Annual Registration Statement / Annual Report

Form 56-1 One Report

(e-One Report)

HANA MICROELECTRONICS PUBLIC COMPANY LIMITED

Fiscal Year End 31 December 2024

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Part 1 Business Operations and Performance

1. Organizational structure and operation of the group of companies

1.1 Policy and business overview

1.1.1 Overview of the vision, objectives, goals and business strategies

Message from the chairman

Dear Shareholders,

As we close another year, I would like to present this report on Hana Microelectronics Public Company Limited's performance and the progress we have made across our diverse business segments. Despite a challenging global environment, 2024 has been a year of both resilience and development for our company.

Macroeconomic Overview

2024 continued to reflect global economic challenges. While US consumer demand remained resilient, the slowdown in China persisted due to its property slump and a tempered recovery in industrial activity. These macroeconomic dynamics influenced the performance of our key business units and highlighted the importance of diversification and adaptability in our strategy.

Business Performance

OSAT Assembly (Ayutthaya Thailand & Jiaxing China)

It was a challenging year for both our Ayutthaya & Jiaxing OSAT operations. Utilization levels dropped to historical lows of less than 50% on average and in the latter part of the year fell even lower to less than 45%. Jiaxing bore the brunt of this drop as consumer demand in China dried up and geopolitics impacted our export markets. A strong focus on reducing costs through operational rationalization, productivity improvements and a headcount reduction enabled us to remain operationally financially positive.

Despite the cyclical weakness during 2024, we have been able to win several new accounts focusing on our core strengths of sensors and Internet of Things (IoT) packages, power management and system in a package (SIP) which we believe positions us for a recovery in the second half of 2025. We also took the opportunity to purchase more land adjacent to our existing location in Hi-Tech, Ayutthaya with a factory in situ, which will allow for future expansion when we believe the inevitable semiconductor cycle turns positive.

EMS Assembly (Lamphun Thailand, Jiaxing China & Koh Kong Cambodia)

Our EMS (Electronics Manufacturing Services) assembly segments remained firm during the year, especially at our flagship operation in Lamphun where automotive, industrial and RF (radio frequency) saw strong demand. Throughout the year, we expanded production capabilities, increased our automation and advanced technologies to improve productivity, and deepened relationships with global clients. Geopolitical concerns weakened our Jiaxing EMS operation, but they still achieved a positive result.
Our Cambodian unit suffered with lower revenues in 2024, and we undertook a re-structuring to prepare for expansion in 2025.

Silicon Carbide (SiC) Production, Korea

Demand for SiC solutions, driven by the electric vehicle (EV) industry and renewable energy markets were the main drivers for SiC demand. However, market dynamics in 2024 saw an oversupply from new and existing players leading to price erosion and profitability pressures in what is clearly becoming a geopolitical driven market. To address these challenges, we have prioritized differentiation through quality, reliability, and strategic long-term contracts with key customers in different regions.

Power Master Semiconductor (PMS) has established two marketing partnerships in China, one to focus on the local EV market and the other non-EV industries for both Si & SIC. In India, PMS has established partnerships with a local OSAT company and one of India's major semiconductor distributors, targeting several local industries including metering, electric vehicle (EV) chargers, on-board charging units, and uninterruptible power supplies (UPS).

Our R&D efforts remain focused on developing next generation SiC solutions to reduce costs and improve performance. We have launched generation II devices featuring a ~30% reduction in size whilst maintaining high performance targeted at EV chargers,

battery testing systems, AI data centers and photovoltaic (PV) systems. We continue to develop the next generation devices for our future roadmap.

Strategic Transition in Semiconductor Manufacturing

In response to the significant oversupply and declining prices in the power semiconductor market, PMS made the strategic decision to cease in-house manufacturing of its silicon (Si) and transition to utilizing a China-based foundry. This shift, which is expected to be completed by the end of Q3/25, will optimize cost-efficiency and reduce losses at our Korean facility, which have faced significant cost pressures. While this restructuring has resulted in a non-cash impairment charge, it positions PMS for sustainable operations going forward as we focus solely on Silicon Carbide (SiC) manufacturing.

RFID Inlay Manufacturing (Solon, Ohio, USA & Jiaxing, China)

Our RFID inlay manufacturing division achieved significant milestones in 2024 and achieved a third consecutive year of record revenues. We were accredited with ARC Quality Management System certification by Auburn (the RFID standards body) for both our Ohio and Jiaxing facilities. A growing adoption of RFID tags across industries such as logistics, retail, and healthcare has driven significant demand in 2024. In 2025 we expect to show continued growth, for which we are well positioned, having expanded our capacity both in Ohio at our new location in Solon, & Jiaxing China during the year.

Financial Performance

Hana's key financial performance figures for the year 2024 compared to 2023 were:

- Revenues THB 24,801 million in 2024 down 5 % from THB 26,152 million in 2023.
- Operating Earnings including Other Income THB 1,145 million in 2024 down 36% from THB 1,787 million in 2023.
- Normalised EBITDA (excluding impairment) THB 3,138 million in 2024 down 12% from THB 3,579 million in 2023.
- Net Earnings after tax (THB 634 million) in 2024 down 136% from THB 1,761 million in 2023
- Net Cash and financial investments THB 10.2 billion at YE 2024 up 30% from THB 7.8 billion at YE 2023.
- Gross dividend payout of THB 0.75/share* gross for 2024 reduced by 25% from THB1.0/share gross in 2023

(* Subject to shareholder's approval.)

Global Trade and Tariff Challenges

Geopolitical dynamics and evolving trade policies continued to shape the global business environment. While the US remains a key market, potential tariff impacts require careful navigation. Conversely, the shift in global supply chains away from China presents opportunities. Hana is well-positioned to benefit, given our diversified manufacturing footprint and established facilities in non-China locations.

To mitigate risks and seize opportunities, we have:

1. Diversified Market Presence: Strengthened our footprint in emerging markets to reduce reliance on any single region.
2. Optimized Supply Chains: We continue to enhance our supply chain resilience through localized partnerships and multi-regional manufacturing capabilities.
3. Engaged in Policy Advocacy: Collaborated with industry groups to promote fair trade practices and mitigate tariff impacts – where possible.

Sustainability, Innovation & Quality

Sustainability remains central to our strategy. In 2024, we made measurable progress in reducing our carbon footprint, implementing energy-efficient manufacturing processes, and introducing environmentally friendly product innovations. These initiatives align with our commitment to global sustainability goals and reinforce Hana as a responsible corporate leader. During the year, Hana Ayutthaya received the "Prime Minister's Industry Award 2024 for Manufacturing and Services of the Future". Hana Lamphun received the "Kano Quality Award 2024" from the Technology Promotion Association (Thailand-Japan).

Looking Ahead

As we enter 2025, our focus remains on navigating uncertainties and pursuing growth. Key priorities include:

- Next generation SiC development to meet global demand while managing challenges in oversupply.
- Continuing investment in advanced automation and Industry 4.0 technologies to enhance operational efficiency.
- Exploring strategic partnerships and acquisitions to broaden market reach and technological capabilities.
- Positioning Hana as a preferred alternative to China-based manufacturing through innovation, reliability, and compliance with evolving trade policies.

• Adapting to semiconductor market dynamics with a flexible and cost-efficient manufacturing strategy, including partnerships with foundries.

Acknowledgments

On behalf of the Board of Directors, I extend my heartfelt gratitude to our employees for their dedication, our customers for their trust, and our shareholders for their unwavering support. Together, we will achieve new milestones and deliver long-term value for all stakeholders.

Thank you for your continued confidence in Hana Microelectronics Public Co., Ltd.

Sincerely,
John Thompson
Chairman

Vision

In 2024, the Board of Directors annually reviewed and approved the Company's vision, mission and corporate objectives/the long-term goals as below.

To become the electronics manufacturing services company of choice, by providing world-class quality manufacturing through a diverse field or related disciplines.

Objectives

Corporate Objectives / Long-Term Goals

• Develop and foster our human resources base for continuous expansion and in order to meet the ever-changing demands of the market and for their own personal career paths
• Build strong and long relationships with our core customers to foster continuous growth
• Understand our customer demand and endeavor to meet them
• Continuously diversify our customer base, geographic and industry exposure in order to cope with fluctuations in economic cycles
• Create and grow shareholder value through the distribution of profits and increasing returns
• Conduct business with responsibilities, maintain integrity through business ethics and respect the rights of all groups of stakeholders
• Promote innovative ways to enhance employees' creativity focusing on social responsibilities, reducing environmental impacts and challenges adaption while developing business opportunities towards sustainability

Goals

Mission

To create long-term shareholder value in a manner which minimizes fluctuations in earnings; to develop and promote our employees' wellbeing; to create strong customer satisfaction; to be a good corporate citizen maintaining high corporate, environmental and social practices for the benefit of all stakeholders, and to enable a culture of innovation enhancing business, social and environmental success.

Business strategies

Conducting business with good governance, integrity and accountability, managing business performance with profitable growth and shareholders return, and innovation for efficient process, product quality and service as well as making positive contribution to the organization towards sustainable development

1.1.2 Material changes and developments

Details regarding material changes and developments

Year	Material changes and developments
2024	• The Company additionally invested in 20,000 ordinary shares of Hana Microelectronics (Cambodia) Company Limited, in amount of USD 20 million or equivalent to Baht 715.04 million. As at 31 December 2024, the Company invested in 40,000 ordinary shares of Hana Microelectronics (Cambodia) Company Limited, amounting to USD 40 million or equivalent to Baht 1,417.17 million, representing 100% of the issued and paid-up share capital of the subsidiary. • The Company entered into an agreement with NewVersal Company Limited, the subsidiary of PTT Public Company Limited for an investment in a newly incorporated company, FT1 Corporation Limited, to seek business opportunity in smart electronics industry. The Company has invested in 4,900 ordinary shares, in an amount of Baht 0.49 million, representing 49% of the issued and paid-up share capital of that company. Then the Company additionally invest in 7,448,000 ordinary shares of the share capital increase of FT1 Corporation Limited, in an amount of Baht 744.80 million, according to its shareholding percentage of 49% in that company.
2023	• Hana Microelectronics Public Co., Ltd. additionally invested in 15,000 ordinary shares of Hana Microelectronics (Cambodia) Co, Ltd., a subsidiary of the Company in amount of USD 15 million or equivalent to THB 546.18 million. As of 31 December 2023, the Company has total investment of 20,000 ordinary shares of Hana Microelectronics (Cambodia) Co., Ltd. amounting to USD 20 million or equivalent to THB 702.13 million, representing 100% of the issued and paid-up share capital of the subsidiary. • Hana Microelectronics Public Co., Ltd. issued and allocated the newly-issued ordinary shares by means of a general mandate in the amount of 80,478,800 shares, at the par value of Baht 1.00 per share for the purposes of offering for sale in the private placement at the offering price of Baht 57.00 each or a total of Baht 4,587.80 million. The Company received payment for such shares and registered the increase of its paid-up capital with the Ministry of Commerce on 19 October 2023.
2022	• Hana Microelectronics Enterprise Co., Ltd. additionally invested in 256,959,297 ordinary shares of Power Master Semiconductor Co., Ltd., amounting to USD 103.59 million or equivalent to THB 3,565.50 million, representing 100% of the issued and paid-up share capital of that company. • Hana Microelectronics Enterprise Co., Ltd. additionally invested in ordinary shares of Hana Microelectronics (Jiaxing) Co., Ltd., amounting to USD 65.0 million or equivalent to THB 2,345.68 million, representing 100% of the issued and paid-up share capital of that company.

1.1.3 Spending of the raised fund to serve the objectives declared in the registration statement for securities offering

Is there an issuance of equity securities or debt securities? : Yes

Spending of the money obtained from each offering of equity or debt securities

List of spending of the money obtained from each offering of equity or debt securities	
Item 1	
Types of securities used for fundraising	**Amount of funds raised**
Equity Instruments	4,561.00 Million Baht

Spending objectives	Duration (approximate)	Amount of money as planned	Amount of spent money
1. Joint venture investment to establish FT1 Corporation Limited with NewVersal Co., Ltd. which is a subsidiary of PTT Public Company Limited.	Jan 2024 - Jun 2024	0.49 - 0.49	0.49
2. Additional capital investment in FT1 Corporation Limited	Jul 2024 - Dec 2024	372.00	372.00
3. CAPEX investment in Power Master Semiconductor Co., Ltd, the subsidiary of the Company.	Jul 2024 - Dec 2024	1,037.00	1,037.00

Implementation according to objectives

Achieve objectives

Progress of fund utilization / reasons and measures taken in case the funds are not spent according to the objectives

As Hana Microelectronics Public Co., Ltd. (“The Company”) completed the capital increase from the allocation of 80,487,800 newly issued ordinary shares under a General Mandate to Private Placement (PP) at a price of THB 57.00 per share on 19 October 2023, the amount of funds raised after the deduction of related expenses was THB 4,560,772,213.

On 28 February 2024, the Company establishment of FT1 Corporation Limited, a joint venture company with NewVersal Company Limited which is a subsidiary of PTT Public Company Limited in the amount of THB 490,000.

