

2023 ESG Report

Summary Edition

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Gold Award Ranked at top 5% Taiwan Corporate Sustainability Award in Corporate Governance (TCSA) Corporate Evaluations Sustainability Report -orporate Governance Zero Zero information security legal proceedings associated incidents and leakages of with anticompetitive customer privacy or antitrust behaviors 1/2 Innovative Growth The number of independent directors exceeded one-half of all directors Green Operations Reduced generated Completed 100% waste volumes by 23% 1 of Group greenhouse gas compared with 2022 inventories and Growt Achieved carbon reductions of 17.9%, approximately 62,048 tons of carbon emissions Submitted SBTi Commitment Letter and signed pledge aligned with the Paris Agreement and the recent

United Nations Climate Conference 1.5°C active carbon reduction commitment

Registered **1,281** trade secrets

6,003 patents approved worldwide

Group end products reduced electricity usage by 375 million kWh, equivalent to 186,000 tons of carbon emissions

average satisfaction scores for all courses exceeded 4.6 points Social participation and investment amounted to NT\$ 3,767,090

eded 4.0 points NT

Provided education and training to 57,272 people with a total training budget of NT\$ 8.29 million;

A total of 4,880 employees in our Taiwanese factories received human rights education and training, achieving a training completion rate of 100%



023 Sustainability Report - Summary Edition

About This Report

Report Duration

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



Management System

Management Systems

ISO 14001 Environmental Management System

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

ISO 14064-1 Greenhouse Gas Emissions at the Organizational Level

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

ISO 50001 Energy Management System

Lextar

ISO 45001 Occupational Health and Safety System

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

CNS 45001 Taiwan Occupational Health and Safety System

EPISTAR, Unikorn

ISO 27001 Information Security Management System

Ennostar, EPISTAR, Lextar, Unikorn

IATF 16949 Automotive Quality Management System

EPISTAR, Lextar, Epicrystal, Can Yang, Lextar Electronics

ISO 9001 Quality Management System

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

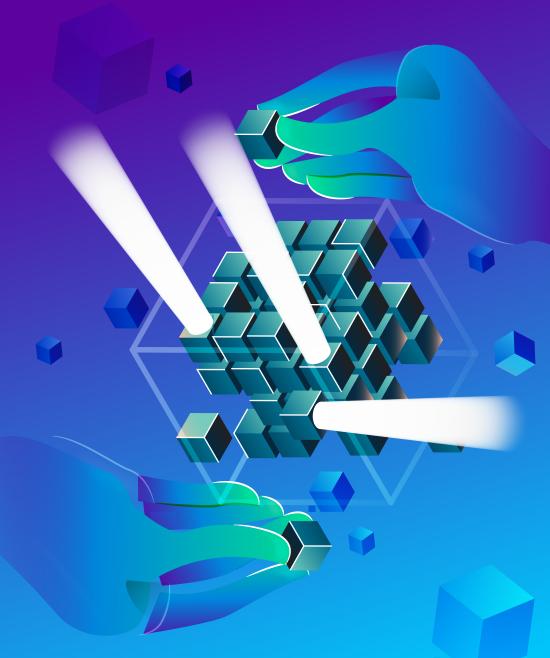
ISO 26262 ASIL B Automotive Functional Safety Certification

Lextar

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

Corporate Governance

- Corporate Governance and Ethical Management
- Risk Management
- Responsible Supply Chain
- Information Security
- Product Quality and Safety



Corporate Governance and Ethical Management

Targets and Achievements

Achieved

Торіс	Metrics and targets	Short-term targets (2023~2024)	Short-term targets (2025~2026)	Mid- to long-term (2027)
	Complete promotion, education, and training associated with ethical management, moral conduct, and anti-competition behaviors	100%	100%	100%
Ethical Management	Number of substantiated anti-competition and corruption incidents	0 incidents	0 incidents	0 incidents
	Continue to maintain our record of zero major violations	0 violations	0 violations	0 violations

Ethical Governance

- Establishing an ethical policy and culture: The Group has formulated the "Ethical Corporate Management Best Practice Principles" and "Ennostar Procedures for Ethical Management and Guidelines for Conduct" to establish sound business operations.
- Grievances and Reporting Systems : The Group has established a "Reporting System for Professional Ethics Violations" on our corporate website and intranet, which serve as grievance reporting channels for internal and external stakeholders (such as suppliers, clients, employees, and shareholders); the Audit Onice is responsible for accepting reports and conducting audits. Whistleblowers can make anonymous reports, and whistleblower identities and reports are protected and kept confidential.
- 100% employees in Taiwan participated in anti-corruption training. We will arrange for employees in Mainland China to participate in anti-corruption education and training 2024.
- No incidents of corruption occurred within the Group in 2023.

Legal Compliance

- Legal Compliance Management Systems and Regulations: Build appropriate legal compliance systems (including but not limited to anti-corruption and fair competition laws) and internal control mechanisms
- Enhance Legal Compliance Awareness: We will not only continue to review legalities and implementations of related regulations within the company, but will also regularly post announcements and organize training courses.
- In 2023, the Group was not involved in any government sanctions, civil cases, or criminal proceedings related to major violations associated with illegal social and economic regulations, anti-competition behaviors, or anti-trust and anti-monopoly laws.

Board Operations

- Ennostar's "Corporate Governance Best Practice Principles" stipulate that Board compositions should be diverse and the Board should be composed of industrial and academic experts who have the ability to formulate practical management targets.
- In 2023, the Group convened 5 Board meetings and the average director attendance rate was 100%.

