry out meeting resolutions. Other executive staff as well as finance and accounting personnel are set up according to meeting requirements to handle planning, financial management, and other related tasks for joint promotion of employee welfare goals.

The Employee Welfare Committee provides wedding bonuses, childcare subsidies, funeral subsidies, hospitalization condolence payments, bonuses for the three major festivals, birthday bonuses, labor day gifts, department activity subsidies and travel allowances, childcare subsidies, and discounts for special stores and e-commerce platforms, providing the best care and services to our colleagues through comprehensive welfare benefits. To promote a work-life balance, the Employee Welfare Committee regularly organizes large-scale events including art activities, educational activities, fairs and markets, Christmas parties, year-end departmental networking activities, and year-end banquets. The Employee Welfare Committee has also formulated regulations for social club establishment and provides subsidies to encourage voluntary establishment of social clubs, thereby creating diverse interpersonal interactions and promoting lifelong learning.

The core aim of the Employee Welfare Committee is to improve employee satisfaction and well-being by optimizing welfare policies and activities. We continue to care for diverse employee needs through our digital platform, making it convenient to apply for and participate in welfare activities, so our colleagues are able to enjoy all activities. The Employee Welfare Committee launched many innovative activities to further promote employee work-life balance through recreational and family activities so our colleagues can enjoy harmony in their work and daily lives despite their busy schedules.

We are also integrating resources through active expansion of external collaborations to diversify employee benefits by providing special discounts and options. The Employee Welfare Committee continues to support internal social club activities by encouraging voluntary participation, providing subsidies, and organizing volunteer activities to promote implementation of corporate social responsibilities. We hope these measures enable the Employee Welfare Committee to build a vibrant and cohesive corporate culture as well as caring and warm workplace environments that improve employee well-being and loyalty.

Film appreciation activity

To enrich employee lives and improve employee engagement, we established a movie ticket platform to help our colleagues enjoy movies in their free time.

Total participants: 2,588

External competition bonuses

We encourage our colleagues to actively participate in external sports and recreational activities in their free time. Colleagues that receive prizes can apply for external competition bonuses. This encourages our employees to expand their interests and enjoy their lives while adding to our employee welfare options.

Total applicants: 10

Employee trips

Relaxing and fun trips give our colleagues a channel to relieve physical and mental stress, promote emotional communication and interaction between colleagues, and enhance connections and mutual understanding. This is also a way for the Group to thank and reward employees for their contributions using diverse welfare activities that enhance employee satisfaction and well-being to build a heartwarming and harmonious corporate culture as well as improve employee commitment and sense of belonging.

Total participants: 1,412

Friendly procurement

The activity allowed employees to redeem Employee Welfare Committee points for high-quality products from charity organizations and stores promoting sustainability concepts, with shortfalls deducted from their salaries. This made it convenient for our colleagues to purchase high-quality products while supporting social welfare organizations. This year, we worked with Joyce-Polio Care Association Sheltered Workshop, Children Are Us Foundation, Eden Social Welfare Foundation, and AGRIC Social Enterprise, and purchased peanuts and honey from local companies in Hualien, supporting post-earthquake economic recovery and social welfare through practical actions. We invite our colleagues to help us spread environmental sustainability principles by converting their Employee Welfare Committee points to social contributions, creating a virtuous cycle through contributions to sustainability concepts.

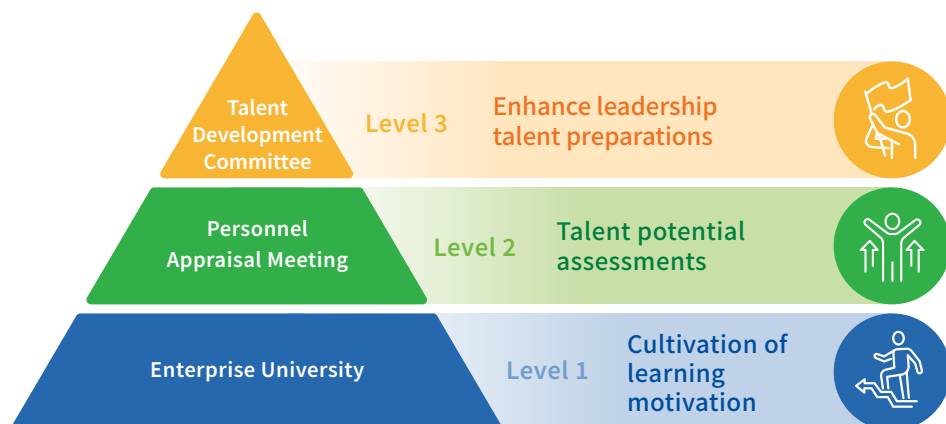
Talent Development and Cultivation

Our long-term talent development goal is to ensure that our employees can keep pace with the times and strengthen organizational resilience. Apart from supporting 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.

Material Topic	Talent Cultivation					Base year: 2022
Indicators	2024		Target	Target for 2025	Target for 2026	Target for 2030
Increase digitalization ratios for annual training programs	<div>✓</div> EPISTAR 15.6% Lextar 47.5%		10%	20%	20%	30%
Increase total number of individual learning hours each year	<div>✓</div> Completed program establishment/an average of 42 learning hours for Group trainees		Complete program establishment at all subsidiaries/improve learning platform	Increase by 10%	Increase by 10%	Increase by 10%
Formulate comprehensive learning blueprint	<div>✓</div> 1. Completed 100% formulation of management competencies 2. Completed 100% of professional competency blueprints for Ennostar University		100% coverage for manager learning blueprints (based on management capabilities) More than 70% coverage for professional learning blueprints (based on professional capabilities)	Complete 100% of professional learning blueprints for (competency) development units	Complete 100% of professional learning blueprints for (competency) development units	80% of colleagues have individual learning blueprints
Succession plan for key talent	<div>✓</div> Completed talent inventories and identify 100% of key positions		Complete talent inventories and identify 100% of key positions	Establish 100% of IDPs for key talent	Establish 100% of IDPs for key talent	Achieve 80% of internal replacement rates for key positions
Promotion of development-oriented performance management (Applicable to factories in Taiwan)	<div>✓</div> 1. Integrated performance systems and mechanisms 2. 100% establishment of annual targets for all indirect labor 3. 100% competency evaluations for all indirect labor		1. Achieve implementation rate of 90% for indirect labor performance appraisal target management MBO 2. 100% incorporation rate of performance management in competency appraisals	1. Complete establishment of and promote performance management PDCA mechanisms 2. Complete establishment of target management reports	Establish diverse performance appraisal models	Incentive mechanisms linked with organizational performance
Responsible unit	Group Human Resources Center					

Talent Development Committee

Ennostar Talent Development Organization



The Group considers talent to be our most important asset. In 2023, we initiated the three stages of “Aggregate,” “Integrate,” and “Incorporate” to gradually maximize synergies in 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.” In terms of talent development strategies, we have established functional capabilities and mapped out the abilities required by our colleagues. We enabled structured learning, 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.

Six main axe

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

Ennostar University

To incorporate learning resources from all companies and achieve our “One Ennostar” goal, we began formulating plans for Ennostar University in July 2024, simultaneously met with related stakeholders, and discussed Ennostar University structures and six colleges with all college deans and academic affairs committee members. In October 2024, we hosted the “Ennostar University Establishment and Teacher’s Day Event” to celebrate the official opening of Ennostar University. We formulated related training plans using a university framework and convened meetings to review learning effectiveness.

Ennostar University has a president, university affairs center, and six colleges; each college has a dean, associate dean, academic affairs committee members, and executive committee members. The university president sets the educational policies and reviews training plans; college deans/associate deans are responsible for formulating development guidelines and training blueprints, as well as reviewing training results; academic affairs committee members help to formulate targets and plans, and provide suggestions on course topics and lecturers; and executive committee members help with curriculum designs and implementation, as well as performance tracking.

Ennostar University Affairs Meetings/Semi-Annual Meetings

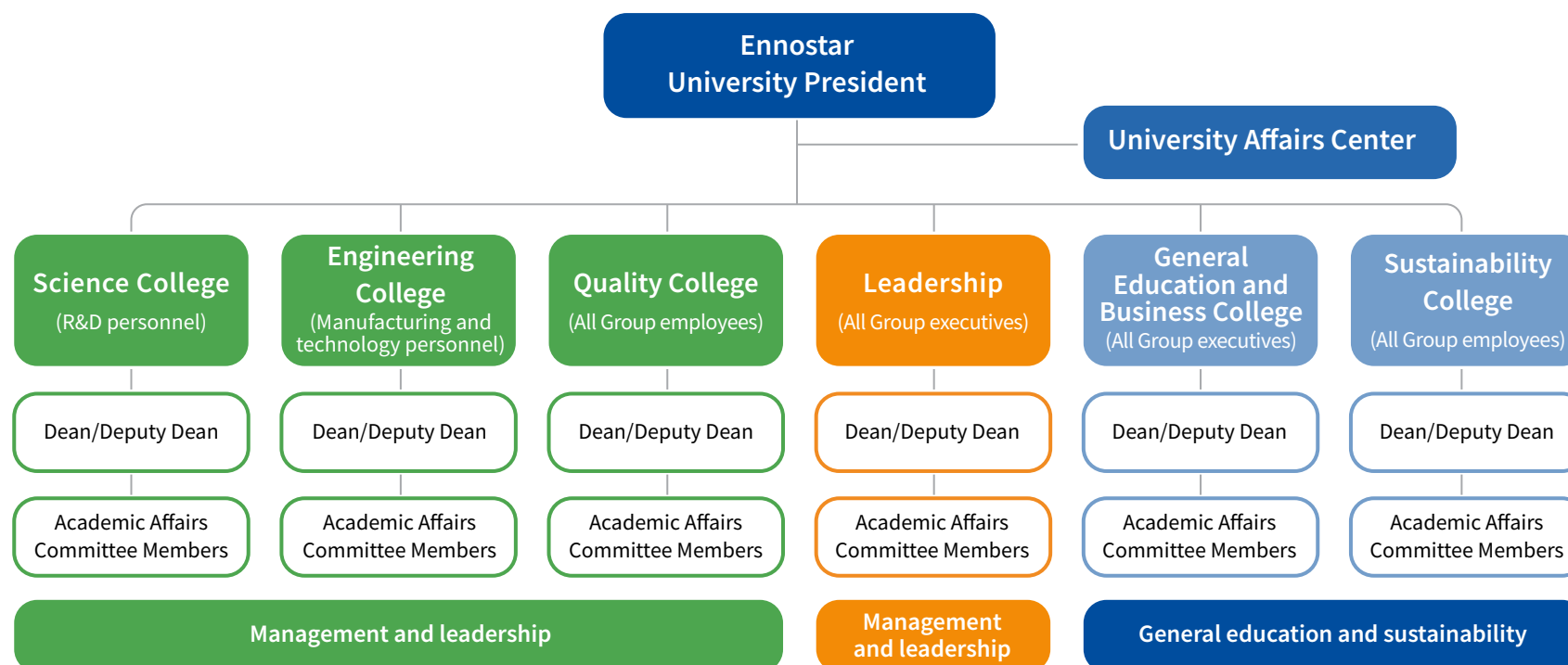
Ennostar University establishes training plans for each new year, keeps informed of overall learning results, and ensures alignment between training plans and corporate strategies through semi-annual college meetings and university affairs meetings.

■ Semi-annual college meetings:

The first semi-annual meeting of each year covers training results for the first half of the year and adjustments to training plans for the second half of the year; the second semi-annual meeting covers training results for the second half of the year and training plans for the new year.

■ University affairs meetings:

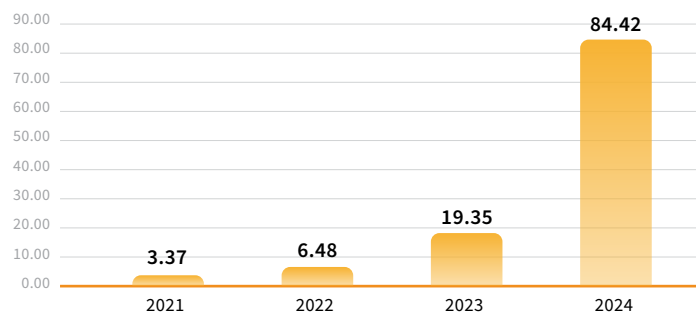
University affairs meetings showcase training results for the entire year, focus on educational policies/goals, and propose training strategies for the new year.



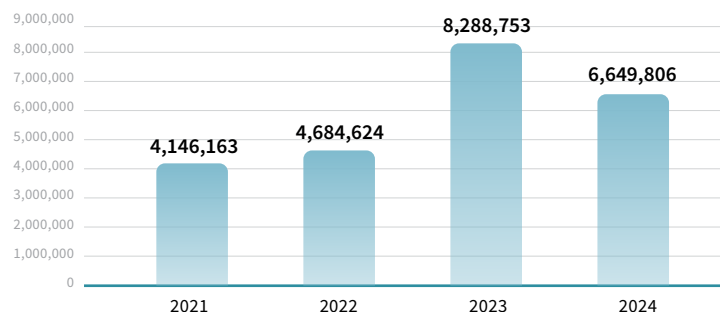
Training Achievements for 2024

In 2024, the Group provided training to 90,226 people over a total of 636,661.4 hours; total training costs amounted to NT\$6.64 million.

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 hours	26,651.7	81,279.3	528,729.8	500,189.5	136,471.2
Total number of employees	793	2,637	3,477	4,110	3,132
Average training hours per person	33.61	30.8	152.1	121.7	43.6

* This year, the formula for calculating average training hours per person was adjusted to: Total Group training hours/Total Group employees; data for 2021-2023 have been changed in accordance with this formula.

Training hours significantly increased for our factories in China as the Group increased the number of online training courses shared to factories in China. We also added mandatory human rights and ethical courses for all employees.

** Does not include contract labor

*** Includes contract labor

Training Focuses in 2024

Engineering College

- Number of classes: **42 classes**
- Total number of trainees: **1,131 people**
- Total training hours: **4,855.96 hours**
- Course content: Introduction to GaN LED yellow light processes, basic principles of factory water utility systems, and epitaxy principles

Science College

- Number of classes: **100 classes**
- Total number of trainees: **1,787 people**
- Total training hours: **6,254.81 hours**
- Course content: Introduction to product development and management processes, innovative thinking and applications, Micro LED component materials and electrical analysis technologies

Quality College

- Number of classes: **178 classes**
- Total number of trainees: **11,032 people**
- Total training hours: **14,910.4 hours**
- Course content: Quality concepts, introduction to quality and green product management systems, IATF 16949 internal auditor training

Management College

- Number of classes: **60 classes**
- Total number of trainees: **3,915 people**
- Total training hours: **4,039.13 hours**
- Course content: Resolving conflicts and creating mutual wins, Ennostar Group key competency online courses, problem analysis and resolution

Sustainability College

- Number of classes: **99 classes**
- Total number of trainees: **15,761 people**
- Total training hours: **19,763.48 hours**
- Course content: ESG awareness, climate change adaptation, international trends in social innovation, generating mutual benefits

Classes for Specific Topics

Topic	Training achievements	Course content
Ethics and human rights	Total number of trainees: 7,915 people Total training hours: 8,682.5 hours	<ul style="list-style-type: none"> Ethical and human rights training for all employees/ human rights and management of ethical behaviors 2024 Ennostar Group ethics, human rights, and integrity policy online courses
Anti-corruption	Total number of trainees: 1,701 people Total training hours: 1,134.19 hours	<ul style="list-style-type: none"> Introduction to US Foreign Corrupt Practices Act (FCPA) On-the-job training: New promotions for anti-corruption regulations (SHS120009)
Information security	Total number of trainees: 1,293.04 people Total training hours: 2,101 hours	<ul style="list-style-type: none"> "New employee orientation" : Ennostar Group information security policies "New employee orientation" : EPISTAR information security policies "Information technology" : New ISO27001 information security management training "Information technology" : Information security awareness 2024 information security awareness education and training course Information security policies: Refresher training course
Energy	Total number of trainees: 9 people Total training hours: 104 hours	<ul style="list-style-type: none"> 2024 energy management learning community: Air-conditioning energy conservation technologies Ministry of Economic Affairs Energy Administration subsidy: 2024 energy conservation proposal learning community: On-site expert guidance + training course to assist with energy conservation proposals. 2024 Ministry of Economic Affairs Energy Administration "air-conditioning energy conservation" learning community

Topic	Training achievements	Course content
Waste management	Total number of trainees: 63 people Total training hours: 327.38 hours	<ul style="list-style-type: none"> (Certificate) Waste treatment technician (Certificate) Waste treatment technician on-the-job training (Certificate) Waste treatment technician orientation training Zero Waste Program (ZWP) zero waste to landfill operations training "Sustainability College" lectures: Circular economy practices and case studies
Water resources	Total number of trainees: 18 people Total training hours: 168.18 hours	<ul style="list-style-type: none"> (Certificate) Wastewater treatment specialist (Certificate) Wastewater treatment specialist on-the-job training "Engineering College" lectures: Basic principles of factory water utility systems "Engineering College" lectures: Introduction to cooling water in factory processes
Supply chain	Total number of trainees: 10 people Total training hours: 20 hours	<ul style="list-style-type: none"> "Sustainability College" lectures: Circular economy practices and case studies
Environmental issues	Total number of trainees: 3,664 people Total training hours: 3,899.49 hours	<ul style="list-style-type: none"> "Sustainability College" lectures: Climate change adaptation "Sustainability conference series" general lectures: Making friends with nature "Sustainability conference series" : Net zero technologies exhibition "Sustainability issues forum" innovative technologies forum: Outlook on clean technologies "Sustainability conference series" lectures: SBTi net zero carbon reductions "Sustainability College" carbon reduction cheat sheet "Sustainability conference series" : ESG Award "Sustainability College" lectures: ESG awareness Carbon footprint Carbon reduction in manufacturing industry advanced A class

Key Talent Cultivation Program

Online Course Planning

Our online courses include compulsory courses for Group employees, subsidiary courses, and internal departmental training. Compulsory courses for all employees help our colleagues learn about Group subsidiary regulations for each year through online texts and tests on our learning system. In 2024, we launched several online courses: “2024 information security awareness training course,” “2024 Ennostar Group ethics, human rights, and integrity policy online courses,” “Ennostar Group key competency online course,” “Anti-corruption course series: Introduction to Foreign Corrupt Practices Act,” “Carbon reduction cheat sheet” ; a total of 12,744 people completed training on these courses. Subsidiary courses are uploaded online based on the needs and strategies of each subsidiary. Internal departmental training includes online courses self-produced by each department, which are combined with tests so that our colleagues can learn at their own pace.