During 1 July - 31 December 2024, the Company increased capital in FT1 Corporation Limited. in the amount of THB 372,400,000 and investment expenses (CAPEX - Capital Expenditures) in Power Master Semiconductor Co., Ltd., a subsidiary of the Company, in the amount of THB 1,037,204,000.

The total fund utilization as of 31 December 2024 was THB 1,409,604,000 and the outstanding as of 31 December 2024 was THB 3,150,678,213.

Related links

https://weblink.set.or.th/dat/news/202501/0324NWS310120251701250138E.pdf

1.1.4 The obligations to which the company has committed in the registration statement, including the compliance with such obligations or conditions in the following years

Are there any issued securities with obligations or conditions? : No

1.1.5 Company information

Company name	:	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED
Symbol	:	HANA
Address	:	65/98 Soi Vibhavadi-Rangsit 64, Junction 2, Kwang Talad Bangkhen, Khet Laksi
Province	:	Bangkok
Postcode	:	10210
Business	:	Electronics Manufacturing Service "EMS" Producer
Registration number	:	0107536000773
Telephone	:	0-2551-1297, 0-2521-4935-9
Facsimile number	:	0-2551-1299 , 0-2552-4906
Website	:	www.hanagroup.com

Email : -

Total shares sold

Common stock : 885,366,660

Preferred stock : 0

1.2 Nature of business

1.2.1 Revenue structure

Revenue structure by product line or business group

	2022	2023	2024
Total revenue from operations (thousand baht)	27,167,163.00	26,152,117.00	24,801,340.00
PCBA (thousand baht)	15,126,294.00	15,955,628.00	15,866,523.00
IC (thousand baht)	10,701,622.00	8,234,763.00	6,708,894.00
Microdisplay (thousand baht)	1,339,247.00	1,961,724.00	2,225,922.00
Others (thousand baht)	0.00	2.00	1.00
Total revenue from operations (%)	100.00%	100.00%	100.00%
PCBA (%)	55.68%	61.01%	63.97%
IC (%)	39.39%	31.49%	27.05%
Microdisplay (%)	4.93%	7.50%	8.98%
Others (%)	0.00%	0.00%	0.00%

By geographical area or market

	2022	2023	2024
Total revenue (thousand baht)	27,167,163.00	26,152,117.00	24,801,340.00
Domestic (thousand baht)	282,109.00	202,195.00	305,872.00
International (thousand baht)	26,885,054.00	25,949,922.00	24,495,468.00
Singapore (thousand baht)	6,889,000.00	6,432,000.00	5,093,289.00
United States of America (thousand baht)	5,823,000.00	6,260,000.00	6,347,509.00
China (thousand baht)	3,395,000.00	3,175,000.00	2,801,353.00
Malaysia (thousand baht)	2,930,000.00	3,063,000.00	3,165,987.00
Switzerland (thousand baht)	1,333,000.00	645,000.00	510,335.00
Hong Kong (thousand baht)	852,000.00	589,000.00	202,360.00
Germany (thousand baht)	634,000.00	1,128,000.00	772,537.00
Bulgaria (thousand baht)	623,000.00	757,000.00	878,065.00
Ireland (thousand baht)	614,000.00	492,000.00	401,547.00
Taiwan (thousand baht)	596,000.00	563,000.00	751,187.00
Others (thousand baht)	3,196,054.00	2,845,922.00	3,571,299.00
Total revenue (%)	100.00%	100.00%	100.00%
Domestic (%)	1.04%	0.77%	1.23%

	2022	2023	2024
International (%)	98.96%	99.23%	98.77%
Singapore (%)	25.62%	24.79%	20.79%
United States of America (%)	21.66%	24.12%	25.91%
China (%)	12.63%	12.24%	11.44%
Malaysia (%)	10.90%	11.80%	12.92%
Switzerland (%)	4.96%	2.49%	2.08%
Hong Kong (%)	3.17%	2.27%	0.83%
Germany (%)	2.36%	4.35%	3.15%
Bulgaria (%)	2.32%	2.92%	3.58%
Ireland (%)	2.28%	1.90%	1.64%
Taiwan (%)	2.22%	2.17%	3.07%
Others (%)	11.89%	10.97%	14.58%

Other income as specified in the financial statements

	2022	2023	2024
Total other income (thousand baht)	455,839.00	438,666.00	641,656.00
Other income from operations (thousand baht)	455,839.00	438,666.00	641,656.00
Other income not from operations (thousand baht)	0.00	0.00	0.00

Share of profit of joint ventures and associates accounted for using equity method

	2022	2023	2024
Share of profit (thousand baht)	0.00	0.00	0.00

1.2.2 Information on products and services

1.2.2.1 Product/service information and business innovation development

Printed Circuit Board Assembly (PCBA)

Printed Circuit Board Assembly (PCBA) is the IC and other electronic components assembling on a printed circuit board which holds electronic parts to create a useful electronic circuit. In providing high quality with high precision and high accuracy as the components are getting smaller, we have invested in the up-to-date technology equipment to meet customers' requirement and aim towards zero defect manufacturing approach to provide our customers with PCBA solutions and services worldwide.

The PCBA operations of Hana are located in Lamphun province, Thailand and Jiaxing city, China and Koh Kong city in Cambodia where our business includes Printed Circuit Board (PCB) manufacturing and electronic contract manufacturing service.

PCBA – HANA LAMPHUN

The PCBA factories in Lamphun, Thailand provides manufacturing services for the following products:

A) COB (Chip-on-Board) Assembly

COB (Chip-on-Board) Assembly is die-assembly onto printed circuit board directly that does not operate die as package before installing which facilitates to reduce operation steps and cost of production. This method is suitable for less circuitry using products such as automotive sensor products, household products, consumer products, telecommunication devices and medical products, etc.

COB and PCBA are used as the component parts of electric appliances and other electronic devices such as:

- Circuit Board in automotive sensors for pressure sensor applications
- Circuit Board in personal computers (PC) and notebooks
- Circuit Board for hearing aid devices to help a wearer hear certain sounds better
- Circuit for adding memory management unit in computer industry

B) Wireless High Frequency Product

The product is a high frequency telecommunication device for infrastructures and test accessories. It needs technology for signal check technology, high frequency check equipment and requires high delicacy for this assembly operation as material part is very highly delicate and costly. Also professional competency workmanship is crucially required. High frequency device receives and sends Microwave and Millimeter wave signal of telecommunication device that using for mobile phone network station and all other related infrastructures.

C) Electric Part Product for Interface Device

Electric part product for interface device is the product for supporting in demand transmitting between users and electronic equipment (such as PC, laptop, mini-stereo, server, mobile phone or safety equipment) which users can touch demand transmitting equipment via computer screens, keyboards for selecting information, changing places for information, signal or option setting.

D) Other Electronic Devices include:

- Air Pressure and Temperature Control product is an electronic device for air pressure controlling of vehicle's brake system, air bag system and electronic device for temperature measurement and controlling including other pressure measurement meters (for water and gas).
- Medical Devices to assist the hearing aid purpose
- Wireless Sensor product is an equipment for sending and receiving light signal that using with other electronic equipment such as optical mouses, printers, mobile phones, etc.

PCBA – HANA JIAXING

The PCBA operation in Jiaxing, China provides manufacturing services for the following products:

A) COB (Chip-on-Board) and CIB (Chip-in-Board) Assembly

COB (Chip-on-Board) assembly is die-assembly onto printed circuit board directly that has the advantage of lower-cost die component comparing with IC package mounting. The process is quite similar to conventional IC process. The only difference is

instead of using lead frame, printed circuit board is used as substrate. This method is suitable for products with moderate circuitry complexity such as consumer electronics e.g. Software Copy Protection Devices, circuit boards in personal computers (PC) and notebooks, etc. Aside from using printed circuit boards, a flexible printed circuit may also be used. This is highly recommended for products requiring thin and flexible profile not attainable using conventional printed circuit boards. Typical application of this is in the area of RF cards, BLE (Bluetooth Low Energy) cards, tags, hearing aid devices, etc.

CIB (Chip-in-Board) assembly process has the same technology as above but for those products that thickness is critical, the die itself is mounted at the substrate below its surface level.

B) Wireless Radio Frequency Product

Wireless Radio Frequency Product from low, high, and ultrahigh frequency telecommunication devices. This involves using expensive electronic equipment to perform signal level and data integrity check. The wave-length used can range from Millimeter wave to Microwave and the applications are mainly for mobile phone network station.

Not limited to the above, the needs for low power consuming electronic devices had led to BLE technology that can send and receive signals to multiple devices at short ranges.

C) Electronic Devices

• Air pressure and temperature control product is an electronic device/MEMS for air pressure controlling of vehicle's brake system, air bag system, air flow and measurements for medical applications, gas and air quality detectors, and electronic devices for temperature measurement and controlling including other pressure measurement meters (for water and gas).

• Fiber optic device is a connector equipment between computer equipment and fiber optic thread which sends and receives light signal from fiber optic thread and sends to computer equipment.

• Wireless sensor product is an equipment for sending and receiving light signal that using with other electronic equipment such as optical mouses, imaging sensors, printers, mobile phones, health-monitoring devices, base stations/routers, remote controls for drones and UAV, etc.

• Smart card product is used for telecommunication, entertainment, controlling equipment, payment transactions, other electric appliances, employee cards, student cards, etc.

• LED assembly product such as LED boards for vehicle's rear lighting, trucks, traffic LED light boards which offers brighter light than ordinary light bulbs and electronic backlight.

• Medical devices such as hearing aid and accessories, pregnancy test kits and dosimeters.

• Card readers and embedded modules which may include RFID technology for door entrance/ access system for residences, offices, transportation vehicles, manufacturing and government facilities, hotels, public areas, asset tracking, etc.
• Bluetooth low energy devices used for child care, mobile phones, controlled door access, routers/extenders, card readers, programmable cards, audio/acoustic devices, building administration system, etc.

• System in Module and/or System on Chip are ultra-compact devices/modules offer efficient computing core for variety of leading edge IoT applications for professional camera platforms, multi-display, video conferencing, and/or advanced AI drone/robotics, 3D printing products as provide multiple specialized processing cores for AI engine, ISP, GPU, and DSP processing needs.

• Power controllers for power distribution system operators offer end-to-end multipurpose intelligent solutions for smart grids and power distribution systems used on railways, power grids, EV charging stations, etc. where remote control is needed.

• Home security products that offers 24-hour monitoring, surveillance, and alarm either standalone or cloud based security systems for any sign of movements and/or force intrusions. The products integrate with known home kits applications that may come along with home automation integration.

D) Flexible Circuit Board

Flexible circuit board product is the assembly of IC or other electronic parts onto flexible circuit boards for more convenience of using such as RFID tags and low profile dimension products which is adapted for using in commercial work for inventory and selling which is replaced of old bar code system, using in traffic section, transportation, personal identification and building security and asset tracking.

E) Electric Part Product for Interface Device

Electric part product for interface device is the product for supporting of data transmission demand between users and electronic equipment (such as PC, laptop, mini-stereo, server, mobile phone or safety equipment) which users can use the touch screen as transmitting equipment via computer screens, keyboards for selecting information, changing places for information, signal or option setting, either by using wired, RF wireless, or BLE protocol.

F) Micro Coil Winding Assembly

A coil is the key component used in wireless transmission and communication such as smart cards, RFID cards, security readers, sensors, etc.

G) Surface-Mount Technology (SMT)

SMT is a method for constructing electronic circuits (IC) in which the components are mounted directly onto the surface of printed circuit boards (PCB) or flexible printed circuit (FPC) boards by automated equipment. Applications are mainly in equipment and/or products used in telecommunication, measuring equipment, industrial and security services, automotive and medical field of use.

PCBA – HANA CAMBODIA

The PCBA operation of Hana Cambodia provides manufacturing services for the following products:

A) Secure Reader Box Build Assembly

Smart Card Product is used for telecommunication, entertainment, controlling equipment, other electric appliances, employee cards, student cards, etc.

1. RFID Readers

Contactless RFID Card Reader Modules for door entrance/access system for residences, offices, transportation vehicles, manufacturing and government facilities, hotels, public areas, asset tracking, etc.

2. Smart Card Readers

Contact Smart Card Readers Modules is used to support demand transmitting between users and electronic equipment (such as PC, laptop or safety equipment).

B) Cable Harness

Cable Harness is used for secure reader box build, telecommunication devices, computer components and automotive cable wire harnesses.

C) USB Token Security

Multi-Factor Authentication Token with added security in accessing online accounts.

D) Ultra Switch

RF/microwave switches are used in a wide variety of signal routing applications for test and measurement systems

E) Remote Control

Remote Control for cable TV control box and satellite control box.

F) Access Control Device

ID card scanner to capture full-color ID cards for identity verification.

Integrated Circuit (IC) Assembly and Test

Integrated Circuit (IC) is a semiconductor chip consisting of circuit components such as resistors, capacitors, inductors, transistors, diodes, etc., which are connected with wires. Electronic circuits are developed by getting smaller size but more power and safety to incorporate them into devices. We have invested in the up-to-date technology equipment to meet customers' requirement and aim towards zero defect manufacturing approach to provide our customers with a wide range of integrated circuit solutions.

