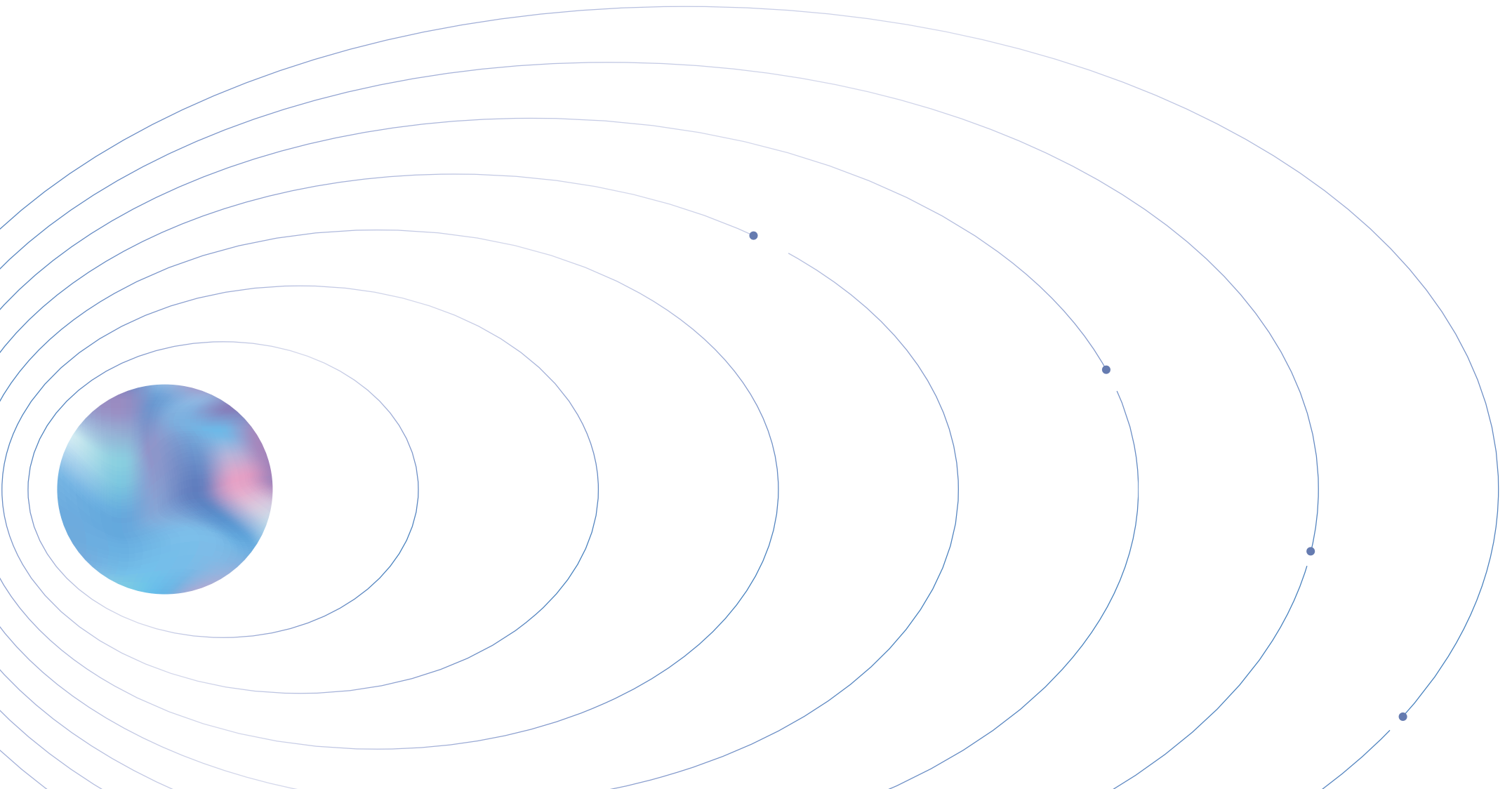


BEYOND HANA MICRON, TOWARD SUSTAINABLE SEMICONDUCTOR

2025 HANA MICRON Sustainability Report



About This Report

Overview

HANA Micron publishes its sustainability report annually to comprehensively report non-financial and financial performance and communicate with stakeholders, including sustainability management direction and activities. The 2025 Sustainability Management Report faithfully contains major issues and progress in the environmental, social, and governance sectors. We seek to realize social value by actively communicating with stakeholders through the annual publication of the report.

Reporting Standards

This report follows GRI (Global Reporting Initiative) Standards 2021, the international reporting guidelines for sustainability management, and also reflects SASB (Sustainability Accounting Standards Board) and UN SDGs (Sustainable Development Goals). Additionally, the financial information included in this report complies with K-IFRS (Korean International Financial Reporting Standards). If any, changes are separately noted in the comments.

Reporting Period

This report contains sustainability management activities and performance from January to December 2024. For major activities, data for three years (2022 to 2024) is included to improve comparability, and for some non-financial performances, the first half of 2025 is included.

Reporting Scope

The scope of this report includes Korea (HANA Micron, HANA WLS), Vietnam (HANA Micron Vietnam, HANA Micron Vina), and Brazil (HT Micron, HANA Electronics). If the reporting scope is different, it is indicated separately for reference. The financial performance includes the consolidated financial information of HANA Micron and its affiliates.

Report Verification

This report was verified by an independent third party to ensure the suitability of the reporting process and the reliability of the report contents. A detailed opinion of the verification is included in the Appendix of this report.

Inquiries

This report can be viewed or downloaded from the website. If you have any questions or comments, please contact us using the contact information below.

Homepage	www.hanamicron.com
Address	77, Yeonamyulgeum-ro, Eumbong-myeon, Asan, Chungcheongnam-do
Department	ESG Group
E-mail	sbim@hanamicron.co.kr
Tel	041-423-7080

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Our Business

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CEO Message

We strive to practice ESG management to fulfill our responsibilities toward the environment and people and pursue coexistence with stakeholders.

I express our deepest gratitude to all stakeholders for their continued interest and support in HANA Micron's journey to create a sustainable world with next-generation technology.

The Year 2024 was a meaningful year in which HANA Micron solidified a firm ESG management foundation toward a sustainable future despite uncertainties in the global business environment. Since its inception in 2001, HANA Micron stands as a leading company providing a 'Full Turn-key Solution' encompassing packaging, testing, and module assembly, based on accumulated expertise in the semiconductor packaging field. In particular, we focused on developing cutting-edge packaging that unites various AI semiconductors, including HBM, further strengthening our competitiveness in the global semiconductor back-end process market.

In the rapidly changing global political and industrial environment, sustainability has become an essential requirement rather than an option. As data processing speeds become faster, packaging technology for semiconductors is becoming more advanced and environmental, social and economic risks are more complex than ever. In these challenges, HANA Micron reorganized its existing ESG management strategies and concentrated on achieving substantial performance.

In the Environment (E) area, we actively implemented the '2050 Greenhouse Gas Reduction Plan' and promoted energy efficiency projects to consistently reduce greenhouse gas emissions and increase resource recycling rates. In the Social (S) area, prioritizing 'safety' and 'security,' we established an autonomous safety and health system to prevent company-wide accidents and expanded various programs to enhance employee capabilities and support work-life balance. In the Governance (G) area, centered on the ESG Committee, we built a systematic ESG management system to strengthen transparency and responsible management, while improving shareholder communication channels to establish a sound governance culture.

In the future, HANA Micron will create economic value through technological innovation and continue to practice genuine ESG management that balances responsibility toward the environment and society. Through our core competitiveness in cutting-edge packaging technology, we will develop semiconductor solutions while contributing to the transition to a low-carbon society. Furthermore, based on active communication and cooperation with out stakeholders, we will build a mutually beneficial ecosystem and become a trusted company through transparent and responsible management.

We ask for your continued interest and support. Thank you.

HANA Micron Inc. CEO



About HANA Micron

Company Overview

Company	HANA Micron Inc.
CEO	Dong-cheol Lee
Establishment	August 23, 2001
Paid-in Capital	KRW 33.1 billion (As of December 31, 2024)
Sales	KRW 1,250.7 billion (based on consolidated financial statements as of December 31, 2024)
No. of Employees	771 (As of December 31, 2024)
Business Area	Semiconductor packaging and testing
Address in Korea	Head Office (Manufacturing) : 77 Yeonamyulgeum-ro, Eumbong-myeon, Asan-si, Chungcheongnam-do Pangyo (R&D) : 9FL, 35, Pangyo-ro 255beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do



Total assets
(consolidated) **1,944.6** billion



Total capital
(consolidated) **605.8** billion



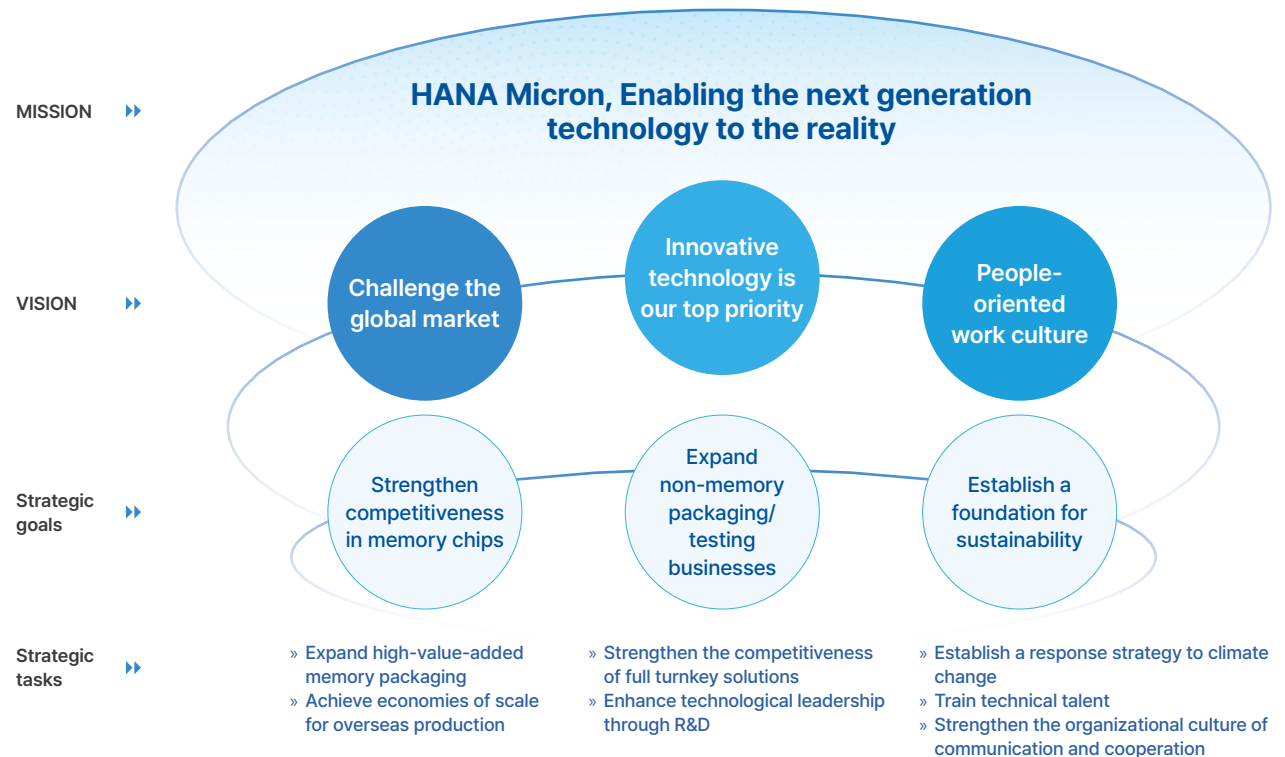
Operating profit
(consolidated) **106.8** billion



Credit rating
(consolidated) **BB-**

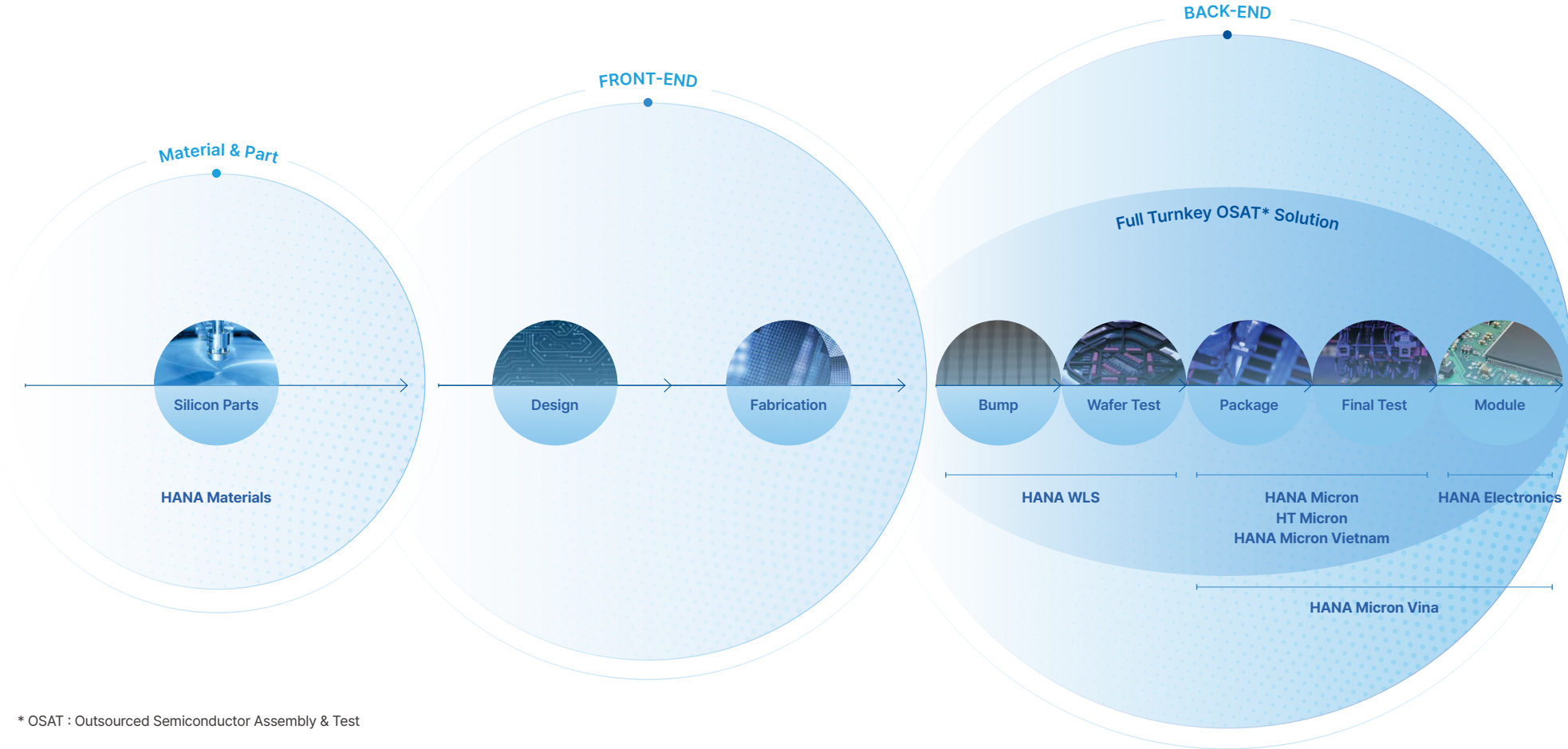
Vision and Strategy

HANA Micron has achieved sustainable growth through bold investments and research and development even in a rapidly changing semiconductor market, establishing itself as a global top 10 semiconductor back-end process company. Despite the rapidly evolving industrial environment in 2024, we completed the construction of a second factory in our Vietnam production base, expanded our sales volume, and focused on strengthening our manufacturing competitiveness. In addition, we diversified our portfolio by expanding our non-memory product line, which focused on mobile and home appliances, to automotive, and laid the foundation for the company's sustainable growth by strengthening our testing business capabilities. HANA Micron will invest in future growth areas to discover new growth engines and leap forward as a leading global semiconductor back-end process company.



Business

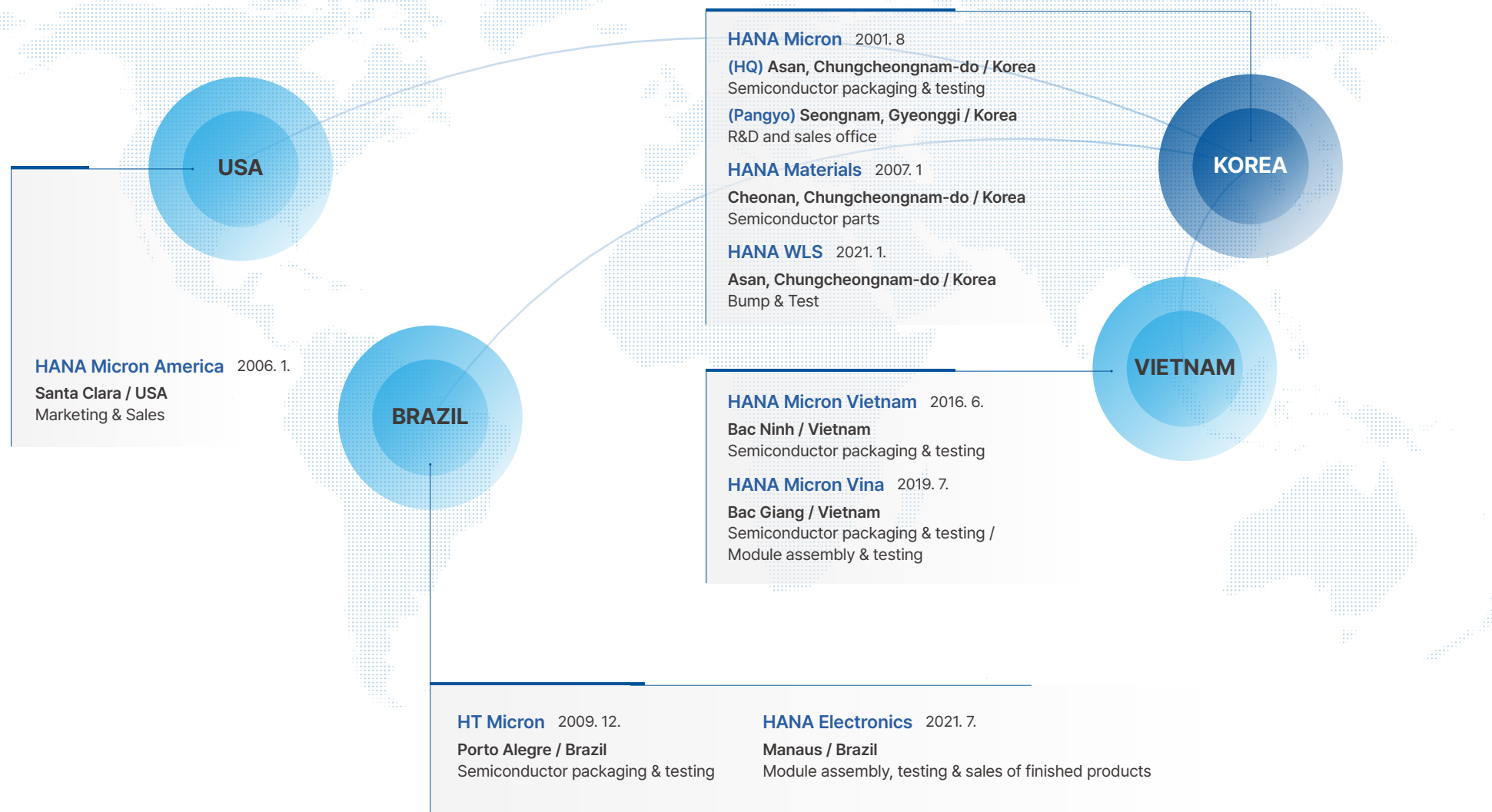
HANA Micron's main businesses include semiconductor packaging and testing, which is the back-end field of the semiconductor industry. We pursue constant change and innovation based on excellent technology and talent, secure a global base by expanding our production bases in Vietnam and Brazil, and continue to grow based on strategic partnerships with the best domestic and foreign semiconductor companies. We are expanding our system semiconductor business based on our full turnkey technology encompassing memory semiconductor packaging, testing, and module assembly, and are committed to developing cutting-edge packaging technology that unites various artificial intelligence semiconductors, including high bandwidth memory (HBM). As a result, we will grow into a total solution company for the semiconductor back-end process that satisfies the needs of various customers worldwide.



* OSAT : Outsourced Semiconductor Assembly & Test

Global Network

Since its early days, HANA Micron has aimed for overseas expansion in the semiconductor business and has continuously explored foreign markets. We have enhanced manufacturing competitiveness by expanding production bases centered on Vietnam and have achieved significant performance by securing a Latin America market hub focused on Brazil, a newly emerging economic power with unlimited growth potential. HANA Micron will continue to strive to provide the best solutions tailored to the diverse needs of customers worldwide, based on accumulated business experience and overseas bases.



Approach to Sustainability



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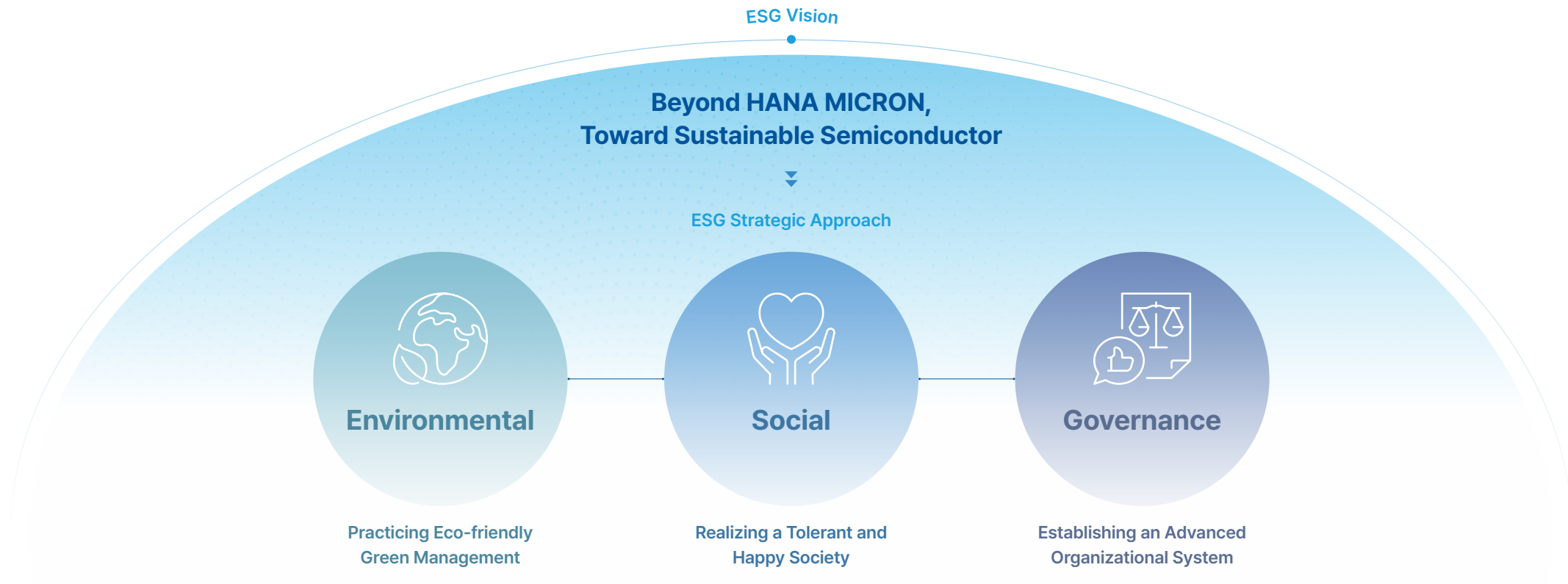
ESG Management Strategy

ESG Vision

HANA Micron's ESG vision, 'Beyond HANA MICRON, Toward Sustainable Semiconductor', implies 'semiconductor' as its identity and 'sustainability' as its direction. The expression 'Beyond HANA MICRON' means moving beyond our company and toward the nation and the world. It also indicates continuously developing beyond the limitations of semiconductors required by the times.