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



Risk Management

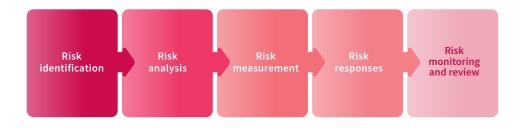
Targets and Achievements

Achieved

Торіс	Metrics and targets	Short-term targets (2023~2024)	Short-term targets (2025~2026)	Mid- to long-term (2027)
	ERM Enterprise Risk Management mechanisms	Incorporate 🥚	Strengthen	Maintain
Risk Management	Improve notification and response mechanisms for emergencies	Establish 🔴	Strengthen	Maintain
	Smart early risk warning mechanisms	-	-	Formulate

Risk Management Processes

The Group established the "Risk Management Policies & Procedures" to define various risks in accordance with overall corporate operational guidelines. Our senior executives identify key and emerging risks at least once a year and use various analysis tools to assess potential impacts from risk events.





The Top 5 Risk in 2023 and the Response Measures

	Supply chain (raw materials)			
	Description of risk and related impacts Most of our materials are procured from China and have no alternatives; this is particularly true of our key materials. If problems occur with local suppliers, this will directly impact production.			
		Response measures		
Company	Short-term	Mid-term	Long-term	
EPISTAR	 Control proportions of raw materials from China and focus on high-proportion materials. Arrange third-country transshipments for high-proportion materials to reduce risks. 	 Establish external procurement channels for quaternary chips in China to ensure that production and local client needs are met. Seek out and verify quaternary chip suppliers that meet our requirements 	 Regularly monitor effectiveness and actual conditions for third-country transshipments, particularly for high- proportion materials. Continue to monitor verification information for alternate materials, including verifications of second sources 	
Lextar	 Establish safety stock to meet customer orders Arrange diverse transshipment methods, including cross-border transshipments, to reduce risks. 	 Establish second suppliers outside of China to facilitate deployment of production capacities. Establish outsourcing strategies to avoid material shortage problems 	 Establish evaluation measures for long-term strategic partners and implement HUB/VMI management 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 Review and reduce usage of key materials from China	 1. Optimize supply chain management through joint procurement and establishment of shared stock 2. Seek out materials not produced in China for process testing 	

Technology development

Description of risk and related impacts Inadequate technological or innovation capabilities during continued product R&D make it difficult to meet client/market needs and improve product and design quality, thus affecting corporate profitability, implementations of transformation plans, and future market competitiveness.

Response measures				
Short-term	Mid-term	Long-term		
 R&D personnel regularly visit clients and potential clients along with business/product managers to directly and quickly understand market needs and future developments. 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. Establish book club for R&D personnel to enhance innovation capabilities through reading and sharing. 	 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. 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. Discover new suppliers and periodically invite equipment vendors and material suppliers to participate in exchange meetings to better understand their development trends and capabilities. 	 Regular participation in local and international technology and equipment exhibitions and seminars. Align with national policies, participate in government plans, and utilize government subsidies to develop innovative technologies. 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

Difficulty finding production equipment vendors which offer reasonable prices affect corporate expansion plans and equipment upgrades.

Response measures				
Company	Short-term	Mid-term	Long-term	
Unikorn	 Optimize parameters/modify hardware in accordance with current equipment processes to align with the needs of OEM products. 	 Find/cultivate second-hand equipment vendors to buy and modify equipment, and adjust quotations from original vendors Evaluate second-hand equipment vendors in the market and assess suitability Improve equipment repair and modification capabilities of factory engineers 	 Work with equipment vendors/module engineers to jointly develop equipment that adhere to process needs 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	 Expand recruitment channels 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 	 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 	 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	 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	 All subsidiaries report management measures for key materials to ensure that we can cover production needs for three months and respond to risks. Establish backup supplier mechanisms for high-risk suppliers. 	 Establish regular review mechanisms to increase local and third-country supply proportions and reduce impacts from cross-strait restrictions. Conduct scenario simulation drills associated with embar- goes 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	 Monitor local production and delivery risk dispersion conditions 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	 Re-examine client contracts and seek exemptions from possible impacts caused by force majeure factors such as flight suspensions. Develop more than two suppliers for each supply chain position, establish common goals, and build a verification team. Integrate and standardize specifications to reduce costs from switching suppliers and organize product training 	 Improve cross-border operational management, utilize the Group's import and export platforms, and form strategic collaborations. 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	 Expand customer locations and product diversity. Localize production of raw materials and equipment components in Taiwan, and decentralize production bases. Establish raw material supply chain tracking mechanisms to strengthen legal compliance, management, and adjustments. 	

Climate change

Description of risk and related impacts

Responding to water shortage and power shortage issues caused by climate change and limitations on natural resources in Taiwan affects normal production, operations, and sustainable management of all Group subsidiaries.

	Response measures				
Company	Short-term	Mid-term	Long-term		
Ennostar	 2023 green electricity procurement plan: Continue to track progress on supplier electricity purchase contracts Continue to contact amenable green electricity suppliers 	 Promote construction of self-built solar power generation systems in factories Apply for T-RECs and initiate self-generation and self-use starting from 2024 	 Gradually introduce use of renewable energy across the whole Group Continue to assess renewable energy sources and renewable energy needs at all stages 		
EPISTAR	 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 	 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 	 Build new solar power generation systems for self-generation and self-use in our factories Utilize offshore wind power and aim to purchase 100 million kWh/year by 2030 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: Factory: Improve CDA/Oven energy savings Factory management: Upgrade air compressors, cooling tower fans, and oil seal PVs 	 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 	Establish solar power/offshore wind power procurement plans and discuss ways to increase green electricity usage proportions at Zhunan Factory.		
Unikorn	 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 	 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 	 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. 		