The IC operations of Hana are located in Ayutthaya province, Thailand and Jiaxing city, China where our business includes IC Packaging and Assembly and electronic contract manufacturing service.

IC – HANA AYUTTHAYA

The IC operation of Hana Ayutthaya, Thailand provides manufacturing services for the following products:

A) IC (Integrated Circuit) Assembly

IC is a part of electronic devices consisting of Chip IC (Integrated Circuit) that compounding as IC package for assembling to other electronic device parts.

• Optical Sensors and Modules:

Used in a variety of applications, including mobile, electronic appliances, and retailed automation

• Leadless Packages:

QFN, DFN, Multi Row/Routable

QFN, MCM on QFN

Used for mobile phones, tablets, industrial/power, electric appliances & PlayStation

• Leaded Packages:

VSOP, MSOP, SOIC, SOT, SC70, SOT5x3, SOT9x3, SOD723

Used for telecom industry, notebooks, computers, tablets, electronic appliances, home appliances, appliances, mobile phones & quick battery chargers

• Laminate Packages:

SIP, MEMS, LGA

Used for mobile phones, digital cameras, DVD readers/appliances & power management

Smart Card Modules

Used for RFID cards, credit cards, security cards & consumer tags

• Power Packages:

Flip-Chip, Cu-Clip, Soft Solder, Heavy Al Wire

Used for home appliances, motor drivers, UPS & power management

B) DC-DC Converter Assembly

A DC-to-DC converter is an electronic circuit that converts a source of direct current (DC) from one voltage level to another. The DC-DC Converter is used in general electronic devices such as computers and medical products.

C) Optocoupler Assembly

An optocoupler is an electronic component that transfers electrical signals between two isolated circuits by using light. Optocouplers prevent high voltages from affecting the system receiving the signal. Two parts are used in an optocoupler: an LED that emits infrared light and a photosensitive device that detects light from the LED. Optocouplers are used in industrial, computing, consumer, communication, and automotive markets.

D) RF, Microwave, Millimeter Wave and Optical Component Assembly

RF, Microwave, Millimeter Wave and Optical Component are semiconductor products that used in satellite, radar, wired & wireless networks, automotive, industrial, medical, and mobile devices.

E) Die Sales

This type of business is to support customers who do not have capability on wafer probe, back grind, wafer dicing & die inspection, Hana will service & provide sawn dice put in wafer rings, waffle packs, antistatic chip trays.

IC– HANA JIAXING

IC Division of Hana Jiaxing in China has offered variety of IC assembly and test services as follows:

A) Standard IC Products

• QFN/DFN/LGA/Flip-Chip Packages:

Used for consumer electronics (like smart phone, tablet, sensor and touch pad, etc.), industrial and automotive applications

• SC, SOT, TSOT, MSOP:

Used for consumer electronics (like mobile phone, digital camera, computer, etc.), industrial and automotive applications

B) Power Modules and Power Discrete with IGBT or SiC (Silicon Carbide) Dies

Used for industrial welding machine, UPS, EV Charging Station, PV inverter, electrical vehicle, hybrid electrical vehicle and wind turbine.

C) Wafer Level Chip Scale Package (WLCSP)

WLCSP is driven by a strong push for cost reduction and miniaturization. Hana Jiaxing offers wafer level chip scale packaging services for handheld and portable servers and automotive products.

D) LEDs and LED Modules for Automotive Lighting and Projector Light Sources

Automotive lighting designers can utilize the small size and distinctive look of LUXEON LEDs to rethink lighting applications and lighting engineers can take advantage of the efficiency, robustness and power savings that the small, light-weight emitters deliver. For example, headlamps, high and low beam, break lights, turn signals, position and marker lamps, etc. High power LED modules are used in light sources for projectors, screenless TV and heads-up display. UV LED modules are used in 3D printing and sterilization.

IC- POWER MASTER

Integrated power device manufacturer, Power Master Semiconductor with FAB and R&D center in Korea, provides manufacturing services for the following products:

A) SiC MOSFET

650V/1200V e SiC MOSFET is an advanced Power Master Semiconductor's SiC MOSFET family. This technology provides design flexibility for high system efficiency, higher switching frequency for system size reduction with higher reliability thanks to its extremely low switching losses, low FOM [QGx RDS(ON)], no reverse recovery losses of body diode and high ruggedness.

B) SiC Diode

650V/1200V/1700V e SiC Diode is an advanced Power Master Semiconductor's SiC Diode family by utilizing MPS technology. This technology combines the benefits of high surge current capability and excellent performance with lower VF and QC for both low and high frequency applications.

C) HV SJ MOSFET

600V/650V e MOS 7 series is an advanced Power Master Semiconductor's Super-Junction MOSFET family. e MOS 7 series classified by two products.

• The e MOS E7 technology provides well-balanced performance, ease of use (e.g. low ringing) with an excellent switching performance in hard-switching topologies for high efficiency and high-power density power conversion system.

• The e MOS UF7 technology provides extremely lower QRR and robust body diode performance for higher system efficiency and improve reliability for resonant topologies and bridge topologies for various applications.

The end application covers system solution especially in automotive, Cloud, energy infrastructure and consumer applications.

D) MV MOSFET

The e MOS G1 is a Power Master Semiconductor's medium voltage (MV) MOSFET family. This technology is optimized for high current capability and high ruggedness such as avalanche and dynamic dv/dt. With a breakdown voltage ranging from 150V to 300V, eMOS is ideal for various applications requiring performance and ruggedness. Product differentiation through low conduction loss & high ruggedness capability.

RFID & Microdisplay

RFID – HANA USA

Hana Technology Inc. (HTI) in Twinsburg and Solon, Ohio, USA manufactures microelectronics products such as Microdisplays, camera modules and RFID (Radio Frequency Identification) passive tags.

A Microdisplay is a device used for transferring electrical signals to high-resolution visual images that can be highly magnified. These products can be LCOS (Liquid Crystal on Silicon), MEMS, or HTP (High-Temperature Polysilicon) based devices, and are incorporated in a wide variety of products such as virtual and augmented reality goggles, multimedia projectors, rear-projection televisions, adaptive optics, and telecommunication devices.

An RFID (Radio Frequency Identification) device is used to transfer information in a fast and wireless mode. HTI manufactures passive tags where these tags can be queried by a reader. The tags are programmed with identification, security, and other historical information that is of interest in the particular applications. The information can also be modified on the tags (write mode) by the RFID readers. The tags consist of an IC that contains the vital information and an antenna. The antennas that are primarily used are thin conductors that are either printed or etched onto a plastic web so that they can be manufactured in a high-speed, flip-chip manufacturing mode. HTI is the world leading's producer of RFID tire tags.

The new product line of HTI is RFID Inlays comprised of RFID chip (IC), tag antenna and substrate, typically on a film face. An RFID inlay is the functional part of an RFID label. The inlay can be used alone by simply attaching it to the target asset. RFID inlays become the best option particularly for retailers and other small-scale users for tracking, identification, and inventory management. RFID Inlays will drive HTI future growth. HTI customers are mainly based in the North America and Europe, with some having product drop-shipped to other countries for post-assemblies.

Product end applications for RFID technology are listed here:

- Inventory tracking
- Asset tracking
- Attach with cloth for thief preventing in shops (anti-thief tags)
- Anti-Counterfeit
- Car parking cards
- For research and study in consumer behavior
- Tire Tags
- Supply chain management
- Microchips used in pets
- Movie cards
- Anti-thief equipment for car's key
- M-commerce via mobile phones instead using credit cards
- Logistics

Research and development policy in various areas, and details regarding innovation development in processes, products and/or services, or business models.

Research and development (R&D) policy : Yes

R&D expenses in the past 3 years

	2022	2023	2024
Research and development (R&D) expenses over the past 3 years (Million Baht)	161.30	131.50	136.90

Additional explanation about R&D expenses in the past 3 years

Silicon & Silicon Carbide Power Management Devices

Silicon Carbide (SiC), is a new material, a compound of Silicon and Carbon which can operate at very high temperatures allowing much higher voltage, higher switching frequency with lower power losses than traditional Silicon semiconductors so it is perfectly suited to power applications for smarter power designs in a broad range of high-end consumer electronics, consumer white goods, telecommunications, cloud computing & especially EV-inverter/OBC (On-Board charger) and renewable energy (solar and wind sectors), where faster re-charging speeds are required. Because of these physical properties, SiC is more difficult to manufacture and costlier. However, we will also produce standard Silicon for devices that do not require such high performance levels but are lower in cost to produce as there is the demand for both types.

• Hana has invested the necessary equipment to produce in mass production scale the products of Silicon & Silicon Carbide Power Management devices through its subsidiary Power Master Semiconductor (PMS) in Korea. After installation of equipment, Hana's subsidiary PMS will have the capability to produce Silicon & Silicon Carbide Semiconductors to be sold directly to end customers or further processed at Hana's existing IC Assembly & Test factories in Thailand and/or China into packaged IC or Power Modules.

This will support the growth of Hana's existing IC Assembly & Test business to enter into the fast-growing market for EV cars & EV chargers and other uses of Power Management devices.

• Strategic Products and Package Developments (SPPD) in Hana Jiaxing which has been established in July 2021 focusing on power semiconductor packaging solutions for emerging renewable energy saving application market like Electric Vehicles (EV) traction module, On-board charger, EV charging station, using SiC MOSFET, Diode and Si IGBT, Diode. This research and development organization is capable semiconductor packages design, predict its electrical and thermal performance by simulation software, as well as thermo-mechanical stress and mold flow, also Hana Jiaxing's pilot line can provide prototype and pre-production samples to customers.

These packages targeted Halogen free EMC, robust delamination solution, heavy Aluminum wire up to 20 mil and Clip Bonding capability. These discrete power packages reliability qualification is following AEC-Q101.

Power semiconductor package solution to electric vehicle is most focused activities. For Semiconductor Packaging Research and Development, Hana established Finite Element Analysis (FEA) capabilities. These simulation solutions will predict products and packages thermal, electrical, thermo-mechanical performance by proposed and given design by Hana Jiaxing, also to minimize trial and error, learning cycles, preventing failures, saving customer resource and development cycles.
• Automotive qualified SiC product release (1200V SiC Diode) in 2023
• Automotive qualified SiC product release (1200V SiC MOSFET Gen1 21/80 milli ohm, Gen2 16/40 milli ohm) in 2024

Key Benefits of Silicon & Silicon Carbide Power Management Devices:

Product Market Opportunities:
• Expanding the product range to cover new segments
• Entering new markets or adapting existing products for emerging markets
• Developing customized solutions for specific customers
• Increasing or maintaining market share
• Growing green revenue by offering energy-efficient solutions

Internal Capabilities and Organization:
• Upgrading employee skills to meet evolving industry needs
• Enhancing the Company's ability to absorb, process, and analyze knowledge effectively
• Promoting better knowledge sharing and transfer between Hana sister companies
• Improving the efficiency and functionality of the Company's value chain
• Strengthening relationships with external entities, such as other firms and universities
• Increasing business resilience and adaptability to changing market conditions
• Establishing new business models to align with future growth opportunities

Economy, Society, and Environment:
• Delivering energy-efficient products that contribute to green revenue for the group

• Supporting the global energy transition towards clean energy, as our end-use products are integral to electric vehicles (EVs), power management systems, renewable energy applications, and more

Green Revenue:

Our PMS products contributed to more green revenue to the group enhancing the transition to the green economy by saving CO2 emissions as follows.

• In 2024, CO2 emissions were reduced by 51,130 tons CO2eq.
• In 2023, CO2 emissions were reduced by 32,414 tons CO2eq.
• In 2022, CO2 emissions were reduced by 20,891 tons CO2eq.

INNOVATIVE DEVELOPMENT

Hana is committed to delivering high-quality products and services, consistently prioritizing customer satisfaction through continuous improvement initiatives. The Company fosters a culture of innovation, aiming to create value not only for the business but also for society and the environment. By fostering a culture of innovation, Hana offers its employees opportunities to apply their knowledge, skills, and critical thinking, while also integrating technological expertise. This approach drives the development and enhancement of working processes, equipment, and products, reinforcing the Company's vision of an innovation-driven organizational culture.

Our key innovative developments are outlined as follows:

• Machine Automation & Industry 4.0

Hana has continuously invested in manufacturing automation projects to transition traditional manufacturing processes towards Industry 4.0. This shift enhances the Company's competitive edge by improving product quality, increasing operating efficiency, reaching lean production, enhancing employees' capabilities, responding to higher customer requirements, managing labor issues regarding both labor costs and labor shortages, as well as reducing waste and environmental impact.

Key Automation Strategies:

Below are the key strategies Hana is implementing to transition from manual processes to full automation:

1. Manual to Automation

Achieving Continuous Quality Control and Zero Defects

We are automating manual processes to ensure continuous quality control, achieving zero defects at every stage of manufacturing, both in terms of input and output.