ESG Strategic Approach

HANA Micron provides high-value solutions related to semiconductor packaging & testing and is making bold investments and innovations for business expansion and future growth. We have established three significant directions for ESG management : practicing eco-friendly green management, creating an inclusive and happy society, and establishing an advanced organizational system. Through this, we aim to provide a sustainable growth engine and reveal the company's management philosophy and commitment.



ESG Management Strategy

ESG Implementation Strategy

ESG Strategic Approach	Practicing Eco-friendly Green Management	Realizing a Tolerant and Happy Society	Establishing an Advanced Organizational System
	 <p>HANA Micron recognizes global environmental issues and endeavors to create a sustainable environment for future generations.</p> <p>We aim to practice eco-friendly green management by minimizing the environmental impact of our business activities and actively taking the lead in environmental improvement.</p>	 <p>HANA Micron's commitment goes beyond economic value. We are dedicated to contributing to the happiness of humanity by pursuing social value. We actively work to minimize risks that could negatively impact the social community and the environment, playing a crucial role in creating an inclusive and happy society.</p>	 <p>HANA Micron seeks to establish an advanced organizational system based on efficiency and innovation without being bound by the past. We will strengthen compliance and ethical management, strengthen the Board of Directors' responsibility, and pursue communication with all stakeholders, including members, as our top priority, believing that communication with stakeholders ensures sustainable growth.</p>
ESG implementation strategy	<div>Advancement of environmental management</div> <div>Establishment of response strategy to climate change</div>	<div>Safe and happy workplaces</div> <div>Management of supply chain sustainability</div>	<div>Reinforced compliance and ethical management</div> <div>Internal management innovation</div>
Main activities	<ul style="list-style-type: none"> » Expand environmental education » Discover and drive reduction/ control activities » Establish mid-to-long-term GHG reduction strategies » Introduce new and renewable energy 	<ul style="list-style-type: none"> » Strengthen safety and health and serious accident prevention activities » Create an organizational culture of communication and cooperation » Advance quality management » Establish a supply chain management policy and manage partner's risk 	<ul style="list-style-type: none"> » Consider introducing an anticorruption management system » Expand ethics and anti-corruption education » Consider expanding the diversity and expertise of the Board » Internal accounting management system training

ESG Management Strategy

ESG Management System

ESG Committee

HANA Micron organized the ESG Committee in August 2024 to achieve sustainable growth. We expanded the committee's role from focusing solely on safety and health to encompassing the entire ESG spectrum, including environment, human rights, and labor. The ESG Committee consists of 8 people, with the CEO as the chairman and executives from QRA (quality), COO, PKG Technology Team, facility, purchasing, and technology departments as members. We run the organization as a management-centered organization that can perform a more rapid and realistic supervisory function by enhancing employee awareness campaigns and promoting greenhouse gas reduction activities. We plan to introduce an ESG Committee under the Board of Directors for the second half of 2025.

ESG Council

The ESG Council comprises working-level personnel in each environmental, social, and governance sector, including climate change response, hazardous substance control, talent development, supply chain management, safety and health, and ethical management. We discuss the direction and action plan for each ESG sector, carry out implementation tasks, and share current issues and performance information. The ESG Council operates regularly and frequently depending on issues such as ESG evaluation, RBA certification, and safety and health activities.

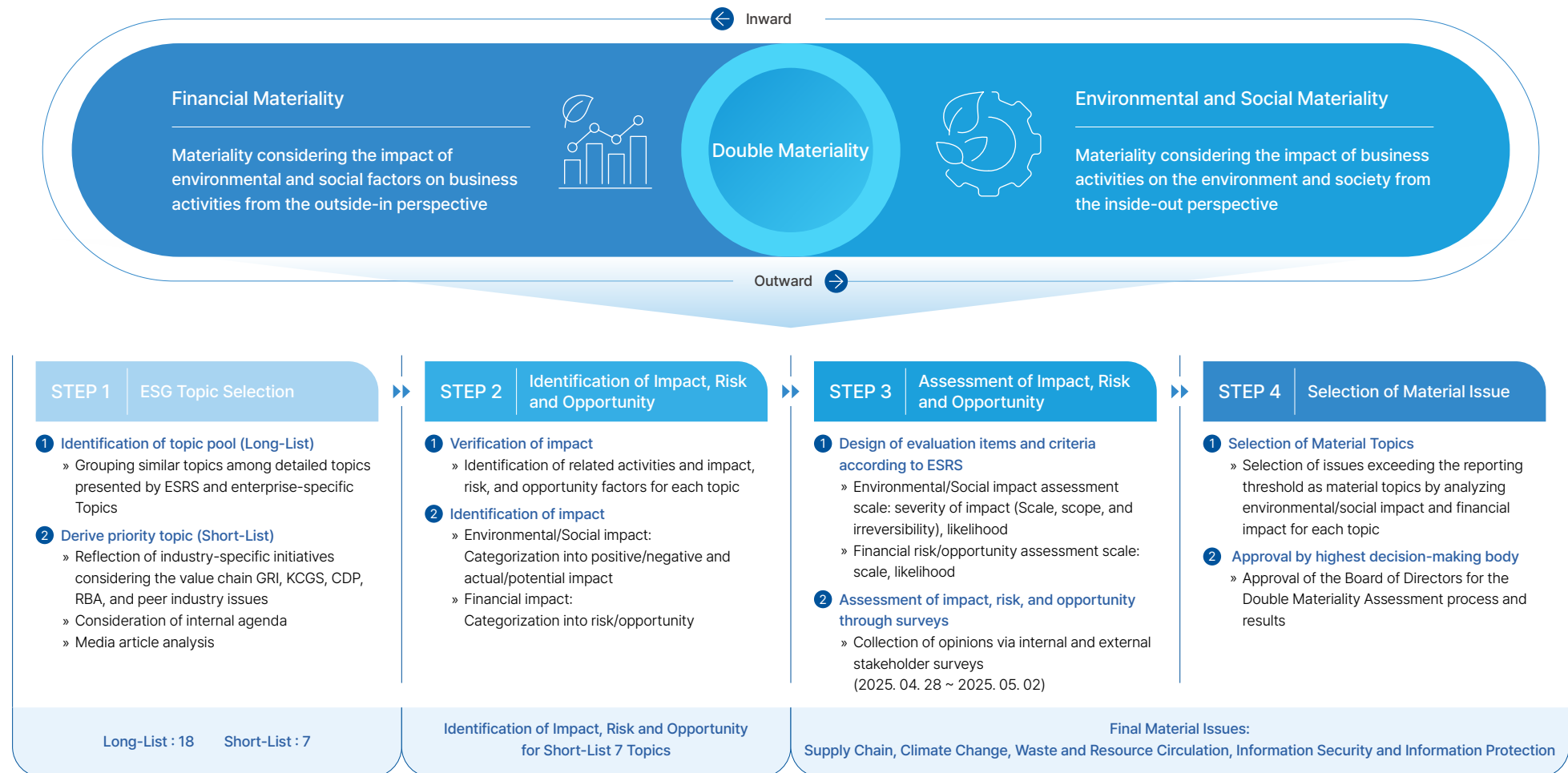
ESG governance



Double Materiality Assessment

Double Materiality Assessment

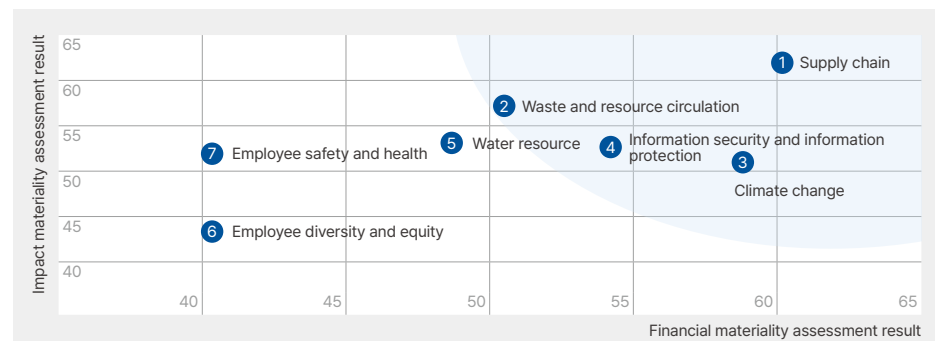
Materiality assessment is widely used to determine the economic value of a company affected by ESG. Double materiality means considering the external environmental and social impacts of corporate management activities and external environmental and social factors affecting the company's financial status, that is, both internal and external perspectives. HANA Micron introduced and analyzed the double materiality assessment, which considers environmental and social impacts and financial materiality when selecting material issues for sustainability.



Double Materiality Assessment

We analyzed the impact of financial and socioenvironmental materiality of material issues and included the main activities and achievements performed by HANA Micron in the body of this report to respond effectively to opportunity and risk factors.

Results of the materiality assessment



Material issue impact analysis

Material issues	Financial impact	Risk /Opportunity	Social and environmental impact	Positive /Negative
Supply chain	Sales may increase through enhanced competitiveness via shared growth with partners, related costs can be reduced by minimizing legal disputes and fines with partners, and operating costs may decrease through establishing a stable supply chain.	Opportunity	To prevent risks that may arise from partner companies, we operate partner management and evaluation processes, conduct activities for shared growth with partners to establish a win-win cooperation system, and enhance expertise across the supply chain to improve supply chain sustainability and reliability.	Positive
	Legal costs, trust recovery costs, sales decline, and stock price drop may occur due to human rights violations or non-compliance within partners; additional costs such as delay penalties may arise from supply disruptions caused by termination of supplier contracts.	Risk		
Waste and resource circulation	Operational efficiency may improve by recycling raw materials used in waste manufacturing processes in reusable processes and using recycled raw materials, resulting in reducing manufacturing costs and operating expenses.	Opportunity	Reducing waste through recycling waste generated in processes and using recycled raw materials, minimizing environmental impact, and contributing to the activation of the circular economy.	Positive
	Waste disposal costs may increase due to charges from the waste charge system, strengthened environmental regulations, and lack of treatment facilities; investment and operating costs for waste reduction facilities may occur; fines may be imposed for violations of waste-related laws.	Risk		
Climate change	Due to strengthened greenhouse gas emission regulations, costs for purchasing greenhouse gas emission rights may increase; costs for responding to ESG information disclosure demands from stakeholders may rise; facility investment costs may increase due to renewable energy transition; energy price increases caused by climate change may raise transportation and manufacturing costs.	Risk	Greenhouse gas emissions from using energy such as diesel, gasoline, electricity, and city gas during business activities may cause climate change, leading to abnormal weather, natural disasters, changes in precipitation, sea level rise, desertification, water shortages, spread of tropical diseases, and reduction of species.	Negative
Information security and information protection	Fines and penalties may occur due to leakage of customer and employee personal information and technology information under relevant laws; leakage of core technology may weaken enterprise competitiveness and sales may be reduced due to decreased customer demand.	Risk	Leakage of personal information (employees and customers) may infringe on the human rights and privacy of stakeholders including customers and employees; unauthorized leakage of corporate information assets during handling of technology information may infringe shareholders' rights.	Negative
Water resource	Facility investment costs may increase to establish water reuse systems; industrial water procurement costs may rise if water shortages worsen.	Risk	Excessive water use in processes may cause water shortages in nearby business locations; discharges wastewater and pollutants may result in water quality pollution.	Negative
			Introducing water reuse facilities to manage and reduce water intake may minimize water resource risks and reduce community water stress.	Positive
Employee diversity and equity	Insufficient human rights risk management may result in litigation costs or fines for legal violations, loss of trust from stakeholders, reputation decline leading to decreased sales and stock prices; a culture that does not respect employee diversity and lack of systematic education and training may cause reduced employee capabilities and productivity, leading to lower product and service quality and decreased sales.	Risk	Inadequate human rights risk management causing human rights violations may increase anxiety and dissatisfaction among stakeholders and intensify social instability.	Negative
			Creating working conditions that prevent infringement of fundamental rights of internal and external stakeholders including employees and respect human rights; ensuring diversity regarding race, gender, religion, and other minorities; complying with the RBA Code of Conduct; operating human rights grievance handling channels to contribute to stakeholder satisfaction, health, and improvement of quality of life.	Positive
Employee safety and health	Fines, penalties, and compensation costs may occur due to violations of laws such as the Serious Accident Punishment Act in case of safety accidents or serious disasters; expenses for safety and health activities and trust recovery costs may arise.	Risk	Safety accidents may cause injury, illness, or death to employees within the supply chain; deterioration of supply chain stability; threats to employee health within the supply chain; and reduced quality of life for employees' families.	Positive


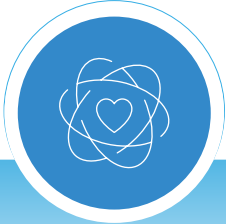



Impact of material issues

●○○ Low ●●○ Medium ●●● High

Priority	Area	Material issues	Financial materiality	Social/environmental materiality	Page	UN SDGs
①	S	Supply chain	●●●	●●●	39-41	SDGs 8
②	E	Waste and resource circulation	●●○	●●●	24-27	SDGs 12
③	E	Climate change	●●●	●●○	21-24	SDGs 7, 13
④	S	Information security and information protection	●●●	●●○	52	SDGs 9
⑤	E	Water resource	●○○	●●○	25	SDGs 6
⑥	S	Employee diversity and equity	●○○	●●○	31-35	SDGs 3
⑦	S	Employee safety and health	●○○	●○○	36-38	SDGs 3

Communication with Stakeholders

HANA Micron divides its major stakeholders into customers, employees, local communities, shareholders and investors, partners, and the government and collects and reflects their opinions through various channels.

	 Customers	 Employees	 Local community	 Shareholders and investors	 Partners	 Government
Main interest	» Product and service quality » Accurate product information » Rapid response » Effective communication	» Organizational culture » Welfare & benefits, rewards » Training and career development » Management status	» Revitalization of the local economy » Support for the underprivileged » Industry-academic cooperation » Biodiversity and conservation activities	» Responsible governance structure » Enhancing shareholder value » Financial performance » Transparent information disclosure » ESG risk management	» Fair trade » Shared growth » Improvement of environment and safety » Workers human right protection	» Indirect economic effects (tax payment, employment, etc.) » Compliance with laws and regulations » Realization of social responsibility
Communication channels	» Website (hanamicron.com) » Sustainability Report » Groupware » 'Voice of Customers'	» Groupware » Labor-Management Council (Hana Council) » Meetings by level » Reporting system (ethics, human rights)	» Hana Volunteer Corps » Schools in the community » Eumbong Development Council	» Shareholders' meetings » Business reports » Websites » Investment briefing sessions	» Environment, Safety, and Health Integrated Portal, 'Listen to Opinions' » Councils in partners	» Press release » Association activities » Policy meeting
Response activities	» Provision of product information through the website » Quality control	» Regular communication between labor and management councils » Sharing company news » Events and activities to improve organizational culture	» Kimchi-making with love » Environmental cleanup campaign » MOUs with Local schools	» Quarterly performance announcement » IR meetings	» Quality meeting with partners » Safety meeting with partners	» Electronic disclosure » Tax payment

ESG Performance

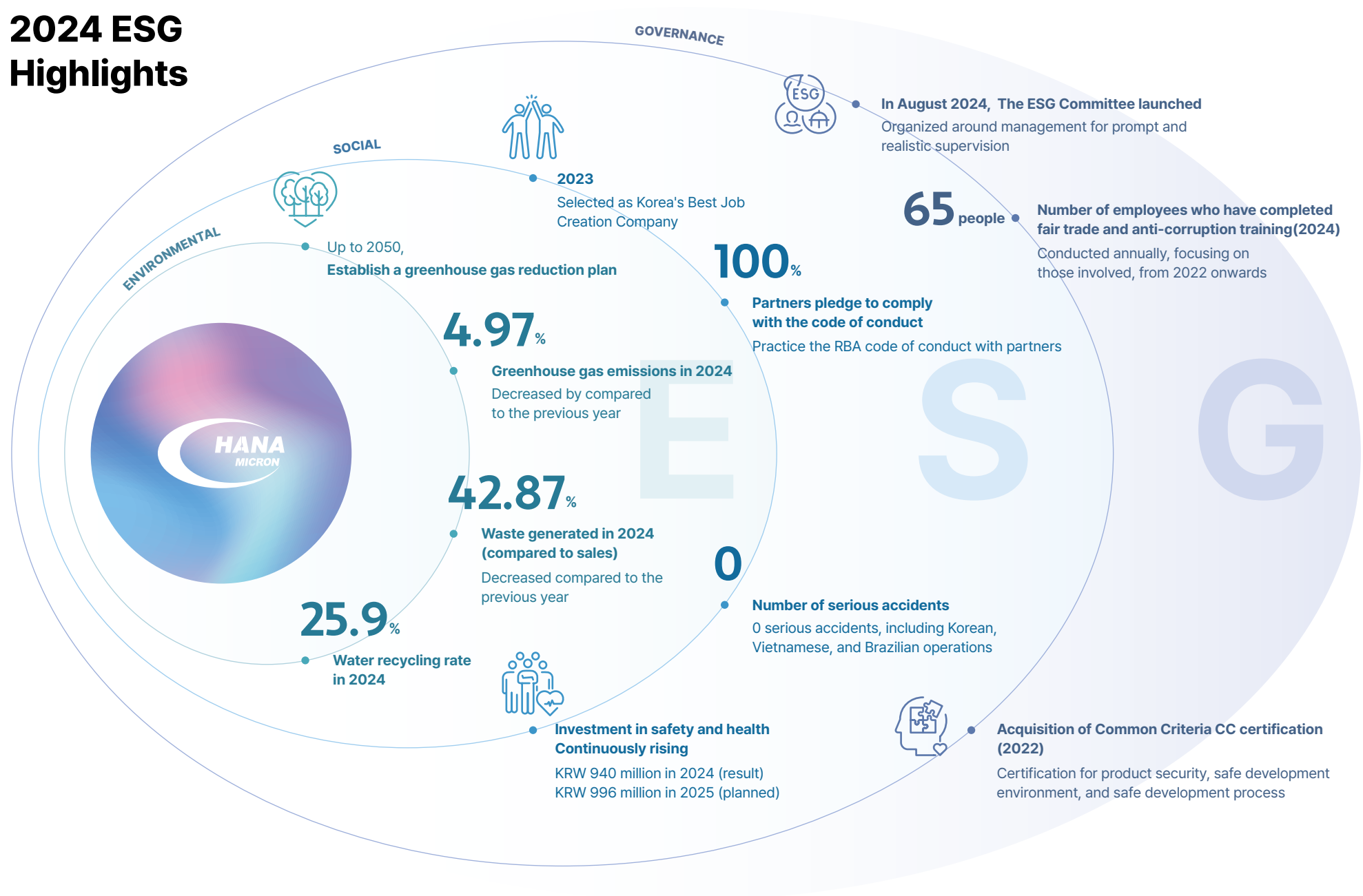
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2024 ESG Highlights



ESG PERFORMANCE

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Up to 2050,
Establish a greenhouse
gas reduction plan



Greenhouse gas emissions in 2024
Decreased compared
to the previous year

4.97%

Waste generated in 2024
(compared to sales)
Decreased compared
to the previous year

42.87%

Water recycling rate
in 2024

25.9%

Environmental Management

Environmental Management Strategy

HANA Micron promotes eco-friendly management under the direction of 'practicing eco-friendly green management' of ESG management. In order to solve the climate crisis, which has become a global issue, we are carrying out activities to reduce raw material, water, and energy usage and greenhouse gases while also making every effort to reduce air and water pollutants and waste emissions. In addition, by establishing environmental policies and an environmental management promotion system based on the environmental management system (ISO 14001), we efficiently manage environmental risks and systematically identify, evaluate, and improve the organization's environmental performance. HANA Micron's environmental management strategy consists of Environmental Policy, Strategy, Strategic Tasks, and Action Tasks.

Environmental Policy

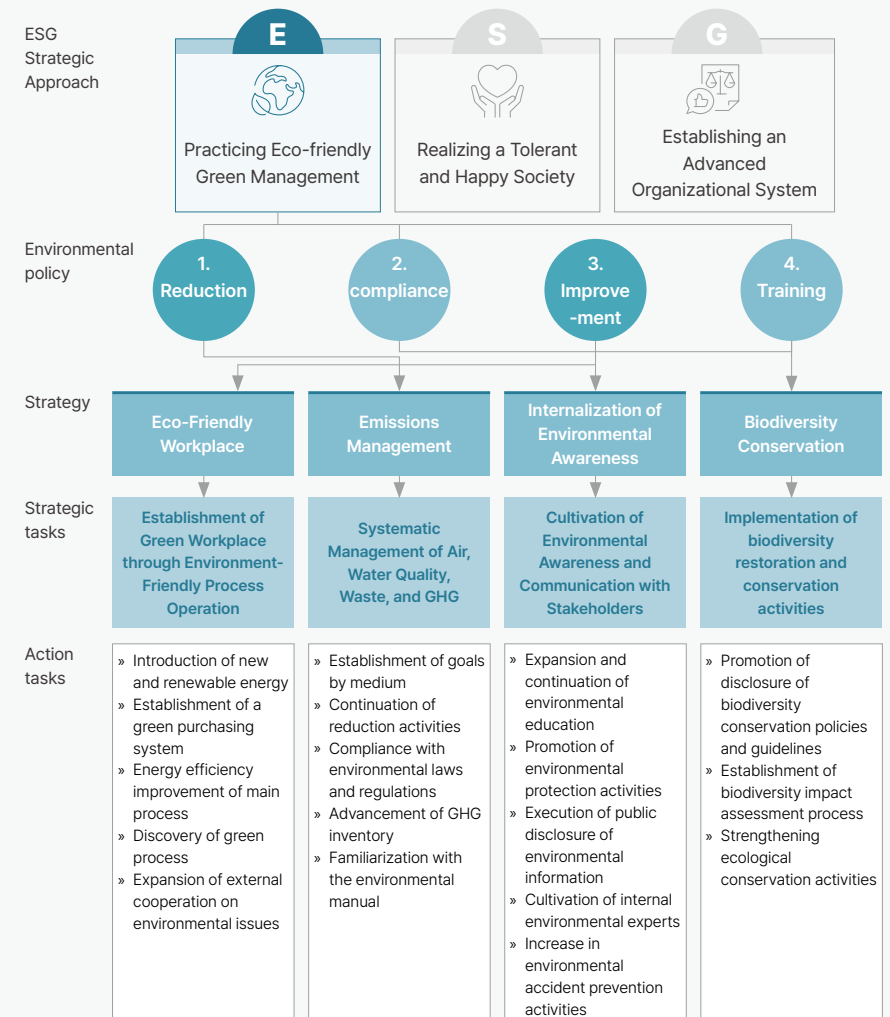
Hana Micron declares the following environmental management policy to minimize environmental impacts throughout corporate management and to faithfully implement ESG management. HANA Micron carries out eco-friendly management activities throughout the entire process of corporate actions and products according to the principle of putting the environment first.

HANA Micron Environmental Policy

Hana Micron declares the following environmental management policy to minimize environmental impacts throughout corporate management and to faithfully implement ESG management.