Course title	Compulsory training targets	Completed trainees
2024 information security awareness education and training course	Ennostar Group indirect labor	1,851
2024 Ennostar Group ethics, human rights, and integrity policy online courses	All Ennostar Group employees	3,939
Ennostar Group key competency online course	Ennostar Group indirect labor	2,241
Anti-corruption course series: Introduction to Foreign Corrupt Practices Act	Ennostar Group indirect labor	1,838
Carbon reduction cheat sheet	All Ennostar Group employees	2,875
Total		12,744

Increase Individual Learning Hours

All Group employees continue to complete training on learning platforms without time and space restrictions. Additionally, aligning with our “One Ennostar One System” vision, responding to the 3+1 strategy, and cultivating future talents for new business models/business domains/market needs requires a universally applicable system that can accelerate identification of competency

gaps and provide corresponding blueprint plans. In 2024, we completed evaluations for an integrated Group learning platform which is scheduled to be launched online in July 2025.

Establishment of Learning Blueprints

All subsidiaries have formulated development and learning blueprints which are regularly reviewed and modified each year. We finalized Group management competencies in April 2024 and are working to formulate Group manager learning blueprints. The Group established Ennostar University in October 2024 to integrate learning resources from all companies. Ennostar University has six colleges: Leadership College, Sustainability College, General Education and Business College, Quality College, Science College, Engineering College; we are currently working to formulate blueprints for all colleges.

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. In 2024, we completed nominations and preparatory assessments of center/business group reserve candidates in February, selected key talent in March, convened 3 personnel appraisal meetings for the first quarter of 2024 in April, conducted development analysis on key talent in May, assessed and confirmed development evaluation tools in June, convened personnel appraisal meeting for third quarter of 2024/talent evaluations in September, initiated assessments of mentor systems and key talent development plans (TDP) in October, and formulated TDP preparatory processes in November. To strengthen development of human capital, we have linked performance indicators associated with talent successor development to long-term incentive plans for senior executives.

Achievement Highlights

Promotion of key Group capabilities

We set “adaptability” and “promotion of team success” as our two key capabilities. In March 2024, we changed company computer screen savers to show images promoting these two capabilities. In April 2024, we self-produced an online course on key capabilities so our colleagues could learn about core competencies and links to their jobs; the course completion rate was 95%. In October 2024, we promoted key capabilities as part of our Teacher’s Day activities. In December 2024, we hosted a key capability quiz event.

Achievement Highlights

Training program for new Group supervisors

This training program ensures our new supervisors have sufficient learning resources to ease them into their new roles and helps them align with Leadership College blueprint courses, while also enabling new supervisors to feel valued by the Group and receive management guidance. Starting in March 2024, we gradually finalized course topics for new supervisors, then spent 6 months formulating courses and producing 8 online courses. We officially launched the first-time supervisor training program (FSTP) in October 2024. At present, 16 new supervisors are working through the program.

Organization-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 assess 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.

To promote integration within the Ennostar Group, we coordinated performance management systems and operational processes and systems for all domestic and overseas subsidiaries in the first half of 2024 so all companies could conduct assessments using the same appraisal scores and rankings, creating a consistent structural foundation. During the second half of 2024, we focused on “strengthening goal setting” and built channels and processes aligned with organizational targets. We extended the promotion period so each department could align their performance targets and strategic goals. We also promoted “target categories” and “target combinations” to encourage managers and supervisors to inventory their personal capabilities and increase personal capabilities development targets as needed to enhance team development and progress on organizational targets.

Performance Appraisal Participation Rates

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	213	100%	370	100%	583	100%	NA	NA
EPISTAR	3,009	100%	2,726	100%	2,918	100%	2,817	100%
Lextar	872	100%	760	100%	959	100%	673	100%
Unikorn	298	100%	230	100%	332	100%	196	100%
Lextar Electronics	918	100%	487	100%	561	100%	844	100%
Episky	617	100%	361	100%	597	100%	381	100%
Epicrystal	432	100%	291	100%	442	100%	281	100%
Can Yang	258	100%	149	100%	285	100%	122	100%
Total	6,617	100%	5,374	100%	6,677	100%	5,314	100%

Note Direct labor includes migrant workers

Diversity, Equity, and Inclusion

Corresponding SDGs



Material Topic	Protection of Human Rights					Base year: 2022
Indicators*	2024		Target for 2025	Target for 2026	Target for 2030	
	Achievement	Target				
Coverage rate of due diligence procedures for human rights issues**	100%	100%	100%	100%	100%	
Gender equality and care promotion items	2	2	2	2	2	
Number of major human rights violations***	0	0	0	0	0	
Proportion of female executives	24%	22%	22%	22%	22%	
Continued employment and retention rates of migrant workers	90%	75%	75%	80%	80%	
Responsible unit	Group Human Resources Center					

Material Topic	Diversity and Inclusion					Base year: 2022
Indicators****	2024		Target for 2025	Target for 2026	Target for 2030	
	Achievement	Target				
Rate of closed employee feedback (complaint) cases	100%	100%	100%	100%	100%	
Satisfaction rate on employee activities	90%	85%	85%	85%	85%	
Responsible unit	Group Human Resources Center					

* Applicable scope for indicators: Ennostar Group's factories in Taiwan

** Implemented in accordance with ethical and human rights codes of conduct

*** Definition of major violation: Violations incurring penalties of more than NT\$300,000

**** Applicable scope for indicators: Ennostar Group's factories in Taiwan

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," 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 and Risk Mitigation Plans



The Group uses human rights self-assessment questionnaire (SAQ) to conduct risk assessments and formulated risk mitigation plans for identified potential risk issues, as well as implementation, supervision, and management of prevention measures.*

* This program encompassed 11 factories in Taiwan

Human rights risks	Prevention or remedial measures / Implementation progress
Promotion of human rights policies	<ul style="list-style-type: none"> Annual promotions of human rights issues <p>A total of 7,499 people completed training (100% completion rate for the entire Group)</p>
Freedom to seek employment and prohibition of forced labor	<ul style="list-style-type: none"> Implemented zero-fee policy for foreign migrant workers and promoted freedom to seek employment Convened regular (quarterly) communication meetings with foreign migrant workers <p>Hosted 25 meetings and a total of 4 issues were reported; 100% of issues were resolved</p>
Work hours and salaries that comply with legal regulations	<ul style="list-style-type: none"> Regular review of reports and early warning mechanisms: Weekly attendance records are sent to our colleagues and monthly working hour reports are sent to supervisors <p>100% regular execution</p>
Prevention of sexual harassment and unlawful infringement in the workplace	<ul style="list-style-type: none"> Set up dedicated 7885 complaint hotline and email address The Grievance Handling Committee is a permanent organization dedicated to complaint handling. Convened online meeting in May to brief managers on amendments made to the Gender Equality in Employment Act and promote associated information Hosted a sexual harassment prevention course in July where a lawyer presented case studies and handling practices <ul style="list-style-type: none"> A total of 9 complaints were submitted to the Group in 2024 and 100% were resolved 100% promotion and execution
Non-discrimination	<ul style="list-style-type: none"> Amended recruitment processes and personnel charts to ensure non-discrimination Human rights policies and employee feedback channels are promoted at new employee orientation training to ensure a non-discriminatory and friendly workplace <p>100% regular execution</p>

Human rights risks	Prevention or remedial measures / Implementation progress
Freedom of association	<ul style="list-style-type: none"> Implemented promotions and training related to labor-management meetings for new employees and all other employees to ensure that all colleagues are aware of their right to participate in said meetings. <p>All factories convene quarterly labor-management meetings (100% execution)</p>
Occupational health and safety	<ul style="list-style-type: none"> 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 EHS management manuals and occupational health and safety regulations in accordance with international standards and local regulations, and established the Occupational Health and Safety Committee which convenes either quarterly (head office) or monthly (all factories) <p>Safety Committee meetings chaired by the president are convened every quarter and meetings chaired by regional factory managers are convened every month (100% execution)</p>
Integrity and ethical management	<ul style="list-style-type: none"> New employees are required to undergo training associated with the Ennostar Group Procedures for Ethical Management and Guidelines for Conduct Annual Procedures for Ethical Management and Guidelines for Conduct training for existing employees <p>A total of 7,499 people completed training (100% completion rate for the entire Group)</p>

In 2024, 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.***

* The Ennostar Group's human rights regulations prohibit use of child labor and internal regulations include remediation measures for erroneous use of child labor.

** Our human rights policies prohibit forced and compulsory labor. We have established comprehensive communication channels, work hour reminders, regular labor-management meetings, quarterly migrant worker meetings, and migrant worker agency audits to ensure that no forced and compulsory labor is being used.

*** Definition of major legal violations: Violations incurring fines of more than NT\$300,000

Human Rights Education Activities

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 4,204 participants, 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 and mitigating human rights risks. We also disseminate information on human rights policies and demonstrate our emphasis on human rights through non-periodic newsletters to enhance employee awareness of human rights issues.

Friendly Work Environments

The Ennostar Group is committed to building a friendly, inclusive, equal, and healthy workplace. Our core goal is to promote employee physical and mental health as well as employee well-being. We provide and promote comprehensive health care through regular health examinations, psychological support services, and diverse employee activities. The Group also actively works to build an inclusive and equal workplace environment that guarantees feedback from each employee is respected and heard, and ensures that all employees can receive fair development opportunities. We constantly improve our work conditions and corporate culture through sound feedback mechanisms and employee satisfaction surveys that improve employee loyalty and sense of belonging. To this end, we organized various health promotion activities, lectures on psychological health and health education, and have established a health information section to help employees build good habits and health awareness. We hope these measures enable us to establish a healthy and friendly workplace environment that promotes employee well-being and quality of life; ultimately achieves our health, inclusion, and sustainable development goals; and creates the best platform to enhance employee physical and mental health as well as enable professional growth.

Long-Term Retention and Care for Migrant Workers

In 2022, the government promoted long-term retention policies for migrant workers to help employers retain outstanding talent. However, language and cultural differences often create obstacles. To lower barriers between colleagues and help migrant workers feel a sense of belonging, the Ennostar Group created a diverse and friendly environment that aims to help migrant workers overcome limitations during their stays in Taiwan so that they will be willing to remain with us over the long term in this era of labor shortages and competition for talent.

Chinese Classes for Migrant Workers

To reduce communication barriers between colleagues and cultivate seed personnel, we began organizing free courses for outstanding migrant workers in 2023. This year (2024), the number of course attendees and participants in certification tests increased, and 78% of migrant workers who took our tests exceeded threshold scores. In 2023, 16 migrant workers participated in our courses. In 2024, 30 migrant workers participated in our courses, an increase of 78%; 23 migrant workers took the TOCFL listening examination and 78% passed the examination. We hope to retain outstanding migrant workers through these cultivation activities and plan to promote these colleagues to management positions in accordance with our corporate promotion policies.



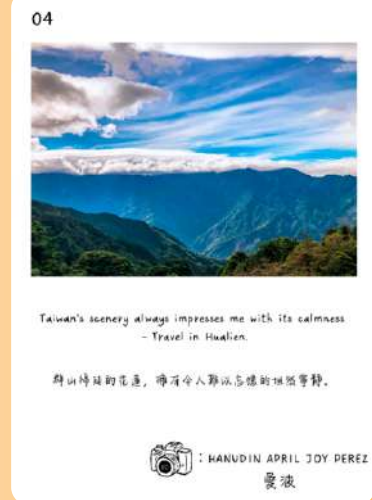
Chinese Classes for Migrant Workers

Migrant Worker Photography Exhibition

We hoped that this activity could help our colleagues get to know each other better and build a diverse and inclusive environment that helps our colleagues feel a sense of belonging.

We hosted our first migrant worker photography exhibition in 2023 as a prelude to integration of diverse cultures. We hoped the theme of the exhibition, “Moving Rooms and Homes,” could ease feelings of homesickness in our migrant workers. These photographs also served as a window for other colleagues to experience the hometowns of our migrant workers and understand their longing for home. The satisfaction score with the activity was 4.52 out of 5 points.

In 2024, we hosted the Lights & Shadows migrant worker photography exhibition. As the exhibition for the previous year received great acclaim from colleagues, we expanded the photography exhibition for this year to three factories. Last year, we focused on easing homesickness in our migrant workers. This year, we wanted our colleagues to share stories of their hometowns through their photographs to strengthen ties between all colleagues. This activity was combined with an online exhibition as well as an online vote which attracted 852 participants and served as a basis for selecting the most popular entry. The satisfaction score with the activity was 4.56 out of 5 points. This activity not only encouraged all migrant workers who submitted entries, but also encouraged other colleagues to better understand our migrant workers using a different perspective. Last year, many of our colleagues told us the exhibition was a great event. This year, many local colleagues were moved by this event and told us that they had never realized that many of the things we take for granted in our everyday lives look so special to others. The perspectives of our migrant workers revealed unexpected and unique ideas, and we felt a stronger sense of understanding and resonance among our colleagues.



Outstanding photographs at the migrant worker photography exhibition-1

Feedback from our colleagues

Colleague 1: I liked every photograph and all the stories about everyone's hometowns, which moved me very much

Colleague 2: Creating and sharing wonderful memories here in Taiwan is a big privilege. Thank you for creating this idea.

Annual Agency Audits

To ensure the rights of migrant workers, regular agency audits are conducted in accordance with domestic and foreign human resource agency management regulations, and we strive to provide our migrant workers with comfortable environments. In 2024, we strengthened non-periodic audits on dormitories and agency-conducted satisfaction surveys indicated that the satisfaction score for our improved dormitory environments following audits were 3.85 out of 5 points. Agencies review dormitory environments and related documents during audits to ensure that the Ennostar Group is implementing human rights and friendly workplace policies.

Achievement Highlights

Care for migrant workers

In April 2024, our subsidiary EPISTAR received a certificate of appreciation from the Manila Economic and Cultural Office. Baguio Silieta Pahugot, a migrant worker at EPISTAR, was diagnosed with lung disease in May 2023. Her condition became so severe that she needed a ventilator to breathe, and she was also diagnosed with tuberculosis and transferred to the intensive care unit. Her employment permit expired on September 14, 2023, so EPISTAR assisted said worker in applying for unpaid sick leave and submitting an application to the National Immigration Agency to extend her residence permit. This enabled our colleague to reside legally in Taiwan during the duration of her treatment; we also transferred her health insurance to the district office so she could significantly reduce her medical costs. Although our colleague was eligible to receive corporate group insurance and health insurance payments, EPISTAR displayed care and empathy towards her personal economic conditions, and provided NT\$101,000 in condolence payments on December 25, 2023 to help her with medical and living expenses. While our colleague was hospitalized, EPISTAR kept up her spirits by organizing multiple visits from her family members, who lived overseas. Our colleague finally recovered from her illnesses after being bedridden for 11 months. After the hospital discharged her for recuperation, the airline company cleared her to fly back to her home in the Philippines.

This case received great acclaim from the Filipino government and the Manila Economic and Cultural Office (MECO) and received positive coverage by Filipino media outlet Business Mirror. EPISTAR was named “the best company in the industry” and was invited to receive a certificate of appreciation from the Filipino Economic and Cultural Office in Kaohsiung.

<https://businessmirror.com.ph/2024/04/10/taiwan-firm-lauded-for-humanitarian-deeds/>



Scan the QR code to
view media coverage

Quarterly Migrant Worker Meetings

Apart from existing corporate communication channels, we also listen to feedback from our migrant workers through quarterly meetings hosted in migrant worker dormitories, which not only promote important corporate information, but also strengthen understanding of migrant workers through interviews to ensure that all colleagues are receiving fair treatment.

Achievement Highlights

Selection of outstanding employees

Apart from retaining migrant workers, the Ennostar Group also strives to achieve diversity and inclusion so that outstanding colleagues of all nationalities can be recognized. EPISTAR migrant worker ALMODOVAR MA. CRISTINA CASTILLO received the Southern Taiwan Science Park Excellent Park Employee in 2024. Candidates for this award were first nominated by company managers for election within each company (the chance of being elected was 0.5%). Company-selected candidates were then nominated to the science park administration. EPISTAR nominated 18 employees, 5 of which ultimately received this award. After receiving the award, ALMODOVAR MA. CRISTINA CASTILLO said, “Living in Taiwan for 9 years has not been easy for me, but I am thankful I have met many friendly colleagues at EPISTAR, and I thank the company for believing in my capabilities and helping me to receive this award.”

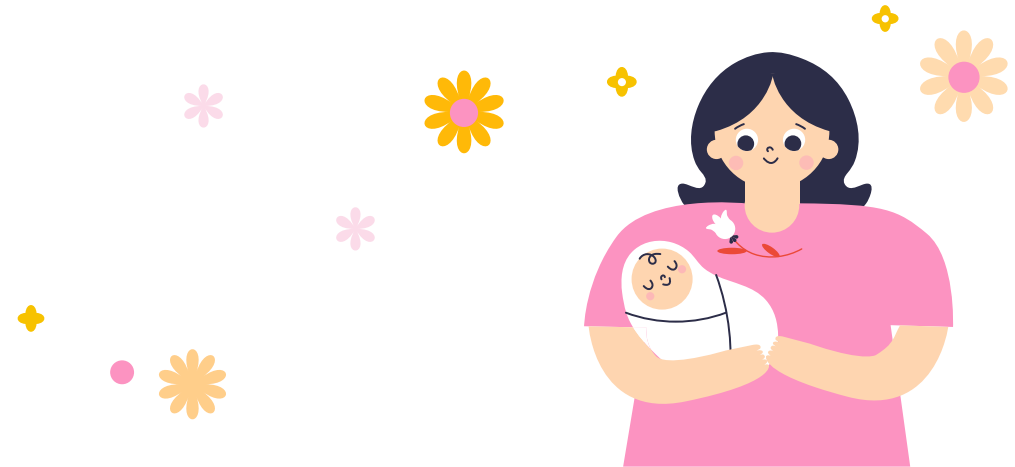


Excellent Park Employee:
ALMODOVAR MA. CRISTINA CASTILLO

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.