2. Streamlining

Enhancing Efficiency and Production Speed

The implementation of a shop floor automation system has streamlined our manufacturing process, resulting in faster, more efficient production with enhanced quality.

3. System Integration and Control

Enabling Seamless Machine-to-Machine Communication

Machine-to-machine communication is integrated, allowing devices to exchange information seamlessly, optimizing operations and enabling real-time decision-making.

4. Big Data Analysis

Leveraging Data for Informed Decision-Making

We use advanced system applications to monitor and control production processes, utilizing data analytics to identify abnormalities and enable high-level decision-making.

Summary of Achievements in Manufacturing Automation Projects (Past 3 Years)

Hana has made notable progress in automating its manufacturing processes across its factories in Lamphun, Ayutthaya, and Jiaxing. Over the past three years, the Company successfully implemented a variety of automation projects, achieving cost savings and operational improvements as follows.

1. Manual to Automation

Hana implemented 73 projects in 2024, 54 in 2023, and 75 in 2022, automating 529 machines in 2024, 973 in 2023, and 1,190 in 2022. These efforts resulted in cost savings of $529K in 2024, $973K in 2023, and $1.19M in 2022, along with reducing 121

operators in 2024, 53 in 2023, and 108 in 2022. Total investments were $449K in 2024, $403K in 2023, and $1.62M in 2022.

2. Streamline Process Management

In 2024, Hana implemented 6 projects, 9 in 2023, and 5 in 2022, focusing on streamlining process management. These projects led to cost savings of $632K in 2024, $0.5K in 2023, and $142K in 2022, with a reduction of 28 operators in 2024, 2 in 2023, and 8 in 2022. Total investments amounted to $419K in 2024, with no investment in 2023 and $80K in 2022.

3. System Integration and Control

Hana implemented 49 projects in 2024, 27 in 2023, and 28 in 2022, focusing on system integration and control. These projects were implemented for 382 machines in 2024, with 117 machines in 2023 and 622 machines in 2022. The total cost savings amounted to $1.23 M in 2024, $117K in 2023, and $622K in 2022, while reducing 33 operators in 2024, 3 in 2023, and 4 in 2022. Total investments were $36K in 2024, $196K in 2023, and $80K in 2022.

4. Big Data Analysis

Hana implemented 4 projects in 2023 and 5 in 2022 focused on big data analysis. These projects resulted in cost savings of $12K in 2023 and $598K in 2022. While there were no machine implementations or operator reductions in 2024, the total investment in big data analysis projects was $14K over the three years.

Overall Impact:

In total, Hana executed 335 projects over the past three years as part of its manufacturing automation efforts. These initiatives resulted in the automation of 1,063 machines, delivering cost savings of $6 million and the workforce reduction of 360 operators from the total investment $3.3 million during 2022-2024, highlighting Hana's ongoing commitment to improving efficiency, cutting costs, and enhancing productivity through automation and innovation.

• Use of Advanced Enterprise Resource Planning (ERP) system:

Hana has implemented the new SAP S/4HANA ERP system which enables the workflow of information more efficient, enabling cost controlling including increased productivity by reducing time and effort employees need for completing their day-to-day activities, eliminating manual processes, and automating new information fast and in real-time planning, execution, reporting and analytics with the integration and streamlining business functions: sales, planning, purchasing, finance, inventory, and logistics into one central database. A modern ERP system helps Hana to enable innovation, optimize resources, and streamline operations.

• Process Development

Hana Ayutthaya has developed the technical competency encouraging our customers to continue to load significant number of new package development activities in 2024. This implementation has boded very well for the business outlook in 2024 and beyond since all of these development and NPI activities will translate into increased production over the next 12-24 months. We have also continued to file our intellectual property (IP) on some of our custom package developments. Our focus on IP will continue in 2024 and beyond to further differentiate Hana Ayutthaya.

Our technology development focuses on the following key areas:

Optical Sensors:

We focus the sensor development to build the sensor products to be smaller and thinner to sustain our positioning in this area. R&D also focuses to enhance the working temperature of the sensors to be higher in order to cover more market sectors. In addition, there is also a focus to enhance the light sensing to be higher accuracy and precision for next generations of applications in the future.

Development in 2024 focused on the following enhanced application.

- Light sensor with light pipe
- Light emitter with light beam from side wall of the chip
- System in package light sensor

Power Packages:

We focus on power package development to have more functionality & thermal improvement. Packages developed to have multi-chip options as well as different cooling options like bottom side cooling or top side cooling or both sides cooling called dual cool. In addition, there are improvement on isolation developed especially for future and higher voltage requirements.

Development on the enhanced thermal cooling packaging solution take advantage of the Cu-clip with DBC (Direct Bond Copper) technology and exposed pad QFN.

Developments in 2024 focused on implementation of new process capabilities to support Power module devices.
• Implemented Laser grooving process for GaN on Silicon and Low K wafers
• Qualified full cut laser dicing for SiC that eliminates edge chipping
• Qualified Solder die attach for Multi-die GaN modules
• Installed and Qualified Vacuum reflow for better control of solder voids <5%
• Flip Chip and upgraded Cu Clip equipment capability

Multichip Modules (MCM):
We focus on IC packaging with complex designs to integrate more functionality while trying to reduce also the overall package size. Development in combining different technologies in IC assembly to have multiple systems in a package with multiple active dice, whether stacked die or side-by-side configuration.

New MCM products released to production on various custom package/product designs and complex processes.
• Flip Chip for stack bumped die MEMs on CMOS on 1.1 x 1.2mm DFN package
• Custom product with 5 dies and Ceramic DBC solder attach
• Stack die SiC on Ceramic Direct Plated Copper for automotive application

SIP (System-in-Package)/SMT (Surface-Mount Technology) Modules:
Demand for more functionality in a small package size also drives SIP & SMT modules combining technology for IC packaging for active components & SMT package with passive components. These packages also have some additional requirements for its functionality improvement, for example, metal shield for EMI protection.

Commodity/Standard IC Packages:
The commodity or standard IC package also gets to be improved & developed further using new supplier capabilities to increase lead frame/substrate density, combined with new BOM selection to improve capabilities to support latest customer requirements.

Introduction of new optimized BOM set per MSL capability to meet customer product reliability requirement will be able to provide cost effective solution.
• Ultra-high density LF for QFN and selected Leaded packages
• Brown oxide roughening to replace roughened PPF LF on QFN and SOIC
• Alternate BOM set for adhesive epoxy, Copper wire, and mold compound
• Continuous Improvement in Manufacturing

Hana's electronic products, particularly ICs, present challenges for manual handling and visual quality checks due to their small size, product variety, and high production volume. Defects can occur at any point on the products and in various sizes. To address these challenges, Hana Ayutthaya continues to enhance its manufacturing processes by adopting a Smart Manufacturing approach with a zero-error proofing concept, driven by the development of an Equipment Management System (EMS). The in-house EMS, created by Hana's development teams, has been successfully deployed across the plant, providing real-time monitoring of equipment status, production output, and product quality. The Poka-Yoke approach has been implemented to prevent errors before they occur, ensuring that defects are avoided from the start. Additionally, an Early Warning System (EWS) has been incorporated to detect key equipment anomalies and provide timely alerts. The advanced traceability system generates paperless logs, supporting troubleshooting and product traceability. This smart manufacturing platform not only increases efficiency and productivity but also eliminates weaknesses, boosts delivery performance, reduces labor, energy, and material usage, and ultimately enhances customer satisfaction.

• Capability Enhancement Projects
Hana Jiaxing has enhanced its in-house capabilities with several key automation projects in 2024 to improve productivity and quality. These include automating material deliveries through AGVs (Automated Guided Vehicles) to optimize handling and manpower allocation, upgrading Low Pressure Overmoulding (LPMS) equipment with improved cooling and resin handling, implementing automatic solder paste thawing with integrated control and label outputs, and developing an auto label scanning system for better traceability and efficiency. These initiatives collectively enhance operational efficiency, quality assurance, and responsiveness

to customer needs.

1.2.2.2 Marketing policies of the major products or services during the preceding year

Printed Circuit Board Assembly (PCBA)

Hana's Marketing Policy for PCBA Business:

Hana's PCBA business focuses on providing high-quality, reliable, and innovative assembly services for a wide array of industries, including telecommunications, automotive, medical devices, industrial applications, and consumer electronics. We serve a broad spectrum of customers, ranging from large multinational corporations to emerging startups. With the growing demand for precision and miniaturization, our expertise in PCBA allows us to meet the most stringent quality standards while delivering cost-effective and efficient solutions.

Our marketing policy for the PCBA business revolves around building strong, long-term relationships with our customers by offering integrated, turnkey solutions that streamline their production processes. We aim to provide customers with end-to-end services, from prototyping and design support to large-scale production, ensuring high-quality assembly that meets international standards. The goal is to be a trusted partner for all our customers, delivering consistent value through our focus on quality, timely delivery, and responsive customer service.

We believe in transparency and close collaboration with our customers, understanding their needs and providing tailored solutions that help them achieve their business goals. With a focus on continuous improvement and technological advancement, we aim to remain a leader in the PCBA market by offering state-of-the-art manufacturing techniques, competitive pricing, and exceptional customer support.

The domestic/export sales ratio

Countries	Ratio (%)
Malaysia	20.00
United States of America	20.00

The industry competition during the preceding year

Competitive Landscape

The PCBA industry is characterized by the presence of numerous players, ranging from large multinational corporations to specialized regional manufacturers. Key players in the main industry include Flextronics, Jabil, Celestica and USI. The competitive landscape is influenced by factors such as technological innovation, production capacity, pricing strategies, and the ability to meet diverse customer requirements.

Strategic initiatives such as mergers and acquisitions, partnerships, and investments in research and development are common among industry players aiming to enhance their market position. For instance, companies are focusing on expanding their portfolios to include advanced PCBA solutions for emerging technologies like the Internet of Things (IoT), automotive electronics, and wearable devices.

Looking ahead, the PCBA market is expected to continue its growth trajectory, driven by several key factors:
• Technological Advancements: Ongoing innovations in PCB design and manufacturing processes are expected to lead to more compact, efficient, and high-performance assemblies, meeting the demands of next-generation electronic devices.
• Emerging Applications: The proliferation of IoT devices, advancements in automotive electronics, and the growth of wearable technologies are anticipated to create new opportunities for PCBA manufacturers, requiring specialized solutions tailored to these applications.
• Sustainability Initiatives: Increasing emphasis on environmental sustainability is likely to drive the adoption of green PCBs and eco-friendly manufacturing practices, influencing both product development and regulatory frameworks.
• Regional Developments: Regions such as Asia Pacific are expected to maintain their dominance in PCBA production, supported by robust manufacturing infrastructures and a growing consumer base for electronic products.

The PCBA industry in 2024 demonstrated resilience and adaptability, navigating challenges and capitalizing on emerging opportunities. As technological advancements continue and new applications emerge, the industry is well-positioned for sustained growth, with competition driving innovation and value creation across the global electronics market.

Hana's Value Proposition and Competitive Advantage:

In the contract manufacturing industry, Hana is now classified as one of the top 50 world EMS companies. In Thailand, there are only few companies doing similar business as Hana. Key players in the main industry include ASE, Amkor, JCET, TFMC, Huatian as main players in the industry. Hana avoids direct competition with competitors by focusing on the manufacturing of microelectronics components and sub-assembly, while most competitors focus on box build assembly.

Hana focuses on providing our customers with an overall competitive cost of doing business and does not just focus on price but on quality, capability and flexibility. This remains the cornerstone of our long relationship with our customers and leads to a mutually beneficial and symbiotic partnership with our customers. Hana continues each year to increase the technical capabilities at each of our manufacturing facilities. This continuous development is another key attraction for all our customers.

Hana's strategic competitive advantage is to provide a diversified Electronics Manufacturing Service (EMS) to an international customer base. Our diversification includes Integrated Circuit (IC) Packaging and Test, Chip-on-Board, Surface-Mount Assembly "PCBA", Hybrid-Assembly, Micro-Coil, etc., which can provide "One-Stop-Shopping" for most of our customers. This broad range of services is a key competitive advantage for Hana and this integration proves to be extremely useful due to the merging of semiconductor devices and module level assembly.

Integrated Circuit (IC) Assembly and Test

Hana's Marketing Policy for IC Business:

Hana's IC business serves a global market, catering to customers who require high-quality integrated circuits for use in a variety of industries, such as telecommunications, automotive, mobile phones, medical devices, and consumer electronics. Our clients include major OEMs and contract manufacturers who rely on the precision, functionality, and performance of the ICs we produce.

Our marketing policy for the IC business is built on the foundation of providing innovative solutions, cutting-edge technology, and a customer-centric approach. We focus on offering high-performance ICs designed to meet the diverse and ever-evolving needs of the electronics industry. Our commitment to excellence and the continuous development of our IC product offerings ensure that we stay at the forefront of technological advancement, enabling our clients to remain competitive in their respective markets.

We emphasize strategic collaborations with our customers, offering customized solutions that integrate seamlessly into their product designs and manufacturing processes. By leveraging our deep technical expertise and strong customer relationships, we aim to foster long-term partnerships that are mutually beneficial. Hana's IC business strives for market leadership by maintaining the highest standards of quality, reliability, and customer service, while continuously investing in innovation and product development to stay ahead of market demands.