- | | |
|-----------|---|
| 01 | Reduce greenhouse gas emissions and respond to climate change by optimizing energy efficiency. |
| 02 | Fulfill social responsibility by faithfully complying with environmental laws and related requirements. |
| 03 | Strive to minimize environmental impacts throughout all stages including product production, use, and disposal, and contribute to resource circulation and biodiversity conservation. |
| 04 | Conduct training so that all members understand and comply with the policy, and disclose environmental management information and performance to stakeholders. |

Environmental management system



Environmental Goals

Four Major Environmental Goals¹⁾

HANA Micron has established four environmental goals based on the environmental management strategy's 'Environmental Policy 1 (Reduction)' and 'Strategy (Emissions Control)' and the results of the double materiality assessment. The four environmental goals represent HANA Micron's will to solve and respond to climate change problems and consist of 'greenhouse gases', 'energy', 'water', and 'waste' in order of importance. The greenhouse gas target is linked to the '2050 Greenhouse Gas Reduction Plan' and represents mid- to long-term greenhouse gas reduction goals for 2030, 2040, and 2050. The energy goal represents the ratio of renewable energy to total energy use, that is, the renewable energy conversion rate; the water goal is the water recycling rate, and the waste goal is the incineration and landfill rate of discharged waste to zero. The four major environmental goals initially apply only to the head office and Pangyo business site but are scheduled to expand to overseas subsidiaries in the future gradually. In the future, HANA Micron will actively participate in overcoming the climate crisis by establishing specific plans to achieve goals through the ESG Committee and dedicated organizations, and inspecting and disclosing progress.

Goal	Definition	Time horizon	Tasks	Performance
GHG Reduction rate	Reduce GHG emissions by 30% compared to 2023	2030	» Establish a 2050 greenhouse gas reduction plan by 2024. » Establish a 2050 renewable energy transition plan by 2024.	» Establish and operate a GHG reduction plan (draft) and renewable energy transition plan
	Reduce GHG emissions by 58% compared to 2023	2040	» Continue to discover reduction measures, benchmarking cases within the industry, and reduce reduction activities. » Replace with high-efficiency equipment and improve operating conditions.	» Reduce GHG emission by 4.96% compared to 2023 » Reduce solar energy 0.3% of total emissions
	Reduce GHG emissions by 75% compared to 2023	2050	» Promote membership in related initiatives (K-RE100, etc.).	» Replace with a high-efficiency boiler » Optimize facility operation rates
Transition rate to renewable energy	Achieve a transition rate of 75% to renewable energy	2050	» Establish a 2050 GHG reduction plan by 2024. » Establish a 2050 renewable energy transition plan by 2024. » Build and operate renewable energy power generation facilities. » Promote membership in related initiatives (K-RE100, etc.).	» Establish and operate a GHG reduction plan (draft) and renewable energy transition plan » Implement solar power generation » » Optimize facility operation rates
Water recycling rate	Achieve a water recycling rate of over 50%	2030	» Expand the construction of water recycling facilities. » Continue to monitor the amount of water recycling.	» 2023 : 28.1% » 2024 : 25.9%
Zero waste incinerated or landfilled	Achieve a 0% rate of waste incinerated or landfilled	2030	» Continue to comply with legal waste disposal. » Monitor the disposal method of discharged waste and inspect partner companies.	» Recycled waste rate » 2023 : 93.6 % » 2024 : 97.8 %
	Reduce waste generation by 50% compared to 2023	2030	» Practice Waste Reduction Activities	» Reduce waste generation per sales by 42.87% compared to 2023

1) The goals may be revised depending on the level of goal achievement by period and changes in the internal and external business environment.

Four Major Environmental Goals

Greenhouse gas

30%

Reduce greenhouse gases by 2030 compared to 2023 (Scope 1 & 2)

75%

Reduce greenhouse gases by 2050 compared to 2023 (Scope 1 & 2)

Energy

75%

Transition rate to renewable energy by 2050 (head office and Pangyo)

Transition

Expand the transition to renewable energy at overseas subsidiaries in Vietnam and Brazil

Water

50%

Water recycling rate by 2030

Waste

0%

Incineration and landfill rate of waste generated by 2030

50%

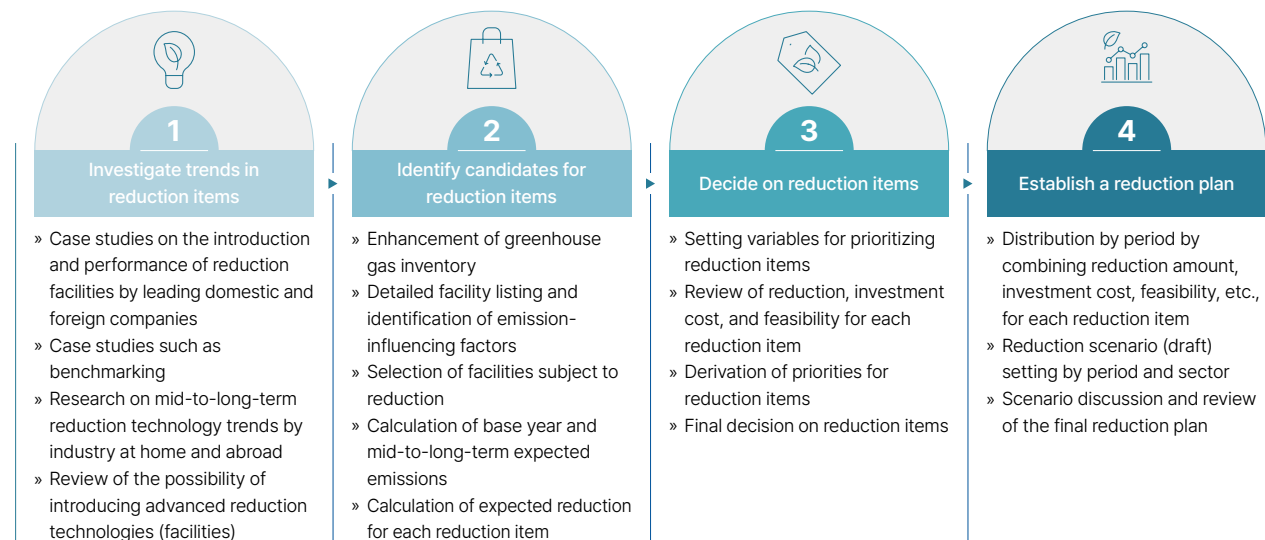
Reduce waste generation by 2030 compared to 2023

Greenhouse Gas Reduction Plan

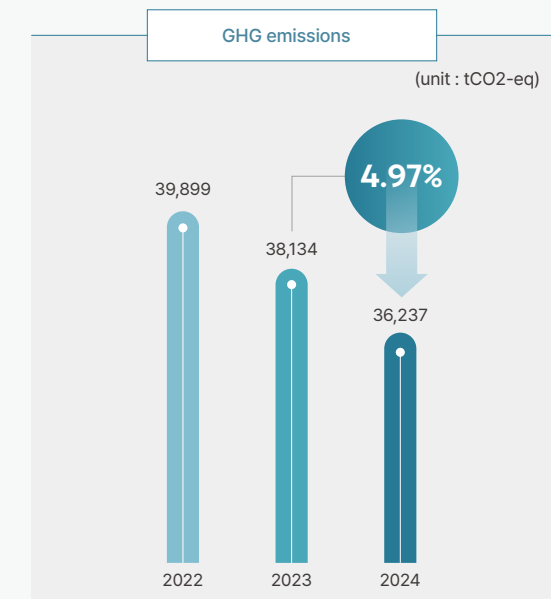
Greenhouse Gas Reduction Plan 2050

HANA Micron recognizes that carbon neutrality is a global challenge and the core of corporate management and has established a greenhouse gas reduction plan for 2050 to respond more actively. Starting with the greenhouse gas inventory (advancement), which is an essential part of carbon emissions management, we listed the utility's detailed facilities to identify factors affecting emissions and analyzed the age and operation rate of each facility. Next, we investigated reduction methods and benchmarking cases within the industry to derive candidates for reduction items, then conducted an economic feasibility analysis to determine priorities for reduction items. We ultimately established a mid- to long-term greenhouse gas reduction plan. A total of 40 reduction items, consisting of 10 in the renewable energy sector and 30 in the energy efficiency sector, were discovered and are comprised of various items such as equity investment in power generation facilities, REC¹⁾ purchase, PPA²⁾, improvement of operating conditions, and introduction of high-efficiency facilities. HANA Micron plans to apply this step by step to reduce greenhouse gases by 75% compared to 2023 by 2050 (approximately a 5% reduction per year on average). It plans to continue to monitor and advance the achievement of this plan in the future.

Procedure for Establishing the 2050 Greenhouse Gas Reduction Plan



Reduction goals for each time horizon



Reduction rate

Average annual reduction rate

76% reduction through renewable energy and 24% reduction through energy efficiency improvement to achieve an average annual reduction rate of 5.0% by 2050

5.0%

REC (Renewable Energy Certificates) : Renewable energy supply certificate issued by Korea Energy Agency

PPA (Power Purchase Agreement) : A direct purchase contract system for renewable energy between power generators and companies

Greenhouse Gas

Greenhouse Gas Risk Control

HANA Micron has participated in the Emissions Trading Scheme since its inception in 2015 and has been responding to the national carbon-neutral policy. In addition, the Company participates in the Carbon Disclosure Project (CDP)¹⁾, one of the world's most credible platforms, to disclose GHG emissions and decision-making systems. It prepares statements on GHG emissions annually, establishes goals and action plans to reduce GHGs, and continues to carry out reduction activities. To achieve the greenhouse gas reduction goal in 2050, the internal management system was upgraded to continuously discover reduction items, while energy use was reduced by planned production equipment downtime and improvements in processes and operating conditions. As a result, greenhouse gas emissions in 2024 decreased by approximately 5% compared to 2023. Starting 2023, we will also disclose the greenhouse gas emissions of some overseas subsidiaries, which are affiliated companies, through this report, and we strive to disseminate these activities in the future to encourage all affiliated companies to participate.

Furthermore, HANA Micron plans to conduct ESG impact analysis assessments when making new and significant investment decisions related to facilities and equipment. Through this, we will identify the substantial financial and strategic impacts related to climate change and analyze risk and opportunity factors across Environment, Social, and Governance areas to ensure continuous growth

Greenhouse Gas Emission Activities

HANA Micron's greenhouse gas emission activities are divided into direct and indirect emissions. Direct emissions include stationary combustion (gas fuel combustion), mobile combustion (passenger cars, trucks), and process emissions (electronics industry - semiconductors), while indirect emissions include external electricity use and external heat use. Greenhouse gas emissions in 2024 were 36,237 tCO₂-eq, a decrease of approximately 4.97% compared to the previous year, and greenhouse gas emissions per KRW 100 million in sales were 4.54 tCO₂-eq/KRW 100 million in 2024, a decrease of approximately 30.64% compared to the previous year. The emission activity with the highest emissions is indirect emissions, accounting for approximately 96.4% (34,931 tCO₂-eq) of total emissions, the remainder being stationary combustion, mobile combustion, and process emissions. Process emissions occur due to using sulfur hexafluoride (SF₆) gas in semiconductor analysis labs, but their proportion of total emissions is insignificant, less than 0.01%. Meanwhile, overseas subsidiaries, which can be considered major production bases, are located in Vietnam and Brazil among HANA Micron's consolidated subsidiaries. In Vietnam, there are HANA Micron Vietnam Co., Ltd. and HANA Micron Vina Co., Ltd.. In Brazil, there are HT Micron Semicondutores S.A. and HANA Electronics Industria E Comercio Ltda., whose emission activities are similar to those of the head office. Please refer to the environmental performance section of the ESG Data Book in the Appendix for information on greenhouse gas emissions and energy usage of reporting subsidiaries, including the HANA Micron head office.

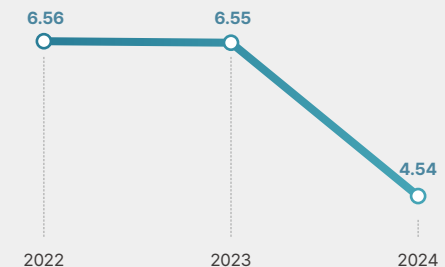
1) CDP (Carbon Disclosure Project) : A project to respond to climate change that is being carried out globally

2) For data on greenhouse gas emissions and energy usage by business locations, refer to pages 55-57

Emissions

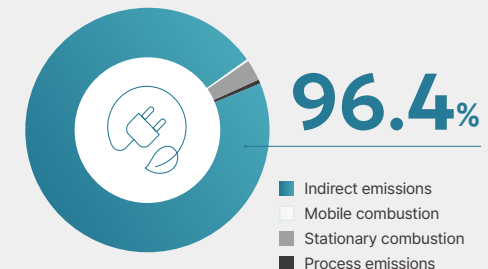
GHG emissions

(Unit : tCO₂-eq / KRW 100 million in sales)



Emissions activities

Indirect emissions (head office and Pangyo)



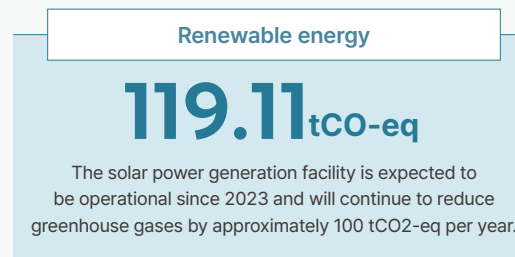
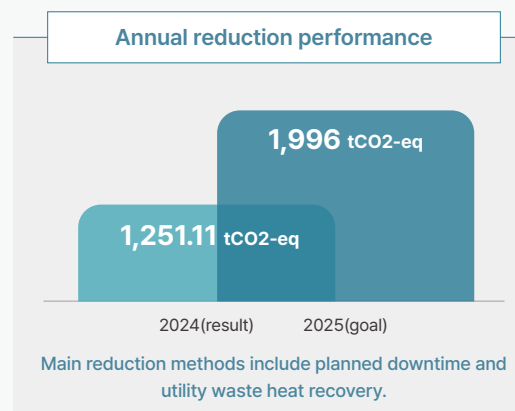
Greenhouse Gas

Greenhouse Gas Reduction Activities

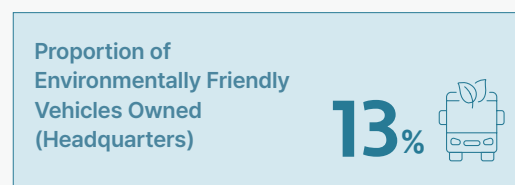
HANA Micron is responding to climate change at the corporate level and continuously establishing and managing greenhouse gas emissions reduction strategies across all business areas. HANA Micron's greenhouse gas reduction activities have continued steadily in the past. In the 2050 greenhouse gas reduction plan established independently, reduction activities are primarily divided into the renewable and energy efficiency sectors. Since the construction of renewable energy facilities within our business sites is limited, we plan to actively accept the government's system and conduct investment-oriented activities in the renewable energy sector. On the other hand, in the energy efficiency sector, indirect emissions due to external electricity use are the highest, and due to the nature of the process, the 24-hour operation must be maintained continuously, so we are focusing on optimizing and monitoring utilities. As a result of daily monitoring of the usage and trends of utility resources, we were able to reduce energy usage through the introduction of high-efficiency equipment such as low-NOX boilers and inverter-type air compressors and constructing rooftop solar power generation facilities. We are planning to implement various reduction items, such as installing a waste heat recovery heat exchanger for air compressor coolant, replacing an internally corroded once-through boiler, and replacing the cooling system of the second production line. The following table summarizes HANA Micron's major greenhouse gas reduction activities by process as of 2024.

Area	Emissions	Emission source	Process	Reduction method	Reduction items	Annual reduction (tCO ₂ -eq)
Energy efficiency	Indirect	Electricity	D/P	Planned production equipment downtime	Production Equipment Always Powered Off	79.20
	Indirect	Electricity	D/A	Planned production equipment downtime	Production Equipment Always Powered Off	51.20
	Indirect	Electricity	W/B	Planned production equipment downtime	Production Equipment Always Powered Off	322.10
	Indirect	Electricity	W/B	Planned production equipment downtime	Equipment Heater and Tower Lamp Off	20.80
	Indirect	Electricity	F/N	Planned production equipment downtime	Production Equipment Always Powered Off	193.50
	Indirect	Electricity	TEST	Planned production equipment downtime	Power Saving Mode(HT9046) software update Standby time reduction adjustment	16.60
	Indirect	Electricity	TEST	Planned production equipment downtime	Planned downtime Ultra Flex(RF)	37.30
	Direct	LNG	FACILITY	Improve processes and operating conditions	Recovery of waste heat from air compressor coolant	401.80
	Indirect	Electricity	FACILITY	Improve processes and operating conditions	Non-use of water supply pump	9.50
Renewable energy	Indirect	Electricity	FACILITY	Solar power	Operation of solar power generation facilities	119.11
Total						1,251.11

Major reduction activities



Status of Eco-friendly Vehicle

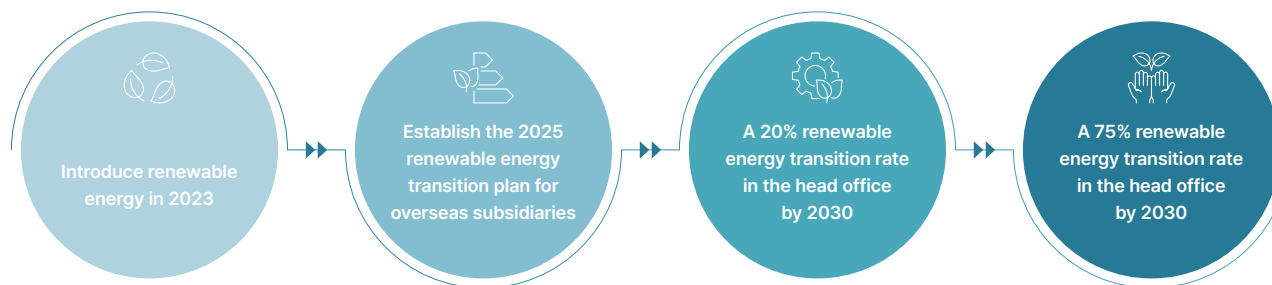


Energy

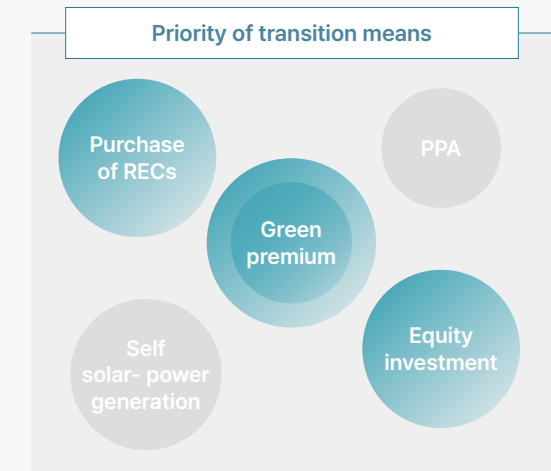
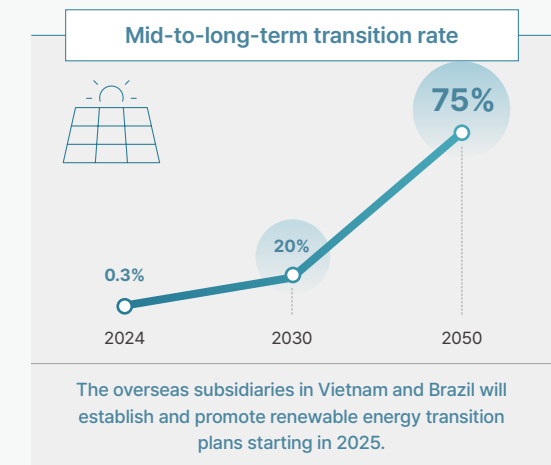
Transition to renewable energy

Global companies that have joined RE100¹⁾ are implementing RE100 by utilizing various types of renewable energy. However, expanding renewable energy in our country is challenging due to geographical limitations and poor location conditions, such as a small land area, low solar radiation, and low wind speed. In addition, the semiconductor industry consumes a lot of power because it is a large-scale device industry. Hana Micron's power consumption is expected to continue to increase as the production scale expands. Nevertheless, HANA Micron has set a more challenging goal of converting to renewable energy through its 2050 greenhouse gas reduction plan. As of 2024, the renewable energy transition rate is only 0.3%, but we plan to increase it to about 20% by 2030, about 50% by 2040, and about 75% by 2050. In particular, we are implementing a plan to secure a stable renewable energy supply chain such as building additional solar power generation facilities in warehouse buildings and industrial passive buildings. After reviewing joining the K-RE100 council, which was established to support the implementation of global RE100 by domestic companies, the primary implementation means in K-RE100, we are actively reviewing measures such as expanding self-generation, promoting power purchase agreements (PPA), purchasing renewable energy supply certificates (REC), and equity investment. In the future, we will not only respond to the demand for responding to the global climate crisis but also actively participate in RE100 with our customers and establish a renewable energy conversion plan for overseas subsidiaries to contribute to the spread of new and renewable energy use and the realization of green value.

Transition plan to renewable energy



Transition to renewable energy



1) RE100 (Renewable Electricity 100%) : A global initiative to replace electrical energy with 100% renewable energy

Water

Water Management¹⁾

HANA Micron uses both industrial water and residential water. Due to the nature of the water-consuming process, the amount of water used for industrial purposes is higher than that for living. Industrial water is classified by process and residential water by building and is monitored monthly through flow meters. The total water intake per sales is showing a decreasing trend to 85.5m³/KRW 100 million in 2022, 84.3m³/KRW 100 million in 2023, and 59.33m³/KRW 100 million in 2024. In addition, HANA Micron operates its water recycling facility to reduce water consumption and increase the circulation rate.

The amount of water recycling (recycling rate) decreased compared to the previous year, reaching 234,948m³ (20%) in 2022, 206,019m³ (31%) in 2023, and 165,185m³ (28%) in 2024. These results correspond to a temporary reduction effect due to about 30 days of recycling facility inspection including pump replacement in June 2024.

Water Intake Reduction Plan

HANA Micron is building a facility that reuses 700 to 800 m³/day of water in the ultrapure water process. The current operation rate of recycling facilities is around 70-80%, and we plan to operate the facilities at the maximum operation rate in the future. We expect to significantly contribute to reducing water usage in the future. The goal is to continuously expand the introduction of water recycling facilities step by step and achieve a more than 50% water recycling rate by 2030. By 2025, we plan to maintain the current recycling rate while ensuring operational stability. We continuously analyze and review applicable processes, operating rates, and expected water savings to increase the water recycling rate annually from 2025 onwards.

The head office plans to increase the amount of wastewater

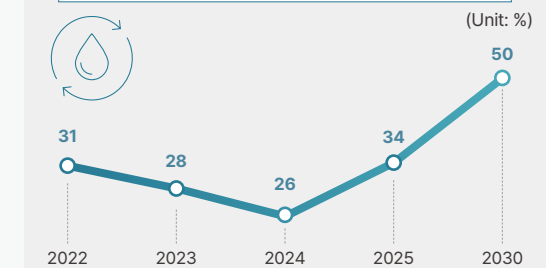
separation further and UF recycled water treatment generated from the SAW process to reduce water intake and achieve a recycling target of 34% by 2025. Our Vietnam business site, with the completion of water recycling facility construction in July 2024, plans to reduce water intake for achieving a recycling rate target of 50% by 2030.

Water Stress Areas

HANA Micron understands the level of water stress in the area where each production site is located based on the World Resources Institute (WRI)'s 'Water Risk Atlas'. The domestic business sites (HANA Micron's head office and Hana WLS) are located in Asan, South Chungcheong Province is located in the 'Medium-High' and the Vietnamese business site (HANA Micron Vietnam Co., Ltd. and HANA Micron Vina Co., Ltd.) is located in the 'High (40-80%)' area. The Brazilian business site (HT Micron Semicondutores S.A. and HANA Electronics Industria E Comercio Ltda.) is in the 'Low (<10%)' region. There are no areas within the reporting scope where water stress is high or extreme in the workplace. Nevertheless, HANA Micron will continue to monitor the level of water stress, build water recycling facilities for overseas business sites with high water intake, and strive to minimize water resource risks.