Employee maternal protection and care services include the following:



Dedicated cleanroom clothing/ Pregnancy parking

- Dedicated yellow cleanroom clothing
- Designated parking spaces closest to exits for pregnant employees so they can quickly and safely arrive at work.



Welcoming Babies initiative

To ensure that pregnant employees receive timely health protections in the workplace, our operational departments proactively notify the health center when they learn that female employees are pregnant so the health center can initiate related assessments and protections. The human resources department also provides the names of colleagues who have applied for pregnancy checkup leave and tocolysis leave so the health center can provide maternal protections and arrange for consultations with on-site doctors. As part of our plan to build a friendly, healthy, and happy workplace, our pregnant colleagues can collect a pregnancy gift from our health center by showing their mother's handbook.

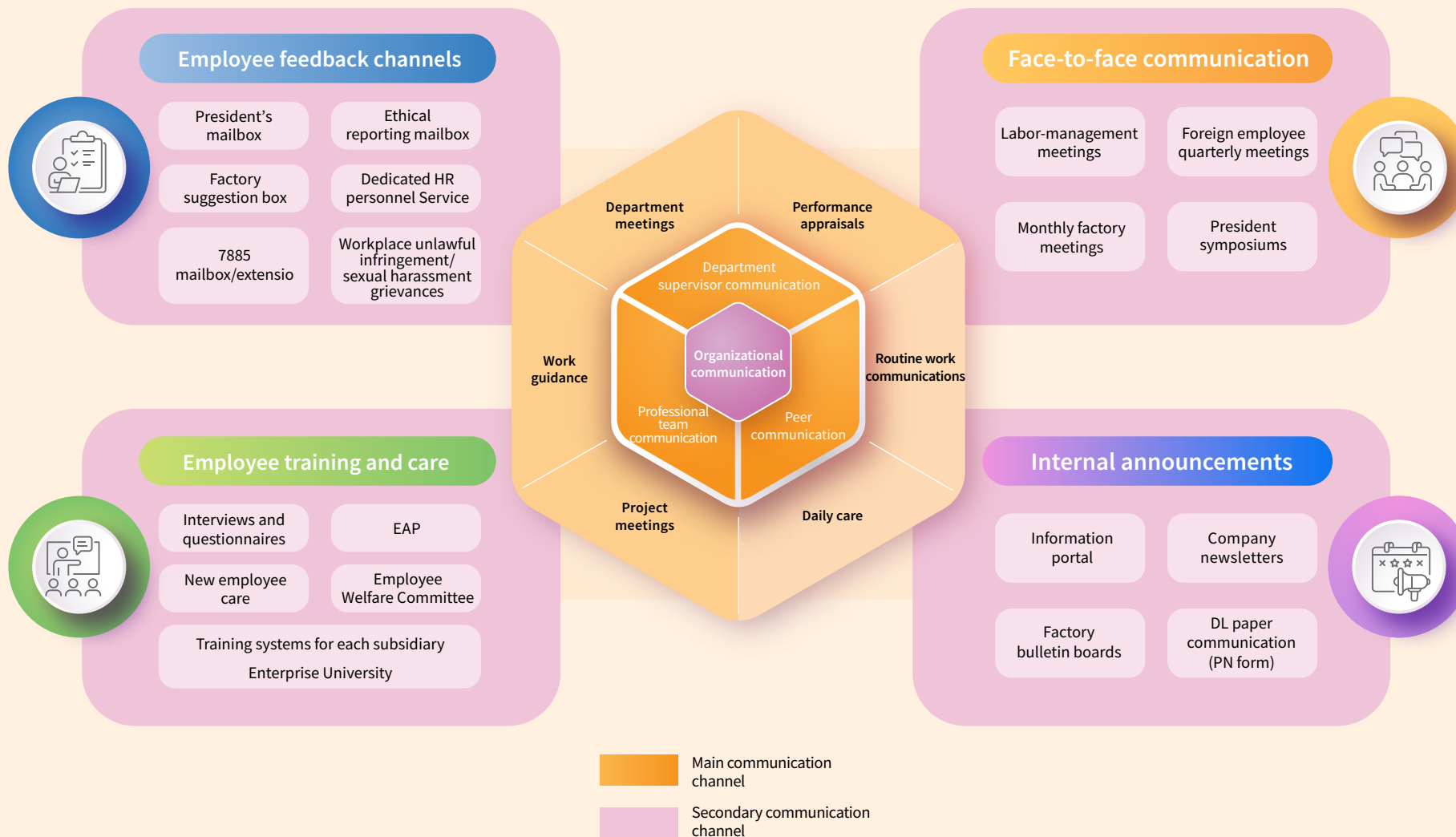


Women's health activities

To protect the health of female colleagues, we host annual cancer screenings for women which are covered by health insurance as well as paid health examinations to give our female colleagues a convenient and rapid means of undergoing Pap smears, transvaginal scans, breast ultrasounds, and mammograms.

Employee Communication

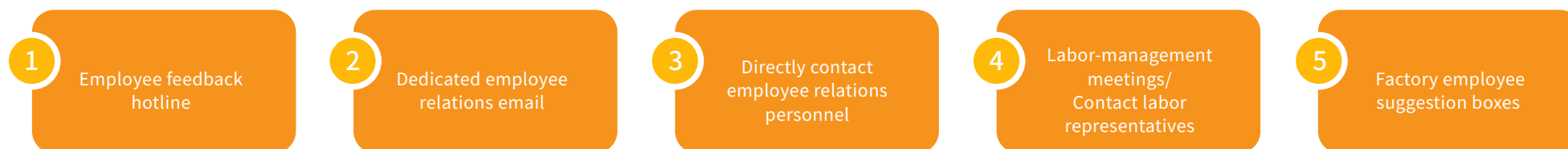
Employee Feedback Channels



The Group's 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. We 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 2024, 100% of received reports were resolved.

Five main grievance channels



Six grievance handling procedures



- Reporting system for professional ethics violations on corporate website
- Intranet president's mailbox, with letters personally read by the president. We have also designed a system which keeps sender IPs confidential, and our production line and factory suggestion boxes are placed in locations which cannot be seen by surveillance cameras so the rights of our colleagues are protected when they make anonymous reports.
- Dedicated employee relations units provide bilingual online mailboxes and hotlines, and we responded to received suggestions and tracked improvements in 2024 by conducting one-on-one meetings with 67 employees.
- Our president hosts quarterly "communication meetings" (EPISTAR business briefing session/Lextar Talk) and invites vice presidents from all centers to conduct on-site discussions with colleagues and answer questions submitted anonymously. Continued and open interactions enable effective communications when implementing organizational strategic goals.
- Group electronic publications: The Ennostar Chairman began issuing monthly newsletters to colleagues to convey important corporate information starting in June 2023. Major corporate incidents, received awards, corporate management updates, and tasks that require joint implementation by Group employees are communicated in real time using these monthly electronic newsletters. In October 2024, we began issuing quarterly Group electronic publications that convey corporate information and culture from senior executives to all employees; the publication also has an ESG column to help our colleagues better understand core values of Group sustainable development implementations.

Labor-Management Communication

Although the Ennostar Group currently has no labor unions, 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, and we convene special labor-management meetings as necessary to facilitate real-time communications. 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	Frequency
Labor-management meetings	Ennostar, EPISTAR, Lextar, Unikorn	64	Once every quarter at each factory
Description 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.			

Quarterly Migrant Worker Meetings

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



Employee Engagement Surveys

The Ennostar Group continues to optimize employee experiences and strengthen employee engagement. To enhance employee cohesion and organizational commitment, we began conducting employee engagement surveys in our factories in Taiwan starting from 2022. In 2023, we distributed bilingual Chinese and English surveys to all employees in Taiwan. In 2024, we expanded survey scope to all employees in Taiwan and overseas. The employee experience (engagement) survey included five aspects (employee career development, job roles, workplace environments, leadership and management, and welfare measures) and enabled us to better understand employee perspectives. We formulate improvement measures based on analysis results to strengthen organizational efficiency within the Ennostar Group. Analysis results showed that the overall satisfaction score was 4.17 out of 5 points.

Employee engagement scores were incorporated into ESG performance indicators linked to variable compensation for senior executives in 2024.

Employee engagement results for 2024:

Results of the employee engagement survey for 2024 showed that employees hoped for active feedback and prospective development opportunities. To ensure clear delivery of top-down strategies so all colleagues at all levels understand our corporate strategies, we plan to continue organizing briefing sessions reminding managers to disseminate information to department colleagues in 2025. We will also recognize outstanding employees and teams that align with our core values.

To build effective tracking and feedback channels that help senior executives keep informed of progress on strategy implementations, we will continue to conduct annual employee interviews and employee experience surveys as well as optimize performance management systems. We also provide engagement survey results to all department managers to serve as a reference for adjusting internal management measures. We hope these measures can enhance employee passion and commitment toward their work while achieving corporate goals and missions.

	Ennostar			EPISTAR				Lextar			
	2022	2023	2024	2022	2023	2024 Taiwan	2024 Overseas	2022	2023	2024 Taiwan	2024 Overseas
Employee Engagement	4.29	3.79	4	3.75	3.82	3.98	4.35	3.8	3.82	4	4.49
Active engagement rate (Note)	70%	37%	50%	44%	43%	55%	77%	37%	43%	56%	45%

Note Number of people who gave a score of 4 points or above/Number of completed responses

Employee Activities

Heartwarming Ennostar Christmas Week

At the end of the year, the Group organized a two-week Christmas market event at eight factories across Taiwan. This year, the market was open from four in the afternoon to eight in the evening so that both day-shift and night-shift employees could enjoy the festivities. Our A1/T01B factories had other tenants that helped to enhance the friendly atmosphere of the Christmas market. We invited partners from other floors in our buildings to join this Christmas event, which included a scavenger hunt, homemade iced cookies, and market vendors. Participants who completed the scavenger hunt received NT\$100 coupons which could be used for purchasing items on site.

Participation rate

29.7%

1,227

registered participants

(not including colleagues who participated in but did not register for the activity)

Activity
satisfaction score

4.5

- **Charity support:** We invited Yu An Retarded Children's Home Miaoli, R.O.C. to share their homemade cookies, which received great praise. We supported this institution with practical actions and empowered early intervention subjects to continue building virtuous cycles.
- **Paper-free measures:** Our subsidiary Lextar took the lead in adopting a paper-free registration system for 331 people.



Happy EPISTAR

To thank EPISTAR colleagues for their work contributions, we collaborated with Taitung County Farmers' Association and gifted festive red quinoa snacks to these employees to demonstrate the Ennostar Group's support for local agricultural goods. We organized a two-week virtual reality (VR) puzzle game at all factories based on "Age of Light" so that all our colleagues could visit different factories and experience fun VR games during their free time. Colleagues who solved all puzzles could participate in a raffle for NT\$200 Family Mart gift cards, enhancing their experience of the event.

The satisfaction score for
the VR puzzle event was

4.11

out of 5 points

There were

730

attendees

(participation rate: 24.6%)

417

people (57.1%) completed
the VR puzzle event.

Lextar Sixteenth Anniversary

- **Online activity:** We organized a fun photo check-in activity and invited our colleagues to jointly welcome Lextar's sixteenth anniversary and promote organizational cohesion.
- **Physical activities:** We organized four scavenger hunt activities corresponding to the four elements required for sports (muscle strength, balance, speed, and reflexes) so our colleagues could look at sport from a different perspective while participating in these innovative competitions. Many employees invited their colleagues to participate in these activities, and we saw a different side of our usually serious colleagues, some of whom were actually amazing sharpshooters or musclemen. Much admiration, surprise, and joy was expressed during this event, which concluded successfully, providing our colleagues with a chance to relax their minds and bodies.

Activity participants

342

people

Activity satisfaction rate

96.2%

Occupational Health and Safety

Corresponding SDGs



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

Occupational Health and Safety Management

Material
Topic

Occupational Health and Safety

Indicators	Applicable Scope	2024		Target for 2025	Target for 2026	Target for 2030
		Achievement	Target			
Number of major deficiencies discovered during external ISO 45001 and CNS 45001 management system audits	EPISTAR, Epicrystal, Episky, Can Yang *	✓ 0	0	0	0	0
Establish a safe operational environment: Improvement rate of employee proposals on unsafe environments **	EPISTAR, Epicrystal, Episky, Can Yang ***	✓ 100%	100%	100%	100%	100%
ERT team emergency response training qualification rate at three factories	Epicrystal, Episky, Can Yang	✓ 100%	100%	100%	100%	100%
Number of penalties imposed by labor authorities	EPISTAR, Lextar Electronics	✓ 0	0	0	0	0
Number of severe industrial safety incidents ****	Lextar/Lextar	✓ 0	0	0	0	0
Disabling injury frequency rate (FR) *****	Lextar, Lextar Electronics, EPISTAR, Epicrystal, Episky, Can Yang	✓ Lextar: 1.15 Lextar Electronics: 1.58 Episky: 1.15 Epicrystal: 0.6 Can Yang: 0	Lextar: <1.84 Lextar Electronics: <1.79 Episky: <1.84 Epicrystal: <1.17 Can Yang: <0.96	Lextar: <1.69 Lextar Electronics: <1.75 Episky: <1.69 Epicrystal: <0.62 Can Yang: <1.34	Lextar: <1.54 Lextar Electronics: <1.75 Episky: <1.54 Epicrystal: <1.54 Can Yang: <1.54	Lextar: <0.87 Lextar Electronics: <1.69 Episky: <0.87 Epicrystal: <0.87 Can Yang: <0.87
Disabling injury severity rate (SR) *****	Lextar, Lextar Electronics, EPISTAR, Epicrystal, Episky, Can Yang	✓ Lextar: 2 Lextar Electronics: 15 Episky: 2 Epicrystal: 0.6 Can Yang: 3	Lextar: <21 Lextar Electronics: <20.8 Episky: <21 Epicrystal: <1.17 Can Yang: <4.6	Lextar: <20 Lextar Electronics: <20 Episky: <20 Epicrystal: <0.62 Can Yang: <4.96	Lextar: <19 Lextar Electronics: <20 Episky: <19 Epicrystal: <1.54 Can Yang: <19	Lextar: <18 Lextar Electronics: <18.2 Episky: <18 Epicrystal: <0.87 Can Yang: <18

Responsible
unit

All subsidiary occupational safety units, health management units

* CCNS 45001 only applies to EPISTAR

** Formula: Number of improvements/Number of proposals * 100%

*** Epicrystal, Episky, and Can Yang added this goal starting from 2025

**** Definition of major industrial safety incidents: Lextar Electronics: Disabling injuries resulting in 105 or more lost work days; Lextar: Incidents that resulted in fatalities, where the number of victims was equivalent to or more than 3 persons, or where the number of victims was equivalent to or more than 1 person that required hospitalization.

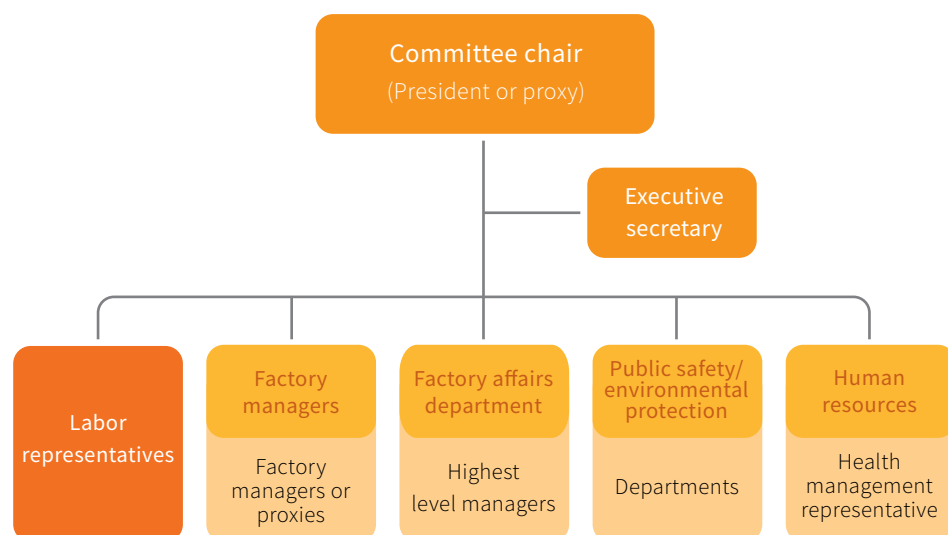
***** Disabling injury frequency rate: Number of occupational injury cases x 1,000,000 / Total work hours; temporary workers were excluded.

***** Disabling injury severity rate: Total number of days lost to disabling injuries x 1,000,000 / Total work hours; temporary workers were excluded.

The Ennostar Group strives to promote a culture of health and safety which uses a comprehensive occupational health and safety management system to protect the health and safety of all employees and contractors, thereby preventing occupational injuries and diseases. We established the “EHS Management Manual” and “Environment, Health and Safety Principles,” and also formed the “Environment, Health and Safety Committee” in accordance with ISO 45001, ethical and human rights codes of conduct, local regulations, EHS system regulations (ISO 14001, ISO 45001, CNS 45001) to implement identification, assessment, and control of work environment and operational hazards. All departments conduct analysis of health and safety hazards so we can keep informed of hazards in production processes, factory systems, equipment, and all operations, and can actively prevent occupational hazards and achieve occupational health and safety goals.