The domestic/export sales ratio

Countries	Ratio (%)
Singapore	37.00
United States of America	22.00

The industry competition during the preceding year

The industry competition during the preceding year

The electronics market, particularly the semiconductor industry, has been undergoing a transitional phase as it works toward recovery and stabilization after facing numerous challenges. 2024 has been a year of adjustment as companies continue to address excess inventory and shifting market dynamics. Many industries, especially consumer electronics, have experienced a decline in demand, a byproduct of the post-COVID-19 pandemic landscape and changing economic conditions. While consumer spending has been subdued due to inflation and economic uncertainties, sectors like artificial intelligence (AI), high-performance computing (HPC),

automotive, aerospace, and defense have experienced significant growth.

Key factors propelling the IC market include the widespread adoption of 5G technology, the proliferation of Internet of Things (IoT) devices, and the integration of artificial intelligence (AI) across various sectors. These developments have heightened demand for advanced ICs capable of supporting high-speed data transmission and complex processing tasks.

Competitive Landscape: The IC industry remains highly competitive, dominated by major players such as Intel, Samsung, Qualcomm, and Texas Instruments. These companies lead in various segments, including microprocessors and memory chips, continually investing in research and development to drive innovation. Emerging startups are also making their mark, particularly in niche markets like automotive applications and IoT solutions.

Geopolitical Dynamics: Geopolitical tensions, particularly between the U.S. and China, have significantly impacted the IC industry. The U.S. maintains an edge in advanced chip technology, while China has made substantial progress in producing legacy chips essential for everyday applications. In 2024, China increased spending on wafer fabrication equipment by 29% compared to the previous year, reflecting a strategic push to enhance domestic production capabilities.

In 2025, the semiconductor industry will witness fierce competition across multiple sectors. Dominant players such as TSMC, NVIDIA, Intel, and Samsung will lead the charge, driven by AI, high-performance computing, and memory technologies. However, geopolitical tensions, particularly the U.S.-China trade war, will continue to shape the landscape, influencing supply chain dynamics, technological development, and regional growth trajectories.

Hana's Value Proposition and Competitive Advantage:

Hana's value proposition lies in its ability to provide highly tailored solutions in IC assembly, testing, and microelectronics components, targeting niche markets often overlooked by larger competitors. The Company differentiates itself by offering high-tech solutions with superior infrastructure in Thailand, which allows it to remain competitive despite rising labor costs compared to countries like India and Vietnam. The ongoing US-China trade conflict benefits Thai industries, and Hana has strategically positioned itself to take advantage of these shifts.

Hana's competitive edge is further enhanced by its strategic geographic presence, with a strong base in China providing technical and administrative support to distinguish it from local competitors. Hana's consistent cash flow and multiple production sites, which provide alternative facilities, make it a reliable partner for customers. In the IC business, Hana continues to invest in cutting-edge technologies, ensuring it meets the growing demands for high-performance chips used in telecommunications, automotive, and consumer electronics sectors. This focus on innovation and adaptability strengthens Hana's position as a trusted partner in the competitive IC industry.

RFID & Microdisplay

Hana's Marketing Policy for RFID & Microdisplay Business:

Hana's RFID (Radio Frequency Identification) and Microdisplay business is committed to providing innovative and reliable solutions to meet the diverse needs of industries such as telecommunications, automotive, healthcare, retail, and consumer electronics. Our marketing policy focuses on delivering high-performance RFID tags, systems, and microdisplay solutions that enhance operational efficiency, enable advanced tracking capabilities, and provide superior visual experiences for our clients.

We aim to position ourselves as a leading provider of integrated, turnkey solutions that leverage cutting-edge technology in RFID and Microdisplay systems. Our product offerings include high-quality RFID tags for asset tracking, inventory management, and supply chain optimization, as well as Microdisplays for wearable devices, automotive heads-up displays, and other compact visual applications. Through continuous innovation and collaboration with our customers, we ensure our solutions are scalable, customizable, and aligned with industry-specific requirements.

Our marketing strategy is built around creating long-term, trusted relationships with our customers, supported by expert consultation and technical assistance. We focus on providing end-to-end solutions—from initial design and prototyping to full-scale production and after-sales support. Hana is committed to staying at the forefront of RFID and Microdisplay technology, ensuring that we deliver products that not only meet but exceed customer expectations for quality, reliability, and performance.

In the future, Hana plans to expand its reach in emerging markets, positioning itself as a go-to partner for RFID and

Microdisplay solutions by combining technological advancements, competitive pricing, and outstanding customer service to address evolving market needs.

The domestic/export sales ratio

Countries	Ratio (%)
United States of America	94.00
Hong Kong	4.00

The industry competition during the preceding year

Competitive Landscape

The RFID market is highly competitive, featuring a mix of established players and emerging innovators. Key companies include Zebra Technologies, Impinj, Invengo Technology, NXP Semiconductors, Alien Technology, and GAO RFID. These companies focus on strategic initiatives such as product development, partnerships, and regional expansions to strengthen their market positions. For instance, the global RFID tag market was valued at approximately USD 9.46 billion in 2023 and is projected to reach USD 15.32 billion by 2029, growing at a CAGR of around 8.6% during the forecast period.

Regionally, North America and Europe have been early adopters of RFID technology, primarily due to advanced infrastructure and a strong emphasis on technological innovation. In Asia-Pacific, countries like China, Japan, and India are witnessing rapid adoption, driven by manufacturing hubs and increasing investments in smart technologies. The Asia-Pacific RFID market was estimated at USD 40.90 billion in 2023 and is predicted to reach around USD 73.94 billion by 2033, at a CAGR of 6.1% from 2024 to 2033.

In summary, the RFID market in 2024 reflects a dynamic and rapidly evolving landscape, with significant investments and innovations driving adoption across various sectors. As industries continue to recognize the benefits of RFID technology, the market is expected to witness robust growth, offering ample opportunities for both established and emerging players.

1.2.2.3 Procurement of products or services

Printed Circuit Board Assembly (PCBA)

Hana manufactures all products based on our customers' specifications and requirements, selling these products directly to our customers. The key raw materials are sourced directly from suppliers or are consigned by our customers. We place orders for materials in line with customer orders, utilizing planning software systems to align with the customer demands. The raw materials primarily serve industrial applications, and most of them are commonly available in the market. We source materials and electronic components from a global network of suppliers to ensure consistent quality, cost-efficiency, and availability, supporting our production processes and meeting our customers' needs. This global supply chain ensures a steady flow of materials to meet the needs of our production processes.

The company's production capacity

	Production capacity	Total utilization (Percent)
Lamphun Plant (Million Pieces/Year)	1,200.00	74.00
Jiaxing Plant (Million Pieces/Year)	45.00	67.00
Cambodia Plant (Million Pieces/Year)	15.00	50.00

Acquisition of raw materials or provision of service

The major raw materials for the PCBA product segment include dies/ASICs, PCBs, electronic components, metal parts, and plastic

parts. For most of our customers, wafers/dies are consigned with proprietary designs and are exclusively used in their own products.

Our PCBA operations in Thailand and Cambodia import 95% of key materials from overseas and 5% sourced from domestic suppliers, either directly or through distributors. In China, 65% of raw materials are imported, while 35% are sourced locally.

At Hana, we prioritize product quality and adhere to international standards. To ensure this, we implement thorough testing procedures for all incoming materials before they are released to the assembly lines, maintaining high production standards in line with customer requirements. Additionally, we work closely with our suppliers to ensure that materials meet quality standards and are sourced in accordance with our customers' specifications.

Proportion of domestic and overseas procurement

Countries	Name of raw material	Value (Baht)
Malaysia	Package Assembly, Metal and Plastic Parts	1,534,805,601.00
Belgium	ASICs	1,506,091,136.00

Major raw material distributors

Number of major raw material distributors (persons) : 30

For PCBA product segment, Hana has not purchased raw materials from any one supplier valued more than 10% of the total purchases according to consolidated financial statements. Our major suppliers have been part of our approved vendor list and have maintained long-term relationships with Hana, ranging from 10 to 27 years.

Integrated Circuit (IC) Assembly and Test

Hana manufactures integrated circuits (ICs) that meet the specific needs and requirements of our customers. These products are primarily developed for use in a wide range of industries, including electronics, automotive, Optocoupler, telecommunication, industrial, and consumer. The major raw materials for IC production are sourced from a combination of direct suppliers and customer consignment. To ensure efficient production, the Company utilizes advanced planning software systems to forecast and align raw material orders with customer demand. The materials used in IC production are typically specialized components and technologies, with many being proprietary or tailored to customer specifications.

The company's production capacity

	Production capacity	Total utilization (Percent)
Ayutthaya Plant (Million Pieces/Year)	6,297.00	70.00
Jiaxing Plant (Million Pieces/Year)	2,244.00	42.00
Korea Plant (Million Pieces/Year)	49,922.00	80.00

Acquisition of raw materials or provision of service

The major raw materials of IC product segment are wafers, lead frames, wires, epoxy, and electronic components. For most of our major customers, wafers/dies are consigned by the customers with their proprietary designs and are exclusively used in their own products.

In Thailand and Cambodia, our IC operation imports the key materials used in production, with 95% sourced from overseas and 5% from domestic suppliers, either directly or through distributors. In China, 45% of raw materials are imported, with 55% sourced locally.

Some materials, such as gold, copper, and steel, are subject to fluctuations in global market prices. To manage this risk, the Company employs several strategies, including sourcing alternative raw materials, negotiating long-term contracts with suppliers, and working closely with suppliers and customers to plan material orders in advance, diversifying the supplier base, and implementing more efficient production methods also helping mitigate cost increases. In some cases, the Company may collaborate with customers to share the burden of fluctuating prices.

Proportion of domestic and overseas procurement

Countries	Name of raw material	Value (Baht)
Singapore	Wafers, lead frames, wires	1,534,805,601.00
Malaysia	Wafers, lead frames	501,006,475.00

Major raw material distributors

Number of major raw material distributors (persons) : 30

For the IC product segment, Hana has not purchased raw materials from any one supplier valued more than 10% of the total purchases according to consolidated financial statements. Our major suppliers have been part of our approved vendor list and have maintained long-term relationships with Hana, with the longest lasting 24 years.

RFID & Microdisplay

Hana manufactures Radio Frequency Identification (RFID) and Microdisplay products that support a wide range of applications, including logistics, inventory management, and security. Our RFID products are tailored to meet the unique needs of customers, offering solutions that enhance tracking, authentication, and consumer interaction capabilities. These products serve as critical semi-finished solutions in rapidly growing markets.

The company's production capacity

	Production capacity	Total utilization (Percent)
USA Twinsburg Plant (Million Pieces/Year)	200.00	100.00
USA Solon Plant (Million Pieces/Year)	800.00	60.00

Acquisition of raw materials or provision of service

The raw materials for RFID & Microdisplay production are sourced from a combination of direct suppliers and customer consignment. To align with customer demand, the Company uses advanced planning software systems to optimize material orders. The materials used in RFID & Microdisplay production are typically specialized components, such as ICs, PCB, Flex, etc.

Our RFID & Microdisplay operation import the key materials used in production, with 78% sourced from overseas and 22% from domestic suppliers, either directly or through distributors.

Proportion of domestic and overseas procurement

Countries	Name of raw material	Value (Baht)
Japan	ICs	239,814,960.00
Taiwan	ICs	188,051,675.00

Major raw material distributors

Number of major raw material distributors (persons) : 10

For the RFID & Microdisplay product segment, Hana has not purchased raw materials from any one supplier valued more than 10% of the total purchases according to consolidated financial statements. Our major suppliers have been part of our approved vendor list and have maintained long-term relationships with Hana, with the longest lasting 23 years.

1.2.2.4 Assets used in business undertaking

Core permanent assets

The property, plant and equipment of the Company and subsidiaries as of 31 December 2024 (Unit: Million Baht) For further detail reference, it is provided in Attachment 4.

The appraisal price of core permanent assets

List of assets	Book value / Appraised value	Ownership	Obligations	Additional details
Land	533.00	Owned asset and leasing	None	-
Buildings	1,782.00	Owned asset and leasing	None	-
Leasehold improvement	18.00	Leasing	None	-
Fixtures	332.00	Owned asset	None	-
Machinery and equipment	5,432.00	Own assets and leasing	None	-
Office furniture and equipment	123.00	Own assets	None	-
Vehicles	22.00	Own assets	None	-
Construction in progress and machinery under installation	1,085.00	Own assets	None	-

Core intangible assets

Intangible assets of the Company and subsidiaries as of 31 December 2024 (Unit: Million Baht)

The appraisal price of core intangible assets

List of assets	Types	Book value / Appraised value	Additional details
Computer software	Software	77.00	-
Development costs	Others : Research and Product Development	84.00	-

Investment policy in the subsidiaries and associated companies

Investment policy in the subsidiaries and associated companies : Yes

The Company has authority to manage and oversight the subsidiaries and associated companies. Operating sections of each subsidiary shall be responsible by General Manager which shall report to the Chief Executive Officer. Capital expenditure and

financial control management shall be handling by the Executive Committee which is reviewed by the Board of Directors.