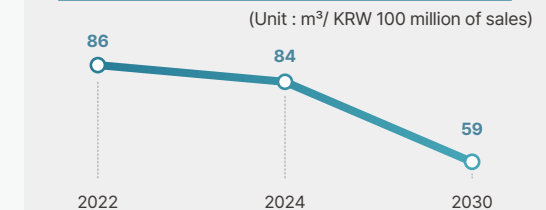
Water

Water recycling rate (head office)



Water recycling rate of over 34% by 2025
Water recycling rate of over 50% by 2030

Water intake (head office)



Water intake per sales decreased
compared to the previous year

2025 Water usage goal
(based on industrial water)

483,659m³

¹⁾ Refer to page 58 for water-related data for each business site

Waste

Waste Management¹⁾

HANA Micron monitors the entire process, from waste generation to transportation and treatment, by applying an environmentally legal treatment system. Supervised by the ESG Group, the Company continues to comply with the legal treatment of various wastes, observes the storage days according to the type and nature, and creates an inspection log to check periodically. Waste synthetic resins (general) and waste organic solvents (specified) are the primary wastes from HANA Micron. Therefore, it is essential to treat both types of waste by recycling : as stable materials based on petrochemical raw materials, waste synthetic resins rarely decompose naturally and generate harmful gases when heated, whereas waste organic solvents cause various types of air pollutants when incinerated. However, since its business nature of limited direct consumption of such recycled waste, the Company focuses on water recycling and entrusts all the generated waste for treatment. We monitor whether the consignment company recycles waste to increase the recycling rate of waste generated during consignment processing. In 2024, the rate of waste recycled after discharge increased by 4.17%p compared to the previous year, reaching 97%. To minimize waste generation, we have set a target for waste generation in tons, aiming for a 50% reduction by 2030 based on 2023 as the baseline. Additionally, in the short term, we have set a goal to achieve a 97.5% post-discharge waste recycling rate by 2025.

Waste reduction plan

HANA Micron is building a waste disposal process based on the PDCA²⁾ Cycle of the environmental management system (ISO 14001). When selecting a consignment company from the planning stage, priority is given to companies that have the technology and licenses to recycle the waste produced. In order to achieve the 2030 goal, HANA Micron will first set the ratio of recycled waste after discharge from the business to at least 90% and seek ways to recycle some waste synthetic resins and organic solvents that are not currently being recycled. In accordance with Article 21 of the Act on Promotion of Transition to Circular Economy and Society, we are currently applying for circular resource recognition for trays generated in the process. Upon approval by the Ministry of Environment, it is expected that waste generation (approximately 40.83 tons of tray waste in 2024) will be reduced. In addition, in the case of overseas subsidiaries, we will establish and implement internal regulations to take action in case the consignment company violates the laws of each country in waste disposal and to consider the possibility of recycling the raw materials and consumables purchased.

1) Refer to page 59~61 for waste-related data for each business site.

2) PDCA : Plan, Do, Check, Act

Waste

Goal

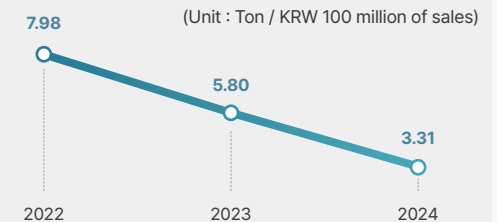
Zero waste to be landfilled or incinerated after discharge

0%

Reduction of waste emissions by 2030 compared to 2023

50%

Waste generated (head office)



The amount of waste generated decreased compared to the previous year

2025 Goal: Percentage of waste recycled after discharge (head office)

We continuously monitor waste recycling by waste disposal consignment companies.

97.5%

Pollutants and Chemicals

Pollutants management¹⁾

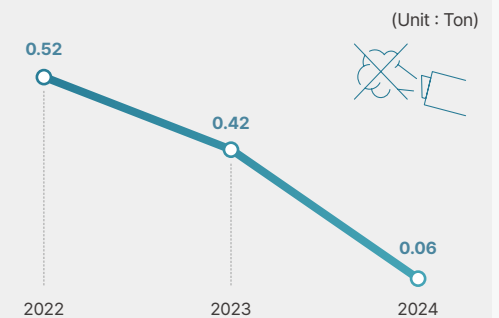
Having the business site with Type 4 air emission facilities and Type 1 effluent discharge facilities, HANA Micron conducts self-measurements once a year for dust, sulfur oxides (SOx), and nitrogen oxides (NOx) and monitors the results. Also, as for effluents, the Company regularly monitors about ten types of water pollutants, including biochemical oxygen demand (BOD), chemical oxygen demand (COD), suspended solids (SS), total phosphorus (TP), and total nitrogen (T-N). All effluents are treated by flowing into the effluent treatment facility. Additionally, HANA Micron strives to prevent air and water pollution and ensure stable treatment. We are establishing a wastewater treatment process based on the PDCA Cycle of the environmental management system and writing an inspection log daily. In 2024, air pollutants and water pollutant emissions were 0.06 tons and 29.37 tons, respectively, down 89.83% and 41.14% from the previous year. In the case of overseas business sites, we comply with each country's laws regarding air and water pollutants, and we plan to compile and disclose each pollutant's emissions in the future.

Chemical management

As chemical regulations are strengthened worldwide and regulatory targets and standards vary by country, more specialized chemical management is required. HANA Micron regularly updates chemical substances-related laws and regulations for the head office and its Vietnamese and Brazilian subsidiaries where its manufacturing plants are located. The company also manages target substances to comply with legal requirements and minimize related risks. In addition, to minimize damage in a chemical-related accident, we conduct periodic training and environmental impact assessments (head office) in preparation for emergencies, monitor various environmental regulations, and comply with obligations. In particular, the content of hazardous substances in wafers, which are the raw materials mainly handled by HANA Micron, PCB²⁾, EMC³⁾, and packaging materials used in the packaging process, are strictly controlled by the customer's standards as products that have met the customer's strict inspection and requirements.

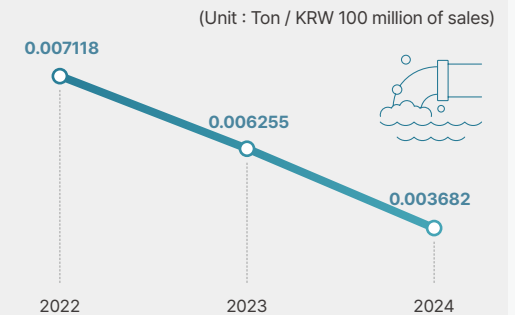
| Pollutants

Air pollutants emissions (head office)



Air pollutant emissions decreased compared to the previous year.

Water pollutants emissions (head office)



Water pollutant emissions decreased compared to the previous year.

1) Refer to page 62 for data on pollutants for each business site.

2) PCB : printed circuit board

3) EMC (epoxy molding compound) : a circuit protection agent that protects semiconductor circuits from external environments such as moisture, heat, shock, and electric charges.

Environmental Engagement

Improvement of Environmental Awareness

HANA Micron enhances environmental awareness through environmental education for employees and minimizes the impact of its business activities and products on the environment. The Company establishes an annual environmental education plan, including legal education. When setting a plan, the Company divides the types of education into recruitment training, work training, special training, regular education, etc., and conducts various educational programs on environmental topics such as fine dust, environmental safety, hazardous substances, and GHGs to improve a sense of responsibility for the environment. Due to the nature of its business, HANA Micron is regulated by environmental laws and regulations, such as the "Act on the Integrated Control of Pollutant-discharging Facilities". During the reporting period, there were no cases of violation of environmental laws or fines paid. Under the environmental management system, the Company has established and steadily carried out environmental policies, promotion plans, corrective actions, management reviews, and improvement activities. HANA Micron intends to expand environmental education further to achieve the goal of 'zero violation of environmental laws and regulations'. While specifying an annual environmental training plan, the Company will gradually expand the related budget. It plans to have those who have completed legal education hold in-house proliferation training and, if necessary, arrange training programs for each environmental issue from external professional institutions. In particular, we provide opportunities and encourage employees to continuously participate in education on greenhouse gases, resource circulation, and water, which are emerging as core issues in the environmental field, including ESG.

Environmental Education

HANA Micron conducts periodic environmental training at least once a year for environmental managers and hazardous chemical workers. During the reporting period, the environmental training included fine dust-related training, ISO 14001 internal auditor training, environmental improvement cases and issue dissemination training, and environmental regulation-related training. All employees are required to participate in environmental education once a year starting in 2024.

Environmental Education Provided

Education	Subject	Training Date	No. of Participants
Understanding of ESG and practice	All relevant departments	Sep.23	6
ISO 14001 internal auditor training	Applicable person	Mar.23	38
Chemical substance training	Handlers, related workers	Frequent	28
Intensive environmental education (greenhouse gas control)	Environmental officer	Oct.22	1
Environmental education (ESG education / required)	All employees	Jun.24	820
ESG implementation strategy training	All employees	2024.04.08~25	818

Environmental Engagement

Violation of environmental regulations (head office)

We plan to expand employee participation in environmental education to maintain 'no violation of environmental laws'.

0 cases



Number of people who participated in environmental education (accumulated)

An increase of 818 people compared to the previous year

1,711 people



Biodiversity and Ecosystem Protection

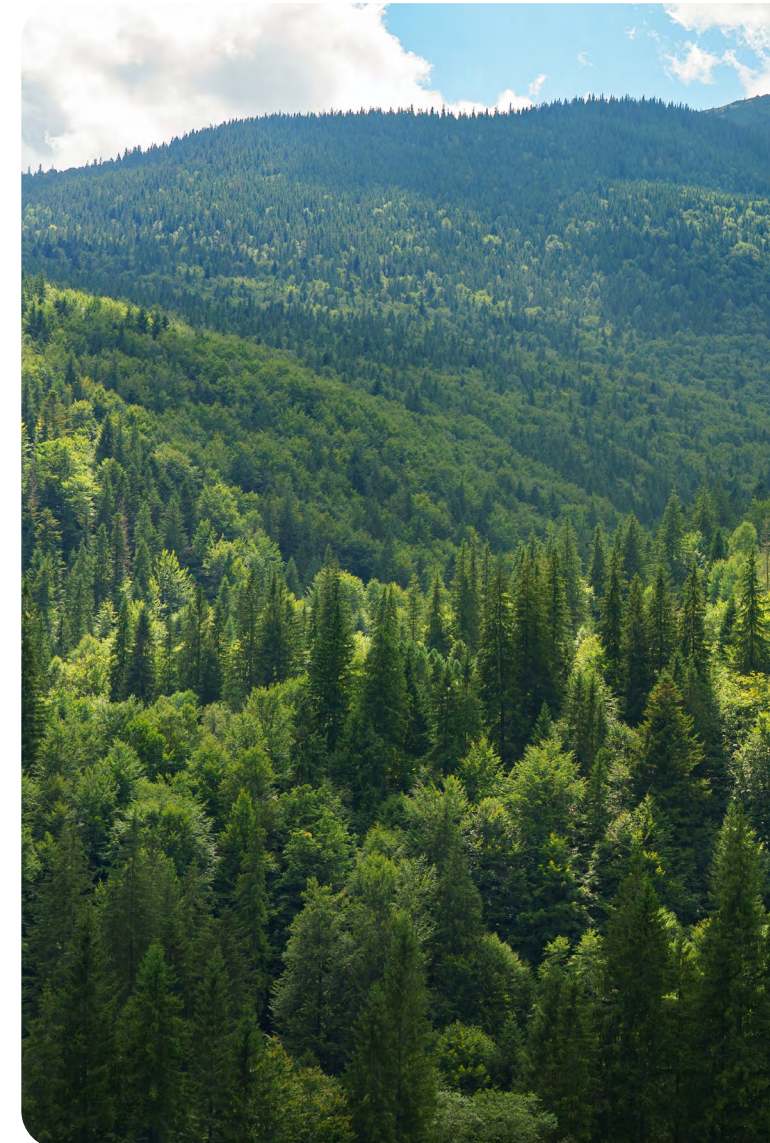
Biodiversity Conservation

Recently, global awareness has increased regarding the impact of biodiversity loss on humanity and enterprise activities, alongside strengthened international regulations and investor demands. Accordingly, biodiversity conservation has emerged as a key issue for enterprises' sustainable growth.

HANA Micron's main business is based on precise manufacturing processes and advancing infrastructure, which may directly or indirectly affect ecosystems through large-scale water usage, chemical handling, and factory site development. This implies the need to establish resource management strategies that consider biodiversity conservation and ecosystem protection to pursue sustainable growth.

Accordingly, in February 2025, we revised the [environmental management policy](#) to incorporate biodiversity conservation and ecosystem protection considerations and strive to understand and conserve the overall ecosystem impact. By 2025, HANA Micron will conduct a pre-assessment for risk and opportunity identification related to biodiversity, and evaluate the impact of business activities on biodiversity to identify priority regions and issues. Subsequently, we will establish and operate biodiversity conservation policies and monitoring systems to minimize ecosystem impacts, while expanding various environmental protection activities within the community.

Biodiversity Conservation Plan



ESG PERFORMANCE

E S G

Social

- 31 Culture of Communication and Collaboration
- 36 Safety and Health
- 39 Sustainable Supply Chain Management
- 42 Social Contribution

2023
**Selected as Korea's
Best Job Creation
Company**



**Partners pledge to comply with
the code of conduct**

Practice the RBA code of
conduct with partners

100%

Number of serious accidents

0 serious accidents, including
Korean, Vietnamese, and
Brazilian operations

0 cases

**Continuously rising investment in
safety and health**

996 million in 2025
(planned)

940 million KRW

Culture of Communication and Collaboration

Talent Development

HR Principles

HANA Micron respects the human rights of its employees and strives to create an organizational culture where everyone can work with dignity. In terms of talent development, we systematically provide training opportunities improve competency for each job, implement fair performance evaluation through a differentiated evaluation systems according to the job group, and offer reasonable compensation based on the results. In addition, we have established and operate an HR management system that provides various growth opportunities to talented individuals through in-house universities, online campuses, and foreign language tests.

Leadership Training and Job Competency

HANA Micron recognizes talent as a core element of corporate competitiveness and has established and operates a systematic talent development strategy. We design and implement training programs according to the directions of nurturing self-directed leaders, field-oriented job experts, and talents with global competencies. We have improved accessibility for employees by allowing them to check, apply for, and take courses through the curriculum site within the groupware.

Performance Evaluation and Compensation

HANA Micron operates a fair compensation system based on job duties, years of service, etc., providing equal base pay regardless of gender. Performance is quantified through differentiated evaluation systems (MBO, KPI, technical level assessment) by job group, and differential compensation linked to performance is implemented. Furthermore, we operate a fair promotion system linked to evaluations across all job groups based on a position hierarchy from staff to senior manager. In addition, we operate a defined benefit retirement system. The retirement benefit provision (non-consolidated) as of the end of 2024 is KRW 31,384,921 thousand.

Talent Training System

Self-directed leaders

- » Leadership training by level/manager
- » Training for promoted employees and new employees
- » Liberal arts and job knowledge education
- » In-house university

Field-oriented experts

- » Company-wide job competency improvement training
- » Professional courses from external educational institutions
- » Professional degree programs to discover key talent
- » Regular learning support systems

Talent with global capabilities

- » In-house and external language courses
- » In-house language tests
- » Autonomous language learning

Ideal talent in HANA Micron



Those who dream big, are not afraid of failure, and take on challenges



Those who want to learn and study thoroughly and become the best experts



Those who revitalize the organization by creating new values and ideas



Those who have a deep understanding of the global business environment and the ability to pioneer



Those who value harmony with colleagues, seniors and juniors, and actively lead by example

Culture of Communication and Collaboration

Talent Development

Technical Talent Development

HANA Micron aims to systematically cultivate outstanding technical talent through a job-centered in-house technical training program roadmap to strengthen semiconductor packaging technology competitiveness, targeting Global OSAT TOP5. In 2023, as the first phase, we completed the establishment of core technology experts and foundational educational content and knowledge for each process.

And in 2024, as the second phase, we successfully developed in-house specialized textbooks and built a pool of in-house instructors capable of conducting process-specific training. Employees completed customized training courses according to the in-house education roadmap, aiming to elevate job competencies uniformly. In addition, the in-house instructor system will discover next-generation technology leader candidates and serve as a foundation for becoming a century-old enterprise.

New Employee Training (HANA Future Talent Mind-Up)

HANA Micron operates a systematic and diverse training course for new employees. Through cooperation and unity among new employees, we strive to improve employees' self-satisfaction and job satisfaction by increasing their ability to adapt to the organization and establishing career views, a sense of belonging, and labor-management views. As of 2024, training for new employees was conducted six times, and 86 new employees completed the training.

In-house University Courses

HANA Micron established Korea's first in-house university (in partnership with Baekseok Culture University) in 2004 to support employees in obtaining associate degrees while working. By providing tuition support and on-site classrooms, we expand learning opportunities for employees and continuously support self-directed competency development, offering chances for personal growth.

Phase	Roadmap for in-house technical training courses	Target year	Implement year
Phase 1	1. Selection of experts on key topics : Experts with experience and knowledge in each manufacturing process 2. Preparation of job descriptions : knowledge, capabilities, training goals, training content, etc. for each process	2023	2023
Phase 2	1. Development of lecture material : Teaching materials by process and job group 2. Appointment of in-house instructors : A pool of instructors for each process	2024	2024
Phase 3	1. Operation of technical training courses 2. Development of technical intensive courses and elemental technology courses 3. Institutionalization of the internal mandatory curriculum	2025	
Phase 4	1. Operation of new technology courses 2. Discovery of SMEs in technology/support sectors and nurturing prospective in-house instructors 3. Spread to overseas subsidiaries	2026~	



Technical intensive courses



HANA Future Talent Mind-Up

Culture of Communication and Collaboration

Organizational Culture

HANA Micron pursues an organizational culture of communication and collaboration in which employees respect different ideas and can express their opinions freely.

Fun Life in HANA Micron

HANA Micron continuously expands opportunities for communication among employees to foster a vibrant and flexible organizational culture. Once a month during lunch breaks, simple games such as table curling, shoe throwing, and soccer are held to create occasions for enjoyment among team members. MOVIE DAY is an event in which friends, lovers, and family participate together, encouraging active communication in an environment other than a rigid company. HOF DAY provides an opportunity for mutual communication between various levels and departments, such as employee-to-employee, employee-to-manager, and manager-to-manager. Fun Life in HANA Micron was held 7 times in 2024 and received a great response.



Meetings by Level

We hold meetings by level to listen to employees' stories, encourage them, and share business direction and issues through various channels. We realize trust-based mutual communication grounded in practical solutions by directly listening to and resolving employees' difficulties and answering their questions through meetings with excellent employees, employees with disabilities, department heads, and group leaders.

Active Labor-Management Communication

HANA Micron does not have a labor union. Still, it has formed the Labor-Management Council to promote all workers' welfare and the company's sustainable development through cooperation between workers and employers. The Hana Council, with six employer and six employee members, holds monthly small meetings between the HR group and employee members and regular council meetings every quarter to discuss management status, working conditions, and agendas for welfare improvement, and the decisions made are applied to all employees.

In 2024, as part of the flexible work system, the half-half-day leave system was introduced, and agreements were made to improve cafeteria menus and rest area environments, contributing to better working conditions. In the future, we will continue to strive for mutual benefits of labor and management based on a trustworthy and harmonious organizational culture.



Hana Council

Culture of Communication and Collaboration

Human Rights Management

Human Rights Management Policy

[HANA Micron Code of Conduct](#)

HANA Micron continuously strives to respect the human rights of all employees and create a discrimination-free work environment based on the RBA (Responsible Business Alliance) Code of Conduct. We have established and implemented specific codes of conduct addressing key human rights issues such as prohibition of forced labor and child labor and protection of labor rights, etc. Furthermore, we operate a comprehensive responsible management system encompassing five areas: safety and health, environment, ethics, and management systems. To ensure the effectiveness of human rights-related policies and procedures, we conduct internal labor risk assessments and require our partners to comply with key standards, thereby practicing responsible supply chain management.

RBA Third-party Verification

HANA Micron is subject to regular inspection by an external professional agency for RBA (Responsible Business Alliance) compliance. Third-party verification evaluates workplace compliance with the RBA Code of Conduct and local laws and regulations in five areas and takes measures to improve non-compliance. In 2024, HANA Micron's domestic business site and HANA Micron VINA conducted third-party verification and received SILVER and PLATINUM ratings, respectively. In the future, we plan to expand to other overseas business sites and inspect and improve them to operate according to RBA standards. In addition, we strengthen sustainable management throughout the supply chain by evaluating and selecting partner companies based on RBA.

Area	Key RBA Code of Conduct
Labor	Prohibition of forced labor, working hours, wages and allowances, prohibition of discrimination, freedom of association and collective bargaining
Safety and health	Industrial safety, emergency response, industrial hygiene, workers' health
Ethics	Business integrity, IP protection, fair trade, personal information protection
Environment	Environmental permits and reporting, pollution prevention, resource conservation, hazardous substances
Management system	Commitment and responsibility, compliance with legal requirements, risk assessment and management, worker training

Human Rights Education

HANA Micron conducts human rights education for all employees to spread a culture of respect for human rights and prevent human rights risks. We provide the HANA Micron code of conduct and ethical management training once a year, as well as legally mandated training on preventing sexual harassment and bullying in the workplace and awareness training for the disabled.

Grievance Handling

Grievance Handling Systems

HANA Micron operates a grievance handling process that receives, handles, and takes action to systematically respond to human rights violations such as discrimination and either sexual or non-sexual harassment. Internal employees and external stakeholders can report ethical violations, including human rights violations, by phone or email, and all information, including the reporter's identity, is kept strictly confidential. The grievance handling procedure is operated by establishing regulations within the code of conduct, and when a grievance is received, the situation is quickly identified according to the procedure, the cause of the grievance is resolved, and measures are taken to prevent recurrence. From 2021 to the present, there have been no complaints, human rights reports, or violations of laws.

RBA Compliance Declaration

As a global leading semiconductor Packaging & Test company, HANA Micron commits to complying with the key contents of the RBA (Responsible Business Alliance, formerly Electronic Industry Citizenship Coalition) Code of Conduct. We pledge to comply with all laws related to our business, meet customer requirements and other obligations, and achieve continuous improvement through monitoring and audits. To accomplish this, we have incorporated these principles into our company's labor, environment, health and safety policies, and code of ethics. These policies explicitly state our corporate social responsibility in labor, wages, health and safety, environment, and ethics. We also conduct self-assessments to ensure faithful implementation of our policies and procedures. Furthermore, HANA Micron communicates with our partners to share our social responsibility commitments and requires them to comply with key standards. Thank you.

Lee Jong-cheol

RBA Compliance Declaration



RBA third-party verification certificates

Culture of Communication and Collaboration

Diversity and Inclusion of Employees

In accordance with the RBA Code of Conduct, HANA Micron prohibits discrimination on any grounds such as race, gender, age, disability, etc., in recruitment and employment activities and provides fair opportunities across all personnel systems including promotion, wages, and compensation. We also continuously strive to respect diversity and increase inclusiveness, including balancing the gender ratio and recruiting socially underprivileged people. To improve the working environment for female talent, we operate a rest area for female employees and various family-friendly systems to help employees who are pregnant, giving birth, and raising children at the same time achieve a balance between work and home. As part of efforts to expand employment of persons with disabilities, we provide industrial safety, semiconductor sign language terminology, and job experience training for the hearing impaired in connection with the Cheonan Asan Customized Training Center of the Korea Employment Agency for the Disabled. In addition, we publish our sign language book, which includes semiconductor terminology, and we support employees in performing their work smoothly through visual communication using LED displays. Regarding foreign worker employment, two foreign workers were newly hired in 2024, enhancing diversity and inclusion within the organization by attracting talent from various backgrounds. HANA Micron will continue to strive to create an employment and working environment where all socially disadvantaged groups are not discriminated against.