Occupational Health and Safety Committee

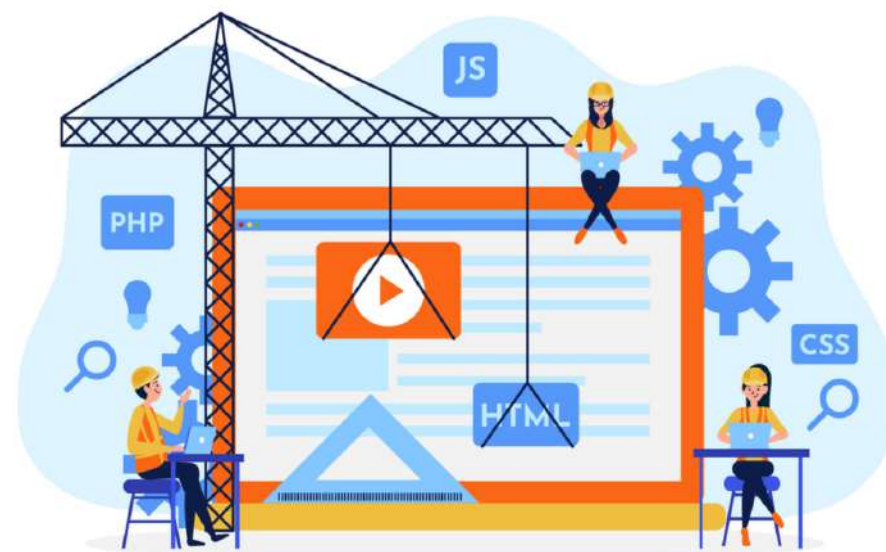
All Group subsidiaries have established environment, safety and health (ESH) committees to discuss and coordinate ESH matters, formulate targets, and continue to promote improvement plans. We have established complete contractor management regulations as well as hazard identification, risk assessment, 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.



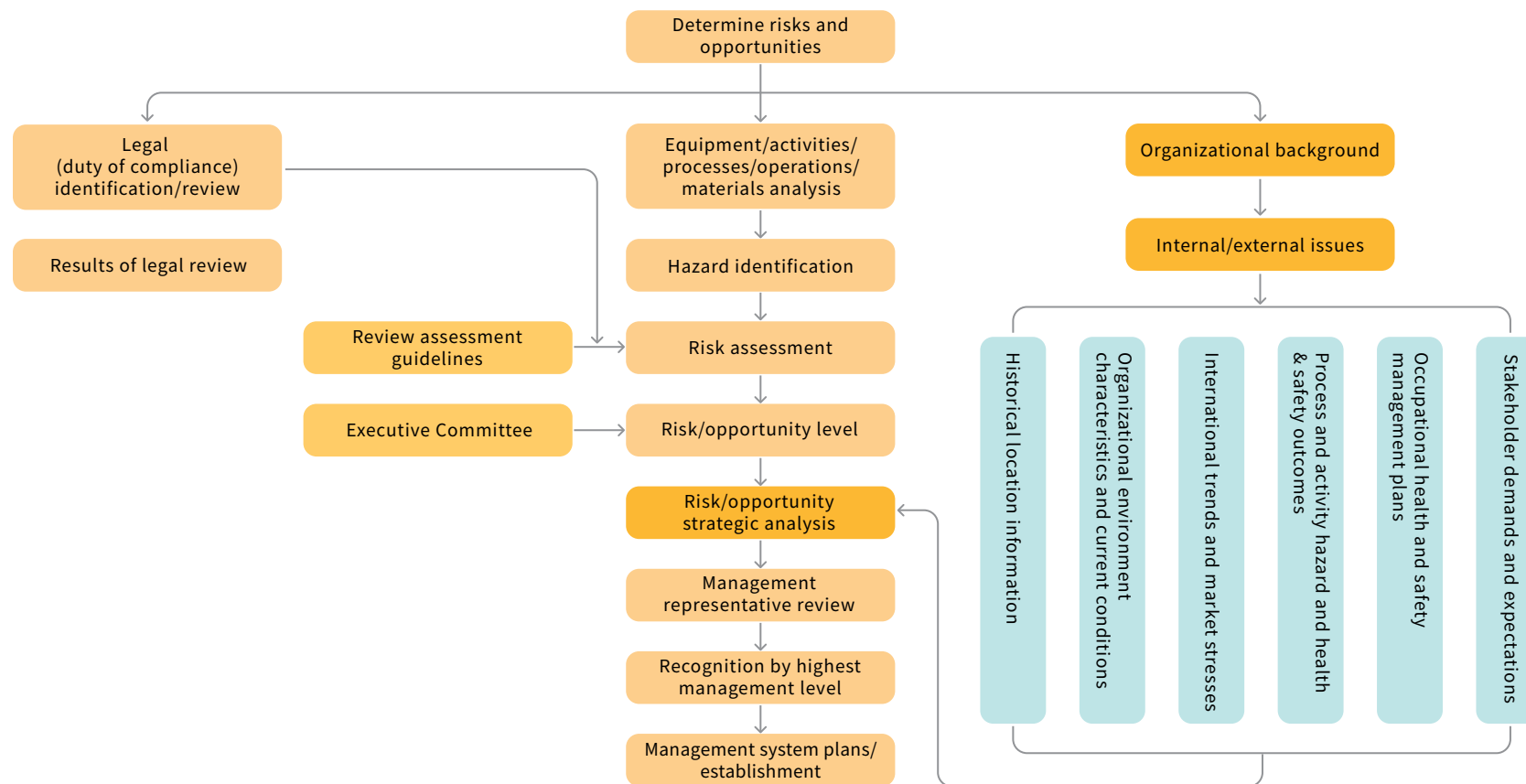
The Group’s ESH Committee is convened each quarter by presidents or proxies. Factory-level ESH committee meetings are convened at least once every month by factory managers and meeting conclusions are applicable to all factories. Meeting attendees include committee members such as factory managers or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

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.



Processes for determining and handling risks and opportunities



Internal and External Audits

To ensure that our ESH activities adhere to ESH management systems (ISO 45001 and CNS 45001), regulations, corporate policies and goals, and related processes, the Group formulated annual internal audit plans in accordance with the “Environment, Safety, and Health Internal Audit Execution Procedures.” By implementing the Plan, Do, Check, Action processes of our ESH management system, we can discover existing and potential problems in advance, control risks, enhance system efficiency, assess overall benefits of ESH operations, and provide a reference for managers. We implement internal audits of management systems each year in accordance with the requirements of the “Environment, Safety, and Health 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 2024, internal audits at all factories discovered 0 major deficiencies, 32 secondary deficiencies, and 42 suggestions. All Group subsidiaries have passed ISO 45001 independent third-party verifications, and EPISTAR has also passed CNS 45001 external verifications. No major deficiencies were discovered during external audits (government, ISO 45001, RBA, and client audits) conducted in 2024, and all (100%) audit deficiencies and suggestions have been improved and resolved.

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” to be adopted following incident occurrence. Incident investigations are conducted with labor representatives to discover 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.*



Emergency Response Mechanisms and Drills

The Group has formulated “ESH Emergency Response Procedures” to implement tiered management, dividing response units into head office levels and factory levels. If abnormal incidents occur in factories, initial responses are made on site. If subsequent responses are needed, we rapidly complete notifications and initiate emergency factory response measures. In the event of incident scope expansion, we initiate head office response organizations that respond to various situations based on their duties.

These emergency response procedures apply to all employees and contractors at all factories, and we conduct at least one factory-wide emergency response drill every 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 emergencies do not expand to the entire factory. In 2024, we conducted a total of 169 emergency response/disaster response/evacuation drills covering electric shocks, fires, earthquakes, occupational disasters, chemical disasters, storm prevention, mechanical injuries, and chemical warehouse theft and robbery prevention. 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.

All of our ESH personnel have obtained occupational health and safety certification and qualifications. We conduct annual training and certification procedures for internal ESH auditors, and also undergo internal audits of ESH systems at least once every year.



Factory emergency response drills

* 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.

Management of Work-Related Injuries

The Group attaches great importance to safe workplace environments for employees and contractors. To prevent occupational disasters, our ESH department implements periodic and non-periodic ESH investigations, and invites managers ranking above factory department supervisors to participate in monthly ESH investigations. Deficiencies are recorded by responsible units, who also assess related correction and response periods; all deficiencies are tracked until they have been corrected.

Region		Factories in Taiwan		Factories in China		Total
Gender		Female	Male	Female	Male	
Occupational disasters	A Number of injured personnel	5	4	4	6	19
	B Number of fatalities	0	0	0	0	0
C Number of high-consequence work-related injuries		0	0	0	0	0
D Total number of employees		1,929	2,136	1,203	2,274	7,542
E Total number of work-related injuries (=A+B)		5	4	4	6	19
F Total work hours (=D*8*T)		3,858,000	4,272,000	2,415,624	4,566,192	15,11,816
G Occupational injury rate (=E/F*200,000)		0.03	0.02	0.03	0.03	0.10
H High-consequence work-related injury rate (=C/F*200,000)		0.00	0.00	0.00	0.00	0.00
I Total days away from work		16	51	46	60	173
J Total employee-days (=D*T)		482,250	534,000	301,953	570,774	1,888,977
K Absence rate (=I/Jx100%)		0.00%	0.01%	0.02%	0.01%	0.01%
L Lost workdays		24	53	46	60	183
M Lost workday rate (L/F*200,000)		1	2	4	3	2

Note In 2024, the actual number of work days was 250 in Taiwan and 251 days in China.

Statistics on Occupational Injuries*

In 2024, the Group's employees incurred 19 work-related injuries, none of which were high-consequence work-related injuries. The main injury types included falls and cuts, and there were no fatalities. After occupational injury incidents occur, we explain improvement measures to the health and safety committee, strengthen disseminations related to these work-related injuries, and inspect the locations where injuries occurred and the equipment that caused the injuries to prevent similar injuries from reoccurring.

Work-Related Ill Health

No work-related ill health incidents or mortalities occurred at our factories in 2024.**

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 so 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 plan to provide convenient assessment and improvement tools that will help us develop pragmatic improvement and management strategies to reduce impacts on workers.

* The actual number of working days in Taiwan in 2024 will be 250, while the actual number of working days in mainland China will be 251.

** Diagnosis certificates from a hospital occupational medicine specialist are required to confirm work-related ill health incidents. 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).

Enhancing Safety Awareness

Occupational Health and Safety Training

The Group organized 359 occupational health and safety training courses in 2024, including response training courses (fire and disaster prevention drills, general knowledge of hazards, emergency evacuation drills, first aid training, chemical spill training), on-the-job training, and occupational safety certification training. 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, ensuring that our migrant workers fully understand how to implement occupational safety procedures and prevent hazards.

We also organized company-level safety education training courses and activities such as the Lextar Electronics “Hidden dangers of electrical safety: Converting electrical outlets” and “Occupational health and safety trivia competition.”

The Group actively participates in government-organized ESH activities, including by participating in disaster prevention and rescue drills, and by co-hosting the 2024 Hsinchu Science Park Occupational Safety and Environmental Protection Month Emergency Response Activity,” joining forces with the government in maintaining and improving occupational safety.

Occupational Health and Safety Competitions

Lextar Electronics Occupational Health and Safety Trivia Competition

Our colleagues formed teams to join the second Lextar Electronics occupational health and safety trivia competition. Prize money was awarded to the best teams and individuals. This activity integrated education and entertainment to enhance safety awareness in our colleagues.



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 ESH competitions and other fun activities to enhance safety awareness in employees.

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.

Corrected 3 chemical hazards

- Classified and segmented empty waste liquid bottles
- Replaced parts on aged and damaged bench panels
- Established warning signs for PT cleaning process to prevent other personnel from entering process areas

Corrected 1 other abnormality

- Changed rusted wires in safety switches and used silicon seals to prevent damp

Corrected 12 physical injury risks

- Removed broken lattice wall
- Prevent crush injuries: Added sensors
- Prevent personnel falls/slips: Relaid plastic panels, improved pipelines to prevent slips, and secured pipelines
- Cleared mud on sidewalks
- Cleaned tank doors and added safety locks

Corrected 4 fire abnormalities

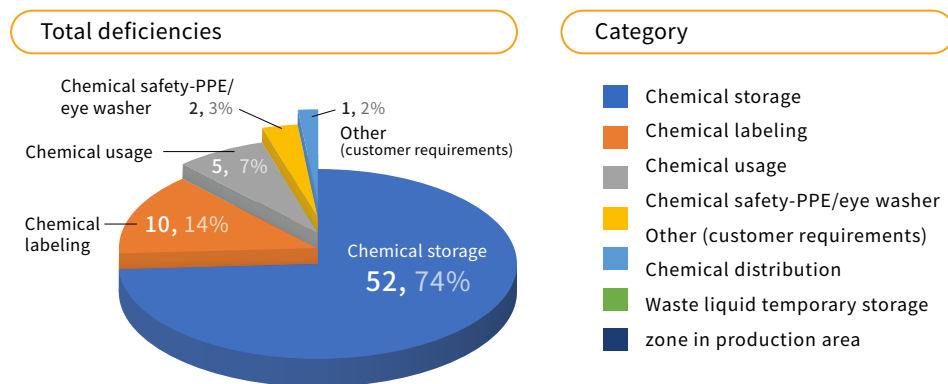
- Replaced MO with self-dumping high-performance dust collector
- Added smoke channels and vertically mounted steel canisters and pipes
- Adjusted MO experiment component locations for operational ease and to reduce risks
- Replaced PT filter materials with steel wire materials

Corrected 2 abnormal gas leaks

- Improved exhaust connection locks
- Changed gloves and airtight O-Rings for specification alignment

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



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 information on violations to serve as a reference for assessing and selecting contractors in future.

Apart from informing contractors of high-risk operational hazards before they entered factories, EPISTAR also strengthened contractor awareness of hazards through online courses. Contractors must obtain full scores on these courses before entering sites. Our implementation rate in 2024 was 100%.

Looking to the future, the Group will continue to focus on different aspects and issues, and strive to build safe and healthy workplace environments for all employees.

Digitalization and automation applications

- Smart technologies: IoT, AI, and data analytics have become important tools for improving occupational health and safety efficiency. Sensors can be used to monitor environmental data and robots can replace humans on dangerous tasks to reduce work-related injury rates.

Remote and flexible work environments

- Increased prevalence of remote jobs is drawing attention to occupational health and safety issues (including mental health, musculoskeletal injuries, and digital fatigue) at home and in non-traditional workplaces.

Mental health and workplace well-being

- Management of work pressures, anxiety, and burnout have become important topics. Employers need to enhance support for mental health as well as create inclusive and healthy work environments.
- Comprehensive mental health education and resources to promote psychological security in employees.

Green workplaces and sustainability

- Increasing interest in environmental issues, combined with workplace health and sustainability goals, will create more green buildings and health-oriented designs.
- Reduce use of harmful chemicals and promote green ecological workplace transformations

Responses to emerging risks

- Emergence of new technologies such as battery technologies and nanomaterials mean that occupational health and safety measures need to consider emerging risks such as chemical exposure, radiation, and hazards from robot collaboration.
- Improve response capabilities to new diseases and epidemics (such as COVID-19) and strengthen biosafety protections.

Education and professional development

- Strengthen capability training for occupational health and safety personnel, particularly focusing on applications of new technologies and digital tools.
- Promote interdisciplinary collaborations to improve occupational health and safety research and practical standards.

* 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 ESH training for joint protection of factory safety.

Health Promotion*

Material
Topic

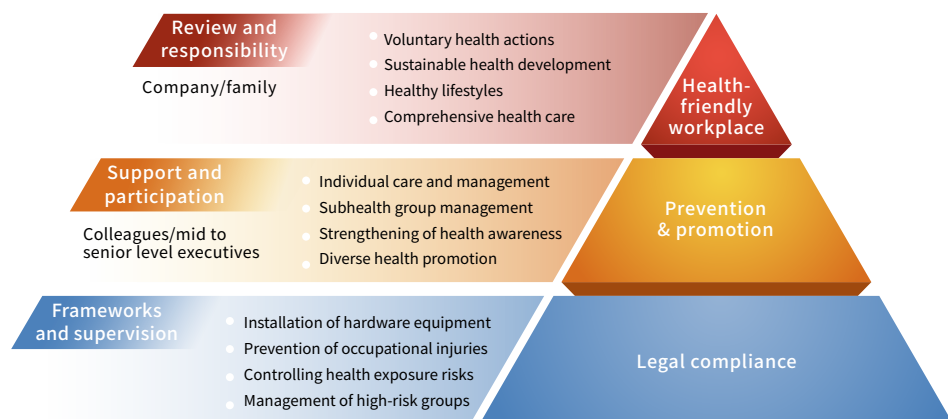
Occupational Health and Safety

Indicators	2024		Target for 2025	Target for 2026	Target for 2030
	Achievement	Target			
Management rate for groups at risk of occupational health hazards	✓ 100%	100%	100%	100%	100%
Number of health promotion events	✓ 8 events	4 events every six months	4 events every six months	4 events every six months	4 events every six months
Accredited Healthy Workplace certification rate	✓ 100% certification	100% certification	100% certification	100% certification	100% certification

Responsible
unit

Group health management units

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.

The Group has 9 factories which have obtained Accredited Healthy Workplace certificates from the Ministry of Health and Welfare Health Promotion Administration. We continue to promote employee health care action plans using diverse health management strategies and comprehensive care measures to promote employee physical and mental health so we can achieve long-term health sustainability developments while building a friendly, inclusive, and caring workplace environment.

Health sustainability developments

- Continued health examinations and prevention measures: Regular annual health examinations, three-in-one screening test for women, lung/coronary computed tomography scan, and subsequent tracking and health improvement suggestions to prevent major diseases.
- Health resource integration and optimization: Integrate internal and external health service resources on an employee health information platform to improve convenience and coverage rate of health services.

Comprehensive health care

- Health promotion activities: Regular organization of Mother's Day and Father's Day massage activities as well as flu vaccinations to care for the health of employees and their families.
- Stress management and psychological support: We provide psychological counseling and stress relief courses to help employees build psychological resilience and maintain mental health.

Strengthening health awareness

- Health lectures and education: We regularly organize health lectures covering prevention of chronic diseases, nutritional management, and prevention of work-related ill health to improve employee health awareness.
- Health information promotion: We use newsletters, internal announcements, and internal platforms to regularly share health information and practical tips that help our employees master techniques for self-management of their health.

Prevention of work-related ill health

- Work postures and environmental improvements: We promote correct work postures, encourage regular exercise, and also provide guidance and solutions to improve musculoskeletal disorders and other common problems in the workplace.
- Environmental hygiene management: We regularly maintain hygiene of workplace environments to reduce risks from work-related ill health and infectious diseases.

Assessment of health management effectiveness

- Tracking of health indicators: We established employee health indicators and regularly assess effectiveness of all health measures to serve as a reference for future improvements.
- Employee satisfaction surveys: We used surveys and feedback mechanisms to collect employee suggestions on health services for continued optimization.

* The reporting scope for this chapter only encompassed factories in Taiwan.