Responsible Supply Chain

Targets and Achievements

Achieved

Торіс	Metrics and targets	Short-term targets (2023~2024)	Short-term targets (2025~2026)	Mid- to long-term (2027)
	Increase the number of key A+B grade suppliers who implement energy and carbon conservation measures	Survey 🔴	+4	+3
Enhance Sustainability Awareness	Increase the number of key A+B grade suppliers who use renewable materials	Survey	+2	+5
	Host supplier ESG exchange activities	\geq 3 activities	\geq 3 activities	≥ 3 activities
Evaluate and Assign Ratings	Increase the number of local suppliers	≧85% ●	≧ <mark>85</mark> %	≧85%
Responsible Business Alliance	Pledge not to use conflict minerals	100%	100%	100%



Supply Chain Management Strategies

Aspect	Management Approach
Improve supplier sustainability influence	 We require all suppliers to sign a "Commitment to Supplier Social Responsibilities" and adhere to Responsible Business Alliance (RBA) guidelines related to labor, health and safety, environmental protection, ethical regulations, and management systems to strengthen understanding of our rules and implementations We implement a supplier ranking system and regularly evaluate supplier grades (A, B, C, D, E) in accordance with the supplier management procedures of our subsidiaries. We guide suppliers who received rankings of C, D, or below in implementing improvements. We also conduct irregular RBA and EHS audits on key suppliers
Continuous risk management	 We continue to diversify supplier sources and obtain verification for key materials, as well as keep informed of geographical distributions for supplier production lines to reduce variability in material supplies and prevent future supply shortage risks caused by extreme weather or major natural disasters. We established emergency response processes for supply risks caused by abnormal supplier incidents so the most appropriate measures can be used to reduce impacts and prevent major operational hazards from affecting stakeholder interests.
Avoid conflict minerals	• We declare and pledge not to use metals sourced from regions or smelters associated with conflict minerals, require suppliers not to use conflict minerals and sign guarantees committing to no use of conflict minerals, and use the Conflict Minerals Reporting Template (CMRT) released by the Responsible Minerals Initiative (RMI) to ensure that we do not use conflict minerals.
Increase proportion of local procurement	• We actively establish collaborative relations with local suppliers to build long-term strategic relationships and stable supplies, reduce risks of material shortages, accelerate supply chain efficiency, speed development of new products, and reduce additional expenditures.
Build green supply chains	• We continue to work with our supply chain partners to develop carbon reduction technologies, achieve carbon reduction benefits, strengthen green supply chain developments, and improve supply chain resilience.

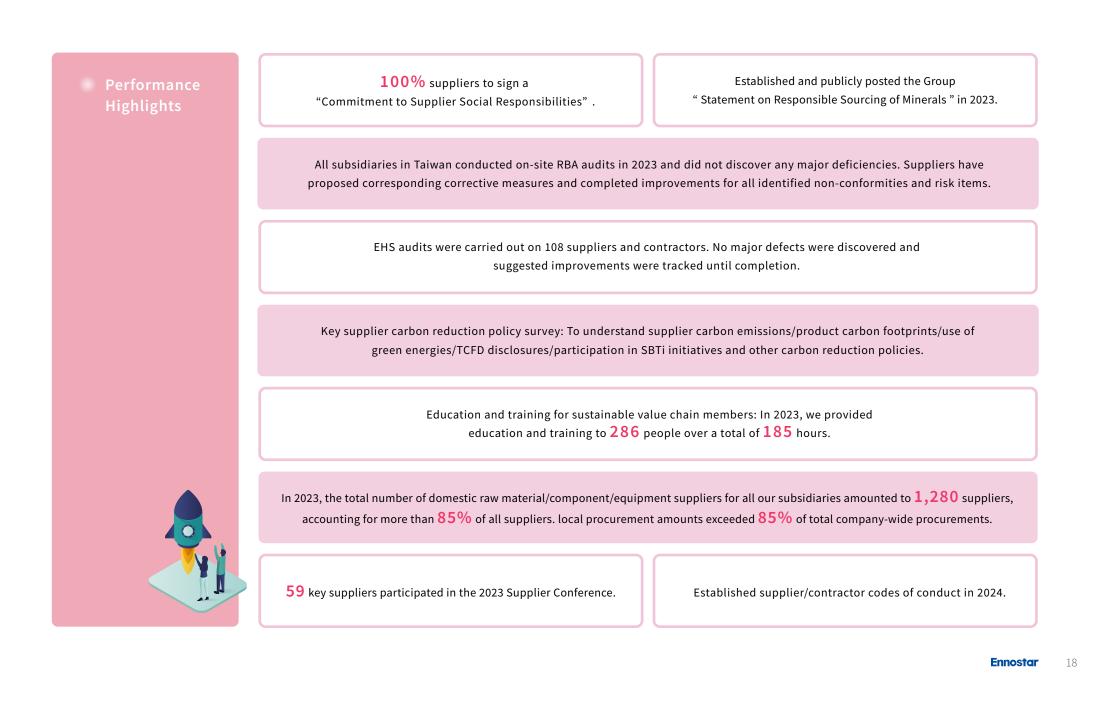
Sustainability Assessment for Suppliers

Sustainability Assessment for New Suppliers

Scope of implementation	Assessment	Assessment results
Key material suppliers	 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 qualified suppliers after assessment results show they adhere to our standards, and we require our suppliers to sign a Commitment to Supplier Social Responsibilities.