Work-Life Balance

Through various welfare and benefits systems such as flexible work systems, childcare support systems, leisure life support systems, and health support systems, HANA Micron improves employees' quality of life and increases work satisfaction and engagement.

Flexible Work System

To foster a family-friendly work environment, HANA Micron operates reduced working hours during pregnancy and childcare periods and every Thursday is designated as Family Day, allowing employees to leave work early without working overtime. Furthermore, in 2024, a flexible work system was piloted at the Pangyo business site, with plans to expand its application to the headquarters starting in 2025.

Childcare Support

HANA Micron operates various childcare support systems to enable employees to raise their children in a stable environment. For employees with preschool children, daycare fees are supported, and a scholarship program is provided that offers entrance congratulatory money or tuition reimbursement for children from elementary school through university, reducing employees' burden of educational expenses.



Health Support

HANA Micron operates various health support systems to systematically manage employees' health. We provide regular health checkups for all employees, and comprehensive health checkup costs are provided for employees aged 35 and above as well as their spouses. In addition, we operate a healthcare center staffed by company nurses to offer routine health consultations and emergency care. We also provide support for medical expenses due to illness or accidents affecting employees and their spouses.

Leisure Life Support

To enhance employees' quality of life, HANA Micron operates various leisure life support systems. We support the use of condos and resorts so employees can find vitality in daily life and improve psychological stability and community spirit. We also offer lifestyle services at reasonable costs through partnerships with discounted merchants such as cinemas, beauty salons, hospitals, and automotive-related businesses. In addition, we support wellness club usage for leisure activities like fitness, swimming, and golf, and promote in-house club activities to foster communication and harmony among employees.

Safety and Health

Strengthening Safety and Health Leadership

Safety and Health Management Policy

HANA Micron establishes principles and standards for safety and health and promotes continuous safety and health promotion activities to create a workplace where employees are happy and safe. We establish a mid-to- long-term safety and health roadmap and critical implementation plans and actively invest human and material resources.

HANA Micron Safety and Health Management Policy

HANA Micron places safety and health as the top management value. It has declared a safety and health management policy to create a happy and safe workplace for all employees.

- 01 We fulfill our social responsibilities by strictly complying with safety and health laws and related regulations.
- 02 We create a safe working environment by continuously discovering and improving harmful risk factors.
- 03 We continue conducting safety education and promotional activities to raise awareness and spread safety culture.
- 04 We prevent accidents by establishing a voluntary safety and health management system in which all employees participate.
- 05 We regularly evaluate and improve our safety and health management system to ensure efficient implementation.

Establishment of Safety and Health Goals

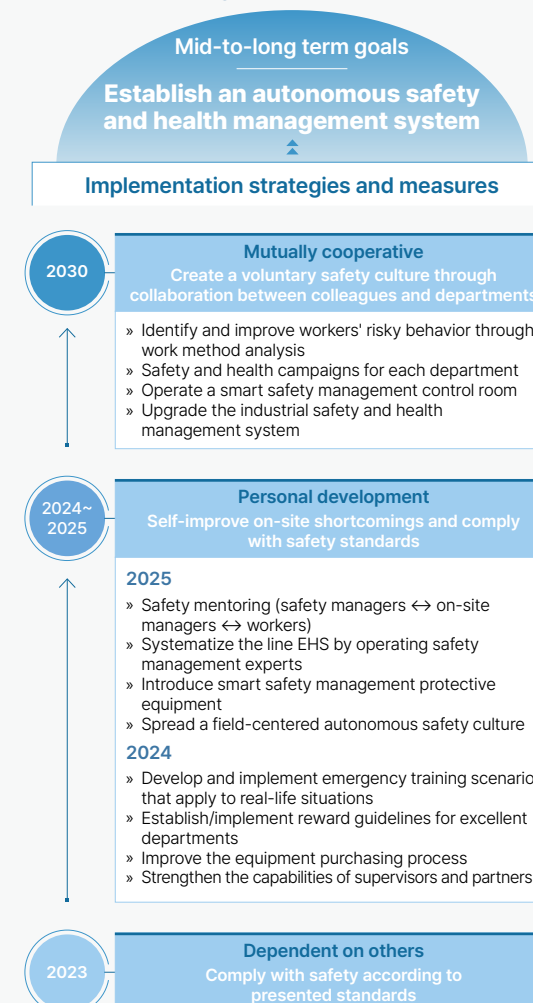
HANA Micron has established a mid-to-long-term roadmap for an autonomous safety and health management system. In 2024, we developed and implemented emergency drill scenarios and established and enforced guidelines for rewarding outstanding departments.. In 2025, we plan to improve to a level of personal development management that improves on-site deficiencies and complies with safety by implementing a safety mentoring system and systematizing Line EHS through the operation of specialized safety management personnel.

In 2030, we plan to create a voluntary safety culture based on collaboration between colleagues and departments.

Reinforced Safety and Health Organization

HANA Micron inspects and supervises major performance of the safety and health system operation plan and implementation status once a year. Under the general manager for safety and health, safety managers, health managers, and personnel dedicated to safety and health establish safety and health goals and action plans for each workplace and hold monthly meetings to discuss safety and health-related issues and risks. In addition, to improve the capabilities of management and supervisors, we conduct diagnosis and training on process safety and health operation levels, establish safety and health KPIs, and reflect performance in executive performance evaluations to promote active safety improvement activities among employees.

Safety and health goals



Safety and Health

Safety and Health Activities

Safety and Health Management

HANA Micron conducts on-site inspection activities by the CEO every month to manage workplace safety and health. It also operates a regular inspection system, including regular safety inspections, frequent inspections, and departmental inspections, to eliminate factors that violate laws and dangerous work. In addition, to prevent occupational diseases, we measure the work environment for harmful factors, measure noise, and conduct health checkups for employees. We also continuously provide customized health counseling to those with health conditions.

Safety and Health Education and Training

HANA Micron uses an online education platform so employees can easily and conveniently take safety and health training. Regular safety training is conducted every quarter, and we strive to provide more effective training by operating safety training programs appropriate for the target audience and job, such as special safety training, training for new employees, and training for supervisors. We conduct fire, environmental, and serious accident drills to minimize damage through rapid response in the event of an emergency. We also conduct training by creating scenarios for various serious accidents and environmental accidents and analyze and improve any deficiencies after training.

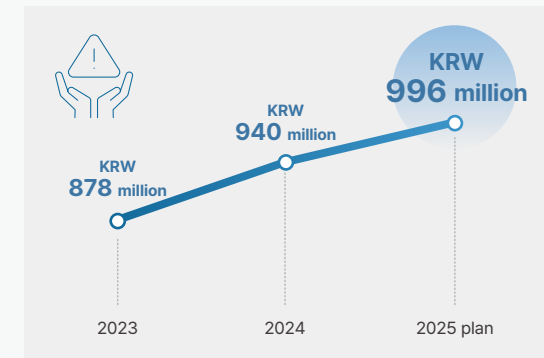
Expansion of Safety and Health Investments

We continue to expand investments in safety and health to strengthen our safety and health management system. We plan to invest in facility safety inspections and renovations, train safety personnel, provide protective gear and health checkups, and expand the budget to support the safety management capabilities of our partners.

Partners' Safety Management

To improve the safety management level of our partners, we provide safety training and discuss safety and health issues through monthly council meetings. In particular, the companies subject to qualification screening have been expanded to include contractors, construction companies that visit more than 60 days a year, and companies that supply/work with hazardous substances. When selecting partners, contractors, construction companies, etc., we have established internal regulations to evaluate qualified suppliers and a system for regular evaluation and management. We comply with the provisions of the Serious Accident Punishment Act by establishing and implementing procedures and standards for determining eligibility according to each company's safety and health management capabilities.

Investment in safety and health



Total hours in safety and health training

Business sites in Korea (2024)

21,448 hours

Overseas business sites (2024)

39,936 hours

Safety and Health

Safety and Health Activities

Prevention of Serious Accidents

To respond to laws and regulations such as the Serious Accident Punishment Act, HANA Micron evaluates the level of implementation semiannually and carries out improvement activities for deficiencies. The data obtained by conducting workplace safety inspections is managed in an EHS system developed in-house in 2023, and based on this, a self-discipline prevention system that induces voluntary improvement is established and operated.

Spreading Safety and Health Culture

HANA Micron conducts various campaigns to raise safety awareness among employees and prevent safety accidents that may occur in the workplace. We have set up a "Listen to Employees' Opinions" channel where employees can directly find risk factors and make suggestions, and we reward excellent agenda items every quarter. In addition, we held a safety and health word quiz event as an activity to look up terms of the Occupational Safety and Health Act and safety accident cases. In addition, we strive to spread and establish a safety culture by expanding safety and health video promotions, autonomous safety and health campaigns, and safety campaigns to prevent accidents in the winter.

Certification of Safety and Health Management System (ISO 45001)

HANA Micron has acquired the safety and health management system (ISO 45001) certification, an international standard, and established and operates a safety and health management system based on this. Two manufacturing plants in Korea (Asan plant and Pangyo) and Vietnam have acquired safety and health management system certification, and the two Brazilian manufacturing plants have also acquired safety certification in October 2024.

Compliance with Safety and Health Laws and Regulations

HANA Micron conducts quarterly evaluations of compliance with safety and health laws and regulations across each process and business site. It thoroughly complies with safety and health laws and regulations by eliminating factors that violate the law through on-site safety inspections. Over the past three years, there have been no serious accidents or violations of safety and health regulations at any of our subsidiaries located in Korea, Vietnam, or Brazil.



Safety awareness promotion health signage



Autonomous safety and health campaigns



Winter safety campaigns

Sustainable Supply Chain Management

Supply Chain Management Policy

HANA Micron has established supply chain policy management standards and procedures to check compliance with the HANA Micron Partner Code of Conduct and RBA Code of Conduct, as well as matters related to partner companies' social responsibility. We plan to inspect and continuously improve the entire supply chain to ensure that our partners operate in accordance with the HANA Micron Code of Conduct for Partners.

Compliance of Code of Conduct for Partners

HANA Micron distributes the HANA Micron Code of Conduct for Partners to its partners and provides guidance on compliance with the RBA Code of Conduct, requiring them to practice compliance. Suppliers must complete and submit a pledge to comply with the HANA Micron Supply Chain Code of Conduct. The HANA Micron Code of Conduct for Partners is based on the RBA Code of Conduct and applies to all types of organizations that design, sell, manufacture, or provide parts and services used to produce HANA Micron products. The Code of Conduct for Partners comprises 35 items in 5 sectors : labor, safety and health, environmental protection, ethical management, and management system.

Operation of Grievance Handling System for Partners

HANA Micron operates a communication channel on its website where unethical behavior can be reported and notified, maintaining a process to continuously listen to suppliers' grievances.

Evaluation of Partners

In accordance with supply chain policy management regulations, HANA Micron selects major partners among in-house partners and primary partners that supply raw materials and facilities and conducts a supply chain review once a year. The supply chain review items consist of items regarding compliance with the HANA Micron Code of Conduct for Partners and RBA Code, and a correction plan is established and executed within the deadline according to the level of nonconformity due to the review. The contract may be terminated unless action is taken within the specified deadline. Our partners are expected to cooperate when HANA Micron conducts due diligence and requests for data to assess compliance with the Code of Conduct.

Additionally, all raw material partners are evaluated once a year based on the supplier evaluation standards. The main evaluation items are quality management, environmental management system, hazardous substance management, material/product management, safety/environment, labor/ human rights, etc. The evaluation is conducted based on transaction performance data and data provided by partners, ensuring a fair and transparent process. By varying the purchasing policy depending on the evaluation grade, we seek to improve our capabilities by encouraging partners to establish and implement plans to improve their grades.

Reviews of partners' supply chains

1 Labor and human rights

Including voluntary work, youth work, and working hours

7 items

2 Safety and health

Including industrial safety, emergency response, and industrial accidents

7 items

3 Environment

Including environmental permits and reporting, pollution prevention/resource reduction

8 items

4 Ethics

Including anti-corruption/ business integrity and prohibition of unfair profits

8 items

5 Management system

Including management engagement, management duties/ responsibilities, legal and customer requirements

12 items

Sustainable Supply Chain Management

Partner Risk Management

Environmental Safety Risk Management for Partners

HANA Micron constructs a business council for in-house partners and holds monthly meetings to discuss environmental and safety-related status and issues. We discuss topics such as education on the Occupational Safety and Health Act, joint safety inspections, establishment of safety and health management plans, risk assessments, and improvement of emergency response systems. We also support items requiring improvement and carry out various activities to establish our partners' safety and health management systems and strengthen their safety management capabilities, including participating in system emergency training and distributing protective gear.

Quality Risk Management for Partners

HANA Micron conducts quarterly quality meetings with partners. We discuss progress in technology development according to the technology roadmap, quality issues, and improvement plans. By setting quality KPIs, we check the level of achievement, discuss and support difficulties, and ultimately expect effects such as improving quality defects and productivity.

Joint safety inspection with partners



Sustainable Supply Chain Management

Responsible Minerals

HANA Micron is seriously aware of human rights violations and environmental destruction caused by mineral mining in conflict and high-risk areas and strives to protect workers' health, human rights, and the environment. To implement a responsible mineral purchasing policy, HANA Micron has established a conflict minerals management standard and complies with and implements this policy.

Responsible Mineral Management Process

HANA Micron's quality department establishes a response strategy through analysis of domestic and international conflict mineral trends and supervises and manages the conflict mineral management system. We receive BOMs from the technology and sales groups, prepare conflict mineral reports, and continuously check risks. Through CMRT (Conflict Minerals Reporting Template) and EMRT (Extended Minerals Reporting Template) for supplier information collection provided by RMI (Responsible Mineral Initiative), we track information on mineral origins, smelters and refineries for tin, tantalum, tungsten, gold and cobalt. If the use of tantalum, gold, tin, or tungsten from a smelter in the Democratic Republic of the Congo or an adjacent country (e.g., Democratic Republic of Congo, Congo, Sudan, Rwanda, Uganda, Zambia, Angola, Tanzania, Central African Republic, Burundi) is confirmed in the supplied parts, or if the source is unclear, the partner company is required to submit a plan for phase-out of the materials in question.

We conduct surveys on the use of conflict minerals regularly, once a year, and regularly when a customer requests or when developing a new product. Based on the conflict mineral reports (CMRT, EMRT) submitted by partners, as soon as the use of conflict minerals regulated smelters is confirmed, we receive a ban on the receipt of the material and a plan for total disposal or replacement of materials from other companies. To ensure all partners can thoroughly manage conflict minerals, we listen to their difficulties and improve related risks by explaining the conflict mineral management process.

Responsible Mineral Management by Overseas Subsidiaries

HT Micron and HANA Electronics, two Brazilian subsidiaries, and HANA Micron Vietnam and HANA Micron Vina, two Vietnamese subsidiaries, also track and manage the origin of conflict minerals under conflict mineral management standards. We receive and inspect CMRT and EMRT provided by RMI from our partners to check whether tantalum, tin, tungsten, and gold collected from conflict areas are used in supplied parts and take immediate action when the use of conflict minerals regulated smelters is confirmed. In the future, we will strive to fulfill our social responsibilities in line with the standards required by the international community through activities to raise overall awareness of conflict minerals management, including with our partners.



Social Contribution

Social Contribution Vision and Strategy

HANA Micron has set the core vision of 'A Society Succeeding Together' and focuses its social contribution activities on 'Local Talent Development' and 'Employee Participation-Based Contribution Activities,' promoting various programs centered on these areas. By expanding employment opportunities for socially vulnerable groups and supporting job competency development through industry-academic cooperation, we strengthen the self-reliance foundation of the community. In addition, by normalizing volunteer and donation activities voluntarily participated in by employees, we create substantial and sustainable social value through organic connections with the community.

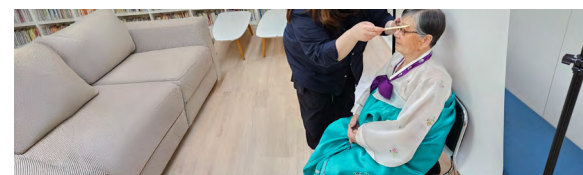
Local talent development



Local Talent Development

HANA Micron focuses on cultivating practical talents based in the region to enhance competitiveness in the semiconductor industry. To this end, we have signed agreements with Korea University of Technology and Education, Myongji University, Korea National University of Transportation, and Pyeongtaek University, contributing to foster human resources in the semiconductor back-end process field through hiring outstanding local talents. Furthermore, based on industry-academic cooperation with Korea University of Technology and Education and Korea National University of Transportation, we operate semiconductor equipment donations and corporate tour programs. In recognition of these efforts, in 2024, we were selected as an Industry-Academic-Research Cooperation Merit Enterprise and an Excellent Industry-Academic Cooperation Institution, respectively. We also collaborate in operating Myongji University's Advanced Industry Academy and Pyeongtaek University's Semiconductor Display Equipment Operation Contract Department. Through recruitment-linked internships for university students and transfer admission bachelor's programs for employees, we are building a local talent base to lead the future semiconductor industry.

Hana Volunteer Group



Employee Participation-Based Contribution Activities

Hana Volunteer Group

The Hana Volunteer Group continuously engages in practical volunteer activities such as visiting welfare facilities, delivering lunch boxes, supporting childcare classrooms, and cleaning social welfare centers. Utilizing volunteer funds raised through employees' voluntary participation, it carries out various activities including donations, goods support, and kimchi sharing for underprivileged in the community. On Parents' Day in 2024, a filial piety photo shoot was held for local seniors, with employees voluntarily participating in all processes from shooting to printing. This event contributed to the emotional stability and self-esteem recovery of local seniors and fostered a culture of respect within the community.

Environmental Protection

HANA Micron practices various environmental protection activities to minimize the impact on the environment around its business sites and to coexist harmoniously with the community. We, led by the Hana Volunteer Group, are promoting the 'One River for One Company, One Mountain for One Company Movement' to restore the ecosystem and preserve water quality in rivers and Yeonam Mountain around the business site., contributing to natural environment recovery and biodiversity conservation. In addition, we regularly conduct 'Environmental Cleanup Campaigns' to protect the environment and create a pleasant atmosphere by keeping our workplace and surrounding environment clean, contributing to sustainable environmental creation at business sites and within the community.

Environmental cleanup campaign



Social Contribution

Global Social Contribution

HANA MICRON VINA

HANA Micron Vina fulfilled its corporate social responsibility and laid the foundation for sustainable growth by engaging in various social contribution activities in 2024 to coexist with the community in Bac Giang Province, Vietnam. In January 2024, we delivered gifts and donations to vulnerable neighbors in Luc Ngan District, Bac Giang Province, and in May, we supported scholarships for underprivileged students at local elementary and high schools, contributing to the sustainable development of the community and nurturing future talent. We contribute to creating a warm society by practicing hope and sharing in the local community, such as donating disaster support funds to the victims affected by Typhoon Yagi in October 2024.

HANA Micron Vina



HT Micron

HT Micron strives to change local communities' lives and the surrounding environment by conducting various activities with NGOs, local governments, and educational institutions. We donated clothes to an animal shelter and used the proceeds from selling these clothes for animal welfare and donated food to the Boa Nova Organization, which was used for lunch boxes and meals for underserved populations. In addition, we donated snacks and toys to over 150 households through the Children's Day donation campaign and participated in the Christmas campaign, delivering Christmas cards and gifts to children and creating memorable moments.

HT Micron



HANA Electronics

In 2024, Hana Electronics actively participated in environmental protection and sharing activities to coexist with the local community. During Brazil's SIPAT and Environment Week, we conducted an 'Ecological Walk' activity together with Edacos and Kapernorte to raise awareness about the importance of sustainable living. Additionally, we donated educational chairs to three local welfare institutions, sharing warmth with vulnerable groups such as children, at-risk women, and low-income youth within the community.

HANA Electronics



ESG PERFORMANCE

E S G

Governance

- 45 Responsible Management of the Board of Directors
- 48 Ethics and Compliance Management
- 50 Enterprise Risk Management

The ESG Committee launched In August 2024

Organized around management for prompt and realistic supervision

Number of employees who have completed fair trade and anti-corruption training (2024)

Conducted annually, focusing on those involved, from 2022 onwards

65 people

Acquisition of CC(Common Criteria) certification (2022)

Certification for product security, safe development environment, and safe development process

Responsible Management of the Board of Directors

HANA Micron seeks to establish a sound and transparent governance structure to create sustainable corporate value and build trust with stakeholders. As the company's highest decision-making body, the Board of Directors drives sustainable management based on expert knowledge and rational decision-making and strives to protect the rights and interests of various stakeholders.

Composition

HANA Micron's Board of Directors consists of three inside directors and one outside director appointed at the general shareholders' meeting by the Articles of Incorporation and related laws. Over half (75%) of internal directors with expertise in the semiconductor industry are appointed, and outside directors are appointed at the general shareholders' meeting on the recommendation of the Board of Directors from among candidates who meet the outside director qualifications outlined in relevant laws. To ensure the expertise and diversity of the Board of Directors, there is no discrimination or restriction in the selection and evaluation of directors based on age, gender, educational level, or region of origin.

Independence and Expertise

In accordance with the company's articles of incorporation, HANA Micron prevents directors with a special interest in the agenda from exercising their voting rights, thereby creating a foundation for the board of directors' independent judgment. Outside directors do not have a special relationship with major shareholders, management, or affiliates and are appointed as experts with extensive academic and industry experience. All directors comply with commercial laws, antitrust regulations, and fair trade laws to prevent conflicts of interest with the company. In order to improve the expertise and efficiency of outside directors in carrying out their duties, we provide materials in advance before the board of directors' meetings are held, hold briefing sessions when necessary, and provide information on major issues on a regular basis.

(As of March 20, 2025)

Type	Name	Gender	Position	Major career and positions	Area of expertise	Transactions with companies
Internal director	Lee Dong-cheol	Male	CEO, Chairman of the Board	Head of Business Division at Samsung Semiconductor in Japan (Executive Director) Current) CEO and President of Hana Micron	General operations (technology, management)	None
	Kim Dong Hyun	Male	COO	Ph.D. in Electrical Engineering, Stanford University Current) Vice President of Hana Micron	Technology	None
	Park Sang-muk	Male	Business management	Current) Executive Director, Business Management Team Leader, Hana Micron	Finance	None
Outside director	Jeong Seung-bu	Male	Outside director	President, Korea Microelectronics and Packaging Society Current) Professor, Department of Materials Science and Engineering, Sungkyunkwan University	Technology (semiconductor)	None

HANA Micron's Board of Directors
drives sustainable management
based on expert knowledge and
rational decision-making and strives
to protect the rights and interests of
various stakeholders.

Responsible Management of the Board of Directors

Evaluation and Compensation

Executive directors conduct regular evaluations within the company, and outside directors, comprised of industry experts, conduct comprehensive internal assessments on whether they provide appropriate advice and proactiveness on significant management decisions. The re-appointment decision after the three-year term comprehensively reflects the evaluation results. Regarding the remuneration of registered directors, the company pays the base salary, holiday bonus, and performance bonus according to the company's management performance, which is decided in the delegation agreement by comprehensively considering the rank, delegated duties, and years of service based on the executive remuneration table. The compensation payment limit is determined through approval at the general shareholders' meeting to strengthen compensation transparency and meet the legitimacy requirements, and severance pay is paid in accordance with the executive severance pay payment regulations resolved at the general shareholders' meeting. The approved remuneration limit and payment status are transparently disclosed in the business report. The annual director remuneration limit of 4.5 billion won (including audit) was approved at the 2023 general shareholders' meeting. Outside directors are paid within the director remuneration limit agreed upon at the general shareholders' meeting, considering the transparency and fairness of their roles.