1.2.2.5 Under-construction projects

Under-construction projects : No

Details of under-construction projects

Total projects : N/A

Values of total ongoing projects : N/A

Realized value : N/A

Unrealized value of remaining projects : N/A

Additional details : -

1.3 Shareholding structure

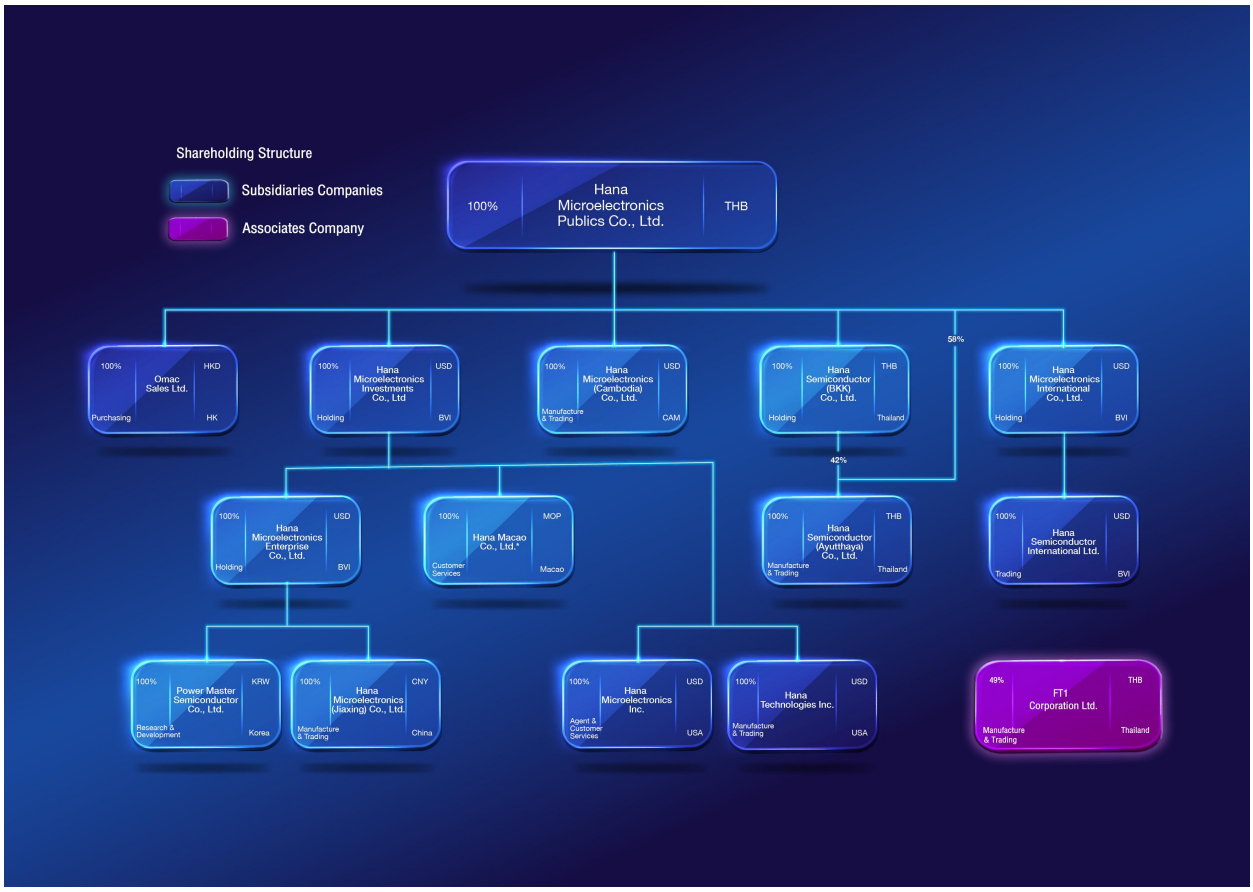
1.3.1 Shareholding structure of the group of companies

Policy on operational organization within the group of companies

Hana has the policy to diversify its business to multiple manufacturing locations strategically based in low-cost country wherever possible and setting up the necessary companies for customer service, purchasing center, trading and holding companies to serve the group requirements.

Shareholding diagram of the group of companies

Shareholding diagram



Subsidiaries

Company name	Juristic person who holds shares of the company	Shareholding proportion (%)	Voting right proportion (%)
Hana Semiconductor (BKK) Co., Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	100.00%	100.00%
Omac Sales Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	100.00%	100.00%
Hana Microelectronics International Co., Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	100.00%	100.00%
Hana Microelectronics Investment Co., Ltd	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	100.00%	100.00%

Company name	Juristic person who holds shares of the company	Shareholding proportion (%)	Voting right proportion (%)
Hana Semiconductor (Ayutthaya) Co., Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	58.00%	58.00%
	Hana Semiconductor (BKK) Co., Ltd.	42.00%	42.00%
Hana Microelectronics (Cambodia) Co., Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	100.00%	100.00%
Hana Semiconductor International Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	0.00%	0.00%
	Hana Microelectronic International Co., Ltd.	100.00%	100.00%
Hana Technologies, Inc.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	0.00%	0.00%
	Hana Microelectronics Investment Co., Ltd.	100.00%	100.00%
Hana Microelectronics, Inc.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	0.00%	0.00%
	Hana Microelectronics Investment Co., Ltd.	100.00%	100.00%
Hana Microelectronics Enterprise Co., Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	0.00%	0.00%
	Hana Microelectronics Investment Co., Ltd.	100.00%	100.00%
Hana Macao Co., Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	0.00%	0.00%
	Hana Microelectronics Investment Co., Ltd.	100.00%	100.00%
Hana Microelectronics (Jiaxing) Co., Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	0.00%	0.00%
	Hana Microelectronics Enterprise Co., Ltd.	100.00%	100.00%
Power Master Semiconductor Co., Ltd.	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	0.00%	0.00%
	Hana Microelectronics Enterprise Co., Ltd.	100.00%	100.00%

Associated companies

Company name	Juristic person who holds shares of the company	Shareholding proportion (%)	Voting right proportion (%)
FT1 Corporation Limited	HANA MICROELECTRONICS PUBLIC COMPANY LIMITED	49.00%	49.00%

Company that holds 10% or more of the total shares sold

Name and the location of the head office	Type of business	Type of shares	The number of shares	The number of shares sold
Hana Semiconductor (BKK) Co., Ltd. 65/98 Soi Vibhavadi-Rangsit 64 Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok 10210 Telephone : 66 2 5511297-8 Facsimile number : -	Holding	Common shares	100,000,000	100,000,000
Omac Sales Ltd. Unit B1, 10/F, Block B, HK IND. Centre 489-491 Castle Peak Road, Lai Chi Kok, Kowloon, Hong Kong SAR, China Telephone : - Facsimile number : -	Purchasing of electronic components and equipment	Common shares	100,000	100,000
Hana Microelectronics International Co., Ltd. Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG 1110, British Virgin Islands Telephone : - Facsimile number : -	Holding	Common shares	2	2
Hana Microelectronics Investment Co., Ltd Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG 1110, British Virgin Islands Telephone : 0 Facsimile number : -	Holding	Common shares	2	2
Hana Semiconductor (Ayutthaya) Co., Ltd. 100 Moo 1, T. Baan Lane, A. Bang Pa-in, Ayutthya 13160 Telephone : 66 35 350803-4 Facsimile number : -	Manufacturing and trading of electronic components	Common shares	120,000,000	120,000,000
Hana Microelectronics (Cambodia) Co., Ltd. Neang Kok Village, Pakkhlong Commune, Mondul Seyma District, Koh Kong Province, Cambodia Telephone : 855 016 234 112 - 4 Facsimile number : -	Manufacturing and trading of electronic components	Common shares	40,000,000	40,000,000
Hana Semiconductor International Ltd. Rua De Pequim No. 126 EDF. Commercial I TAK C18, Macao Telephone : - Facsimile number : -	Trading of electronic components	Common shares	18,512,830	18,512,830

Name and the location of the head office	Type of business	Type of shares	The number of shares	The number of shares sold
Hana Technologies, Inc. 29000 Aurora Road, Solon, Ohio 44139, USA Telephone : 1 330 405 4600 Facsimile number : -	Manufacturing and trading of electronic components	Common shares	437,752	437,752
Hana Microelectronics, Inc. 3140 De La Cruz Blvd., #107, Santa Clara, CA 95054, USA Telephone : - Facsimile number : -	Agent and customer services	Common shares	1,000	1,000
Hana Microelectronics Enterprise Co., Ltd. Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG 1110, British Virgin Islands Telephone : - Facsimile number : -	Holding	Common shares	2	2
Hana Macao Co., Ltd. Rua De Pequim No. 126 EDF. Commercial I TAK C18, Macao Telephone : - Facsimile number : -	Customer services	Common shares	1	1
Hana Microelectronics (Jiaxing) Co., Ltd. No#18, Hengnuo Road, Xingcheng Industrial Zone, Xiuzhou District, Jiaxing City, Zhejiang Province, 314000, P.R. China Telephone : 86 573 83528000 Facsimile number : -	Manufacturing and trading of electronic components	Common shares	65,000,000	65,000,000
Power Master Semiconductor Co., Ltd. 79-20, Gwahaksaneop 4-ro, Oksan-myeon, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Republic of Korea Telephone : 82 043 219 6850 Facsimile number : -	Manufacturing and trading of electronic components	Common shares	256,959,297	256,959,297
FT1 Corporation Limited 65/98 Soi Vibhavadi-Rangsit 64 Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok 10210, Thailand Bangkok 10210 Telephone : 025511297 Facsimile number : -	Manufacturing and trading of electronic components	Common shares	7,452,900	15,210,000

1.3.2 Shareholding by a person with a potential conflict of interest holding exceeding 10 percent of the voting shares in a subsidiary or associated company

Does the company have a person with potential conflicts of interest holding shares in a subsidiary or associated company? : No

1.3.3 Relationship with major shareholders' business

Does the company have a relationship with a business group of a major shareholder? : Yes

The major shareholders of Hana Microelectronics Public Co., Ltd. are Omac Limited, Omac (HK) Limited and Rainbow Joy Limited, all of 3 companies holding shares total of 253,419,360 shares, equivalent to 28.62%. Those companies have no relationship or related to any other businesses with the Company.

1.3.4 Shareholders

List of major shareholders [(1)]

Group/List of major shareholders	Number of shares (shares)	% of shares
1. OMAC (HK) LIMITED	172,480,000	19.48
2. LGT BANK (SINGAPORE) LTD	72,030,600	8.14
3. Thai NVDR Company Limited	45,904,528	5.18
4. OMAC LIMITED	40,939,360	4.62
5. RAINBOW JOY LIMITED	40,000,000	4.52
6. VAYUPAK FUND 1	30,215,300	3.41
7. THE BANK OF NEW YORK MELLON	26,622,708	3.01
8. SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	22,792,825	2.57
9. THAI LIFE INSURANCE PUBLIC COMPANY LIMITED	10,741,600	1.21
10. GOVERNMENT PENSION FUND	7,970,000	0.90

Remark : [(1)] 1. No. 1 OMAC (HK) LIMITED, No.4 OMAC Limited and No. 5 RAINBOW JOY LIMITED are the related companies under Section 258 of the Securities and Exchange Act (No. 4) B.E. 2551. These 3 major shareholders hold totally 253,419,360 share or equivalent to 28.62% of the total issued shares.

2. Han Family hold shares in Omac Limited which is a holding company, equivalent to 66.66%. The shareholders of the company consist of:

1) Ms. Janine Margaret Han holds 120,000 shares or equivalent to 33.33% of the total issued shares.
2) Ms. Alyna Sylvie Han holds 40,000 shares or equivalent to 11.11% of the total issued shares.
3) Mr. Oliver Edward Han holds 40,000 shares or equivalent to 11.11% of the total issued shares.
4) Mr. Rupert George Han holds 40,000 shares or equivalent to 11.11% of the total issued shares.

3. Mr. Richard David Han holds the position of Director at Omac Ltd., Omac (HK) Ltd., and Rainbow Joy Limited. These three companies are engaged in holding business activities.

In accordance with Section 258 of the Securities and Exchange Act of Thailand (No. 4) B.E. 2551, these three companies are considered part of the same group of shareholders.

Major shareholders' agreement

Does the company have major shareholders' : No

agreements?

1.4 Amounts of registered capital and paid-up capital

1.4.1 Registered capital and paid-up capital

Registered capital and paid-up capital

Registered capital (Million Baht)	:	885,366,746.00
Paid-up capital (Million Baht)	:	885,366,660.00
Common shares (number of shares)	:	885,366,660
Value of common shares (per share) (baht)	:	1.00
Preferred shares (number of shares)	:	0
Value of preferred share (per share)	:	0.00

Has the company listed in other stock exchange?