Health Care Activities in 2024

Category	Indicator	Description	Achievements in 2024 *
Physical examinations	Three-in-one screening test for women	To protect the health of female colleagues, we host annual cancer screenings for women which are covered by health insurance as well as paid health examinations to give our female colleagues a convenient and rapid means of undergoing Pap smears, transvaginal scans, breast ultrasounds, and mammograms.	177 participants Overall satisfaction: 95%
	Lung/coronary computed tomography scan	To implement preventive medicine concepts, the Hsinchu Science Park Clinic began collaborating with Min-Sheng General Hospital in Taoyuan starting in 2017 to offer free low-dose lung CT scans (LDCT). We added coronary artery calcium (CAC) score tests in 2024 to convey care and concern for employee health. Apart from a number of free examinations provided at Min-Sheng General Hospital, we also provided a NT\$2,500 subsidy to at-risk colleagues in Central Taiwan Science Park and Southern Taiwan Science Park to facilitate early detection and treatment.	163 participants
	Annual health examinations	To safeguard employee health, we arranged regular health examinations with examination frequencies and checkup items that exceed legal requirements (abdominal ultrasounds, LDL cholesterol tests, and uric acid tests). We covered all health examination costs (including breakfast on the day of the exam). Our health examinations were conducted by Chang Gung Memorial Hospital, a top-tier medical center. Employees engaged in special operations received annual specialized health examinations in accordance with regulations. Tiered management was implemented based on health examination results, with nurses arranging one-on-one health guidance, appropriate work allocations, and physician consultations as needed.	A total of 1,327 people were scheduled for special operations and general health examinations, and we achieved an health examination rate of 100%. No occupational diseases were discovered. A total of 26 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).
Massage activities	Father's Day massage activity	We organized a free massage event for Father's Day to thank our male colleagues for their hard work. Professional and licensed visually impaired masseuses provided massage services to relieve shoulder pain and fatigue in our male colleagues.	180 participants
	Mother's Day massage activity	We organized a free massage event for Mother's Day to thank our female colleagues for their hard work. Professional and licensed visually impaired masseuses provided massage services to relieve shoulder pain and fatigue in our female colleagues.	168 participants
Health promotion	Flu vaccination [Health lectures]	To ensure that our employees and their families were protected from contracting flu during the colder seasons, we encouraged them to receive flu vaccinations. We not only collaborated with hospitals to provide group discount prices, but also provided NT\$100 to each employee as a vaccination subsidy. Collaborating hospitals provided on-site vaccinations to our employees at our factories, but family members were required to visit the hospitals to receive their vaccinations. Registration procedures were completed online, with fees directly taken out of employee salaries for convenient payment.	385 participants Satisfaction score: 97%
	New trends in precision medicine: Gene testing Brain health in the AI era Visual health clinic	These lectures aimed to help our colleagues understand the latest trends and applications in modern medicine. Professional physicians spoke on the practical value of "precision medicine" and "AI use in medicine," as well as the importance of visual health. Advances in gene testing technologies enable early detection of many diseases and active prevention of cancers in a new era of precision medicine. Developments in AI technologies have also made it possible to monitor brain health and interpret emotions, thoughts, and other slight changes in brain activity. As use of electronic products is increasing, physicians also shared their emphasis and techniques for visual care. These health lectures helped our colleagues keep informed of new health management concepts and prepare for future health techniques.	441 participants Satisfaction score: 96%

* All satisfaction scores were scored out of 100 points.

Mental Health Care-EAP

The Ennostar Group has operated EAP services for 14 years. We distribute EAP cards to all employees so they can contact us according to their needs, and we also issue regular EAP newsletters and organize lectures covering topics such as physical and mental health, social interactions, laws, and finances. In 2024, a total of 2,483 people took advantage of our two counseling sessions and the service received a satisfaction score of 92.1 points.

Achievement Highlights

Ennostar Group Sports Day Event

The Ennostar Group encourages colleagues to develop exercise habits. This year, we organized the first Group Sports Day event to thank our colleagues for their hard work and help them achieve work-life balance. This event brought families together through sports activities. We designed a wide range of engaging activities including team competitions, a play area for children, DIY activities suitable for all ages, charity music performances, food markets, celebrity performances, and grand prize raffles, making sports day a joyful family event that extended far beyond sports. We also incorporated ESG concepts into all event components, implementing Group sustainability targets and making the event more sustainable.

To promote exercise habits and interactions in our companies, factories, and departments, we divided all employees in the Group into eight teams and launched a series of warm-up competitions across all factories in September to boost enthusiasm for the upcoming sports day event. On November 30, the day of the sports day event, all teams displayed sportsmanship and expended full efforts during the intense competitions, demonstrating strong teamwork and engagement across the Group.

The Ennostar Group's first sports day event not only presented physical fitness challenges, but also successfully promoted emotional interactions between Group personnel, enabling them to experience a deep sense of teamwork and collaboration within the Group. In future, we plan to carry forward this passion and unity to create a bright future for Ennostar!

Scan the QR code
Watch the Ennostar Group
2024 Sports Day



6

Social Prosperity

Social Prosperity



Social Prosperity

Corresponding SDGs



Material Topic	Social Prosperity			
Indicators	2024		Target for 2025	Targets for 2026 and beyond
	Achievement	Target		
Annual charity donations	NT\$1,049,800	Surpass previous year (Donated NT\$1,147,400 in 2023)	Surpass previous year	Surpass previous year
Annual charity procurements	✓ NT\$3,384,000	Exceed NT\$100,000	Exceed NT\$100,000	Exceed NT\$100,000
Annual material donations	✓ 289 items	Exceed 100 items	Surpass previous year	Surpass previous year
Annual optoelectronic safety knowledge promotion activities (Ennostar fun science activities/science education)	✓ 11 sessions/year	4 sessions/year	4 sessions/year	4 sessions/year
Art exhibitions	✓ 8 sessions/year	4 sessions/year	4 sessions/year	4 sessions/year
Participants in volunteer activities	✓ 248 participants	Exceed 100 participants	Surpass previous year	Surpass previous year
Responsible unit	Group Human Resources Center			

The Ennostar Group adheres to United Nations Sustainable Development Goals (SDGs) and is committed to realizing CSR/ESG social responsibilities. We continue to demonstrate our concern for society through charity donations, fair transactions, and care for the disadvantaged, combining internal corporate momentum and resources with external charity organizations to generate social values, and contribute to society through education and promotion, social participation, and sustainability actions.

We believe in social prosperity and have adopted social innovation concepts, strategic plans, and management models, working with external stakeholders to create positive social influence and achieve mutual prosperity.

Start green

Sustainable green actions

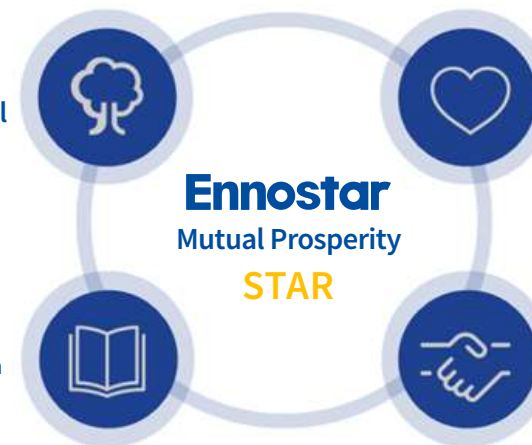
Environmental volunteers



Teachable

LED popular science education

Educational volunteers



Art promotion

Art creativity



Relation

Corporate citizens

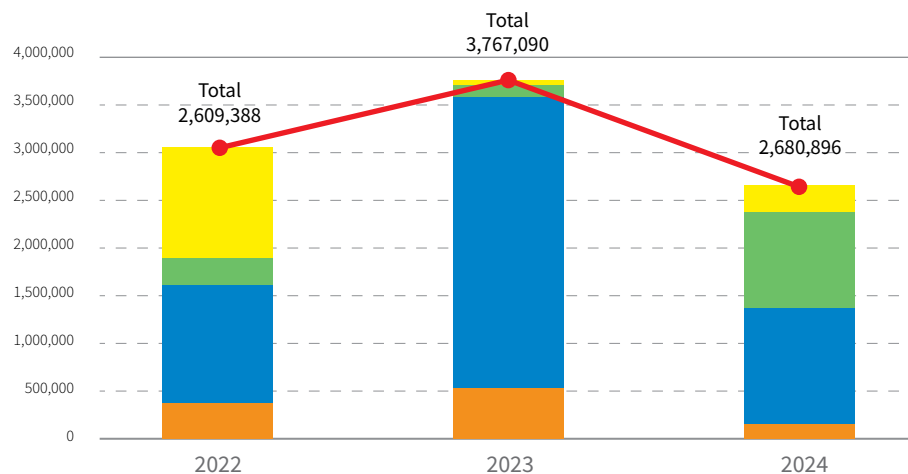


The Group aims to become “the brightest star in the industry.” In 2024, we took the “STAR” from the names of our three companies and established the STAR strategy for social prosperity, with the four development and promotion axes being S for Start green, T for Teachable, A for Art promotion, and R for Relation. This strategy encourages all employees and stakeholders to jointly engage in public welfare, social participation, and social alliances to foster a corporate culture filled with humanistic spirit.

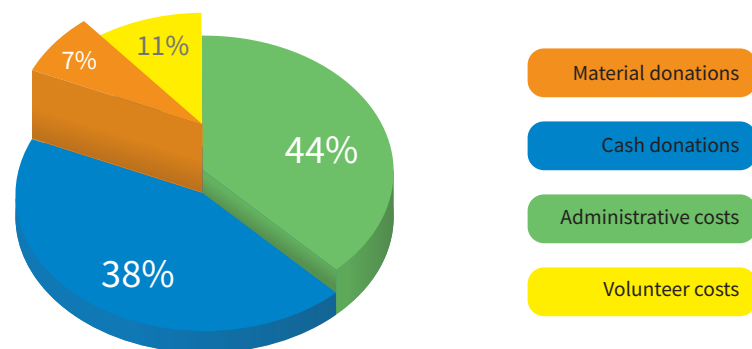


In 2024, the Group invested NT\$2,680,896 in social participation. *

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
2024	197,520	1,177,695	1,024,269	281,412	2,680,896



2024 Social Participation and Investment



* Not including charity procurements.

Cash and Material Donations

Donations to Elementary Schools

Since 2020, EPISTAR has provided annual donations of NT\$100,000 to Singuang Elementary School, Atayal Academy, Taixing Elementary School, and Puhe Elementary School, investing a total of NT\$400,000 in 2024.

Singuang Elementary School

Sponsored funds for schoolchildren lunches and dinners.

Atayal Academy

Supported Atayal children from Nahuy and Wufeng in spreading Atayal culture and language through music.

Taixing Elementary School

Provided students with a sound educational environment for learning about Atayal culture and sponsored transportation fees for students.

Puhe Elementary School

Sponsored soccer education projects.

Ennostar Dream Express

The Ennostar Dream Express linked charity activities within the Group:

- You Can Be Santa Claus:** Collected NT\$4,371,201 in donations from 2016 to 2024.
- Dreams Come True Project:** Focused on “child education” and “care for the disadvantaged,” supporting renovation of libraries and performing arts classrooms in rural elementary schools** to provide better learning environments for the next generation. We raised NT\$1,240,500 in 2024.
- Worked with World Vision International to collect 300 Christmas presents for disadvantaged schoolchildren.

** Hsinchu County Ruifeng Elementary School and Wufeng Elementary School



Charitable Procurements

The “Employee Welfare Committee—Charitable Procurement and Sustainable Selections” campaign was launched in 2022 to purchase high-quality products from charity organizations and stores upholding sustainability concepts. Our colleagues were able to redeem products using Employee Welfare Committee points, with shortfalls deducted from their salaries, making it convenient for our colleagues to purchase high-quality products while supporting social welfare organizations.

In 2024, we worked with Joyce-Polio Care Association Sheltered Workshop, Children Are Us Foundation, Eden Social Welfare Foundation, and AGRIC Social Enterprise. We also purchased peanuts and honey from local companies in Hualien to support post-earthquake economic recovery through practical actions. Our total charity procurements amounted to NT\$3,384,180. In future, we will continue to organize related activities, support public welfare through practical actions, and invite our colleagues to join us in spreading environmental sustainability concepts.



▲ Institutional Certificate of Appreciation



Heartwarming Procurements

EPISTAR has regularly hosted the “Happy EPISTAR” activity since 2022; products are purchased from social welfare groups and given to all employees as gifts. In 2024, we collaborated with Taitung County Farmers’ Association and selected “Taiwan Red Quinoa and Brown Rice Snack Bar,” a local agricultural product made from Taiwanese quinoa and brown rice, as a thank-you gift for our employees, using green procurement to support local agricultural products in Taiwan, with total purchases amounting to NT\$310,000.



▲ Purchased local agricultural product for corporate thank-you gift

Material Donations

The Group continues to organize Free Store events and encourage colleagues to donate materials while working with charity organizations such as Man Fair Social Enterprise and Garden of Hope Foundation to realize a circular economy. Over the years, we have collected a cumulative total of **1,472 items**.

The Group further collaborated with Be Kind to Animal Association and invited our colleagues to volunteer at Mother Wang’s Dog Shelter for half a day to help with cleaning and maintenance; we also donated 60 picnic blankets.

Spreading Love to Nursing Homes

In recent years, Lextar Electronics has organized many activities in collaboration with welfare institutions and nursing homes in Chuzhou. Employee clubs formed charity teams and headed out to welfare institutions and senior apartments in 2024 to call on senior residents, and donated a total of **RMB 7,560**.

Charity Project for Families

We remain steadfast in our commitment to public welfare, turning small kindnesses into great acts of love to provide support and warmth for those in difficult circumstances, giving them strength to move forward. Lextar Electronics (Chuzhou) has set up a charity foundation which raised **RMB 6,171** from employees and volunteers.

Optoelectronic Knowledge Promotion Activities

The Ennostar Group has many years of expertise in the optoelectronics industry and longstanding involvement in child welfare. We incorporated our industrial advantages with educational themes, curriculum content, and sustainability trends to select outreach focuses, and accompanied children in enjoying courses covering science and art in everyday life.

LED Popular Science and Sustainability Education

In 2024, the Ennostar Group officially launched the LED popular science and sustainability education project in collaboration with Friendly Seed. Active teachers were invited to design lesson plans, and two groups of schoolchildren who matched the teaching objectives were selected to experience these lessons, which focused on three key areas: (1) Professional R&D, (2) Elementary school science: Introduction to electricity, (3) Core competencies for elementary students (a series of activity units). LED popular science and sustainability education materials were designed in alignment with SDG 4 Quality Education and SDG 10 Reduced Inequalities.

To close urban-rural gaps, we selected 3 urban elementary schools and 3 non-mountainous, non-urban elementary schools for on-site promotion in 2024. We studied the cultures, student characteristics, venue sizes, and student needs of each school beforehand, then used diverse and interactive teaching methods (reviewing prior experiences, acquiring accurate knowledge, and understanding applications of light in daily life and environments) to enhance learning passion and motivation in children. A hands-on activity that taught the students to make sustainable LED lamps enabled them to develop capabilities that could be applied in family, school, and daily life, enhancing their confidence and sense of achievement.



Achievements in 2024

21 educational volunteers

6 on-site campus promotions

167 student and teacher participants

42 implementations by
educational volunteers

27.5 total service hours

Targets for 2025

50 educational volunteers

More than 6 on-site
campus promotions

Reach more than 400 students



Click here for
more information
on these events

Ennostar Fun Science Activities

These activity helped children learn science through an optical science themed scavenger hunt, incorporating the five major elements of STEAM education* in core activity values to actively cultivate independent thinking and creativity in children. We also allowed the children to visit cleanrooms, taught them about chips at different production stages to help them learn about LED manufacturing processes, and let them use scrap materials in DIY projects so they could understand sustainability and environmental protection concepts. In 2024, we organized 5 courses attended by our colleagues and their children, and also designed a special course for children from the Taiwan Fund for Children and Families. A total of 350 people participated in these courses (106 children, 244 employees and family members).

Teaching children about LED chip production processes through immersive learning

During these activities, the children gained hands-on experience of LEDs at different production stages and various LED devices. We also arranged a cleanroom experience where the children put on cleanroom suits and learned about cleanrooms and cleanroom suits so they could understand how hard their parents worked. To maintain cleanroom conditions, personnel must pass through an air shower before entering. The children particularly enjoyed this component of the activity and described it as a fun and unique experience—like being surrounded by countless whirling fans. Many children told their parents, “It was such a fun experience and I now know more about cleanrooms!”

Hands-on science fun scavenger hunt

We designed a scavenger hunt incorporating different scientific principles used during LED production processes, including light refraction, reflection, transmission through different media, RGB, and the three primary colors of light. This activity enabled children to learn through hands-on and fun science activities, experience science in everyday life as they completed each task, and gain a sense of accomplishment as they learned about these principles. Many parents told us that this activity inspired a passion for natural science in their child and enhanced parent-child interactions.



◀ Cleanroom
experience

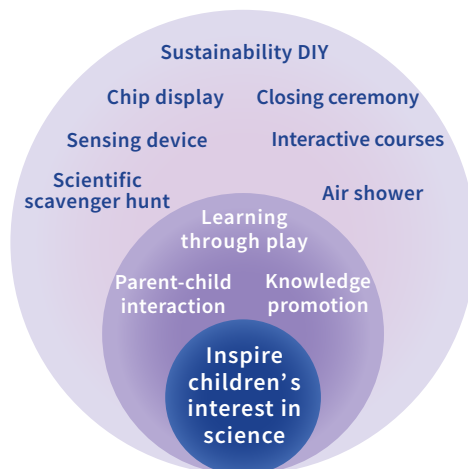
*The five key STEAM elements include hands-on practice, learning from mistakes, encouraging teamwork and collaboration, cultivating interdisciplinary expertise, and embracing new technologies so students can face up to future uncertainties and solve real-life problems.