Sustainability Assessment for Existing Suppliers

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



Information Security

Targets and 2023 Achievements

Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goal (2026 and beyond)
 1.100% of all factories in Taiwan completed ISO 27001 verifications 	Achieved		
2. Completed one information security risk assessment every six months	Achieved		2. Comply with new ISO 27001 requirements
3. Completed one information security internal audit every six months	Achieved	 - 3. Zero information security incidents resulting in property damages across the Group 4. Zero intrusions by hackers due to unpatched 	 Zero information security incidents resulting in property damages across the Group Zero intrusions by hackers due to unpatched
 Zero information security incidents resulting in property damages across the Group 	Achieved	vulnerabilities in external websites vulnerabilities in external webs	vulnerabilities in external websites5. Ensure that ransomware attacks do not affect
5. Conducted at least three social engineering and phishing email drills for all employees each year	Achieved	core systems and computers, and affect fewer than ten users	core systems and computers, and affect fewer than three users
6. Conducted at least one business continuity drill each year	Achieved	-	

Management Framework

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

subsidiary make up the fourth level of our information security framework and are responsible for implementing various targets and projects. We convene information security management and review meetings twice every year, and report information security implementations and resolutions to the presidents of each subsidiary

Performance Highlights

Group subsidiary scores of the information security risk assessment platform Security Scorecard rose to **90** points from **70** points.

Product Quality and Safety

Targets and 2023 Achievements

Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goal (2026 and beyond)
1. Hazardous substance inspections for all product series	Achieved	Hazardous substance inspections for all product series	Hazardous substance inspections for all product series
2. Product compliance with international environ mental regulations	Achieved	Ensure that 100% of manufactured products comply with RoHS, REACH, Green Product, and other international environmental protection regulations*	Ensure that 100% of manufactured products comply with RoHS, REACH, Green Product, and other international environmental protection regulations *
3. No products were recalled by customers due to hazardous substance violations and associated management factors.**	Achieved	Maintain our record of having no products recalled by customers due to hazardous substance violations and associated management factors	Maintain our record of having no products recalled by customers due to hazardous substance violations and associated management factors

* EPISTAR's management guidelines currently encompass RoHS and REACH regulations

****** Applicable for Lextar and Unikorn

Performance



All Ennostar subsidiaries have implemented the ISO 9001 Quality Management System.

In 2023, we added 656 products (5 products for EPISTAR,

104 products for Lextar, and **547** products for Lextar Electronics), which all completed hazardous substances verifications.

Our main subsidiaries EPISTAR and Lextar, and our Chinese factories Epicrystal, Can Yang, and Lextar Electronics have further implemented the IATF 16949 Automotive Quality Management System. All Group products have obtained verifications for RoHS **10** restricted substances and REACH Substances of Very High Concern, and all products produced by subsidiaries Lextar, Lextar Electronics, Unikorn, and Can Yang have obtained halogen-free certifications. Our products and services did not violate any regulations relating to product information or labeling in 2023, and none of our products were banned, recalled, or violated regulations relating to product marketing and communications (including advertisements, promotions, or sponsorships).

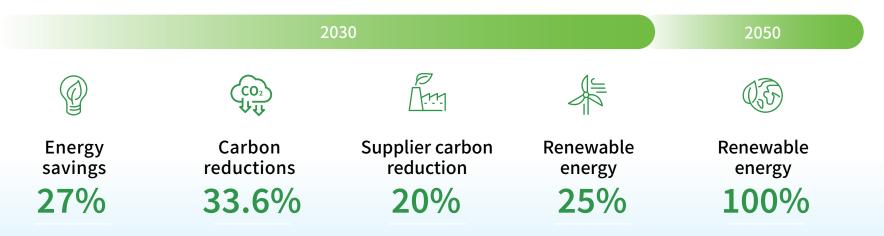
Environment

- Climate Actions
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- Circular Economy
- Air Pollution Prevention



Climate Actions

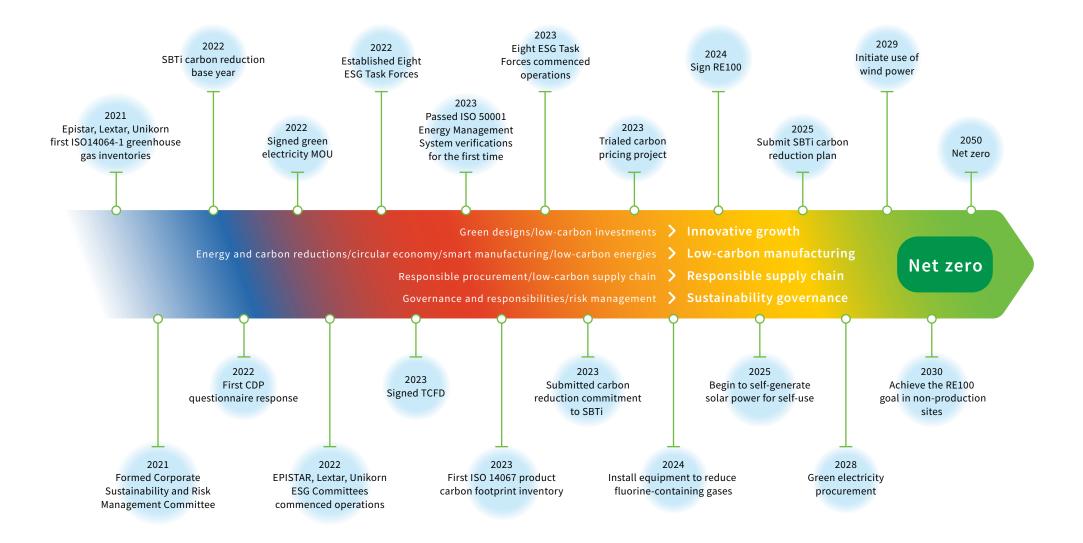
Carbon Reduction Goals



Domestic and International Climate Initiatives

Taiwan Climate Partnership	Task Force on Climate-Related Financial Disclosures	SBTi
In 2022, we became a member of the Taiwan Climate Partnership, demonstrating our energy and carbon reduction commitments. We work with our industry supply chain to achieve mutual growth as we work toward RE100 and EV100 goals	Ennostar senior executives signed Task Force on Climate-Related Financial Disclosures and the Group became a TCFD supporter	Officially submitted Letter of Commitment in November 2023 to make strides toward net zero emissions in 2050