(In millions of Korean won)

Type	Total remuneration	Average remuneration per person	Number of people
Registered directors	927	231	4 people
Outside directors	30	30	1 people
Auditors	100	100	1 people

Operation

The Board of Directors holds regular board meetings every quarter and temporary board meetings when necessary. Agenda items are shared in advance so that they can be thoroughly reviewed. In particular, we promote the company's sustainable growth by deliberating and approving major issues related to the environment and society that are reviewed and submitted to the ESG Committee.

Events	Unit	2022	2023	2024
Number of meetings held	Times	25	35	25
Number of reporting agenda	Cases	4	5	6
Decisions	Cases	29	40	31
Vote in favor	%	100	100	100
Vote against	%	0	0	0

Board of Directors Training

HANA Micron provides training on various topics such as ESG management, cases of disclosure violations by listed companies, and precautions for unfair transactions to support professional capacity building.

Operation of the Board of Directors in 2024

Number of board meetings held

25 times



Number of decisions

31 cases



Number of reports

6 cases



Director's attendance rate

100%



Responsible Management of the Board of Directors

The ESG Committee launched

In August 2024, HANA Micron established an ESG Committee. We have expanded our role from the existing safety and health focus to the overall ESG encompassing the environment, human rights, and labor. The ESG Committee is chaired by the CEO and consists of executives from QRA (quality), facility, purchasing, and technology departments. We plan to operate the committee as an organization that can perform a more rapid and realistic supervisory function and introduce an ESG Committee under the Board of Directors in the future.

Roles of the ESG Committee

The ESG Committee serves as a practical control tower for ESG management, managing and supervising ESG strategies, plans, and major activities. We inspect major plans and implementation matters related to safety and health and discuss climate crisis response strategies and implementation plans, human rights risks, etc. The ESG Committee reviews and approves various issues in each ESG sector, and issues that require deliberation and approval by the board of directors' agenda. The ESG Committee seeks to continuously carry out various activities to manage ESG-related risks, seek opportunities, and achieve sustainable growth. At the ESG Committee held in 2025, a report on the current status of ESG management was presented, and the goals and tasks for the 2025 greenhouse gas reduction plan were established. In future meetings, the committee will discuss the publication of the 2025 Sustainability Report, and quarterly safety and health plans and performance.

Audit

HANA Micron operates a full-time audit system with total assets of less than KRW 2 trillion, and audit work is performed by one full-time auditor appointed by resolution at the general shareholders' meeting by the Articles of Incorporation. To perform audit duties, the articles of incorporation stipulate the authority to access management information necessary for audit work, and the management team assists the auditor in carrying out his/her duties. In addition, in December 2024, we provided training on major issues related to the capital market and key considerations regarding unfair trading under the Capital Markets Act for outside directors of listed companies.



We will launch an ESG Committee centered on management and performing a more rapid and realistic supervisory function to manage ESG-related risks, seek opportunities, and ultimately achieve sustainable growth.

Ethics and Compliance Management

Spread of ethical management

Declaration of Ethical Management

HANA Micron has established a declaration of ethical management and conducts business based on the spirit of ethics and compliance. We are committed to complying with the RBA (Responsible Business Alliance) Code of Conduct and all business-related laws and regulations. We promise to make continuous improvements through monitoring and inspection.

Hana Micron Ethical Management 

HANA Micron pursue a transparent and clean corporate culture by performing our duties in compliance with laws and ethics, establishing a fair trading order, and striving to fulfill our corporate roles and responsibilities.

- 01 We comply with the laws and customs of the local, national, and international communities based on ethical values in all business activities.
- 02 We eradicate corruption by establishing a transparent and fair trading order.
- 03 We strive to make ethical management part of our organizational culture and spread it to our partner companies.
- 04 We have a dedicated organization for ethical management to establish an implementation system and continuously improve it.
- 05 We thoroughly protect reporters and encourage anyone to report unethical behaviors.



Code of Ethics and its Practice Guidelines

HANA Micron declares ethical management and establishes a code of ethics so all employees use it as a standard for decision-making and business activities. To implement ethical management, we have prepared separate practice guidelines for the code of ethics and established judgment standards for ethical conflict situations in performing duties so that employees can adequately understand and practice the code of ethics.

Prevention of Unethical Behaviors

HANA Micron provides ethics training at least once a year to encourage ethical awareness among all employees and encourage them to practice ethical management voluntarily and willingly. We also support internalizing the code of ethics by complying with it and pledging to practice it. We help employees practice ethical management by allowing them to receive consultation from the ethical management department for questions related to the code of ethics and code of ethics practice guidelines. There have been no reports or violations of the code of conduct pertaining to ethical management from 2021.

Unethical Behavior Reporting System


In order to effectively practice ethical management, HANA Micron operates a communication channel so that members and stakeholders can report unethical behavior inside and outside the company. We employ various reporting methods such as email and phone. The informant protection program thoroughly protects all information received through reporting channels.

Ethics and Compliance Management

Voluntary Fair Trade Compliance

Declaration of Fair Trade Compliance

To establish a fair trade order in the semiconductor industry, HANA Micron declares that it will voluntarily comply with all domestic and international fair trade laws and regulations and strive to practice fair and free competition. This declaration is posted on its website, disseminates it to all employees, and discloses it to external stakeholders.

Declaration of Fair Trade Compliance 

HANA Micron pursue a transparent and clean corporate culture by performing our duties in compliance with laws and ethics, establishing a fair trading order, and striving to fulfill our corporate roles and responsibilities.

- 01

The company recognizes that the voluntary practice of fair trade is its true competitiveness and considers this the highest value of corporate management.
- 02

The company does not engage in unfair practices to establish a fair trade order in all fields and regions and consults with its partners from a partnership perspective.
- 03

The company continuously trains all employees to comply with fair trade laws.
- 04

The company operates a self-compliance system, strives to prevent violations, detects violations, and imposes sanctions on itself.

Partners' Compliance with Fair Trade and Anticorruption

HANA Micron operates a Code of Ethics and its Practice Guidelines to establish a culture of transparent and fair transactions with employees and partners. These guidelines include fair competition and transactions, prohibition of improper solicitation, and prohibition of bribery, and we strive to realize sustainable ethical management. In addition, we ask partners to sign a Code of Conduct and evaluate them regularly to check anti-corruption risks, thereby strengthening ethical business relationships with our partners.

Compliance Support Organization

HANA Micron does not have a compliance support officer. Nonetheless, the legal department within the strategic planning team integrates legal risks and actively supports compliance management and ethical management activities. In the future, we plan to establish compliance control regulations and related policies, including standards and procedures that executives and employees must follow when performing their duties, in order to enhance legal compliance and appropriate company management. As of 2021, there have been no violations of the law.

Fair Trade Training

Hana Micron operates a systematic training program to prevent illegal and fraudulent acts that employees may encounter during work and to minimize related risks. In 2024, we conducted fair trade compliance training for 65 employees from the sales, purchasing, and finance groups who work in direct contact with customers. The training covered topics related to fair trade and fair competition, continuously enhancing employees' awareness of compliance and ethics. Through this initiative, we support our members in making decisions based on ethical standards and contribute to fostering a fair and transparent corporate culture.

Completion rate of ethics education

100%



Number of people who completed fair trade and anti-corruption training

65 people



Violations of the code of ethics and laws

0 cases



(Business sites in Korea, 2024)

Enterprise Risk Management

Risk Management System

Risk Management Strategy

HANA Micron operates an enterprise risk management system that identifies risks, analyzes their impact, and effectively establishes response plans to respond to internal and external corporate environment changes. We divide risk management areas into finance, human resources/environment, quality/customer response, manufacturing, technology/intellectual assets, and IT systems, and check risks according to risk stage standards that reflect the characteristics of each sector. In particular, significant issues such as human rights, environment, and safety are reported to the Board of Directors. Additionally, we operate a professional risk management process by utilizing external advisory processes such as outside directors, labor attorneys, lawyers, and safety associations.

Risk Management Response System

In the event of a crisis, HANA Micron forms a Crisis Response Deliberation Committee with the CEO as the crisis management supervisor and the business management team as the crisis management department. The deliberation committee reviews the crisis and determines the direction of crisis response for each sector, and the executing department establishes response plans for each department accordingly. We pursue prompt and transparent disclosure of information to enable quick decision-making by management and prepare emergency plans and response measures to preemptively identify and eliminate risk factors that arise throughout the business.

Risk Management Process

HANA Micron manages risks using the following steps : risk definition, risk assessment, risk response and action, and risk monitoring.



Risk Definition

» Analysis of internal and external trends through management indicators, etc. Defining risks by conducting business analysis



Risk Assessment

» The risk management department conducts risk assessment and reports the results to the Risk Review Committee



Risk Response

» Implementation of crisis response measures by department in accordance with risk response strategies

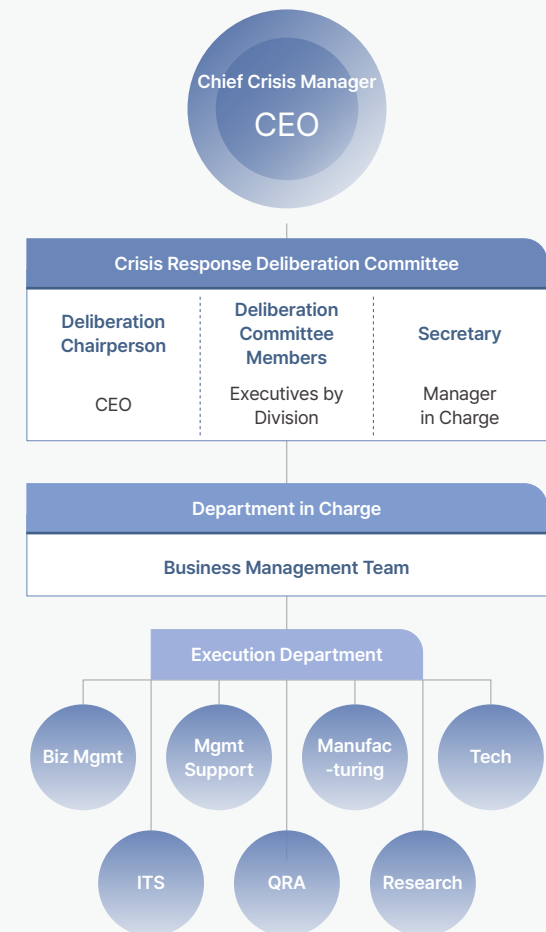


Risk Monitoring and Reporting

» Management report after taking action on risk
Continuous monitoring of internal and external trends

Risk assessment quantifies the risk index according to each sector's risk impact and the difficulty of risk action, determines the risk level into four levels (concern, caution, warning, and serious), and responds by establishing response action guidelines for each level.

Risk Management Governance



Enterprise Risk Management

Management of Major Non-financial and Financial Risks

Non-financial Risks

Management of Safety and Health Risks

We establish and actively implement measures to prevent serious accidents while operating an occupational safety and health committee and a dedicated safety and health organization. In addition, we strengthen the autonomous safety and health system by supporting the improvement of supervisors' capabilities and suppliers' safety and health management levels.

Management of Quality Risks

We strengthen quality control based on ISO 9001 (quality management system), IATF 16949 (automotive quality management system), and ANSI/ESD S20.2 (antistatic) systems, and operate a quality control professional organizational system. We also regularly hold quality reporting meetings and manage quality risks by strengthening quality capabilities such as ESD (electrostatic prevention) and product quality training.

Management of Human Rights Risks

We internalize compliance with HANA Micron's code of ethics and code of conduct, improve employees' human rights awareness by conducting human rights training, and check human rights risks through RBA third-party verification. In addition, we have a human rights violation relief system in place through a grievance reporting system.

Financial Risks

Management of Internal Accounting Risks

We secure the reliability of financial information by operating an internal accounting management system and managing risks that may arise during accounting reporting. The audit evaluates the design and operation status by the best internal accounting management system standards, reports the results to the board of directors and general shareholders' meeting, and discloses them in the business report to stakeholders.

Management of Tax Risks

We manage domestic and international tax risks by identifying differences in tax laws and tax enactment intentions by country and analyzing potential disputes. We strive to comply with domestic and international tax regulations and principles and faithfully fulfill our tax obligations as taxpayers.

Management of Financial Risks

We respond to financial risks by dividing them into foreign exchange, credit, and liquidity risks. Risks due to exchange rate fluctuations are managed within the limits set by the approved policy, and credit risks are identified and managed by each customer's credit rating. Liquidity risk monitors reserves, borrowing limits, and cash flows and establishes a fund management plan by matching the maturity structure of financial assets and financial liabilities.

Rapid internal and external changes in the semiconductor industry's policies, regulations, and economy bring both opportunities and risks to HANA Micron.

We will manage economic, social, and environmental risks that may affect the company in an integrated manner and respond preemptively to ensure stable management activities.

Enterprise Risk Management

Information Protection

Information Protection Policy

HANA Micron establishes management information and technical information protection regulations and, based on those regulations, establishes and implements detailed guidelines such as physical security guidelines, information system operation guidelines, and user management guidelines. Through these activities, we strive to improve the company's information protection level and minimize the occurrence of security incidents. Through personal information protection management regulations, we clarify management and technical measures to protect the personal information of customers and employees and require employees and partners to sign an information protection pledge. As a result, we prevent unauthorized disclosure of information and improve employees' security mindset.

Quarterly Security Inspection and Training

HANA Micron conducts quarterly security inspections to check security levels, identify problems, and improve security awareness. The inspection targets include documentation logs, PC power, and neglected documents. The inspection results are shared throughout the company, and warnings and training are provided to the relevant departments. We strengthen employees' security awareness through quarterly training on security-related announcements, security incident cases, and security inspection results. As of now, there have been no reported complaints related to breaches of customer personal data protection.

Acquisition of the Common Criteria Certificate

HANA Micron has obtained CC (Common Criteria) certification for its semiconductor packaging and testing business. CC certification proves that products intended for supply to national and public institutions meet all security requirements and were produced in a safe development environment and process.

Information Protection Pledge

As the number of cases of unauthorized leakage of technical information the company holds increases, HANA Micron requires its employees and partners to sign a 'Pledge to Protect Trade Secrets, etc.' and a 'Pledge to Protect Personal Information' once a year. This policy prevents the leakage of information assets by ensuring that all employees and partners understand the items that must be implemented for information protection.

Basic Security Compliance

The ten most basic and essential items that employees must have for information protection are designated as the 'Top 10 Security Basics' and posted within the workplace. We encourage all employees to recognize that they are responsible for information protection and to practice it.

Top 10 Security Basics

The 10 most basic and necessary items to protect the company's information are called the "Top 10 Security Basics". These are the essential virtues that all employees must adhere to in relation to security.

- 1 Always wear your employee ID card within the workplace and do not lend or transfer it.
- 2 When creating documents, classify and mark the security level.
- 3 Do not leave important documents unattended in the office during non-working hours.
- 4 When disposing of confidential documents, shred or dispose of them separately from regular tissues.
- 5 Lock the storage boxes of important documents and important information assets.
- 6 Install three PC passwords (booting, screen saver, and shared files).
- 7 Install a computer antivirus and update to the latest version.
- 8 Observe cyber etiquette.
- 9 Change and manage your password periodically every quarter.
- 10 Turn off the power When the PC is not in use.

Appendix



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75 / SASB(Sustainability Accounting Standards Board)

76 / Third Party Assurance Report

77 / GHG Verification Statement

79 / Membership Organization Status

ESG Data Book : Economic Performance

Key Financial Performance

(In millions of Korean won)

Financial data		2022	2023	2024
Statement of financial position (Consolidated)	Total assets	1,409,049	1,725,090	1,944,649
	Total liabilities	920,833	1,180,703	1,338,820
	Total capital	488,216	544,387	605,829
Statement of financial position (separate)	Total assets	946,708	983,201	1,025,466
	Total liabilities	588,850	610,131	594,629
	Total capital	357,858	373,070	430,837
Income statement (consolidated)	Sales	894,396	967,971	1,250,693
	Operating profit	103,548	57,905	106,793
	Net Profit (loss)	58,231	963	(11,157)
Income statement (separate)	Sales	608,137	581,861	797,620
	Operating profit	52,170	16,673	23,184
	Net Profit (loss)	16,538	(42,987)	(20,663)

Distribution of Economic Value (Consolidated)

(In millions of Korean won)

Financial data	2022	2023	2024
Total dividends (shareholders and investors)	2,396	2,399	4,639
Salaries (employees)	137,401	134,659	145,652
Corporate tax (government)	32,430	13,016	9,117
Donations* (community)	30	10	21

*Parent company only

Investment in Research and Development (Consolidated)

(In millions of Korean won)

Financial data	2022	2023	2024
Total R&D cost	31,877	30,099	39,689
R&D cost/sales ratio	3.56%	3.11%	3.17%
Number of IP rights held, including patents	160 cases	170 cases	173 cases

Sales of major overseas subsidiaries

(In millions of Korean won)

Subsidiaries	Location	2022	2023	2024
HANA Micron Vietnam Co., Ltd.	Vietnam	24,231	27,765	19,743
HANA Micron Vina Co., Ltd.	Vietnam	22,741	337,470	512,912
HT Micron Semicondutores S.A.	Brazil	207,603	97,858	240,301
HANA Electronics Industria E Comercio Ltda.	Brazil	59,987	69,658	109,461

Sales by region

(In millions of Korean won)

Region	2022	2023	2024
Korea	597,084	772,979	931,182
Brazil	233,471	124,921	263,037
Vietnam	12,345	12,340	11,244
USA	16,500	9,396	4,811
Others	34,995	48,336	40,419
Sum	894,396	967,971	1,250,693

Ownership

(As of the end of 2024)

Shareholders		Number of shares owned	Stake
Major shareholders and related entities	Choi Chang-ho and 8 others	11,054,330 shares	16.68%
	Hana Materials Co., Ltd.	6,482,350 shares	9.78%
	Subtotal	17,536,680 shares	26.46%

ESG Data Book : Environmental Performance

Energy Consumption

HANA Micron	Unit	2022	2023 ⁴⁾	2024
Total energy consumption ^{1~4)}	TJ	830	795	755
Intensity	TJ/KRW 100 million	0.136	0.137	0.095
Direct energy consumption	TJ	34.6	31.4	24.3
City gas (LNG)	TJ	30.7	27.5	20.3
Gasoline	TJ	1.1	1.2	1.2
Diesel	TJ	2.8	2.8	2.8
Indirect energy consumption	TJ	796	763	730
Power	TJ	793	760	727
Steam	TJ	3.1	3.3	3.6
Renewable energy consumption	TJ	0.0	0.8	0.9

1) Total energy consumption : sum of the head office and Pangyo (Pangyo was added from 2021)

2) Calculation basis and scope : Guidelines on Emissions Reporting and Certification of the Greenhouse Gas Emissions Trading System (Notice No. 2025-28, Ministry of Environment)

3) Including renewable energy

4) Amended record of renewable energy usage for 2023

HANA Micron Vietnam	Unit	2022	2023	2024
Total energy consumption ¹⁾	TJ	25.9	37.0	39.7
Intensity	TJ/KRW 100 million	0.107	0.133	0.201
Direct energy consumption	TJ	0.593	0.638	0.687
LPG ²⁾	TJ	-	-	0.228
Gasoline	TJ	0.000	0.001	0.001
Diesel	TJ	0.593	0.637	0.458
Indirect energy consumption	TJ	25.3	36.5	39.0
Power	TJ	25.3	36.5	39.0

1) Total energy consumption : The domestic standard for calorific value by fuel is applied; 3.6 MJ/kWh is applied for electricity

2) Not reported in 2022 and 2023 (unavailable data)

HANA WLS	Unit	2022	2023	2024
Total energy consumption ^{1~2)}	TJ	23.7	15.2	6.2
Intensity	TJ/KRW 100 million	0.792	0.391	0.096
Direct energy consumption	TJ	0.22	0.20	0.31
Gasoline	TJ	0.22	0.20	0.31
Indirect energy consumption	TJ	23.5	15.0	5.9
Power	TJ	23.5	15.0	5.9

1) Business sites excluded from verification for energy consumption and greenhouse gas emissions

2) Calculation basis and scope : Guidelines on Emissions Reporting and Certification of the Greenhouse Gas Emissions Trading System (Notice No. 2025-28, Ministry of Environment)

HANA Micron Vina	Unit	2022	2023	2024
Total energy consumption ¹⁾	TJ	109	380	510
Intensity	TJ/KRW 100 million	0.477	0.113	0.099
Direct energy consumption	TJ	2.2	5.0	9.1
LPG	TJ	2.2	5.0	9.0
Gasoline	TJ	0.0000	0.0011	0.0089
Diesel	TJ	0.0426	0.0181	0.0976
Indirect energy consumption	TJ	106	375	501
Power	TJ	106	375	501

1) Total energy consumption : The domestic standard for calorific value by fuel is applied; 3.6 MJ/kWh is applied for electricity

ESG Data Book : Environmental Performance

Energy Consumption

HT Micron	Unit	2022	2023	2024
Total energy consumption ¹⁾	TJ	65.6	69.7	75.7
Intensity	TJ/KRW 100 million	0.0316	0.0712	0.0315
Direct energy consumption	TJ	21.2	22.7	26.6
Natural gas	TJ	20.6	21.6	25.6
LPG	TJ	0.013	0.012	0.007
Gasoline	TJ	0.54	1.06	0.99
Diesel	TJ	0.023	0.018	0.002
Indirect energy consumption	TJ	44.4	47.0	49.1
Power	TJ	44.4	47.0	49.1

1) Total energy consumption : The domestic standard for calorific value by fuel is applied; 3.6 MJ/kWh is applied for electricity

HANA Electronics	Unit	2022	2023	2024
Total energy consumption ^{1~2)}	TJ	3.13	5.12	6.12
Intensity	TJ/KRW 100 million	0.005	0.007	1.2
Direct energy consumption	TJ	0.174	0.643	1.480
LPG	TJ	-	0.289	0.485
Gasoline	TJ	0.174	0.347	0.700
Diesel	TJ	-	0.007	0.015
Indirect energy consumption	TJ	2.96	4.48	4.92
Power	TJ	2.96	4.48	4.92

1) Total energy consumption : The domestic standard for calorific value by fuel is applied; 3.6 MJ/kWh is applied for electricity
2) Some missing data were excluded in 2022

ESG Data Book : Environmental Performance

Greenhouse Gas Emissions

HANA Micron	Unit	2022	2023	2024
Greenhouse gas emissions¹⁻²⁾	tCO2-eq	39,899	38,134	36,237
Direct emissions	tCO2-eq	1,831	1,668	1,306
Indirect emissions	tCO2-eq	38,068	36,465	34,931
Intensity	tCO2-eq/KRW 100 million	6.56	6.55	4.54

1) Greenhouse gas emissions : sum of the head office and Pangyo (Pangyo was added from 2021)

2) Calculation basis and scope : Guidelines on Emissions Reporting and Certification of the Greenhouse Gas Emissions Trading System (Notice No. 2025-28, Ministry of Environment)

HANA Micron Vietnam	Unit	2022	2023	2024
Greenhouse gas emissions	tCO2-eq	4,800	6,904	7,186
Direct emissions	tCO2-eq	42	45	45
Indirect emissions ¹⁾	tCO2-eq	4,758	6,859	7,141
Intensity	tCO2-eq/KRW 100 million	19.8	24.9	36.4