Provide high-quality education aligned with SDG 4

Activity structure

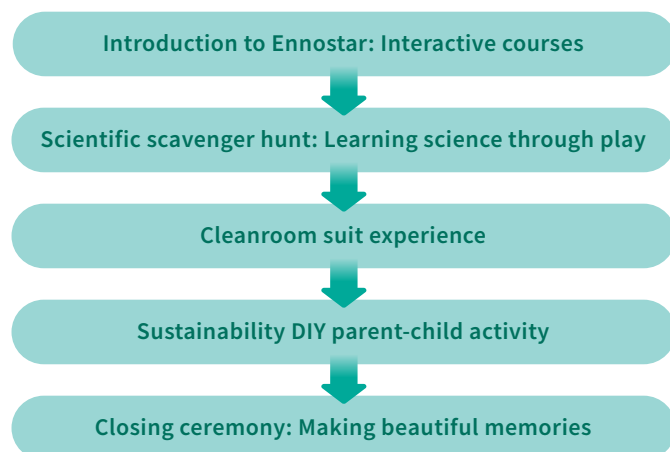


▲ DIY activity



4 experiential activities and 5 scientific scavenger hunt activities to convey 8 scientific principles

Process chart



Art Exhibition

Art can inspire creativity and imagination while enhancing quality of life and expanding culture horizons. We worked with the AAEON Foundation to establish an art walkway on the canteen floor of our headquarters which periodically displays beautiful art works and helps our colleagues learn about artists, experience different art creations, and enjoy the beauty of art and culture. We organized 6 exhibitions in 2024.

Volunteer Activities

Each year, the Ennostar Group calls on all colleagues to become volunteers in line with our belief that “social influence starts with your actions,” and we provide each employee with one day of volunteer leave per year. In 2024, 368 Ennostar Group employees participated in volunteer services over a total of 1,152.5 hours.



Click here
for more information
on these events



Environmental Protection and Educational Volunteer Activities

In 2024, our factories in Taiwan focused on “environmental protection and education” implementations starting with an introductory lecture on “What sea turtles taught us about plastic.” We hosted 2 volunteer activities in Hsinchu and Tainan over 816 hours.

Hsinchu Amphibious Green Actions

This volunteer activity included water and land actions. The water action encompassed riding SUP dragon boats and removing water hyacinths (an ecological threat) to curb overgrowth and avoid negative impacts on the survival and reproduction of aquatic life. The land action was clearing fallen leaves and trash on the trail around Green Grass Lake to reduce habitats for Dolichoderinae ants and minimize overlap with human environments.



▲ Our colleagues clearing water hyacinths with their families

- Conserved local water and land ecology in Hsinchu: Green Grass Lake originates from Keya River and ultimately flows into the ocean. Starting with the Green Grass Lake allows us to protect the entire ecological cycle through concrete implementations and align with SDG 14 Life Below Water through practical actions.
- Total volume of water hyacinths cleared: 836.15 kg

Tainan Beach Clean-Up and Salt Field Tour

Salt field tour: Volunteers of all ages traveled to Jingzaijiao Tile-paved Salt Fields in Beimen to explore mangroves and migratory birds in surrounding regions, and learn how salt was produced over the past two centuries. The participants gained an appreciation for these precious resources provided by the ocean and the ecosystem with land, flora, fauna, and human interdependencies.

Beach clean-up: The clean-up activity took place on the beach next to the Qingshan Fishing Port Security Inspection Office where there were few people but lots of waste. Our partners from Hiin Studio led our colleagues in sharing out the work. Some participants moved large discarded oyster racks weighing 30 kg and some carefully picked up small pieces of man-made trash, while the children served as dedicated little helpers. This activity conveyed waste reduction actions and sustainability awareness to the next generation.

- This ecological tour and beach clean-up helped our colleagues learn more about the land they grew up on while also focusing on biodiversity, plastic reduction, and environmental protection to align with SDG 14 Life Below Water through practical actions.
- 88 volunteers
- Cleared 1,246 kg of marine waste



▲ **Salt field tour:** Learning about local history and ecology through cultural and environmental education



▲ Volunteers work together to move a large (30 kg) discarded oyster rack made from compressed regenerated foam floats



▲ 88 volunteers cleared 1,246 kg of waste

Additionally, our colleagues at Episky formed a 25-person volunteer team and organized a litter pickup activity at the Xiatanwei Wetland Park in Xiang'an, Xiamen to restore park environments and improve living environments.



Episky employee environmental protection activity ▶

Free Store: Joyful Sharing to Extend Love

“One man’s trash may be another man’s treasure” : The core values and tangible benefits of our Free Store have been widely recognized and praised by employees, so we have continued to host Free Store events since 2020. We collect second-hand items from employees to extend the value of every item and spread kindness from within our company.

Free Store events encourage our colleagues to clear objects in their homes and get things they need for free. These events made participants feel like they were giving gifts to a friend; no one was expecting anything in return, as they simply wished to bring joy to someone else while experiencing joy themselves. Spreading goodwill—starting with close colleagues, other departments and factories, then extending to strangers, animals, and even the environment—strengthens reciprocal relationships with others and enables continued distribution of goodwill through the Free Store.

In 2024, we added a new factory to this event, collecting more than 1,000 items and achieving an 80% item claim rate, an increase of 22% compared to 2023. Unclaimed items were categorized and sent to social welfare institutions such as Garden of Hope Foundation, Man Fair Social Enterprise, and Be Kind to Animal Association, spreading the kindness of our colleagues all over Taiwan.

Donating and reusing items are eco-friendly actions

Reusing secondhand items supports waste reduction and circular reuse, and aligns with SDG 12 Responsible Consumption and Production. Our Free Store helps to extend item lifespans and reduces carbon emissions from waste treatment processes. This event collected and donated 249.75 kg of secondhand materials, helping item donors reduce 84.9 kgCO₂e in carbon emissions^{*}, and helping recipients reduce purchases and 4,958 kgCO₂e of carbon emissions.^{**}



(Our colleagues love to find treasures during their daily breaks as interesting new items are being donated every day. Travel tea sets, home appliances, children’s products, and other different items are added to the Free Store on a daily basis, bringing color to the lives of our colleagues and encouraging them to drop by every day.)

Lextar Green Party Sustainability Trip

Lextar organized an employee trip to a farm and an ecological tour introducing various animals and plants. Our colleagues rode on small rafts and experienced the fun of chasing ducks while receiving environmental education. Participants of all ages enjoyed the delicious and fun rice DIY activity where they wrapped rice cakes in freshly picked leaves. The most important component of this sustainability activity was cooking with the traditional kiln. Participating colleagues shared tasks such as digging soil, lighting the fire, and preparing ingredients, then witnessed the important moments when the kiln was sealed and opened. These efforts took many adults back to their childhood and made them think about the abandoned farmlands in their hometowns, while the children experienced traditional farming life and learned the most primitive way of cooking food.

Environmental
education
participants:
198 persons

Environmental
education hours:
990 hours

Reduced
233 kgCO₂e
in carbon emissions
through carpooling

Provided
90 hours
of local work
opportunities

^{*} Carbon footprints were calculated using the coefficient released by the Miaoli County Incineration Plant (3.60E+2 kgCO₂e; declared unit: tons)

^{**} Estimated using carbon coefficients corresponding to donated items and weights for 2024

Appendices

1. Data Overview

- Governance Data
- Environmental Data
- Social Data

2. GRI Index

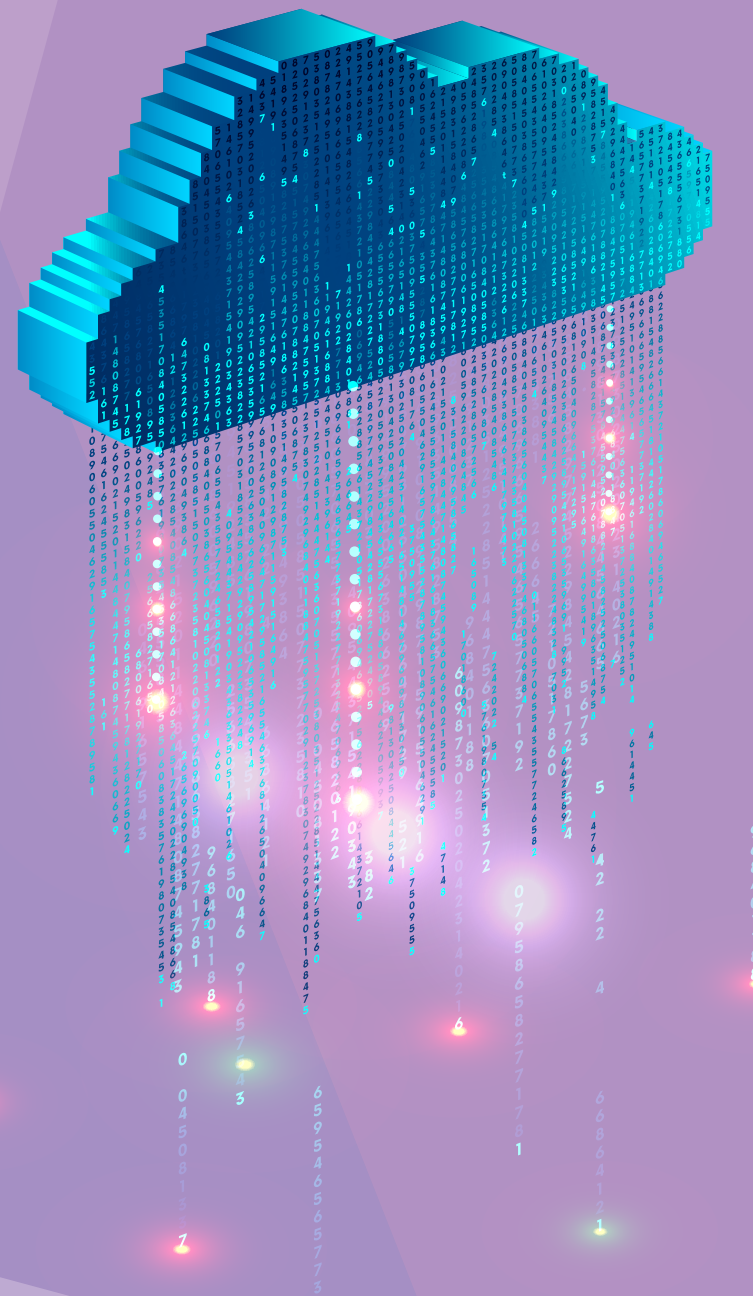
3. Sustainability Accounting Standards Board (SASB) Index

4. ISO 26000 Guidance on Social Responsibility Index

5. Sustainability Disclosure Guidelines: Optoelectronics Industry

6. List of Affiliated Public Associations

7. Independent Assurance Statement from TUV Rheinland



Data Overview

Governance Data

Self-Evaluation Survey Results for the Board and all Committees

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

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



Self-Evaluation Survey Results for the Board and all Committees

Members	Board of Directors	Attendance Rate	Audit Committee	Attendance Rate	Remuneration Committee	Attendance Rate	Corporate Governance and Nominating Committee	Attendance Rate	Corporate Sustainability and Risk Management Committee	Attendance Rate	Steering Committee	Attendance Rate
Shuan-Lang Peng	✓	100.0%					✓	100.0%	✓	100.0%	✓	100.00%
Chin-Yung Fan	✓	100.0%									✓	93.75%
Xiu-Mu Tang	✓	100.0%									✓	93.75%
AUO Corporation representative: Yu-Chieh Lin	✓	100.0%										
Wei-Min Sheng	✓	87.5%	✓	85.7%			✓	100.0%				
Hsien-He Sheng	✓	87.5%	✓	85.7%	✓	100.0%	✓	100.0%				
Wei-Cheng Wang	✓	100.0%	✓	100.0%	✓	100.0%	✓	100.0%	✓	100.0%		
En-Te Hsu	✓	100.0%	✓	100.0%	✓	100.0%	✓	100.0%				
Chun-Hsin Tsou	✓	100.0%	✓	100.0%			✓	100.0%	✓	100.0%		
Feng Cheng Su											✓	100.00%
Ming-Da Jin											✓	93.75%

Environmental Data

Ennostar, EPISTAR, Lextar, Unikorn 2021-2024 Annual Greenhouse Gas Emissions

Indicator (Unit)	Company	Ennostar			EPISTAR			Lextar			Unikorn		
	Year	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Category 1: Direct emissions (t CO ₂ e)		3.28	6.55	9.43	60285.09	31,348.71	48,550.92	285.01	194.35	171.87	1896.59	2,075.14	871.50
Category 2: Indirect emissions (t CO ₂ e)		54.08	173.76	373.36	177,698.88	137,643.10	123,536.60	8,469.83	7,362.82	7,545.83	5383.60	5,110.94	4,842.07
Category 3: Indirect emissions from transportation (t CO ₂ e)		41.14	95.85	160.36	256.16	3,130.27	2,356.17	130.16	978.51	2,421.14	169.98	201.66	104.94
Category 4: Indirect emissions from products used (tCO ₂ e)		-	34.16	76.64	40,385.84	137,362.25	40,619.41	94.49	2,428.04	16,318.92	1036.17	5,368.84	2,664.83
Total (tCO ₂ e)		98.5	310.32	619.80	278,625.97	309,484.33	215,063.10	8,979.49	10,963.72	26,457.75	8,486.33	12,756.58	8,483.35

Epicrystal, Episky, Can Yang, and Lextar Electronics 2022-2024 Annual Greenhouse Gas Emissions

Indicator (Unit)	Company	Epicrystal			Episky			Can Yang			Lextar Electronic		
	Year	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Category 1: Direct emissions (t CO ₂ e)		2,034.72	1,813.73	2,060.55	839.51	902.57	1,116.25	672.77	961.90	943.60	68.77	175.32	260.28
Category 2: Indirect emissions (t CO ₂ e)		30,296.40	32,658.98	33,674.54	18,810.61	19,233.26	14,714.04	24,334.37	29,703.50	31,542.79	15,368.54	15,089.93	19,294.98
Category 3: Indirect emissions from transportation (t CO ₂ e)		-	2,633.33	171.28	-	9,340.37	157.37	-	3,344.54	65.36	-	279.43	373.48
Category 4: Indirect emissions from products used (tCO ₂ e)		-	16,464.15	22,262.69	-	128,345.47	21,105.17	-	23,877.89	21,847.06	-	28,649.88	43,795.07
Total (tCO ₂ e)		32,331.12	53,570.19	58,169.06	19,650.12	157,821.67	37,092.83	25,007.14	57,887.83	54,398.80	15,437.31	44,194.56	63,723.81

Total Group-Wide Category 1 Greenhouse Gas Emissions

Greenhouse gas (t CO ₂ e)	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	Total
Category 1	2,781.15	687.78	2,092.25	1,677.22	46,693.60	52.35	-	53,984.40
Category 2	235,524.20	-	-	-	-	-	-	235,524.20
Category 3	174,499.89	-	-	-	-	-	-	174,499.89

Group-Wide Energy Usage



Indicator	Unit	2022	2023	2024
Purchased power	GJ	1,898,813	1,746,535	1,583,689
Electricity from renewable energy	GJ	14,052	13,260	41,783
Diesel	GJ	722	659	728
Liquefied natural gas (LNG)	GJ	58,422	56,785	43,962
Total energy consumption	GJ	1,972,009	1,817,239	1,670,162
Energy intensity	(GJ/million TWD)	68	81	68
Proportion of electricity usage to total energy usage	%	96.3%	96.84%	97.32%
Renewable energy usage	%	0.7%	0.73%	2.50%

Water Resource

Indicator	Unit	2022		2023		2024	
		Total	Regions under water stress	Total	Regions under water stress	Total	Regions under water stress
Total water withdrawn	million liters	3,492	318	3,060	385	2,975	363
Water withdrawal intensity	million liters/million TWD	0.12	-	0.14	-	0.12	-
Total discharge	million liters	2,822	293	2,069	281	2,015	261
Total water consumption	million liters	670	25	991	104	960	102

water recycling and reuse

	2022	2023	2024
Total recovered and reused water million liters	2,346	2,092	2,177
Pure water consumption cubic meters	-	-	1,699,831

Waste Amounts



Indicator	Unit	2021	2022	2023	2024
General industrial waste	tons	1,618.155	1,616.548	1,727.58	1,543.23
Hazardous industrial waste		13,707.656	9,149.760	6,581.87	7,012.78
Recycling rates for general industrial waste	%	37.97	58.23	58.59	74.76
Recycling rates for hazardous industrial waste		77.76	70.73	81.45	84.22
Waste recycling rate		72.30	68.53	76.70	82.51

Waste Classified by Disposal Method in 2024

Indicator		Unit	General Industrial Waste	Hazardous Industrial Waste
Amount of recyclable waste	Reuse preparations	tons	211.97	1,187.53
	Recycling		378.38	298.99
Amount of non-recyclable waste	Incineration (including recycled energies)		563.39	322.08
	Incineration (excluding recycled energies)		0	0
	Landfill		117.30	285.88
	Other disposal methods		272.19	4,918.29

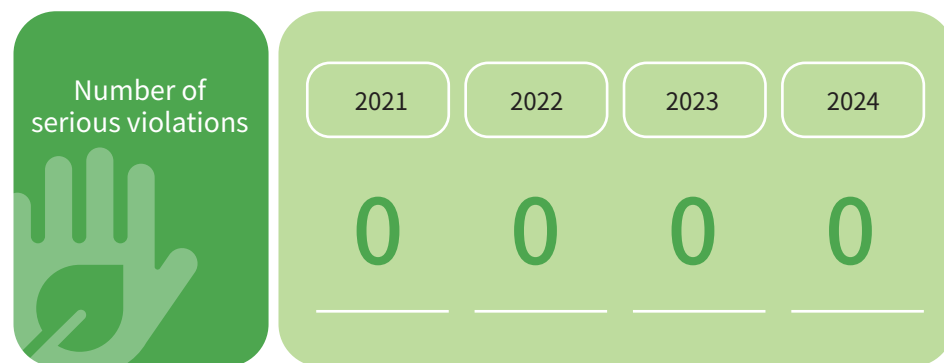
Waste Classified by Disposal Site in 2024

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		862.54	6,404.82
	Direct disposal		680.69	607.97

Air Pollutants**

Gas	Unit	Emissions in 2022	Emissions in 2023	Emissions in 2024
Nitrogen oxides (NOx)	KG	24,107.28	5,925.02	7,437.19
Sulfur oxides (SOx)		15,806.72	7,837.41	9,240.88
Volatile organic compounds (VOCs)		44,874.34	24,445.95	32,871.82

Number of Serious Environmental Violations*



Environmental Expenditures

Indicator	Amount (million TWD)	Scope
A. Environmental capital expenditures	17.95	Energy conservation, wastewater treatment, waste treatment, new air pollutant treatment equipment, equipment upgrades
B. Environmental protection expenditures	83.27	Energy conservation; wastewater treatment; waste treatment; air pollution removal, treatment, and testing fees
C. Total environmental protection expenditures (A+B)	101.22	Energy conservation, wastewater treatment, waste treatment, air pollution expenditures

* Annual emissions for 2021 only included emissions for EPISTAR, Lextar, Unikorn; emissions from Epicrystal, Episky, Can Yang, Lextar Electronics factories were included starting from 2022.