Has the company listed in other stock exchange?	:	No

1.4.2 Other types of share whose rights or terms differ from those of ordinary share

Other types of share whose rights or terms differ from those of ordinary share	:	No

1.4.3 Shareholding by Thai NVDR Company Limited (NVDR)

Are shares held by Thai NVDR Company Limited (NVDR)?	:	Yes
Number of shares (Share)	:	45,904,528
Calculated as a percentage (%)	:	5.18

The impacts on the voting rights of the shareholders

There is no effect on the voting rights of shareholders.

1.5 Issuance of other securities

1.5.1 Convertible securities

Convertible securities : No

1.5.2 Debt securities

Debt securities : No

1.6 Dividend policy

The dividend policy of the company

The Company's dividend policy to pay shareholders is approximately 30 - 100% of its consolidated net income after deduction of all specified reserves, subject to the Company and its subsidiaries' cash flow and investment plans, including justifications and other considerations as deemed appropriate. The dividend policy of the subsidiaries to pay the Company is 0 - 100% of appropriated earnings.

Historical dividend payment information

	2020	2021	2022	2023	2024
Net profit per share (baht : share)	2.3700	1.9200	2.6100	2.1400	-0.7200
Dividend per share (baht : share)	0.7500	1.0000	0.5000	0.5000	0.5000
Interim Dividend (Baht/share) (baht : share)	0.6500	1.0000	0.5000	0.5000	0.2500
Ratio of stock dividend payment (existing share : stock dividend)	0.0000	0.0000	0.0000	0.0000	0.0000
Value of stock dividend per share (baht : share)	0.0000	0.0000	0.0000	0.0000	0.0000
Total dividend payment (baht : share)	1,126,830,404.0000	1,609,757,720.0000	804,878,860.0000	845,122,760.0000	664,024,995.0000
Dividend payout ratio compared to net profit (%)[(2)]	59.00	104.00	38.00	47.00	74.00

Remark : [(2)] Year 2024 dividend payout ratio compared to Earnings (before exchange and exceptional items) THB 901,538,681.

2. Risk management

2.1 Risk management policy and plan

Risk management policy and plan

The Risk Management Committee has formulated risk management policies with following objectives:

1. To enable the Company to manage potential risks efficiently, ensuring that management procedures are executed in a sound and systematic manner.
2. To promote preventive risk management procedures that are conducted promptly, transparently, accurately, and completely, on a consistent and organized basis.
3. To encourage and develop all employees and management members at all levels to have thorough understanding and recognition of the significance of risk management procedures, while fostering active participation in the risk management system across the organization.
4. To ensure that risk management procedures are implemented appropriately and align with to the Company's mission and policies.

As part of its commitment to good corporate governance, the Board of Directors is responsible for overseeing the implementation of an appropriate risk management system that aligns with the Company's objectives and strategies. The risk management framework focuses on identifying, assessing, and prioritizing risks, establishing proactive monitoring processes, and regularly reporting to the Board to ensure effective risk mitigation and control.

Risk Management Structure: With due recognition by the Board of Directors of the various risk factors posing as possible threats to the Company's business operations, the Board therefore assigned the Risk Management Committee, composed primarily of independent directors, provides oversight and reports to the Board on the status of risk management efforts. An independent Risk Management Unit that operates independently from day-to-day operations, ensures the policy's execution by analyzing and assessing risks and reporting on the Company's risk profile. The Executive Committee, led by the CEO, manages day-to-day operational risks and ensures alignment with the company's strategic goals.

The Risk Management Committee oversees this process and reports to the Board of Directors, ensuring that the risk management process is effective and aligns with the Company's strategies and objectives. Each business unit within Hana acts as a risk owner, responsible for assessing and mitigating risks within its respective area. The CEO holds ultimate responsibility for operational risk management and leads the Company in ensuring effective risk management practices. The company's risk management process follows a structured approach that prioritizes risks based on their likelihood and impact, using a risk evaluation matrix to guide decision-making and maintain robust internal controls.

Risk Culture: Risk management is an integral part of our Quality System Management Manual. The company's risk and opportunity assessments are conducted at each process level using various risk analysis tools, including SWOT, PESTLE, Process Approach, Risk-Based Thinking, Turtle Diagram, and Failure Modes and Effects Analysis (FMEA). These tools help form the foundation for our strategic risk management approach, which is closely aligned with our occupational health, safety, and environmental management systems, including the environmental management system. This ensures that risk management is embedded in the company's operations and decision-making processes.

Business Continuity Plan: The Company has a business continuity plan to address significant risks, particularly in mitigating the impact of disruptions to production and delivery. The plan includes crisis management and communication strategies, with specific measures to minimize damage to production facilities caused by natural disasters, prevent damage to storage warehouses and finished goods, and address issues that could impact production capacity due to machinery failures or human errors. Additionally, the plan ensures the continuity of raw material supplies and the operation of critical utilities. The Company has established emergency procedures for a variety of scenarios, and a Crisis Management Team is in place to oversee and coordinate responses during any crisis.

Link for risk management policy and plan : https://www.hanagroup.com/File/ViewDoc/96

Link Page Number : 2 - 6

2.2 Risk factors

2.2.1 Risk that might affect the company's business, including environmental, social and corporate governance issues

Risk 1 Strategic Business Risk

Related risk topics : Strategic Risk
- Behavior or needs of customers / consumers
- Reliance on large customers or few customers
- Economic risk

Risk characteristics

• Change in Major Customers Base Risk and Reliance on Large Customers or Few Customers

The primary risk faced by the Company arises from significant changes in the composition of our major customer base, which may be brought about due to any number of external factors such as a change in their ownership, a change in their product program, or the financial instability of key customers, etc. In addition, reliance on large customers or few customers mean that any change within this group, whether positive or negative, can disproportionately affect the Company's performance.

• Global Economic Risk

Global economic risks may arise from factors particularly trade wars, inflation, recessions, or pandemic, which can disrupt markets and affect the Company's operations. These risks can influence demand, pricing, and costs across global markets.

Risk-related consequences

• Change in Major Customers Base Risk and Reliance on Large Customers or Few Customers

A substantial change in our key customer base can have a direct and material impact on the overall performance of the business. A shift in the ownership, strategic direction, or business viability of a large customer could affect revenue or the need to adjust the business model to accommodate new demands or changes in the market. The reliance on a few key customers could undermine long-term financial stability and hinder sustainable growth for the organization.

• Global Economic Risk

The Company's selling prices and demand for products and services can be affected by the economic condition of global markets derived from trade war, inflation, interest rate, recession, pandemic, and global energy crisis which led to the weakness in global demand. Market conditions resulting from changes in economic growth rates of economies will also affect prices and demand for the Company's services.

Risk management measures

• Change in Major Customers Base Risk and Reliance on Large Customers or Few Customers

To minimize the impact of customer risks, the Company has adopted a strategic focus on customer diversification, maintaining a broad customer base across various market segments and ensuring that no single customer contributes more than 20% of the group's total sales revenue.

• Global Economic Risk

The Company maintains a diverse customer base and a broad product portfolio to minimize the impact of global economic downturns. It also focuses on maintaining a low-cost structure and adequate cash reserves to remain competitive and resilient in challenging environments. While changes in U.S. trade policy may negatively affect the Company's manufacturing operations in China or other future-impacted locations, the trade war has also created opportunities for its manufacturers in regions with unaffected trade policies. The Company and its subsidiaries are prepared to make timely adjustments in response to any potential changes.

Risk 2 Operation Risk

Related risk topics : Operational Risk
- Reliance on employees in key positions
- Shortage or reliance on skilled workers
- Information security and cyber-attack
- Climate change and disasters
- Other : Supply Chain Risk

Risk characteristics

• Reliance on employees in key positions

The Company relies on expatriate management in key positions, which could present risks if senior management were to leave. While no single individual is essential to the Company's survival, the loss of key management or the inability to replace them could negatively impact the Company's market value and performance.

• Shortage or reliance on skilled workers

Hana Group employs over 7,500 people worldwide, primarily in production roles. The Company may face risks from a shortage of skilled labor or difficulty in attracting enough workers to meet demand. Additionally, rising labor costs from minimum wage adjustments, high turnover rates, and increasing competition can lead to higher production costs and a competitive disadvantage.

• Information security and cyber-attack

Cybercrime poses a significant risk to the Company, as cyber-attacks could affect IT systems, hardware, networks, customer data, and intellectual property. Such attacks can cause damage to the business, disrupt operations, and harm the Company's reputation and customer trust.

• Climate change and disasters

Our factories face potential risks from natural disasters, i.e. fires, floods, or earthquakes, which could partially or destroy production facilities. While the Company operates multiple factories, such events could lead to significant customer losses and long recovery times to replace equipment and fulfill orders. Additionally, climate change may increase the frequency and severity of these events. The potential impact of climate change could further intensify these risks, increasing exposure to extreme weather events.

• Supply Chain Risk

Supply chain risks in the electronics industry involve potential shortages, particularly in key components such as ICs for PCBA, RFID inlays, lead frames, and IC dies for integrated circuits. The risk also includes challenges in securing a reliable and cost-effective supply of bare wafers for power package devices. Although the semiconductor crisis has eased, ongoing geopolitical trade risks and potential future disruptions across various sectors of the supply chain continue to contribute to uncertainty.

Risk-related consequences

• Reliance on employees in key positions

The loss of senior management could create a leadership gap, potentially affecting decision-making, strategic direction, and overall company performance. Challenge in replacing key management could lead to operational disruptions, lower investor confidence, and a decline in market value.

• Shortage or reliance on skilled workers

A shortage of skilled workers or challenges in attracting a sufficient workforce could affect production capacity and operational efficiency. Increased labor costs and high turnover could lead to higher operational expenses and potential disruptions, affecting the Company's competitiveness and profitability.

• Information security and cyber-attack

Cyber-attacks can lead to the loss of sensitive data, operational disruptions, and financial losses. A breach could damage the Company's reputation, undermine customer trust, and impact the bottom line.

• Climate change and disasters

Natural disasters could cause extensive damage to facilities, disrupt production, and lead to delays in meeting customer orders.

Recovery may take months or even years, resulting in lost customers and potential long-term financial losses. Limited insurance coverage for flood risk, especially at the Ayutthaya factory, adds to the exposure.

• Supply Chain Risk

The continued uncertainty in the supply chain could lead to delays, higher costs, and production inefficiencies due to component shortages. Geopolitical risks and trade tensions could exacerbate these issues, impacting the availability of critical materials and components. This can disrupt the Company's production loading and increase the cost of raw materials, potentially affecting profitability and customer satisfaction.

Risk management measures

• Reliance on employees in key positions

To mitigate management risks, the Company ensures capable management team to avoid reliance on any one individual. Additionally, the Company has a succession plan in place at the executive level, focusing on the timely replacement of senior management and key positions to ensure continuity in leadership and business operations.

• Shortage or reliance on skilled workers

To address these risks, Hana Group focuses on automating production processes and investing in human capital development, including reskilling and upskilling employees to align with Industry 4.0. The Company also offers ongoing education, and training programs and encourages employees at all levels to participate in Continuous Process Improvement Programs. These initiatives promote analytical thinking, teamwork, and innovation. Additionally, Hana Group fosters a culture of collaboration by recognizing and rewarding team contributions. The Company maintains a strong labor relations system to ensure fair and appropriate welfare for employees, with an emphasis on safety, occupational health, and a positive work environment to promote physical and mental well-being.

• Information security and cyber-attack

To mitigate cyber risks, the Company has implemented a Cyber Security Policy, Cyber Attack Guideline, and Personal Data Protection Policy, including a security incident response plan and dedicated response teams. Hana Ayutthaya and Hana Jiaxing have achieved ISO 27001 certification, demonstrating adherence to international standards for information security management. Additionally, external expert reviews are conducted to assess cybersecurity risks and implement management actions to reduce vulnerabilities.

• Climate change and disasters

The Company mitigates these risks by operating multiple production sites across different countries. Each factory has measures in place to minimize the impact of fire and flood damage, which are regularly reviewed and audited. The Company also carries property damage and business interruption insurance. Although flood insurance coverage is limited for the Ayutthaya factory due to past flood events, additional flood protection measures have been implemented and reassessed annually by insurance experts at major facilities in Thailand. Furthermore, Hana is committed to climate change mitigation by incorporating sustainable practices across its operations, reducing its carbon footprint, and improving environmental resilience through energy efficiency and green initiatives to adapt to the impacts of climate change.

• Supply Chain Risk

To manage supply chain risks, Hana fosters strong relationships with key suppliers through regular communication, joint problem-solving, on-site visits, and supplier award programs. The Company also shares technological platforms with suppliers to enhance collaboration and visibility, ensuring timely responses to disruptions. Additionally, Hana works with customers to explore alternative sourcing options, including multi-sourcing and localized sourcing, to diversify its supplier base and reduce dependency on any single entity, thereby mitigating supply chain risks.