Pathway to net zero emissions



Greenhouse Gas Management

Greenhouse Gas Source	Carbon Emissions (tCO2e)	Boundaries	Reduction Measures
Category 1: Direct greenhouse gas emissions	37,478.27		 Gradually installed local scrubbers containing equipment to reduce fluorine gases to achieve carbon reduction benefits Adjust process recipes with fluorine gas to implement source reduction
Category 2: Indirect greenhouse gas emissions	246,976.29	All factories included in this Report	 Established a smart electricity usage management platform to monitor energy efficiency and prevent unnecessary energy wastage Centralized production plants; reduced machinery loads to conserve energy; and adjusted chillers, temperatures, humidity levels, and dew points in accordance with machine loads Machinery unit adjustments, RA scheduling optimization, energy conservation lighting, and performance enhancements Planned procurement of renewable energies, including solar power, wind power, and other renewable energies
Category 3: Indirect greenhouse gas emissions from transportation	20,003.96		-
Category 4: Indirect emissions from products used	342,530.68		 Reduced raw materials usage Invited suppliers to implement joint carbon reductions
Greenhouse gas emission intensity (tCO2e/thousand TWD)	0.0128		(Category 1+Category 2) Annual carbon emissions/annual revenues

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

Energy Management

Ennostar Renewable Energy Blueprint

1 The Group's Renewable Energy Investment Plan for 2030

Year	Targets	Invested Resources	Expected Benefits
	Completed rooftop solar photovoltaic system installations in factories		2023
	EPISTAR: 464.35 KWp (N5/H1/S1/S3)		Power generated by solar photovoltaic systems in EPISTAR factories: 757,769 kWh (wholesale)
2021	Lextar: 262.89 KWp (Zhunan)		Power generated by solar photovoltaic systems in Lextar factories: 339,468 kWh (wholesale)
	Lextar Electronics: 3648KWp (Chuzhou) * 1		Power generated by solar photovoltaic systems in Lextar Electronics (Chuzhou) factories: 3,683,195 kWh (wholesale) * 3
		We expect to invest a total of	Total: 941,984 kWh (wholesale) and 4,521,000 kWh used in factories
2022	Signed MOU to generate 105 million kWh in offshore wind power each year	NT\$886 million from 2021-2030 * 2	
2023	Installed 633 KWp rooftop solar power generation systems in factories (Epistar H1/S1/S3)		
	Total capacity from installed solar power generation systems in factories:		2023-2024 Generate NT\$3.1 million in revenues by selling factory
2024	1360.29 KWp wholesale transferred for self-use		rooftop solar power to Taiwan Power Company
	(EPISTAR: 1097.35KWp/Lextar: 262.89 KWp)		
2025	External purchases of 2.5 million kWh per year in renewable energies (2 MWp of solar power)		2021~2030 (Estimated)
2027	~2030 Generate 105 million kWh in offshore wind power each year (and achieve RE100 in		Total cumulative renewable energy usage: 350 million kWh * 4
2030	non-production sites)		Total cumulative carbon reductions from renewable energy usage: 178,432 tCO2e (Note 5) * 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
- 1. Not including construction costs for 149.35KWp already installed in 2021
 2. External procurements were calculated using differences between green and gray power prices
- r 3 Our Chuzhou factory purchased renewable energy generated from third-party installations for factory self-use
- 4 1. Actual total consumption within factories for 2021-2022
 - 2. Self-installed capacities within our Taiwan factories are scheduled for self-use starting from 2025 and are expected to decrease by 1% each year. Capacities for new installations in 2023 were calculated using the Bureau of Energy's standard of 1,250 KWk/KWp * Annual decreases of 1%

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

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

r 6 Two electricity carbon emissions coefficients were used for the China region (Lextar Electronics):
1. Electricity purchased from city power grid: 0.581 kg CO₂e
2. Photovoltaic generated power: 0.079kg CO₂e=0.502 kg CO₂e

Energy Management and Conservation Actions

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

Aspect	Achievements in 2023	Improvements implemented in 2023					
- Lighting management	Reduced power consumption by 480,000 kWh and 251 tCO2e of carbon emissions	 Reduced lighting equipment and replaced existing lights with LED lights Installed segmented light controls in production areas 	Д Е	\ 1回回 —— ②	Equipment and system improvements	Reduced power consumption by 2.98 million kWh and 1,546 tCO2e of carbon emissions	 Optimized factory systems, standby equipment, and management of equipment shutdowns Replaced aged equipment and improved operational efficiency
Air-conditioning management	Reduced power consumption by 5.47 million kWh and 2,842 tCO2e of carbon emissions	 Controlled air-conditioning times and temperatures in public areas Shut down non-essential air-conditioners in production areas 			Process efficiency improvements	Reduced power consumption by 1.64 million kWh and 853 tCO2e of carbon emissions	 Optimized production and reduced energy consumption per unit Reduced electricity consumption

Group-Wide Energy Usage



Indicator	Unit	2021	2022	2023
Purchased power	GJ	2,029,858	1,898,813	1,746,535
Electricity from renewable energy	GJ	14,210	14,052	13,260
Diesel	GJ	815	722	659
Liquefied natural gas (LNG)	GJ	73,924	58,422	56,785
Total energy consumption	GJ	2,118,807	1,972,009	1,817,239
Energy intensity	(GJ//million NTD)	58	68	81
Proportion of electricity usage to total energy usage	%	95.8%	96.3%	96.84%
Renewable energy usage	%	0.7%	0.7%	0.73%