** Definition of major violations: Incidents incurring fines of more than US\$10,000

Social Data

Employed Personnel at Each Region in 2024

Region	Type	Male		Female		Total number of employees
		Number of employees	Ratio	Number of employees	Ratio	
Taiwan	Full-time personnel	2,125	28.18%	1,919	25.44%	4,044
	Non-full time personnel (temporary/contracted personnel)	11	0.15%	10	0.13%	21
China	Full-time personnel	1,789	23.72%	1,017	13.48%	2,806
	Non-full time personnel (temporary/contracted personnel)	485	6.43%	186	2.47%	671
Total		4,410	41.53%	3,132	58.47%	7,542

Note 1 Exchange rates in China: Data for 2021 was based on an exchange rate of RMB:TWD=1:4.3597; data for 2022 was based on an exchange rate of RMB:TWD=1:4.4173; data for 2023 was based on an exchange rate of RMB:TWD=1:4.4024; data for 2024 was based on an exchange rate of RMB:TWD=1:4.4557.

Note 2 Personnel numbers were calculated at year-end 2024. 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.

Employee Nationalities*

Nationality	Taiwan	China	Philippines
Proportion of total full-time personnel	50.22%	40.96%	8.52%
Proportion of management personnel	73.64%	26.23%	0.00%

* Data pertains to full-time personnel.



Employee Positions and Age Distributions

Region	Type	Senior executives				Mid-level executives				Junior executives			
		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%	1	0.01%	0	0.00%	4	0.05%	0	0.00%
	31-40 years	2	0.03%	1	0.01%	33	0.44%	10	0.13%	45	0.60%	22	0.29%
	41-50 years	73	0.97%	15	0.20%	103	1.37%	29	0.38%	111	1.47%	29	0.38%
	Above 51 years	54	0.72%	8	0.11%	26	0.34%	4	0.05%	7	0.09%	8	0.11%
China	Under 30 years	0	0.00%	0	0.00%	0	0.00%	0	0.00%	4	0.05%	2	0.03%
	31-40 years	3	0.04%	0	0.00%	26	0.34%	9	0.12%	52	0.69%	39	0.52%
	41-50 years	9	0.12%	1	0.01%	20	0.27%	6	0.08%	20	0.27%	11	0.15%
	Above 51 years	5	0.07%	0	0.00%	1	0.01%	0	0.00%	0	0.00%	0	0.00%
Total		146	1.94%	25	0.33%	210	2.78%	58	0.77%	243	3.22%	111	1.47%

Employee Positions and Age Distributions

Region	Type	R&D and technical personnel				Direct labor				Contract labor			
		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	179	2.37%	143	1.90%	61	0.81%	140	1.86%	0	0.00%	6	0.08%
	31-40 years	391	5.18%	234	3.10%	181	2.40%	475	6.30%	2	0.03%	0	0.00%
	41-50 years	532	7.05%	217	2.88%	226	3.00%	454	6.02%	3	0.04%	1	0.01%
	Above 51 years	79	1.05%	20	0.27%	17	0.23%	111	1.47%	6	0.08%	2	0.03%
China	Under 30 years	216	2.86%	172	2.28%	700	9.28%	303	4.02%	389	5.16%	149	1.98%
	31-40 years	213	2.82%	157	2.08%	407	5.40%	295	3.91%	52	0.69%	20	0.27%
	41-50 years	40	0.53%	32	0.42%	42	0.56%	60	0.80%	4	0.05%	1	0.01%
	Above 51 years	8	0.11%	4	0.05%	3	0.04%	2	0.03%	0	0.00%	0	0.00%
Total		1,658	21.98%	979	12.98%	1,637	21.71%	1,840	24.40%	456	6.05%	179	2.37%

Proportion of Female Employees in Specific Jobs*

Positions	2024
Proportion of female employees in operational units**	19.57%
Proportion of female managers in STEM positions***	23.82%

Annual Total Compensation Ratio****

Annual total compensation ratio (%)

Ennostar	EPISTAR	Lextar	Unikorn*****
968.23	1,218.41	1,028.67	NA
Lextar Electronics	Epicrystal	Episky	Can Yang
1,164.71	575.35	1,040.38	440.54

* Data only pertains to full-time personnel

** All units related to factory operations and revenue generation (including all manufacturing/quality/quality assurance/sales/marketing/R&D/production management/procurement/supply chain/factory management/environmental safety units)

*** STEM position definition: Engineers, and roles or departments belonging to the engineering category (including managers and project leaders)

**** Based on compensation for managers who had served the full year, and calculated using the following formula: (Total annual compensation of the highest-paid individual in 2024/Median annual total compensation for all employees)* 100% (excluding the highest-paid individual).

***** No relevant information is available for Unikorn, as it underwent organizational changes in the second half of 2024

***** Gender remuneration differences formula = (1-salaries for women/salaries for men) x 100%

Ratio of Annual Compensation for Women to Men in 2024

Company	Ennostar	EPISTAR	Lextar	Unikorn	Lextar Electronics	Epicrystal	Episky	Can Yang
Entry-level employees	1:0.783	1:0.83	1:0.84	1:0.806	1:0.42	1:0.56	1:0.72	1:0.7
Junior executives	1:1.342	1:0.825	1:0.92	1:1.348	1:0.77	1:1.17	1:0.66	1:0.4
Mid-level executives	1:0.814	1:0.881	1:0.95	1:0	1:0.26	1:0.44	1:0.96	1:0.1
Senior executives	1:0.489	1:0.896	1:0.74	1:0	1:0	1:0.25	1:0	1:0

Gender Remuneration Differences*****

		Gender Remuneration Differences							
		Ennostar	EPISTAR	Lextar	Unikorn	Lextar Electronics	Epicrystal	Episky	Can Yang
Salaries	Average	45%	40%	42%	44%	9%	15%	5%	4%
	Median	33%	51%	54%	54%	5%	7%	5%	0%
Bonuses	Average	66%	51%	62%	50%	21%	13%	26%	41%
	Median	51%	42%	42%	34%	16%	3%	15%	51%

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

Unit: Thousand TWD

Company	Category	2021	2022	2023	2024
Ennostar	Number of non-managerial full-time employees	52	58	133	231
	Total salaries for non-managerial full-time employees	65,462	82,221	174,708	311,522
	Average salaries for non-managerial full-time employees	1,259	1,418	1,314	1,349
	Median salaries for non-managerial full-time employees	1,046	1,221	908	1,020
EPISTAR	Number of non-managerial full-time employees	3,348	3,713	3410	2796
	Total salaries for non-managerial full-time employees	2,925,741	3,029,522	2,718,519	2,543,814
	Average salaries for non-managerial full-time employees	874	816	797	910
	Median salaries for non-managerial full-time employees	715	635	614	696
Lextar	Number of non-managerial full-time employees	1276	826	734	782
	Total salaries for non-managerial full-time employees	1,102,180	763,825	719,218	815,426
	Average salaries for non-managerial full-time employees	891	958	979	1,043
	Median salaries for non-managerial full-time employees	725	786	833	878
Unikorn	Number of non-managerial full-time employees	179	246	405	300
	Total salaries for non-managerial full-time employees	145,422	216,035	368,510	297,311
	Average salaries for non-managerial full-time employees	812	878	910	991
	Median salaries for non-managerial full-time employees	734	801	737	777

Unit: Thousand TWD

Company	Category	2021	2022	2023	2024
Epicrystal	Number of non-managerial full-time employees	1,288	802	709	815
	Total salaries for non-managerial full-time employees	203,279	184,684	184,242	227,444
	Average salaries for non-managerial full-time employees	158	230	328	292
	Median salaries for non-managerial full-time employees	105	64	318	306
Episky	Number of non-managerial full-time employees	1,239	1,658	1,785	1339
	Total salaries for non-managerial full-time employees	227,120	270,712	299,085	353,808
	Average salaries for non-managerial full-time employees	183	163	167	264
	Median salaries for non-managerial full-time employees	118	94	106	196
Can Yang	Number of non-managerial full-time employees	472	457	478	370
	Total salaries for non-managerial full-time employees	77,841	73,939	139,232	154,687
	Average salaries for non-managerial full-time employees	165	162	291	397
	Median salaries for non-managerial full-time employees	135	136	266	402
Lextar Electronics	Number of non-managerial full-time employees	1,366	1,099	1,546	814
	Total salaries for non-managerial full-time employees	382,424	353,912	404,510	348,360
	Average salaries for non-managerial full-time employees	279	323	262	428
	Median salaries for non-managerial full-time employees	318	331	296	412

Education and Trainin

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	4.82
2022	4,685	54,034	15,967	6.48
2023	8,289	176,474	57,272	19.35
2024	6,650	636,661	90,226	84.42

Note This year, the formula for calculating average training hours per person was adjusted to Total Group training hours/Total Group employees; historical data have been changed in accordance with this formula.

Ratio of Positions Filled Internally in 2024 *

	Ennostar	EPISTAR	Lextar	Unikorn	Lextar Electronics	Epicrystal	Episky	Can Yang
Total	58.67%	70.20%	49.12%	91.07%	6.00%	16.00%	2%	18.18%
Male	20.00%	52.57%	23.68%	64.29%	4.00%	11.00%	2%	4.55%
Female	38.67%	17.89%	25.44%	26.79%	2.00%	5.00%	0%	13.64%
Supervisors	100.00%	92.37%	87.18%	25.00%	0.00%	100.00%	0%	100.00%
Non-supervisor employees	58.11%	59.76%	41.27%	66.07	6.00%	15.00%	2%	7.69%

* Formula: Number of open positions filled by own employees/Total number of open positions at the company

Employee Welfare

Unit: Thousand TWD

Type	2022		2023		2024	
	Persons	Amounts	Persons	Amounts	Persons	Amounts
Physical examinations	2,964	3,123	5,361	9,923	2,513	9,291
Employee trips	2,673	4,527	2,223	7,255	2,789	14,119
Festival bonuses	14,982	13,081	15,105	12,822	16,693	15,162
Employee insurance	8,464	404,190	18,046	458,674	9,411	392,467
Other allowances	1,033	1,941	1,623	2,917	1,129	2,378
Emergency relief	2	9	1	22	2	63
Activity bonuses	18,641	25,865	18,368	28,815	12,406	45,252
Total	48,759	452,737	60,727	520,462	44,943	478,732



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 2024 (January 1, 2024 to December 31, 2024).

GRI 1 Standards Used

GRI 1: Foundation 2021

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	10-11	
	2-2	Entities included in the organization' s sustainability reporting	About This Report	3	
	2-3	Reporting period, frequency and contact point	About This Report	4	
	2-4	Restatements of information	No material restatements of information affecting past reporting periods occurred in 2024	--	
	2-5	External assurance	About This Report Appendix VI	202	
2. Activities and workers					
GRI 2: General Disclosures 2021	2-6	Activities, value chain and other business relationships	About Ennostar	10-11	
	2-7	Employees	Appendix I [Social Data]	177	
	2-8	Workers who are not employees	Appendix I [Social Data]	177	

GRI 2: General Disclosures 2021

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
3. Governance					
GRI 2: General Disclosures 2021	2-9	Governance structure and composition	2-2 Governance Organizations	38	
	2-10	Nomination and selection of the highest governance body	2-2 Governance Organizations	39	
	2-11	Chair of the highest governance body	2-2 Governance Organizations	38	
	2-12	Role of the highest governance body in overseeing the management of impacts	2-2 Governance Organizations	38	
	2-13	Delegation of responsibility for managing impacts	2-2 Governance Organizations	38	
	2-14	Role of the highest governance body in sustainability reporting	About This Report	5\24\38	
	2-15	Conflicts of interest	2-2 Governance Organizations	40	
	2-16	Communication of critical concerns	2-3 Ethical Management	43	
	2-17	Collective knowledge of the highest governance body	A Message from our Chairman	6\13	
			1-1 Sustainable Development Strategies		
	2-18	Evaluation of the performance of the highest governance body	2-2 Governance Organizations	40	
	2-19	Remuneration policies	2-2 Governance Organizations	40\130	
			5-1-2 Talent Attraction and Retention		
	2-20	Process to determine remuneration	2-2 Governance Organizations	40\130	
			5-1-2 Talent Attraction and Retention		
	2-21	Annual total compensation ratio	Appendix I [Social Data]	180	

GRI 2: General Disclosures 2021

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
4. Strategy, policies and practices					
GRI 2: General Disclosures 2021	2-22	Statement on sustainable development strategy	1-1 Sustainable Development Strategies	13	
	2-23	Policy commitments	1-3-2 Management of Material Topics 5-2-1 Protection of Human Rights	14,15 29-30 141	
	2-24	Embedding policy commitments	1-3-2 Management of Material Topics 5-2-1 Protection of Human Rights	14,15 29,30 141	
	2-25	Processes to remediate negative impacts	1-3 Materiality Analysis and Stakeholder Communication 2-3 Ethical Management	31,32 43	
	2-26	Mechanisms for seeking advice and raising concerns	2-3 Ethical Management	43	
	2-27	Compliance with laws and regulations	2-3 Ethical Management	44	
	2-28	Membership associations	Appendix V	201	
5. Stakeholder engagement					
GRI 2: General Disclosures 2021	2-29	Approach to stakeholder engagement	1-3-3 Stakeholder Communication and Engagement	31-33	
	2-30	Collective bargaining agreements	5-2-2 Employee Communication	146	

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	27	
	3-2	List of material topics	1-3-1 Identification of Material Topics	28	
Material topic: Corporate Governance and Ethical Management					
GRI 3: Material Topics 2021	3-3	Management of material topics	2-3 Ethical Management	29 42-44	
GRI 205: Anti-Corruption 2016	205-1	Operations assessed for risks related to corruption	2-3 Ethical Management	42	
	205-2	Communication and training about anti-corruption policies and procedures	2-3 Ethical Management	42	
	205-3	Confirmed incidents of corruption and actions taken	2-3 Ethical Management	42	
GRI 206: Anti-Competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	2-3 Ethical Management	42-44	
Material topic: Economic Performance					
GRI 3: Material Topics 2021	3-3	Management of material topics	2-1 Economic Performance	35-36	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	2-1 Economic Performance	35-36	
	201-2	Financial implications and other risks and opportunities due to climate change	4-1-2 Task Force on Climate-Related Financial Disclosures (TCFD)	105-107	
	201-3	Defined benefit plan obligations and other retirement plans	5-1-2 Talent Attraction and Retention	131	
	201-4	Financial assistance received from government	A total of NT\$88,596 in government subsidies was recognized in 2024.*	--	

* Including subsidies received in the previous year which were recognized as government subsidies for 2024.

GRI 3: Material Topics 2021

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
Material topic: Information Security and Privacy Protection					
GRI 3: Material Topics 2021	3-3	Management of material topics	2-5 Information Security	55-61	
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 2024	55	
Material Topic: Product Quality					
GRI 3: Material Topics 2021	3-3	Management of material topics	3-2-1 Product Quality and Safety	94-96	
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	3-2-1 Product Quality and Safety	95-96	
	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 2024	96	
Material Topic: Customer Relationship Management					
GRI 3: Material Topics 2021	3-3	Management of material topics	3-2-2 Customer Relationship Management	96-98	
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 2024	55	

GRI 3: Material Topics 2021

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
Material Topic: Energy Management					
GRI 3: Material Topics 2021	3-3	Management of material topics	4-1-5 Energy Management	109-111	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	4-1-5 Energy Management	110, 173	
	302-2	Energy consumption outside of the organization	4-1-5 Energy Management	110, 173	
	302-3	Energy intensity	4-1-5 Energy Management	110, 173	
	302-4	Reduction of energy consumption	4-1-5 Energy Management	111	
	302-5	Reductions in energy requirements of products and services	4-1-5 Energy Management	109	
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	108 121	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	4-1-4 Greenhouse Gas Management	108	
	305-2	Energy indirect (Scope 2) GHG emissions	4-1-4 Greenhouse Gas Management	108	
	305-3	Other indirect (Scope 3) GHG emissions	4-1-4 Greenhouse Gas Management	108	
	305-4	GHG emissions intensity	4-1-4 Greenhouse Gas Management	108	
	305-5	Reduction of GHG emissions	4-1-4 Greenhouse Gas Management	108	
	305-6	Emissions of ozone-depleting substances (ODS)	4-2-4 Air Pollution Prevention Appendix I Environmental Data	121 176	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4-2-4 Air Pollution Prevention Appendix I [Environmental Data]	121 176	

GRI 3: Material Topics 2021

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
Material topic: Talent Attraction and Retention					
GRI 3: Material Topics 2021	3-3	Management of material topics	5-1-2 Talent Attraction and Retention	126	
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	131	
	401-3	Parental leave	5-1-2 Talent Attraction and Retention	131	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	5-1-1 Talent Structure	125	
	405-2	Ratio of basic salary and remuneration of women to men	Appendix I [Social Data]	180	
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Appendix I [Social Data]	180	
Material topic: Talent Cultivation					
GRI 3: Material Topics 2021	3-3	Management of material topics	5-1-3 Talent Development and Cultivation	133	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	5-1-3 Talent Development and Cultivation	136	
	404-2	Programs for upgrading employee skills and transition assistance programs	5-1-3 Talent Development and Cultivation	138	
	404-3	Percentage of employees receiving regular performance and career development reviews	5-1-3 Talent Development and Cultivation	139	