1) Indirect emissions : Applied with the annual standard electricity emission factor announced by Vietnam's Ministry of Resources and Environment in December 2024

HT Micron	Unit	2022	2023	2024
Greenhouse gas emissions	tCO2-eq	1,611	1,670	2,106
Direct emissions	tCO2-eq	1,085	1,167	1,363
Indirect emissions ¹⁾	tCO2-eq	526	503	743
Intensity	tCO2-eq/KRW 100 million	0.78	1.71	0.88

1) Indirect emissions : Applied with the annual electricity emission factor announced by the Brazilian Ministry of Science, Technology and Innovation in 2024

HANA WLS ¹⁾	Unit	2022	2023	2024
Greenhouse gas emissions²⁾	tCO2-eq	1,141	732	774
Direct emissions	tCO2-eq	15	14	21
Indirect emissions	tCO2-eq	1,126	719	753
Intensity	tCO2-eq/KRW 100 million	38.10	18.80	11.96

1) Business sites excluded from verification for energy consumption and greenhouse gas emissions

2) Calculation basis and scope : Guidelines on Emissions Reporting and Certification of the Greenhouse Gas Emissions Trading System (Notice No. 2025-28, Ministry of Environment)

HANA Micron Vina	Unit	2022	2023	2024
Greenhouse gas emissions	tCO2-eq	20,108	70,823	92,304
Direct emissions	tCO2-eq	130	288	529
Indirect emissions ¹⁾	tCO2-eq	19,978	70,535	91,775
Intensity	tCO2-eq/KRW 100 million	88.4	21.0	18.0

1) Indirect emissions : Applied with the annual standard electricity emission factor announced by Vietnam's Ministry of Resources and Environment in December 2024

HANA Electronics	Unit	2022	2023	2024
Greenhouse gas emissions	tCO2-eq	46.7	88.5	150.7
Direct emissions	tCO2-eq	11.7	40.6	76.2
Indirect emissions ¹⁾	tCO2-eq	35.0	47.9	74.5
Intensity	tCO2-eq/KRW 100 million	0.078	0.130	0.138

1) Indirect emissions : Applied with the annual electricity emission factor announced by the Brazilian Ministry of Science, Technology and Innovation in 2024

ESG Data Book : Environmental Performance

Water Consumption

HANA Micron	Unit	2022	2023	2024
Total water intake	m ³	519,910	527,258	473,201
Household	m ³	23,320	22,447	20,877
Industrial	m ³	496,590	504,811	452,324
Intensity (total)	m ³ /KRW 100 million	85.50	84.30	59.33
Water consumption	m ³	141,089	148,162	105,941
Amount of wastewater discharged	m ³	340,293	379,096	367,260
Amount of water recycled	m ³	234,948	206,019	165,185
Water recycling rate	%	31.1	28.1	25.9

HANA WLS	Unit	2022	2023	2024
Total water intake	m ³	5,172	11,640	13,614
Household	m ³	942	1,391	1,698
Industrial	m ³	4,230	10,239	11,916
Intensity	m ³ /KRW 100 million	173.0	299.0	210.4

HT Micron	Unit	2022	2023	2024
Total water intake	m ³	43,001	42,273	41,270
Household	m ³	1,160	1,240	1,835
Industrial	m ³	41,841	41,033	39,435
Intensity	m ³ /KRW 100 million	21	43	17

HANA Micron Vina	Unit	2022	2023	2024
Total water intake	m ³	164,870	609,970	672,910
Household	m ³	41,518	65,700	75,200
Industrial	m ³	123,352	544,270	597,710
Intensity (total)	m ³ /KRW 100 million	725.0	181.0	131.2

HANA Micron Vietnam	Unit	2022	2023	2024
Total water intake	m ³	42,617	105,191	74,131
Intensity	m ³ /KRW 100 million	176	379	375

HANA Electronics	Unit	2022	2023	2024
Total water intake¹⁾	m ³	-	492,910	2,425
Intensity	m ³ /KRW 100 million	-	708	2

1) HANA Electronics began reporting in 2023

ESG Data Book : Environmental Performance

Waste Generation

HANA Micron	Unit	2022	2023	2024
Amount of waste generated ¹⁾	ton	485	340	264
Intensity	Ton/KRW 100 million	0.0798	0.0580	0.0331
General waste	ton	481	334	258
Designated waste	ton	4.85	6.62	5.94
Amount of general waste treated	ton	481	334	258
Recycling	ton	-	-	256
Incineration	ton	-	-	2
Landfill	ton	-	-	0
Others ²⁾	ton	-	-	0
Amount of hazardous waste treated	ton	4.85	6.62	5.94
Recycling	ton	-	-	1.95
Incineration	ton	-	-	3.99
Landfill	ton	-	-	0.00
Others ²⁾	ton	-	-	0.00
Total amount of waste recycled after discharge	ton	312	319	258
Percentage of waste recycled after discharge	%	64.3	93.6	97.8

1) From 2024, the amount of general and hazardous waste treated by method (in tons) will be newly disclosed

2) Neutralization, solidification, and etc

HANA WLS	Unit	2022	2023	2024
Amount of waste generated ¹⁾	ton	63	97	127
Intensity	Ton/KRW 100 million	2.1000	2.4900	1.9594
General waste	ton	0	0	0
Designated waste	ton	63.10	96.80	126.81
Amount of general waste treated	ton	0	0	0
Recycling	ton	-	-	0
Incineration	ton	-	-	0
Landfill	ton	-	-	0
Others ²⁾	ton	-	-	0
Amount of hazardous waste treated	ton	63.1	96.8	126.81
Recycling	ton	-	-	78.24
Incineration	ton	-	-	0.00
Landfill	ton	-	-	0.00
Others ²⁾	ton	-	-	48.57
Total amount of waste recycled after discharge	ton	33	59	78
Percentage of waste recycled after discharge	%	52.5	61.3	61.7

1) From 2024, the amount of general and hazardous waste treated by method (in tons) will be newly disclosed

2) Neutralization, solidification, and etc

ESG Data Book : Environmental Performance

Waste Generation

HANA Micron Vietnam	Unit	2022	2023	2024
Amount of waste generated ^{1~2)}	ton	24	93	79
Intensity	Ton/KRW 100 million	0.1000	0.3350	0.3998
General waste	ton	24	90	47
Hazardous waste	ton	0	3.30	32.37
Amount of general waste treated	ton	24	90	47
Recycling	ton	-	-	0
Incineration	ton	-	-	47
Landfill	ton	-	-	0
Others ³⁾	ton	-	-	0
Amount of hazardous waste treated	ton	0	3.3	32.37
Recycling	ton	-	-	0.00
Incineration	ton	-	-	30.47
Landfill	ton	-	-	0.00
Others ³⁾	ton	-	-	1.90
Total amount of waste recycled after discharge	ton	0	0	0
Percentage of waste recycled after discharge	%	0.0	0.0	0.0

1) The standards for distinguishing between general and hazardous waste follow Vietnamese laws and regulations

2) From 2024, the amount of general and hazardous waste treated by method (in tons) will be newly disclosed

3) Neutralization, solidification, and etc

HANA Micron Vina	Unit	2022	2023	2024
Amount of waste generated ^{1~2)}	ton	183.0	659.0	1,051.9
Intensity	Ton/KRW 100 million	0.8050	0.1950	0.2051
General waste	ton	180	652	1,047
Hazardous waste	ton	3.10	7.10	4.96
Amount of general waste treated	ton	180	652	1,047
Recycling	ton	-	-	555
Incineration	ton	-	-	492
Landfill	ton	-	-	0
Others ³⁾	ton	-	-	0
Amount of hazardous waste treated	ton	3.10	7.10	4.96
Recycling	ton	-	-	1.07
Incineration	ton	-	-	3.89
Landfill	ton	-	-	0
Others ³⁾	ton	-	-	0
Total amount of waste recycled after discharge	ton	147	270	556
Percentage of waste recycled after discharge	%	54.8	41.0	52.9

1) The standards for distinguishing between general and hazardous waste follow Vietnamese laws and regulations

2) From 2024, the amount of general and hazardous waste treated by method (in tons) will be newly disclosed

3) Neutralization, solidification, and etc

ESG Data Book : Environmental Performance

Waste Generation

HT Micron	Unit	2022	2023	2024
Amount of waste generated ^{1~2)}	ton	71.9	84.5	107.9
Intensity	Ton/KRW 100 million	0.0346	0.0863	0.0449
General waste	ton	63	76	95
Hazardous waste	ton	8.70	8.20	12.88
Amount of general waste treated	ton	63	76	95
Recycling	ton	-	-	16
Incineration	ton	-	-	71
Landfill	ton	-	-	5
Others ³⁾	ton	-	-	2
Amount of hazardous waste treated	ton	8.70	8.20	12.88
Recycling	ton	-	-	4.03
Incineration	ton	-	-	8.86
Landfill	ton	-	-	0.00
Others ³⁾	ton	-	-	0.00
Total amount of waste recycled after discharge	ton	-	12	20
Percentage of waste recycled after discharge	%	-	14.1	0.2

1) The standards for distinguishing between general and hazardous waste follow Vietnamese laws and regulations

2) Not reported by HT Micron in 2022 and 2023 (unavailable data)

3) Neutralization, solidification, and etc

HANA Electronics	Unit	2022	2023	2024
Amount of waste generated ^{1~2)}	ton	16.8	30.9	29.4
Intensity	Ton/KRW 100 million	0.0281	0.0443	0.0268
General waste	ton	16	29	27
Hazardous waste	ton	0.91	1.69	2.08
Amount of general waste treated	ton	16	29	27
Recycling	ton	-	-	14
Incineration	ton	-	-	12
Landfill	ton	-	-	0
Others ³⁾	ton	-	-	1
Amount of hazardous waste treated	ton	0.91	1.69	2.08
Recycling	ton	-	-	1.40
Incineration	ton	-	-	0.68
Landfill	ton	-	-	0.00
Others ³⁾	ton	-	-	0.00
Total amount of waste recycled after discharge	ton	6	19	14
Percentage of waste recycled after discharge	%	34.7	60.4	48.8

1) The standards for distinguishing between general and hazardous waste follow relevant Brazilian laws and regulations

2) From 2024, the amount of general and hazardous waste treated by method (in tons) will be newly disclosed

3) Neutralization, solidification, and etc

ESG Data Book : Environmental Performance

Air Pollutants¹⁾

HANA Micron	Items	Unit	2022	2023	2024
Air pollutants (Total)	Emissions	ton	0.52	0.42	0.06
	Intensity	Ton/KRW 100 million	0.000086	0.000072	0.000007
Nitrogen oxides (NOx)	Emissions	ton	0.46	0.40	0.06
	Intensity	Ton/KRW 100 million	0.000076	0.000068	0.000007
Sulfur oxides (SOx)	Emissions	ton	0.02	Not detected	0.00
	Intensity	Ton/KRW 100 million	0.000003	Not detected	0.000000
Dust	Emissions	ton	0.03	0.02	0.00
	Intensity	Ton/KRW 100 million	0.000005	0.000003	0.000000

1) Emissions from overseas business sites will be calculated and reported later due to incomplete information for calculating air pollutants

Water Pollutants²⁾

HANA Micron	Items	Unit	2022	2023	2024
Water pollutants (Total)	Emissions	ton	43.29	36.39	29.37
	Intensity	Ton/KRW 100 million	0.007118	0.006255	0.003682
Biochemical oxygen demand (BOD)	Emissions	ton	1.69	3.40	0.86
	Intensity	Ton/KRW 100 million	0.000278	0.000584	0.000108
Chemical oxygen demand (COD)	Emissions	ton	4.09	3.97	4.06
	Intensity	Ton/KRW 100 million	0.000673	0.000682	0.000509
Suspended solids (SS)	Emissions	ton	37.01	28.17	20.29
	Intensity	Ton/KRW 100 million	0.006086	0.004842	0.002544
Total nitrogen (T-N)	Emissions	ton	0.45	0.79	1.48
	Intensity	Ton/KRW 100 million	0.000074	0.000136	0.000186
Total phosphate (T-P)	Emissions	ton	0.05	0.06	0.08
	Intensity	Ton/KRW 100 million	0.000008	0.000011	0.000010
Total organic carbon (TOC) ³⁾	Emissions	ton	-	-	2.59
	Intensity	Ton/KRW 100 million	-	-	0.000325

2) Emissions from overseas business sites will be calculated and reported later due to incomplete information for calculating water pollutants

3) Some missing data were excluded in 2022 and 2023

HANA WLS	Items	Unit	2022	2023	2024
Air pollutants (Total)	Emissions	ton	0.09	0.07	0.00
	Intensity	Ton/KRW 100 million	0.002880	0.001753	0.000034
Nitrogen oxides (NOx)	Emissions	ton	0.06	0.04	0.00
	Intensity	Ton/KRW 100 million	0.001887	0.000913	0.000025
Sulfur oxides (SOx)	Emissions	ton	Not detected	0.01	0.00
	Intensity	Ton/KRW 100 million	Not detected	0.000272	0.000004
Dust	Emissions	ton	0.03	0.02	0.00
	Intensity	Ton/KRW 100 million	0.000993	0.000567	0.000004

HANA WLS	Items	Unit	2022	2023	2024
Water pollutants (Total)	Emissions	ton	0.14	0.36	0.8
	Intensity	Ton/KRW 100 million	0.004642	0.009193	0.01
Biochemical oxygen demand (BOD)	Emissions	ton	0.01	0.05	0.06
	Intensity	Ton/KRW 100 million	0.000362	0.001329	0.000926
Chemical oxygen demand (COD)	Emissions	ton	0.12	0.14	0.28
	Intensity	Ton/KRW 100 million	0.003897	0.003570	0.004281
Suspended solids (SS)	Emissions	ton	0.00	0.13	0.01
	Intensity	Ton/KRW 100 million	0.000103	0.003286	0.000168
Total nitrogen (T-N)	Emissions	ton	0.01	0.04	0.04
	Intensity	Ton/KRW 100 million	0.000271	0.000986	0.000670
Total phosphate (T-P)	Emissions	ton	0.00	0.00	0.00
	Intensity	Ton/KRW 100 million	0.000008	0.000022	0.000008
Total organic carbon (TOC) ³⁾	Emissions	ton	-	-	0.41
	Intensity	Ton/KRW 100 million	-	-	0.006269

ESG Data Book : Social Performance

Employee

(Unit : people)

HANA Micron		2022	2023	2024
Total number of employees ¹⁾		825	820	771
Number of executives	Male	16	17	15
	Female	-	-	-
Number of management ²⁾	Male	54	56	54
	Female	15	15	15
Number of employees	Male	374	377	386
	Female	366	355	301
By age	Under 30 years old	400	362	257
	Under 30-50 years old	395	409	462
	Over 50 years old	30	49	52
By type of employment	Indefinite-term workers	825	820	771
	Fixed-term worker	0	0	0

1) Total number of employees : employees at the head office and Pangyo workplace as of the end of the year

2) Number of management positions : including group leaders, part leaders, and foremen

(Unit : people)

HANA Micron Vietnam		2022	2023	2024
Total number of employees ¹⁾		219	255	184
Number of executives	Male	1	1	1
	Female	0	0	0
Number of management ²⁾	Male	8	12	11
	Female	5	4	5
Number of employees	Male	62	72	55
	Female	143	166	112
By age	Under 30 years old	166	171	98
	Under 30-50 years old	52	81	83
	Over 50 years old	1	3	3
By type of employment ³⁾	Indefinite-term workers	87	86	77
	Fixed-term worker	132	169	107

1) Total number of employees : As of the end of the year

2) Number of management positions : expatriates, Vietnamese employees at manager levels or higher

3) By type of employment : Including full-time employees as defined by local labor regulations

(Unit : people)

HANA WLS		2022	2023	2024
Total number of employees ¹⁾		49	67	70
Number of executives	Male	2	3	3
	Female	0	0	0
Number of management ²⁾	Male	6	3	6
	Female	4	3	2
Number of employees	Male	20	35	33
	Female	17	23	26
By age	Under 30 years old	17	29	23
	Under 30-50 years old	27	33	41
	Over 50 years old	5	5	6
By type of employment	Indefinite-term workers	49	67	70
	Fixed-term worker	0	0	0

1) Total number of employees : As of the end of the year

2) Number of management positions : including group leaders, part leaders, and foremen

(Unit : people)

HANA Micron Vina		2022	2023	2024
Total number of employees ¹⁾		1,703	1,844	1,885
Number of executives	Male	7	7	6
	Female	0	0	0
Number of management ²⁾	Male	144	146	85
	Female	13	9	10
Number of employees	Male	480	638	586
	Female	1,059	1,044	1,198
By age	Under 30 years old	1,362	1,389	1,346
	Under 30-50 years old	323	430	512
	Over 50 years old	18	25	27
By type of employment ³⁾	Indefinite-term workers	0	99	179
	Fixed-term worker	1,703	1,745	1,706

1) Total number of employees : As of the end of the year

2) Number of management positions : including group leaders, part leaders, and foremen

3) By type of employment : Including full-time employees as defined by local labor regulations

ESG Data Book : Social Performance

Employees

		(Unit : people)		
HT Micron		2022	2023	2024
Total number of employees ¹⁾		267	239	255
Number of executives	Male	4	5	5
	Female	2	2	0
Number of management ²⁾	Male	17	21	24
	Female	3	2	3
Number of employees	Male	149	127	124
	Female	92	82	99
By age	Under 30 years old	106	82	102
	Under 30-50 years old	147	142	140
	Over 50 years old	14	15	13
By type of employment	Indefinite-term workers	257	232	247
	Fixed-term worker	10	7	8

1) Total number of employees : As of the end of the year

2) Number of management positions : including group leaders, part leaders, and foremen

		(Unit : people)		
HANA Electronics		2022	2023	2024
Total number of employees ¹⁾		76	96	104
Number of executives	Male	1	1	1
	Female	0	0	0
Number of management ²⁾	Male	4	0	4
	Female	2	2	1
Number of employees	Male	38	47	53
	Female	31	46	45
By age	Under 30 years old	25	29	40
	Under 30-50 years old	48	58	56
	Over 50 years old	3	9	8
By type of employment	Indefinite-term workers	69	91	100
	Fixed-term worker	7	5	4

1) Total number of employees : As of the end of the year

2) Number of management positions : including group leaders, part leaders, and foremen

ESG Data Book : Social Performance

Diversity of employees

(Unit : people)

HANA Micron		2022	2023	2024
Employees with disabilities	Mandatory employment rate	3.10%	3.10%	3.10%
	Employment rate	4.14%	4.11%	4.34%
Nationality	Korea	825	820	771

HANA Micron Vietnam		2022	2023	2024
Nationality	Korea	6	6	6
	Vietnam	213	249	178

HT Micron		2022	2023	2024
Nationality	Korea	12	12	9
	Brazil	255	227	246

HANA Electronics		2022	2023	2024
Nationality	Korea	0	0	4
	Brazil	76	96	100

(Unit : people)

HANA WLS		2022	2023	2024
Employees with disabilities	Mandatory employment rate	3.10%	3.10%	3.1%
	Employment rate	0%	0%	0%
Nationality	Korea	49	67	70

HANA Micron Vina		2022	2023	2024
Nationality	Korea	115	105	77
	Vietnam	1,588	1,739	1,808

Sum		Unit	2022	2023	2024
Total number of employees		People	3,139	3,321	3,269
Nationality	Total number of foreign employees	People	2,132	2,311	2,332
	Percentage of foreign employees	%	67.9	69.6	71.3
Region	Number of employees at overseas business sites	People	2,265	2,434	2,428
	Percentage of employees at overseas business sites	%	72.2	73.3	74.3

ESG Data Book : Social Performance

New employment

(Unit : people)

HANA Micron		2022	2023	2024
Gender	Total	375	137	156
	Male	179(48%)	41(30%)	78(50%)
	Female	196(52%)	96(70%)	78(50%)
By age	Under 30 years old	285	103	110
	Under 30-50 years old	81	32	41
	Over 50 years old	9	2	5

HANA Micron Vietnam		2022	2023	2024
Gender	Total	112	139	38
	Male	34	40	13
	Female	78	99	25
By age	Under 30 years old	100	107	32
	Under 30-50 years old	12	30	6
	Over 50 years old	0	2	0

HT Micron		2022	2023	2024
Gender	Total	78	23	57
	Male	45	14	26
	Female	33	9	31
By age	Under 30 years old	40	14	39
	Under 30-50 years old	37	9	17
	Over 50 years old	1	-	1

(Unit : people)

HANA WLS		2022	2023	2024
Gender	Total	11	52	29
	Male	7	27	20
	Female	4	25	9
By age	Under 30 years old	8	38	10
	Under 30-50 years old	3	14	17
	Over 50 years old	0	0	2

HANA Micron Vina		2022	2023	2024
Gender	Total	1,889	550	724
	Male	471	230	215
	Female	1,418	320	509
By age	Under 30 years old	1,584	456	600
	Under 30-50 years old	300	84	120
	Over 50 years old	5	10	4

Hana Electronics		2022	2023	2024
Gender	Total	87	65	44
	Male	50	35	23
	Female	37	30	21
By age	Under 30 years old	28	23	23
	Under 30-50 years old	53	37	21
	Over 50 years old	6	5	0

ESG Data Book : Social Performance

Years of Service and Turnover

(Unit : year)

HANA Micron		2022	2023	2024
Years of service	Average	6	6	7.1
	Male	6.9	7.5	7.9
	Female	4.8	5.3	6.1
Voluntary retirement	Turnover rate	2.2%	1.3%	2.0%

HANA Micron Vietnam		2022	2023	2024
Years of service	Average	2	1.8	3.4
	Male	1.8	1.8	3.3
	Female	2.1	1.9	3.4
Voluntary retirement	Turnover rate	5.3%	3.3%	4.2%

HT Micron		2022	2023	2024
Years of service	Average	4.0	5.0	4.5
	Male	4.2	5.2	4.9
	Female	3.7	4.7	3.8
Voluntary retirement	Turnover rate	0.7%	0.3%	1.6%

Evaluation and Remuneration

(Unit : people, KRW million)

HANA Micron		2022	2023	2024
Performance evaluation	Total number of employees	825	820	771
	Number of employees subject to evaluation	294	303	338
	Ratio of performance evaluation	35.6%	37.0%	44.0%
Remuneration	Maximum remuneration	525	393	424
	Average annual salary per employee	57	56	63
	Ratio of the maximum remuneration to the average	9.2x	7.0x	6.7x

(Unit : year)

HANA WLS		2022	2023	2024
Years of service	Average	1.6	1.1	1.7
	Male	1.6	1.2	1.6
	Female	1.6	0.9	1.8
Voluntary retirement	Turnover rate	2.3%	5.9%	3.1%

HANA Micron Vina		2022	2023	2024
Years of service	Average	0.6	1.3	1.4
	Male	0.7	1.5	1.5
	Female	0.5	1.2	1.3
Voluntary retirement	Turnover rate	0.9%	1.5%	2.7%

HANA Electronics		2022	2023	2024
Years of service	Average	0.7	1.1	1.1
	Male	0.7	1.1	1.3
	Female	0.7	1.1	0.9
Voluntary retirement	Turnover rate	0.9%	0.3%	3.9%

Education

HANA Micron		2022	2023	2024
Training hours per employee	Hours	38	49	44
Training cost per employee	KRW thousand	59	157	187

ESG Data Book : Social Performance

Parental Leave and Short Work Hours during Pregnancy and Childcare

(Unit : people)

HANA Micron		2022	2023	2024
Number of employees who used parental leave	Male	1	3	5
	Female	13	16	18
Number of employees returning after parental leave	Male	1	2	2
	Female	10	4	5
Number of employees who have been employed for more than 12 months after returning from parental leave ¹⁾	Male	2	1	2
	Female	4	5	6
Number of employees who used short work hours during pregnancy and childcare	Pregnancy	7	10	13
	Childcare	0	3	0