Water Resource Management

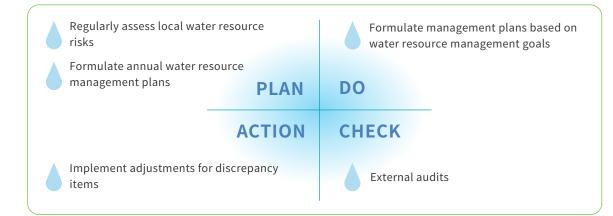
Targets and 2023 Achievements

Achieved

Торіс	Metrics and targets	Short-term targets (2023~2024)	Short-term targets (2025~2026)	Mid- to long-term (2027)
	EPISTAR annual recycled water volumes	>1%	>1%	>1%
Water Savings	Lextar cumulative annual water savings	13%	19%	20%
	Unikorn unit product water consumption volume reductions	40%	45%	50%

Water Resource Management and Reduction Actions

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







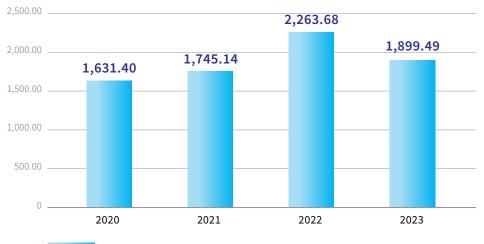
Performance Highlights

Water Conservation Solution	Achievements in 2023
Water recovery and water cycles	Reduced annual water consumption volumes by 87.28 million liters

Improvements Implemented in 2023

- Recovery methods included ROR wastewater recovery, QDR wastewater recovery, polishing wastewater recovery, air-conditioner condensate recovery, RO filter water recovery, and low-concentration drainage recovery
- Heavy metals in wastewater are absorbed using nanoporous glass materials: As heavy metals in wastewater are easily absorbed, water resources can be recycled and absorbed metals can be recycled and reused. Currently in development with the Industrial Technology Research Institute.

Total recycled water volumes and recycling rate



Total recycled water volumes (million liters)

Our ESG Committee (Working Group) conducts monthly reviews of introductions, assessments, and applications for reclaimed water and desalinated sea water. We expanded water resource usage in 2023, and our water sources included 0.24 million liters of ground water and 0.76 million liters of subsurface water.

Achieved

Waste Management

Targets and 2023 Achievements



Waste Management

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

In total, our generated waste volumes in 2023 declined by 23% compared with 2022.



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Project title

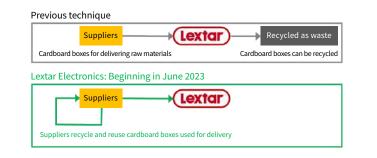
Selected delivery cardboard boxes were returned to and reused by factories

Project boundaries

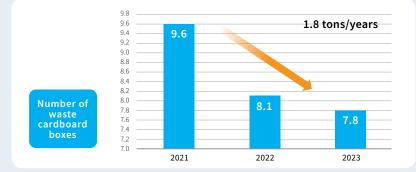
Lextar Electronics SMT material packaging materials

Project description and quantitative performance

We inventoried carrier boxes for SMT materials and found that many boxes were scrapped even though they were only used once for incoming materials and the exteriors were not damaged. Therefore, we returned selected boxes to our suppliers so they could be reused, thereby reducing the amount of scrapped boxes.



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



Achieved

Circular Economy

Targets and 2023 Achievements

[7]

Торіс	Metrics and targets	Short-term targets (2023~2024)	Short-term targets (2025~2026)	Mid- to long-term (2027)
Resource Recycli	g Increase proportion of recycled waste each year	1%	1%	1%

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

	Project title	2023 Performance
Performance	Reduce sapphire process usage volumes	Reduced need for 25,902 units
Highlights	NH3 reductions	 Reduced ammonia usage by 19,206 kg/year Reduced costs by NT\$1,623,688/year
	Reduction of cleaning fluid used during lapping processes	Reduced 415,924 ml of cleaning fluid
	Recycling rates for general industrial waste in Zhunan Facility	Completed the first in-factory general industrial waste SRF treatment process in October, and our recycling rate for general industrial waste rose from 0% to 73.9% from August to October
	Factory organic waste liquid was converted into alternative fuel for use by co-generation power plants	Compared with 2022, the recycling rate of organic waste liquids rose from 49% to 100%
	Recycling and reuse of reels	Recycled a total of 35.46 tons

Please refer to the 2023 Sustainability Report for more detail on waste volumes Circular Economy projects.

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Air Pollution Prevention

Management Targets and 2023 Achievements

Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goal (2026 and beyond)
1. Compliance with emission requirements of air pollution regulations	Not achieved	Compliance with emission requirements of air pollution regulations	Compliance with emission requirements of air pollution regulations
2. Zero major violations of environmental regulations	Achieved	Zero major violations of environmental regulations	Zero major violations of environmental regulations
3. Replaced or upgraded three control equipment	Achieved	Replace or upgrade five control equipment	Replace or upgrade three control equipment in a year

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

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Social

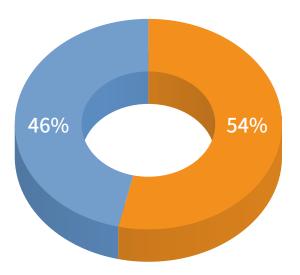
- Talent Management
- Talent Attraction and Retention
- Talent Development and Cultivation
- Occupational Health and Safety
- Human Rights