GRI 3: Material Topics 2021

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
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	151	
GRI 403: Occupational Health and Safety 2016	403-1	Occupational health and safety management system	5-3-1 Occupational Health and Safety Management	152	
	403-2	Hazard identification, risk assessment, and incident investigation	5-3-1 Occupational Health and Safety Management	153-154	
	403-3	Occupational health services	5-3-2 Health Promotion	158-159	
	403-4	Worker participation, consultation, and communication on occupational health and safety	2-6 Responsible Supply Chain	160	
	403-5	Worker training on occupational health and safety	2-6 Responsible Supply Chain	156	
	403-6	Promotion of worker health	5-3-2 Health Promotion	159	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	2-6 Responsible Supply Chain	157	
	403-8	Workers covered by an occupational health and safety management system	5-3-1 Occupational Health and Safety Management	152	
	403-9	Work-related injuries	5-3-1 Occupational Health and Safety Management	155	
	403-10	Work-related ill health	5-3-1 Occupational Health and Safety Management	155	

Standards for Topic-Specific Disclosures

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
Topic-Specific Disclosures: GRI 200 Economic Disclosures					
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	2-6 Responsible Supply Chain	62	
GRI 207: Tax 2019	207-1	Approach to tax	2-1 Economic Performance	37	
	207-2	Tax governance, control, and risk management	2-1 Economic Performance	37	
Topic-Specific Disclosures: GRI 300 Environmental Disclosures					
GRI 301: Materials 2016	301-1	Materials used by weight or volume	Appendix I [Environmental Data]	176	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	4-1-4 Energy Management Appendix I [Environmental Data]	110,173	
	302-2	Energy consumption outside of the organization	4-1-4 Energy Management Appendix I [Environmental Data]	110,173	
	302-3	Energy intensity	4-1-4 Energy Management Appendix I [Environmental Data]	110,173	
	302-4	Reduction of energy consumption	4-1-5 Energy Management	111	
	302-5	Reductions in energy requirements of products and services	4-1-5 Energy Management	109	

Standards for Topic-Specific Disclosures

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
Topic-Specific Disclosures: GRI 300 Environmental Disclosures					
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	4-2-1 Water Resource Management	113-115	
	303-2	Management of water discharge-related impacts	4-2-1 Water Resource Management	117	
	303-3	Water withdrawal volumes	4-2-1 Water Resource Management	112	
	303-4	Discharge volumes	4-2-1 Water Resource Management	112	
	303-5	Water consumption	4-2-1 Water Resource Management	112	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	2-6 Responsible Supply Chain	63	
	308-2	Negative environmental impacts in the supply chain and actions taken	2-6 Responsible Supply Chain	63-64	
GRI 301: Materials 2016	301-2	Recycled input materials used	4-2-2 Waste Management 4-2-3 Circular Economy	118-120	
	301-3	Reclaimed products and their packaging materials	4-2-2 Waste Management 4-2-3 Circular Economy	118-120	
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	4-2-2 Waste Management	119	
	306-2	Management of significant waste-related impacts	4-2-2 Waste Management	119	
	306-3	Waste generated	4-2-2 Waste Management Appendix I [Environmental Data]	119 176	
	306-4	Waste diverted from disposal	4-2-2 Waste Management Appendix I [Environmental Data]	119 176	
	306-5	Waste directed to disposal	4-2-2 Waste Management Appendix I [Environmental Data]	119 176	

Standards for Topic-Specific Disclosures

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
Topic-Specific Disclosures: GRI 400 Social Disclosures					
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	5-2-3 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.	148	
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	5-2-1 Protection of Human Rights	141	
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	141 65	
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	141 65	
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	5-2-1 Protection of Human Rights	141	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	5-1-1 Talent Structure	124	

Standards for Topic-Specific Disclosures

GRI Standards	No.	GRI Disclosures	Corresponding Sections	Page No.	Notes
Topic-Specific Disclosures: GRI 400 Social Disclosures					
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	1-3 Materiality Analysis and Stakeholder Communication	33	
	413-2	Operations with significant actual and potential negative impacts on local communities	No operational activities with significant negative impacts occurred in 2024.	--	
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	2-6 Responsible Supply Chain	64	
	414-2	Negative social impacts in the supply chain and actions taken	2-6 Responsible Supply Chain	64-65	
GRI 415: Public Policy 2016	415-1	Political contributions	No political contributions were made in 2024.	--	
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 2024.	--	
	417-3	Incidents of non-compliance concerning marketing communications	No violations of relevant regulations or voluntary compacts occurred in 2024.	--	

Sustainability Accounting Standards Board (SASB) Index

Metric description	Category	Code	Description	Corresponding Sections	Page No.
Disclosure Topics / Greenhouse Gas Emissions					
(1) Gross global Scope 1 emissions and	Quantitative	TC-SC-110a.1	57,490.31 t CO ₂ e	4-1-3 Management of Greenhouse Gases	108
(2) amount of total emissions from perfluorinated compounds	Quantitative		49,508.68 t CO ₂ e	4-1-3 Management of Greenhouse Gases	108
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	<p>Ennostar Group carbon reduction strategies include:</p> <ol style="list-style-type: none"> 1. Reduction of fluorine gases: The Ennostar Group reduced CF₄ usage in production processes and has installed scrubbers to reduce fluorine gases; we expect to reduce fluorine gas emissions by 90%. 2. Green energy usage: The Ennostar Group has installed solar power equipment at all factories and actively purchases green energy agreements and renewable energy certificates to increase renewable energy usage proportions. Our factories in China began using 100% of green energy in 2025, which we estimate will raise Group renewable energy usage proportions to 43%. 3. Energy conservation measures: The Ennostar Group continues to improve lighting, air-conditioning, equipment and systems, and process efficiency to conserve energy. 	4-1 Climate Actions	100-103
Disclosure Topics / Energy Management in Manufacturing					
Total energy consumed	Quantitative	TC-SC-130a.1	1,670, 162 GJ	4-1-4 Energy Management	110
Percentage grid electricity	Quantitative		97.43%	4-1-4 Energy Management	110
Percentage renewable	Quantitative		2.57%	4-1-4 Energy Management	110

Metric description	Category	Code	Description	Corresponding Sections	Page No.
Disclosure Topics / Water Management					
Total water withdrawn, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	TC-SC-140a.1	2,975 m³ 12.2%	4-2-1 Water Resources Management	112
Total water consumption, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative		960 m³ 10.6%	4-2-1 Water Resources Management	112
Disclosure Topics / Waste Management					
(1) Amount of hazardous waste from manufacturing (2) Percentage recycled	Quantitative	TC-SC-150a.1	(1) 7,012.78tons (2) 82.51%	4-2-2 Waste Management and Circular Economy	118
Disclosure Topics / Employee Health & Safety					
Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	Quantitative	TC-SC-320a.1	Promoted safety culture and occupational health and safety management systems in accordance with ISO45001, Code of Ethical and Human Rights Conduct, local regulations, and EHS system stipulations (ISO 14001, ISO 45001, CNS 45001); established “EHS Management Manual” and “Occupational Health and Safety Principles” ; and formed the “Occupational Health and Safety Committee” to identify, assess, and control hazards in workplace environments and operations, as well as analyze health and safety hazards for each department.	5-3-1 Occupational Health and Safety Management	151
Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	Quantitative	TC-SC-320a.2	No fines were incurred due to workforce health and safety violations in 2024	5-3-1 Occupational Health and Safety Management	151
Disclosure Topics / Recruiting & Managing a Global & Skilled Workforce					
Percentage of employees that require a work visa	Quantitative	TC-SC-330a.1	In 2024, foreign nationals accounted for 8.05% of all employees and expatriate employees accounted for 1.27%, making a total of 9.32% of employees that required work visas.	5-1-1 Talent Structure	125

Metric description	Category	Code	Description	Corresponding Sections	Page No.
Disclosure Topics / Product Lifecycle Management					
Percentage of products by revenue that contain IEC 62474 declarable substances	Quantitative	TC-SC-410a.1	As the substance requirements for the two regulations were not applicable for Ennostar Group products, these were not included in controlled substances lists		--
Processor energy efficiency at a system-level for: (1) servers, (2) desktops and (3) laptops	Quantitative	TC-SC-410a.2	Not applicable as Ennostar Group does not produce the aforementioned products		--
Disclosure Topics / Materials Sourcing					
Description of the management of risks associated with the use of critical materials	Discussion and Analysis	TC-SC-440a.1	<p>Suppliers for all procurement categories are required to sign the Commitment to Supplier Social Responsibilities and incorporate the Ennostar Group's supply chain evaluation mechanisms. 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.</p> <p>The Ennostar Group continues to diversify supplier sources and obtain verification for key materials as well as keep informed of geographical distributions for supplier pipelines to reduce variability in material supplies and prevent future supply shortage risks caused by extreme weather or major natural disasters.</p>	2-6 Responsible Supply Chain	62
Disclosure Topics / Intellectual Property Protection & Competitive Behavior					
Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behaviour regulations	Quantitative	TC-SC-520a.1	<p>The Ennostar Group incurred no monetary losses due to legal proceedings associated with anti-competitive behavior in 2024.</p> <p>All major Ennostar 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.</p>	2-3 Ethical Management	42

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	2-2 Governance Organizations	38
2.Human rights			
2.1	Due diligence	5-2-1 Protection of Human Rights	140
2.2	Human rights risk situations	5-2-1 Protection of Human Rights	141
2.3	Avoidance of complicity	5-2-1 Protection of Human Rights	141
2.4	Resolving grievances	5-2-1 Protection of Human Rights	141
		5-2-3 Employee Communication	147
2.5	Discrimination and vulnerable groups	5-2-1 Protection of Human Rights	141
		5-2-2 Friendly Work Environments	142
2.6	Civil and political rights	5-2-1 Protection of Human Rights	141
		5-2-3 Employee Communication	148
2.7	Economic, social and cultural rights	5-2-1 Protection of Human Rights	140
2.8	Fundamental principles and rights at work	5-2-1 Protection of Human Rights	140

Item Code	Issue	Corresponding Sections	Page No.
3.Labour practices			
3.1	Employment and employment relationships	5-1-2 Talent Attraction and Retention	126
3.2	Conditions of work and social protection	5-2 Diversity, Equity, and Inclusion	140
3.3	Social dialogue	1-3 Materiality Analysis and Stakeholder Communication	27
3.4	Health and safety at work	5-3 Occupational Health and Safety	151
3.5	Human development and training in the workplace	5-1-3 Talent Development and Cultivation	133
4.Environmental			
4.1	Prevention of pollution	4-2 Environmental Management	112
4.2	Sustainable resource use	CH4 Green Operations	112
4.3	Climate change mitigation and adaptation	4-1 Climate Actions	100
4.4	Protection of the environment, biodiversity and restoration of natural habitats	4-2 Environmental Management	112

Item Code	Issue	Corresponding Sections	Page No.
5.Fair operating practices			
5.1	Anti-corruption	2-3 Ethical Management	42
5.2	Responsible political involvement	2-3 Ethical Management	42
5.3	Fair Competition	2-3 Ethical Management	42
5.4	Promoting social responsibility in the value chain	2-6 Responsible Supply Chain	63
5.5	Respect for property rights	3-1-2 Management of Intellectual Property Rights	91
6.Consumer issues			
6.1	Fair marketing, factual and unbiased information and fair contractual practices	2-3 Ethical Management	42
6.2	Protecting consumers' health and safety	3-2-1 Product Quality and Safety	91
6.3	Sustainable consumption	2-6 Responsible Supply Chain	91
6.4	Consumer service, support, and complaint and dispute resolution	3-2-2 Customer Relationship Management	94
6.5	Consumer data protection and privacy	2-5 Information Security	55

Item Code	Issue	Corresponding Sections	Page No.
6.Consumer issues			
6.6	Access to essential services	3-2-2 Customer Relationship Management	94
6.7	Education and awareness	3-2-2 Customer Relationship Management	94
7.Community involvement and development			
7.1	Community involvement	CH6 Social Prosperity	162
7.2	Education and culture	CH6 Social Prosperity	162
7.3	Employment creation and skills development	5-1-2 Talent Attraction and Retention	126
7.4	Technology development and access	3-1 Innovation Management and Smart Transformation	70
7.5	Wealth and income creation	2-1 Economic Performance	35
7.6	Health	5-3 Occupational Health and Safety	151
7.7	Social investment	CH6 Social Prosperity	162

Sustainability Disclosure Guidelines: Optoelectronics Industry

No.	Recommendations	Recommendations Category	Performance for 2024	Corresponding Sections
1	Total energy consumption, percentage of purchased electricity, utilization rate (renewable energy)	Quantitative	Total energy consumption: 1,670,162 GJ Percentage of purchased electricity: 97.43% Renewable energy utilization rate: 2.57%	4-1-5 Energy Management
2	Total water withdrawn, total water consumption	Quantitative	Total water withdrawn: 2,975 million liters Total water consumption: 960 million liters	4-2-1 Water Resources Management
3	Total hazardous waste generated and percentage recycled	Quantitative	Hazard waste volume: 7,012.78 tons Percentage recycled: 82.51%	4-2-2 Waste Management 4-2-3 Circular Economy
4	Types of, number of employees in and rate of occupational accidents	Quantitative	In 2024, a total of 19 employees were involved in occupational accidents, accounting for 0.25% of Group employees; none of the occupational accidents resulted in high-consequence work-related injuries. The main injury types included falls and cuts, and there were no fatalities.	5-3-1 Occupational Health and Safety Management
5	<i>Product Lifecycle Management Disclosure: including weights of scraps and electronic waste and percentage recycled (Note 1)</i>	Quantitative	We are planning to disclose relevant information in our 2025 Report.	-
6	Description of the management of risks associated with the use of critical materials	Qualitative description	Please refer to SASB TC-SC-440a.1	2-6 Responsible Supply Chain
7	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	Quantitative	The Ennostar Group incurred no monetary losses due to legal proceedings associated with anti-competitive behavior in 2024.	2-3 Ethical Management
8	Production by product category	Quantitative	Chip/Wafer: 1,880,261,773 (K EA) Packaging and module: 4,263,165 (K PCS)	2-1 Economic Performance

List of Affiliated Public Associations

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

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

Independent Assurance Statement from TÜV Rheinland



Independent Assurance Statement

Ennostar Group 2024 Sustainability Report

Introduction:

TÜV Rheinland Taiwan Ltd., member of TÜV Rheinland Group, Germany (hereinafter "TÜV Rheinland Taiwan", "We") has been entrusted by the management of Ennostar Inc. (including its major subsidiaries Epistar Corporation and Lextar Electronics Corporation, hereinafter "Ennostar Group", "the Company") to conduct independent assurance of Ennostar Group 2024 Sustainability Report (hereinafter "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 2024 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 2024 (January 2024 ~ December 2024). 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:

TÜV Rheinland Taiwan undertook the assurance work in accordance with the AA1000 Assurance Standard v3 (AA1000AS v3) Moderate level of assurance.

Scope & Type of Assurance:

Our assurance engagement was carried out in accordance with the AA1000AS v3, Type 2, Moderate level on Ennostar Group's sustainability performance disclosed in the Report and evaluated the information and data. The following assurance criteria were used in performing the assurance work:

- In accordance with GRI Universal Standards 2021 and performance indicators and according to disclosure on management approach (DMAs) from Economic, Environment & Social category, also defined in Reporting boundaries.
- Adherence to SASB Standards, SMEI CONDUCTORS Sustainability Accounting Standard.
- Adherence to AA1000 SES Stakeholder Engagement Standard (2015).
- Adherence to AA1000 AccountAbility Principles (2018) of Inclusivity, Materiality, Responsiveness, and Impact.

Limitation: TÜV Rheinland Taiwan performed the assurance based on the scope of defined engagement agreement, and on a moderate level assurance under the AA1000 Assurance Standard v3 for engagement. The assurance engagement was carried out at Ennostar Group Hsinchu Headquarters at Hsinchu Science Park, Hsinchu City, Taiwan. The consultations with external stakeholders were not carried out. Information and performance data subject to assurance is limited to the contents of the Report. Our assurance work did not cover financial report and its financial data, nor other information not related to sustainability.

Assurance Methodology:

TÜV Rheinland Taiwan's assurance activities included:

- Assuring Ennostar Group's ESG-related quantitative data, disclosure processes, system evidence, performance, and related information quality and reliability, to evaluate relevant management systems, including sustainability strategy, management policy, corporate governance, compliance management, risk management, stakeholder engagement, material issue analysis and impact, and key performance.
- Conducting interviews with over 20 Ennostar Group's senior management and managers responsible for gathering and analyzing information on ESG-related performance.
- Reviewing and examining sustainability strategy, management practices, and performance information and data to test the accuracy of such information and data through random sampling principles and applied analytical procedures.

- Collecting documentary evidence and assessing management representations to support the extent to which Ennostar Group adherence to the Accountability Principles.
- The Verification Executive Team was comprised of our multidisciplinary, experienced professionals in the field of Corporate Sustainability, Environment, Social and Stakeholder Engagement.

Adherence to AA 1000 principles:

Inclusivity:

Ennostar Group has identified key stakeholders and continues to seek their participation. The process considers the issues of concern to stakeholders and establishes significant sustainability issues based on this, developing management strategies to respond to sustainability in a responsible and appropriate manner. Evidence shows that this report reflects Ennostar Group's inclusive approach to stakeholder issues and has had an accountable impact on both internal and external stakeholders.

Materiality:

Ennostar Group has implemented materiality assessment. The identification of issues is based on the needs and concerns of stakeholders, internal policy considerations, and understanding and communication of sustainable development content, thereby disclosing the materiality and impact of issues. Evidence shows that Ennostar Group has appropriately responded to the identified material issues in accordance with their priority and materiality, demonstrating the organization's accountability.

Responsiveness:

Ennostar Group has responded to the material issues of concern to stakeholders and engaged with them through diverse channels and measures. It has set clear quantitative targets to track performance and completing systematic information responses, thereby appropriately demonstrating its proactive responsiveness and commitment to accountability.

Impact:

Ennostar Group has effectively identified and disclosed its impacts through transparent, diverse, fair, and effective means, and has established measurement, monitoring, tracking, and management processes to appropriately demonstrate its performance and impact in terms of the environment, society, and governance. It has also fully disclosed and reported this information in its report.

Conclusion:

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

- Ennostar Group 2024 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 evidence 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

Vito C. C. Lin

Technical Manager

TÜV Rheinland Taiwan Ltd.

Taipei, Taiwan
2025-06-25

Thanks



Ennostar Group