1) Revision of calculation standards in 2024

HANA Micron Vietnam		2022	2023	2024
Number of employees who used parental leave	Male	0	0	0
	Female	0	0	0
Number of employees who used short work hours during pregnancy and childcare	Pregnancy	11	18	22
	Childcare	26	13	14

HT Micron		2022	2023	2024
Number of employees who used parental leave	Male	1	8	7
	Female	0	7	2
Number of employees returning after parental leave	Male	1	8	7
	Female	0	7	2

(Unit : people)

HANA Micron Vina		2022	2023	2024
Number of employees who used parental leave	Male	0	0	0
	Female	27	101	83
Number of employees returning after parental leave ¹⁾	Male	0	0	0
	Female	6	32	42
Number of employees who used short work hours during pregnancy and childcare	Pregnancy	33	122	93
	Childcare	6	32	44

1) Revision of calculation standards in 2024

HANA Electronics		2022	2023	2024
Number of employees who used parental leave	Male	0	2	2
	Female	0	0	1
Number of employees returning after parental leave	Male	0	2	0
	Female	0	0	1

ESG Data Book : Social Performance

Safety and Health Training

HANA Micron		2022	2023	2024
Number of people subject to training	People	734	747	731
Total hours of training	Hours	25,024	20,018	21,448
Completion rate	%	100	100	100
HANA Micron Vietnam		2022	2023	2024
Number of people subject to training	People	229	236	226
Total hours of training	Hours	916	944	904
Completion rate	%	100	100	100
HT Micron		2022	2023	2024
Number of people subject to training	People	23	34	74
Total hours of training	Hours	460	816	1,184
Completion rate	%	100	100	100

Industrial Accidents

(Unit : people)

HANA Micron		2022	2023	2024
Number of deaths	Employees	0	0	0
	Partners	0	0	0
	Subtotal	0	0	0
Accident rate	%	0.25	0.21	0.20
Disease rate	%	0	0	0

Safety and Health Certification (ISO 45001)

Subsidiaries	2022	2023	2024
HANA Micron	Acquired	Acquired	Acquired
HANA Micron Vietnam	Acquired	Acquired	Acquired
HANA Micron Vina	Acquired	Acquired	Acquired
HT Micron	-	-	Acquired

HANA WLS		2022	2023	2024
Number of people subject to training	People	53	54	61
Total hours of training	Hours	13,376	10,776	11,392
Completion rate	%	100	100	100
HANA Micron Vina		2022	2023	2024
Number of people subject to training	People	1,703	1,844	1,905
Total hours of training	Hours	31,373.5	34,319.5	35,454.8
Completion rate	%	100	100	100
HANA Electronics		2022	2023	2024
Number of people subject to training	People	42	68	41
Total hours of training	Hours	462	2,040	1,196.8
Completion rate	%	100	100	100%

Quality Certification

Subsidiaries	Certification	2022	2023	2024
HANA Micron	IATF 16949	Acquired	Acquired	Acquired
	ISO 9001	Acquired	Acquired	Acquired
	ANSI/ESD S20.20	Acquired	Acquired	Acquired
HANA WLS	ISO 9001	-	Acquired	Acquired
HANA Micron Vietnam	ISO 9001	Acquired	Acquired	Acquired
HANA Micron Vina	ISO 9001	Acquired	Acquired	Acquired
HT Micron	ISO 9001	Acquired	Acquired	Acquired
HANA Electronics	ISO 9001	Acquired	Acquired	Acquired

ESG Data Book : Governance Performance

Ethical Management Education

HANA Micron		2022	2023	2024
Number of training sessions	Sessions	1	1	1
Hours of training per person	Hours	1	4.5	2
Percentage of employees who participated in training	%	100	100	100

Fair Trade/Anti-Corruption Education

HANA Micron		2022	2023	2024
Number of training sessions	Sessions	1	3	2.5
Hours of training per person	Hours	58	57	65
Percentage of employees who participated in training	%	100	100	100

Violations of Code of Ethics and Laws

HANA Micron		2022	2023	2024
Violation of code of ethics	Cases	0	0	0
Legal actions	Cases	0	0	0

Human Rights Education

HANA Micron			2022	2023	2024
Prevention of sexual Harassment and bullying	Hours of training per person	Hours	2	2	1
	Percentage of employees participating in education	%	100	100	100
Improvement of awareness of the disabled	Hours of training per person	Hours	2	2	1
	Percentage of employees participating in education	%	100	100	100
HANA Micron's code of conduct	Hours of training per person	Hours	1	1	1
	Percentage of employees participating in education	%	100	100	100

Information Protection Education

HANA Micron		2022	2023	2024
Number of training sessions	Sessions	4	4	4
Hours of training per person	Hours	4	4	4
Percentage of employees who participated in training	%	100	100	99

GRI Index

GRI 1 : Foundation 2021

Statement of Use	HANA Micron has reported in accordance with the GRI Standards for the Period 2024. 1. 1. ~ 2024. 12. 31.
GRI 1 used	GRI 1 : Foundation 2021
Applicable GRI Sector Standard(s)	N/A

GRI 2 : General Disclosure 2021

Category	Index No.	Indicators	Reporting Location	Remark
The organization and its reporting practices	2-1	Organizational details	6-8	
	2-2	Entities included in the organization's sustainability reporting	2	
	2-3	Reporting period, frequency and contact point	2	
	2-4	Restatements of information	2	
	2-5	External assurance	76-78	
Activities and workers	2-6	Activities, value chain and other business relationships	7	
	2-7	Employees	63-67	
	2-8	Workers who are not employees	63-64	
Governance	2-9	Governance structure and composition	45	
	2-10	Nomination and selection of the highest governance body	45	
	2-11	Chair of the highest governance body	45	
	2-12	Role of the highest governance body in overseeing the management of impacts	45	
	2-13	Delegation of responsibility for managing impacts	45, 47, 50	
	2-14	Role of the highest governance body in sustainability reporting	47	
	2-15	Conflicts of interest	45	
	2-16	Communication of critical concerns	46-47	
	2-17	Collective knowledge of the highest governance body	45-46	
	2-18	Evaluation of the performance of the highest governance body	46	
	2-19	Remuneration policies	46	
	2-20	Process to determine remuneration	46	
	2-21	Annual total compensation ratio	67	

GRI Index

GRI 2 : General Disclosure 2021

Category	Index No.	Indicators	Reporting Location	Remark
Strategy, policies and practices	2-22	Statement on sustainable development	5	
	2-23	Policy commitments	10	
	2-24	Embedding policy commitments	11	
	2-25	Processes to remediate negative impacts	48-51	
	2-26	Mechanisms for seeking advice and raising concerns	34, 50	
	2-27	Compliance with laws and regulations	28, 38, 48-49	
	2-28	Membership associations	79	
Stakeholder engagement	2-29	Approach to stakeholder engagement	15	
	2-30	Collective bargaining agreements	33	

GRI 2 : General Disclosure 2021

Category	Index No.	Indicators	Reporting Location	Remark
Disclosures on material topics	3-1	Process to determine material topics	13	
	3-2	List of material topics	14	
	3-3	Management of material topics	14	

GRI Index

Topic Standards

Category	Index No.	Indicators	Reporting Location	Remark
GRI 201 : Economic Performance	201-1	Direct economic value generated and distributed	54	
	201-3	Defined benefit plan obligations and other retirement plans	31	
GRI 202 : Market Presence	202-2	Proportion of senior management hired from the local community	63-65	
GRI 203 : Indirect Economic Impacts	203-1	Infrastructure investments and services supported	42-43	
	203-2	Significant indirect economic impacts	42-43	
GRI 205 : Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	49	
GRI 206 : Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	49	
GRI 207 : Tax	207-1	Approach to tax	51	
GRI 301 : Materials	301-1	Materials used by weight or volume	-	This information is not disclosed to the public based on management judgment.
GRI 302 : Energy	302-1	Energy consumption within the organization	55-56	
	302-3	Energy intensity	55-56	
	302-4	Reduction of energy consumption	23	
GRI 303 : Water and Effluent	303-2	Management of water discharge related impacts	25, 58	
	303-5	Water consumption	25, 58	
GRI 305 : Emissions	305-1	Direct (Scope 1) GHG emissions	22, 57	
	305-2	Indirect (Scope 2) GHG emissions	22, 57	
	305-3	Other indirect (Scope 3) GHG emissions	-	Scheduled to be posted on the website
	305-4	GHG emissions intensity	22, 57	
	305-5	Reduction of GHG emissions	21, 23	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	27, 62	
GRI 306 : Waste	306-1	Waste generation and significant waste-related impacts	26, 59-61	
	306-3	Waste generated	26, 59-61	
	306-4	Waste diverted from disposal	26, 59-61	
	306-5	Waste directed to disposal	26, 59-61	
GRI 308 : Supplier Environmental Assessment	308-2	Negative environmental impacts in the supply chain and actions taken	39	

GRI Index

Topic Standards

Category	Index No.	Indicators	Reporting Location	Remark
GRI 401 : Employment	401-1	New employee hires and employee turnover	66-67	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	35	
	401-3	Parental leave	68	
GRI 403 : Occupational Health and Safety	403-1	Occupational health and safety management system	36	
	403-2	Hazard identification, risk assessment, and incident investigation	37-38	
	403-3	Occupational health services	36-37	
	403-4	Worker participation, consultation, and communication on occupational health and safety	37-38	
	403-5	Worker training on occupational health and safety	37, 69	
	403-6	Promotion of worker health	35	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	36-38	
	403-8	Workers covered by an occupational health and safety management system	36	
	403-9	Work-related injuries	69	
	403-10	Work-related ill health	69	
GRI 404 : Training and Education	404-1	Average hours of training per year per employee	67	
	404-2	Programs for upgrading employee skills and transition assistance programs	31-32	
	404-3	Percentage of employees receiving regular performance and career development reviews	67	
GRI 405 : Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	65	
GRI 406 : Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	48	
GRI 408 : Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor	-	Not applicable
GRI 409 : Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	-	Not applicable
GRI 411 : Rights of Indigenous People	411-1	Incidents of violations involving rights of indigenous peoples	-	Not applicable
GRI 413 : Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	42-43	
GRI 416 : Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	40	
GRI 418 : Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	52	

SASB(Sustainability Accounting Standards Board)

Industry category : Semiconductor

Topics	Metric	Code	Response activities and related pages
Greenhouse Gas Emissions	Scope 1 Gross emissions	TC-SC-110a.1	P57
	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	TC-SC-110a.2	P20-23
Energy Management in Manufacturing	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable	TC-SC-130a.1	(1) P55-56 (2) P55-56 (3) P24
Water Management	(1) Total water withdrawn (2) Total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	TC-SC-140a.1	(1) P58 (2) P25
Waste Management	Amount of hazardous waste from manufacturing, and percentage recycled	TS-SC-150a.1	P59-61
Workforce Health & Safety	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	TS-SC-320a.1	ESG Performance>Social> Safety and Health (P36-38)
	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	TS-SC-320a.2	Not applicable (Refer to 3. Matters Related to Sanctions (P361), XI. Matters Necessary for Investor Protection in the 2024 Business Report)
Recruiting & Managing a Global & Skilled Workforce	(1) Percentage of employees that require a work visa (2) Percentage of employees at oversea operations	TS-SC-330a.1	Appendix>ESG Data Book>Social Performance >Diversity of Employees (P65)
Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances	TS-SC-410a.1	HANA Micron does not use IEC 62474 reported substances, and all parts and raw materials used in the product comply with international standards and criteria
	Processor energy efficiency at a system level for : (1) servers, (2) desktops and (3) laptops	TS-SC-410a.2	Not applicable
Materials Sourcing	Description of the management of risks associated with the use of critical materials	TS-SC-440a.1	ESG Performance>Social>Sustainable Supply Chain Management> Responsible Minerals (P41)
Intellectual Property Protection & Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulation	TS-SC-520a.1	Not applicable (Refer to 3. Matters Related to Sanctions (P361), XI. Matters Necessary for Investor Protection in the 2024 Business Report)

Third Party Assurance Report

Dear Stakeholders

Korean Foundation for Quality (hereinafter 'KFQ') has been engaged to independently verify the 2025 Sustainability Report (hereinafter 'the Report') of HANA MICRON (hereinafter 'the Company'). KFQ is responsible for providing an independent third-party verification opinion on the report based on the verification criteria and scope specified below. The responsibility for the preparation of this report lies with the Company's management.

- 1) **Organization Address** : 77, Yeonamyulgeum-ro, Eumbong-myeon, Asan-si, Chungcheongnam-do, Korea
- 2) **Data Collection Period** : This report covers sustainability management activities and performance from January 1 to December 31, 2024, with certain non-financial performance indicators including data from the first half of 2025. For major activities, data from the past three years (2022-2024) has been included to enhance comparability.

Verification Purpose

The purpose of this verification is to ensure the reliability of the data and information stated in the Company's report.

Verification Scope

1. **Verification boundary** : The report covers the domestic entities (HANA Micron, HANA WLS), Vietnamese entities (HANA Micron Vietnam, HANA Micron Vina), and Brazilian entities (HT Micron, HANA Electronics).
2. **GRI indicators subject to verification**

Category	GRI Standards
Universal Standards	2-1 to 2-5 (The organization and its reporting practices)
	2-6 to 2-8 (Activities and workers)
	2-9 to 2-21 (Governance)
	2-22 to 2-28 (Strategy, policies, and practices)
	2-29 to 2-30 (Stakeholder engagement)
Topic Standards*	3-1 to 3-3 (Material Topics Disclosures)
	GRI 302 (Energy)
	GRI 303 (Water and Effluents)
	GRI 305 (Emissions)
	GRI 306 (Waste)
	GRI 308 (Supplier Environmental Assessment)
	GRI 403 (Occupational Health and Safety)
	GRI 405 (Diversity and Equal Opportunity)
	GRI 418 (Customer Privacy)

* Topic standards : GRI provisions linked to material topics

3. **Excluded items from verification** : The following items were excluded from the verification scope

- 1) Performance data and reporting practices of related companies, partners, and third parties
- 2) Sustainability initiatives other than those disclosed under the GRI Standards 2021 presented in this report
- 3) Other related information such as Business report and financial statements

Verification Criteria

This verification has been conducted based on [AA1000AS (v3)], [AA1000AP (2018)], and Type 1 – Moderate.

Verification Method

The audit team reviewed relevant procedures, systems, and control mechanisms, along with available performance data, to verify the reliability of the report's content based on the aforementioned criteria. The documents reviewed during the verification process are as follows:

- » **Non-financial Information** : Data provided by the company, disclosed Business Reports, and information obtained from media and/or the internet.
- » **Financial Information** : Data disclosed in the electronic disclosure system (dart.fss.or.kr) of the Financial Supervisory Service and data posted on the homepage.
- » However, the contents of the above data are not included in the verification scope.

The assessment was conducted through document review, on-site visits, and interviews with the responsible personnel. The validity of the materiality assessment procedure in the Report, the selection of material issues considering stakeholders, the data collection, management, and report preparation procedures, as well as the accuracy of the descriptions, were evaluated through interviews with the responsible personnel. Subsequently, it was confirmed that any errors, inappropriate information, or unclear expressions identified in the above steps were appropriately corrected before the publication of the Report.

Verification Limitations

This verification inherently contains limitations that may arise in the process of applying the criteria and methodology.

Competency and Independence

The audit team for this verification was duly composed in accordance with KFQ's internal regulations. KFQ has no conflicts of

interest that could compromise the independence and impartiality of the verification, apart from providing third-party verification services.

Verification Opinion

As a result of the verification, it is the opinion of KFQ that:

- 1) It has been confirmed that the Report was prepared in compliance with the four principles of AA1000AP (2018)

» Inclusivity

The company has appropriately defined stakeholder groups and communicates with them through tailored communication channels that consider the characteristics of each group. The audit team did not identify any missing key stakeholders in this process and confirmed that the company is making efforts to incorporate stakeholder feedback into its management strategy.

» Materiality

The company has identified material issues through an appropriate process and has thoroughly reviewed the relevant impacts to enhance the validity of its materiality assessment. The audit team confirmed that the identified material issues were given due emphasis in this report and that all material issues recognized during the materiality assessment process were reported without omission.

» Responsiveness

The company strives to respond promptly to stakeholders' requirements and key concerns. The audit team did not find any evidence indicating that the organization's response activities and performance regarding material issues were inappropriately reported.

» Impact

The company identifies and monitors the impact of stakeholder-related material issues across its business activities and reports the findings to the extent possible. The audit team did not find any evidence indicating that the impact of material issues was inappropriately measured or reported.

- 2) The report has been appropriately prepared in accordance with the applicable reporting standards, such as GRI Standards (2021) – Accordance and SASB
- 3) The data and information used for verification were limited to the provided materials and were found to be appropriate, with no significant errors or omissions that could affect the verification opinion.

Ji Young Song

27 June 2025

Seoul, Korea

Ji Young Song, CEO

Korean Foundation for Quality (KFQ)



GHG Verification Statement

HANA Micron, Inc.

The Korea Management Registrar Inc. (hereinafter “KMR”) has conducted the verification on the greenhouse gas (hereinafter “GHG”) emission (Scope 1, 2) of HANA Micron, Inc. (hereinafter “the Company”) in 2024.

SCOPE

Verification of all places of business and emission facilities under the control of the company.

STANDARDS

- » ISO 14064-1:2018, ISO 14064-3:2019
- » IPCC Guidelines for National Greenhouse Gas Inventories (2006)
- » Operational Guidelines for Reporting and Certification of Emissions in the GHG Emission Trading Scheme
- » Verification Guidelines for GHG Emissions Trading Scheme Operation
- » Guidelines for GHG Target Management Scheme Operation

PROCEDURE

We conducted a risk analysis approach and on-site verification based on data evaluation, and we identified the appropriateness of the data and factors applied to GHG emission calculations based on objective evidence. The verification team verified the GHG emissions during the reporting period in a reasonable way based on the verification guidelines.

INDEPENDENT

KMR does not have any stake in the verified entity and does not conduct verification with biased opinions/views. We have drawn an independent and objective verification conclusion based on the verification standards, and reviewed the every aspect of the verification we performed throughout the entire verification process through internal review.

LIMITATIONS

The verification team verified the related reports, information and data presented by the audited institution by sampling or enumeration methods. As a result, there are many inherent limitations, and there may be disagreements in the interpretation of appropriateness. Although we have tried to faithfully perform verification that meets the verification standards, we suggest that errors, omissions, and false statements that could not be found may be latent as the limitations to the verification.

OPINION

- » GHG verification has been performed to meet the reasonable assurance level according to the verification standards.
- » We express that no significant errors were found in the calculation of emissions during the verification process, and that relevant activity data and evidence were appropriately managed and calculated. As a result, we express an “unmodified” opinion.
- » Criticality: meets the criterion, which is less than 5%
- » GHGs Emission(All places)

GHGs Emission	Direct emission (Scope1)	Indirect emission (Scope2)	Total (tCO ₂ -eq)	
2024	1,306.57	34,931.881	36,237	
Energy Consumption	Fuel	Electricity	Steam	Total (TJ)
	2024	24.308	727.25	3.68

* Note : There is a difference in the total amount of emissions and emissions by greenhouse gas and by workplace. (Total emissions are cut to a decimal point for each workplace unit and emissions are summed up for each workplace unit.)

RESULTS

We confirm through verification that the emissions from major emission facilities have been calculated and reported without omission.

* The abovementioned company is responsible for preparing verification data in accordance with the “Guidelines for Reporting and Certification of Emissions in the Greenhouse Gas Emissions Trading System (Ministry of Environment Notice No. 2021-278)”, and KMR’s responsibility is limited to the party in the verification contract according to the agreed contract terms. and is not responsible for other decisions, including investment decisions based on this verification statement.

* The abovementioned company must comply with the use of the certification and logo marks under the contract entered into with KMR.

GHG Verification Statement

GI-25260

Verification Opinion Statement

GHG Emissions Verification

Overseas subsidiaries of
HANA Micron Inc.

Verification Target

Korean Foundation for Quality (hereinafter 'KFQ') has conducted an independent verification of Scope 1, 2 Greenhouse Gas Emissions (hereinafter 'GHG emissions') for the overseas subsidiaries of HANA Micron Inc.¹⁾ (hereinafter 'Company') for 2024. KFQ is responsible for providing an assurance statement on the GHG emissions based on the verification scope and criteria described below, while the responsibility for the claims made regarding the GHG emissions rests with the company.

1) Address (based on headquarters): 77, Yeonamyulgeum-ro, Eumbong-myeon, Asan-si, Chungcheongnam-do

Verification Purpose

The purpose is to provide an independent verification opinion on the company's voluntary GHG emissions inventories.

Verification Scope

KFQ's verification scope covered facilities and emission sources at five overseas subsidiaries²⁾ under the operational control and organizational boundary of the company during 2024.

2) Hana Micron VINA Co., Ltd., Hana Micron Vietnam Co., Ltd., HT Micron Semicondutores S.A., Hana Electronics Industria E Comercio Ltda.

Verification Criteria

The verification was carried out at the request of the company using:

- ISO 14064-1:2018, ISO14064-3:2019
- 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- Rule for emission reporting and certification of greenhouse gas emission trading Scheme (Notification No. 2025-64 of Ministry of Environment)

Verification Approach

The verification has been conducted in accordance with the verification principles and standards of the 'ISO14064-3:2019' under the limited verification level. The verification shall contain the potential inherent limitation in the process of application of the verification criteria and methodology.

Conclusion

Based on the criteria and guidelines stated above, KFQ's verification opinion is as follows.

- 1) GHG emissions Company were properly calculated according to the verification standards.
- 2) The data and information used in calculating the GHG emissions were appropriate, reasonable, and no significant errors or omissions could affect verification statement were not found. The materiality assessment result of GHG emissions has met the agreed-upon criterion of less than 5%.
- 3) Accordingly, KFQ provides a verification opinion that is "Unmodified".

Unit: tCO₂e

Scope 1	Scope 2	Total
2,015.026	99,733.694	101,746

* Because total emissions from each site are truncated, the company's total emissions may differ from the actual values by ± 1 tCO₂e

Annex. Detailed GHG emissions calculation results



June 13th, 2025
Ji Young Song
CEO Ji-Young Song
Korean Foundation for Quality



www.kfq.or.kr
Q Tower, 78 Samjeon-ro, Songpa-gu, Seoul, 05606, Republic of Korea

QA1500-05-GI(3)

GI-25260

Appendix. Summary of GHG Emission Results

Organization

HANA Micron Inc.

Emission calculation period

The emission calculation period is from January 1st to December 31st, 2024.

GHG Emissions

Unit: tCO₂e

Division	Scope 1	Scope 2	Total
Hana Micron VINA	529.587	91,774.536	92,304
Hana Micron Vietnam	45.443	7,141.476	7,186
HT Micron	1,363.788	743.143	2,106
Hana Electronics	76.209	74.539	150
Total	2,015.026	99,733.694	101,746

* Because total emissions from each site are truncated, the company's total emissions may differ from the actual values by ± 1 tCO₂e



www.kfq.or.kr
Q Tower, 78 Samjeon-ro, Songpa-gu, Seoul, 05606, Republic of Korea



QA1500-05-GI(3)

Membership Organization Status

- Korea Semiconductor Industry Association
- Korea Electrical Engineers Association
- Korea Industrial Technology Association
- Institute of Korean Electrical and Electronics Engineer
- The Institute of Semiconductor Test of Korea



- The Korean Microelectronic and Packaging Society
- Korea World Class Enterprise Association
- Semiconductor Equipment and Materials International
- Korea Information & Communication Contractors Association