Talent Management

Talent Structure

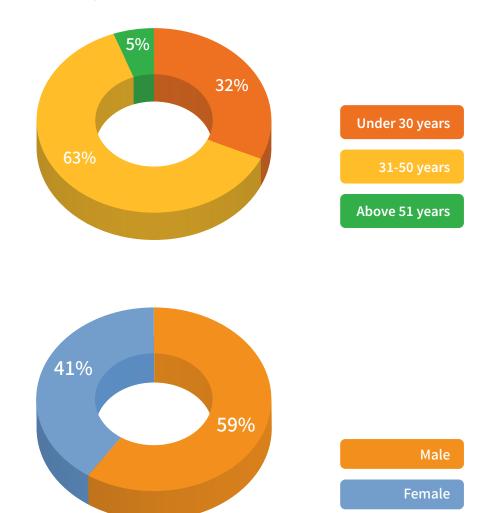
Global manpower distribution

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



Taiwan	4,898	54%
China	4,221	46%
Total	9,119	100%

Personnel composition in 2023



Talent Attraction and Retention

Targets and 2023 Achievements

Achievements in 2023	Achievement status	Short-term targets (2023-2024)	Mid-term goals (2025-2026)	Long-term goals (2027 and beyond)
1. Added <mark>8</mark> effective talent source channels	Achieved	Add 8 effective talent source channels	Add 3 effective talent source channels	Add 3 effective talent source channels
2. Added collaborations with <mark>5</mark> new key target college departments	Achieved	Add collaborations with <mark>6</mark> new key target college departments	Add collaborations with <mark>8</mark> new key target college departments	Add collaborations with <mark>6</mark> new key target college departments
3. Hired a cumulative total of 6 people from key college departments	Achieved	Hire a cumulative total of 16 people from key college departments	Hire a cumulative total of 32 people from key college departments	Hire a cumulative total of 40 people from key college departments
4. Was active on social media and made 88 regular posts	Achieved	Be active on social media and make 74 regular posts	Be active on social media and make 78 regular posts	Be active on social media and make 90 regular posts
5. Achieve employee engagement surveys coverage rate of 21%	In preparation	Achieve employee engagement survey coverage rate of 60%	Achieve employee engagement survey coverage rate of 70%	Achieve employee engagement survey coverage rate of 70%

Industry-Academic Collaboration and Diverse Recruitment Channels

Actively promote industry-academia collaborations and diverse recruitment channels. The Group assessed and identified key target schools and departments, then recruited talent from collaborating schools, increasing the efficiency of recruitment resources, and making talent searches more accurate and more effective.



Campus Cultivation Achievements in 2023

Channel	Partner schools	Benefits	
Key target schools and departments	National Tsing Hua University/National Central University/National Taipei University of Technology/National Changhua University of Education/National Yunlin University of Science & Technology/Yuan Ze University/National United University/Chang Gung University/ National Chung Hsing University/Southern Taiwan University of Science and Technology/ I-Shou University/National Kaohsiung University of Science and Technology/Soochow University	We collaborated with 20 schools/ departments and hired 9 people	
Southbound recruitment and school contacts	National Taiwan University of Science and Technology/National Chung Hsing University/ National Cheng Kung University/National Chiao Tung University/Taiwan External Trade Development Council	Collaborated with 5 schools and recruited 2 people	

Employee Engagement Surveys

In 2023, we conducted surveys which covered five major aspects: Employee life cycles, job roles, workplace environments, management styles, and welfare measures. Survey results showed that we achieved an overall satisfaction score of 3.87 out of 5 points.

Remuneration and Benefits

The Group has established human-oriented management systems and diverse incentive policies. And we promote welfare measures that adhere to employee needs, providing a workplace environment that fosters happiness.

- The Group adjusts employee salaries by referencing market salary levels, economic trends, price indexes, and related information, as well as corporate operational performance and individual performance. No difference based of race, religion, skin color, political affiliation, age, gender, marital status, or physical and mental disabilities. We provide our employees with basic salaries that exceed the standards stipulated by the Labor Standards Act.
- Provide Employee Assistance Programs (EAPs) to help our colleagues relieve work and life stresses and problems. We also review turnover rates and reasons for termination each month and handle severance pay in accordance with the regulations of related labor laws.

Career

Wellness

Comprehensive care for

Provide recreation and

Customized Employee

exercise facilities

physical and mental health

Assistance Programs (EAPs)

- Provide sound learning environments
- Focus on internal transfers and promotions to facilitate talent flow

Compensation

- Maintain competitive salaries to retain and attract talent
- Diverse benefits and rewards

Ennostar Group Overall incentives

Social

- Promote work-life balance
- Diverse social club and department activities
- Comfortable work and social environments

Talent Development and Cultivation

Targets and 2023 Achievements

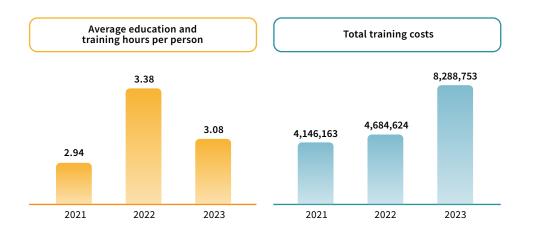
Achievements in 2023	Achievement status	Short-term goals (2024-2025)	Medium and long-term goals (2026 and beyond)
Increased digitalization ratios for annual training programs to more than 10% : EPISTAR 22% ,Lextar 32% , Unikorn 10%	Achieved	Increase digitalization ratios for annual training programs to more than 20%	Increase digitalization ratios for annual training programs to more than 30%
Lextar completed incorporation of its learning platform, and EPISTAR and Unikorn continued to expand platform learning resources	Achieved	Increase total individual learning hours by more than 10% each year	Increase total individual learning hours by more than 20% each year*
Formulated learning blueprints: EPISTAR 100% , Lextar 80% Unikorn systems are currently being developed	Achieved	Complete 100% of professional learning blueprints for (competency) development units	Ensure that 80% of our colleagues have individual learning blueprints
Achieved <mark>90%</mark> promotion rate for development-oriented performance management	Achieved	Incorporation rate of performance management in competency appraisals: 100%	IIncorporation rate of Individual Development Plans (IDP) in performance appraisals: 100%
Formulate plans to establish key talent teams	In preparation	Complete talent inventories and identify 100% of key positions by 2024 Establish IDPs for 100% of key talent	Fill 80% of key positions from internal replacements

- In 2023, the Group initiated the three stages of "Aggregate," "Integrate," and "Incorporate" to gradually maximize the synergy of Group resources. The Group's six axes for talent cultivation are "newcomer orientation," "general capabilities," "professional capabilities," "management capabilities," "self-development," and "sustainability awareness."
- We established a Talent Development Committee at the end of 2023. Committee members personally appointed by the chairman discuss the organization's five-year strategic plans at quarterly Committee meetings to identify key positions within the organization, inventory talent, track talent information, and formulate plans for talent development mechanisms to help managers and employees develop trust in organizational developments and commitments, revitalize human resource structures, and strengthen organizational competitiveness.



Corporate University

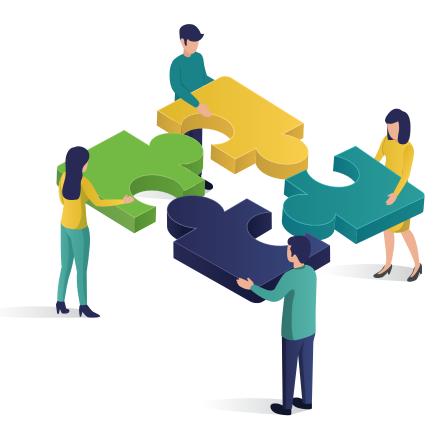
Our corporate university includes five colleges which provide diverse competency training for relevant talent. The five colleges have designed diverse learning programs. In 2023, the Group provided training to 57,272 people with total training costs of NT\$8.29 million; average satisfaction scores for all courses exceeded 4.6 points



		By position			By gender	
Indicator		Indirect labor (Non-management)	Direct labor			
Total training hours	26,300.2	94,457.1	70,684.6	134,303.3	57,138.6	
Total number of training participants	1,509.0	5,826.0	8,992.0	11,741.0	4,586.0	

Development-Oriented Performance

The Group has formulated an appraisal system for performance management and development which aims to enhance overall individual and organizational performance, and implement bidirectional communications and employees development. 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 participation rate in the 2023 performance evaluation reach 100%.



Occupational Health and Safety

Targets and 2023 Achievements

Achievements in 2023	Achievement status	Mid-term goals (2024-2025)	Long-term goals (2026 and beyond)
Zero major deficiencies discovered during external ISO 45001 and CNS 45001 audits	Achieved	 Ensure Zero major deficiencies are discovered during external ISO 45001 and CNS 45001 audits 	 Ensure Zero major deficiencies are discovered during external ISO 45001 and CNS 45001 audits
Zero major industrial safety incidents	Achieved	 Maintain our record of Zero major industrial safety incidents each year 	 Maintain our record of Zero major industrial safety incidents each year
Taiwan factories participated in annual selection processes for excellent occupational safety and health units organized by local science park administration offices	Selected in 2022 Completed short-term goal	3.Participate in selection processes for excellent occupational safety and health units organized by local science park administration offices every two years	3.Participate in selection processes for excellent occupational safety and health units organized by local science park administration offices every two years
Achieved 100% management of workplace	Achieved	 Achieve 100% management of workplace azard health risks in Taiwan and China factories 	 Achieve 100% management of workplace azard health risks in Taiwan and China factories
hazard health risks in Taiwan factories	Achieved	5. Implement diverse health promotions for 100% of employees	5. Implement diverse health promotions for 100% of employees
Achieved EAP satisfaction score of 90%	Achieved	6. Achieve EAP satisfaction score of 90%	6. Achieve EAP satisfaction score of 90%
Obtained Accredited Healthy Workplace certificates for the year	Achieved	7. Obtain Accredited Healthy Workplace certificates for each year	7. Obtain Accredited Healthy Workplace certificates for each year

Environment

Occupational Health and Safety Management

In accordance ISO45001, RBA Code of Conduct, local regulations, and EHS system stipulations (ISO 14001, ISO 45001, CNS 45001). We established the "EHS Management Manual" and "Environment, Health and Safety Principles,"

Hazard Identification and Risk Assessment

The Group has formulated identification and risk assessment procedures for major hazards. We analyze potential risks that could result in abnormalities using risk assessment technologies and have adopted preventive measures to lower probabilities and severity of hazards.

Implementation of Internal and External Audits:

Discover existing and potential problems in advance, control risks, enhance system efficiency, assess overall benefits of EHS operations, and provide a reference for managers. We implement internal audits of management systems each year in accordance.

Incident Notification and Investigation Procedures:

Incident investigations are conducted with labor representatives. Incident investigation reports are simultaneously submitted to the safety committees of all factories and to prevent similar incidents from reoccurring.

Emergency Response Procedures:

We have established response organizations at the head o-ice level and factory level. All personnel comply with their required duties in responding to various situations during emergencies.

Environment, Health and Safety Training:

The Group organized 942 physical and online EHS training courses in 2023.

Management of Work-Related Injuries:

No work-related ill health incidents and fatalities at our factories in 2023. We also applied ergonomic engineering technologies to occupational health and safety management, as well as to prevent accidents.

Activities for Enhancing Safety Awareness:

Such as EHS Competition, Corrections of Inspection Deficiencies for Chemical Categories, etc.



Achieved

Environment

Human Rights

| Targets and 2023 Achievements

Торіс	Metrics and targets	Short-term targets (2023~2024)	Short-term targets (2025~2026)	Mid- to long-term (2027)
Happy Workplace	Rate of closed employee feedback (complaint)	100%	100%	100%

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. 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.

Due Diligence Procedures for Human Rights Issues

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

Migrant Worker Agency Audits

we audit migrant worker agencies once every year in accordance with local and international labor agency management regulations, and promote reasonable operations in the labor market.

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 4,880 participants over a total of 4,880 training hours, achieving a training completion rate of 100%.