Risk 3 Financial Risk

Related risk topics : Financial Risk
- Fluctuation in exchange rates, interest rates, or the inflation rate
- Fluctuation in return on assets or investment

Risk characteristics

• Fluctuation in exchange rates, interest rates, or the inflation rate

In 2024, the Group had a gain on exchange rate amounting to THB 9,780,117, compared to a gain of THB 41,283,448 and a loss on derivatives of THB 49,418,425 in 2023. The primary risk arises from the exchange rate movements of the Thai Baht and Chinese Yuan relative to the US Dollar. However, the Company's sales revenues and material costs are predominantly in USD, which provides a natural hedge. Capital expenditures on machinery, mostly imported, are also in USD.

• Fluctuation in return on financial assets and investments

As of 31st December 2024, the group had THB 10.2 billion in cash and financial investments, which is up from THB 7.8 billion on 31st December 2023. Part of the cash reserves are invested in corporate bonds and short-term debt funds to provide investment income return. The chance that an outcome or investment's actual gains may differ from an expected outcome or return.

Risk-related consequences

• Fluctuation in exchange rates, interest rates, or the inflation rate

Currency fluctuations, particularly in the Thai Baht/USD and Chinese CNY/USD exchange rates, can impact operating profits and margins. The Group's operating profit sensitivity is approximately THB 200 million per quarter for every 10% change in the average exchange rate. This volatility can affect earnings, operating margins, and inventory valuations, with management reporting significant impacts on profits each quarter when necessary.

• Fluctuation in return on assets or investment

The risk of fluctuations in investment returns can affect the Company's financial stability. Negative returns or underperformance of investments could impact overall profitability and limit the Company's ability to meet its financial objectives.

Risk management measures

• Fluctuation in exchange rates, interest rates, or the inflation rate

The Company naturally hedges against currency risks through its USD-denominated sales revenues and material costs. Additionally, the Group monitors and reports on the impact of exchange rate movements, adjusting strategies to mitigate significant fluctuations. The exposure to foreign currency risks is continuously assessed to ensure appropriate management of volatility in earnings and margins.

• Fluctuation in return on assets or investment

To mitigate financial investment risks, the Company invests in investment-grade financial instruments, such as deposits, bonds, and similar funds. The investment portfolio is diversified across various industries and countries, minimizing the impact of adverse economic events in any single country or sector.

Risk 4 Compliance Risk

Related risk topics : Compliance Risk
- Change in laws and regulations
- Violations of laws and regulations

Risk characteristics

• Change in laws and regulations

Changes in laws and regulations represent a significant risk for the Company, whether domestic or international can directly impact business operations, compliance requirements, or financial obligations. These changes may arise from new government policies, industry-specific regulations, environmental laws, tax changes, or shifts in labor laws.

• Violations of laws and regulations

As Hana Group operates in multiple countries, it faces the risk of violating a range of local and international laws and regulations. The complexity of compliance increases when entering new foreign markets, where unfamiliar legal frameworks may pose potential risks for non-compliance.

Risk-related consequences

• Change in laws and regulations

Changes in laws and regulations could result in increased operational costs, the need for adjustments in business processes, or restructuring to meet new compliance requirements. Non-compliance could lead to legal actions, financial penalties, or reputational damage. Additionally, major changes in tax laws or environmental regulations could impact the Company's profitability, operational efficiency, or market competitiveness.

• Violations of laws and regulations

Violations of laws and regulations can result in legal penalties, financial fines, reputational damage, and operational disruptions. Non-compliance may also lead to restrictions on business activities.

Risk management measures

• Change in laws and regulations

To manage risks related to changes in laws and regulations, the Company proactively monitors legal developments, assess risk exposure, and engages with advisors for compliance guidance.

• Violations of laws and regulations

The Company prioritizes legal compliance and recognizes the importance of adhering to local laws and regulations when entering foreign markets. The Company ensures that compliance is continuously monitored and assessed, with regular reviews to prevent intentional or accidental violations of the rules.

Risk 5 ESG Risk

Related risk topics : Strategic Risk
• Reliance on large partners / distributors or few partners / distributors
Operational Risk
• Impact on the environment
• Impact on human rights
• Corruption

Risk characteristics

• Reliance on large partners / distributors or few partners / distributors

Hana faces risks from reliance on a limited number of business partners or distributors, particularly in securing key raw materials. This reliance increases exposure to economic risks, including supply chain disruptions, and the potential for receiving products or services that do not meet quality standards. Additionally, social and environmental risks arise if suppliers do not comply with the Company's Supplier Code of Conduct or the Responsible Business Partner (RBA) Code of Conduct, which sets standards for safe working environments and ethical treatment of employees within the supply chain.

• Impact on the environment

Hana manufacturing operations can impact the environment through pollution, consumption of natural resources, and greenhouse gas emissions. These environmental risks arise from production processes that depend on energy consumption and contribute to waste generation and emissions.

• Impact on human rights

Hana business activities could potentially infringe on human rights, impacting employees, customers, suppliers, and communities if not properly managed. This includes risks related to labor rights, workplace safety, and the ethical treatment of individuals across the supply chain.

• Corruption

Corruption risks vary across different locations and operating units of Hana Group. If not properly managed and monitored, these risks can lead to increased costs and damage to the Company's reputation.

Risk-related consequences

• Reliance on large partners / distributors or few partners / distributors

The reliance on a few suppliers can lead to supply chain vulnerabilities, such as delays, increased costs, or quality issues. Non-compliance with ethical and environmental standards by suppliers could damage the Company's reputation, lead to legal issues, and affect employee welfare. It could also result in operational inefficiencies or disruptions.

• Impact on the environment

Environmental risks can have adverse effects on the ecosystem and may increase operational costs or damage the Company's reputation. Future regulatory changes could impose new obligations or penalties.

• Impact on human rights

Human rights violations can lead to legal liabilities, reputational damage, and loss of trust among stakeholders. This may result in the Company being excluded from business opportunities, facing regulatory fines, or encountering negative publicity, all of which could harm long-term sustainability.

• Corruption

Failure to address corruption risks can result in legal penalties, financial losses, and reputation damage. The Company could face operational disruptions, damage to relationships with stakeholders, and exclusion from certain markets or business opportunities.

Risk management measures

• Reliance on large partners / distributors or few partners / distributors

The Company ensures that suppliers of key raw materials are qualified through a customer-approved supplier qualification program, which identifies and reduces supply risks. The Company also maintains second sources and alternative parts to reduce dependency on a few suppliers and promotes localized suppliers within its supply chain strategy. Additionally, the supplier management program includes onsite visits, a supplier recognition program, and sharing production technology to improve quality, reduce costs, and develop supplier capabilities. The Company further focuses on strengthening supplier relationships and assesses their performance in terms of social responsibility, code of conduct practices, and environmental impact.

• Impact on the environment

To address environmental risks, the Company prioritizes the use of renewable energy, with a strong focus on solar power. Solar panels have been installed across several facilities, including those in Lamphun, Ayutthaya, HQ, and Jiaxing. In 2024, Hana Group expanded its solar energy efforts by adding additional panels at the Lamphun, Ayutthaya, and Jiaxing facilities, covering areas such as rooftops, street lighting, and car park. This expansion increased the total solar power capacity across the Group to 10.6 MW, up from 5.8 MW in 2023. An ongoing plan for solar panel installation is in the pipeline, aimed at further reducing reliance on fossil fuels and decreasing greenhouse gas emissions.

The Company is committed to maintaining high standards for wastewater quality before discharge and has recently upgraded the aeration pump in its wastewater treatment system with support from the Ministry of Energy. Regular inspections and maintenance of the air treatment systems are conducted to ensure optimal performance.

Waste management practices focus on minimizing waste generation and effectively managing waste streams through various treatment methods. In addition, the Company runs awareness campaigns and offers employee training to foster a culture of environmental responsibility and sustainability.

• Impact on human rights

The Company ensures compliance with human rights standards by employing legally qualified individuals in each country of operation and conducting thorough human rights risk assessments as part of its due diligence process. The Company is assessed by

customers for compliance with the Electronic Industry Coalition (RBA) Code of Conduct, which encompasses labor and human rights principles. Regular internal audits are carried out, and any necessary corrective actions are reported to management and the Audit Committee to ensure continuous improvement and accountability.

Additionally, the Company is certified under ISO 45001 Occupational Health and Safety standards, ensuring a commitment to employee well-being. Suppliers are required to sign an agreement to comply with the Supplier's Code of Conduct, which aligns with the Company's human rights policies and expectations. Hana Lamphun has also been recognized by the Department of Industrial Works for its dedication to sustainable corporate social responsibility practices.

To further support HRDD, the Company maintains an open channel for employees and third parties to file complaints or suggestions for improvement, ensuring transparency and responsiveness in addressing human rights concerns.

• Corruption

To manage corruption risks, the Company has implemented an anti-corruption policy and program. Key internal controls are in place, including the establishment of proper workflows for high-risk activities and ensuring compliance with legal requirements. The Board, executives, and employees are adhered to the anti-corruption policy, and monitoring is conducted through the internal audit plan to ensure effectiveness and accountability.

Risk 6 Emerging Risks

Related risk topics :

Strategic Risk
- Policies or international agreements related to business operations
- Changes in technologies
- Pandemic risk
- Climate change and disasters

Operational Risk
- Information security and cyber-attack

Risk characteristics

• Policies or international agreements related to business operations

Trade tensions, geopolitical conflicts, and changes in international policies are significantly disrupting global supply chains, leading to increased operational costs and potential instability in global trade structures. These factors can affect business operations, including sourcing, manufacturing, and distribution strategies. For Hana, the trade friction between major economies like the USA and China, as well as geopolitical tensions such as the Russia-Ukraine conflict, are particularly relevant, as they can lead to shifting trade regulations, tariffs, and supply chain disruptions. These changes may impact production efficiency, costs, and access to key materials, potentially affecting the Company's ability to meet customer demand and maintain profitability.

• Climate change

Climate change presents an operational risk, leading to more frequent and severe weather events such as floods and storms due to rising temperatures and the greenhouse effect.

• Change in Technologies, Information security and cyber-attack

The rapid evolution of technology and increased use of digital systems introduce both opportunities and risks for Hana Group. While technology facilitates operational efficiency, automation, and improved customer service, it also brings challenges such as data breaches, cyber-attacks, and system vulnerabilities. The Company faces the risk of its existing technologies becoming outdated or exposed to new threats, requiring continuous upgrades and investments in information security.

• Pandemic risk

Pandemics and health crises pose significant risks to the global economy and the Company's operations.

Risk-related consequences

• Policies or international agreements related to business operations

Such trade frictions and geopolitical risks can lead to supply chain fragmentation, higher costs, and challenges in maintaining efficient operations, impacting the Company's ability to meet customer demands and maintain profitability.

• Climate change

Climate change poses an operational risk, with its effects including rising temperatures, extreme weather events like floods and storms, potentially impacting the business. These events could result in customer loss, increased energy costs, carbon tax implications, and stricter regulations in our countries of operation and our customers' locations.

• Change in Technologies, Information security and cyber-attack

Failure to adapt to new technologies or safeguard against cyber-attacks can result in operational disruptions, data loss, and financial costs. A successful cyber-attack or breach could lead to the loss of sensitive information, harm to the Company's performance. Moreover, inadequate information security could compromise customer trust, disrupt business continuity.

• Pandemic risk

Pandemics can disrupt business operations, affect the supply chain, affect employee well-being, and result in financial losses, posing a threat to both the Company's performance and its long-term stability.

Risk management measures

• Policies or international agreements related to business operations

The Company has implemented a diversification strategy by establishing production bases in multiple countries, including China, Thailand, the USA, Cambodia, and South Korea, to reduce reliance on any single region. Additionally, the Company has adjusted its business model, with the Chinese factory focusing on local demand while other facilities support international needs. The Company continues to monitor the situation closely and coordinates with customers and partners to adapt as necessary.

• Climate change

The Company prioritizes the management and control of climate change risks through both short- and long-term strategies, along with continuous monitoring of emerging climate-related risks. To address climate change, the Company and its subsidiaries are implementing adaptive practices to anticipate and comply with current and future legislation, while focusing on GHG emission management, including applying the 3R principles: Reduce, Reuse, and Recycle to minimize resource consumption. Additionally, the Company regularly evaluates energy efficiency measures, conducts carbon footprint assessments, and sets specific emission reduction targets.

The Company has been investing in automation technology to optimize production processes, improve resource efficiency, and reduce waste, leading to significant environmental improvements compared to previous methods. To further reduce its environmental impact, the Company supports renewable energy initiatives such as solar power and actively pursues investments in technologies that help lower GHG emissions. Furthermore, the Company explores new opportunities for innovation, collaboration, and partnerships with stakeholders to promote sustainable practices and contribute to the global effort to combat climate change.

• Change in Technologies, Information security and cyber-attack

The Company addresses these risks by continuously monitoring technological trends and manages cyber risks by upgrading security software and procedures to mitigate threats. It adheres to the Personal Data Protection Act and other relevant laws. Additionally, the Company focuses on strengthening its information security system and enhancing employee awareness on cybersecurity practices to ensure a secure working environment.

• Pandemic risk

The Company has developed an emergency response plan that includes tracking news and government policies, implementing outbreak control measures, maintaining clear communication within the organization and with partners, and prioritizing the safety and well-being of employees. These actions aim to minimize business disruptions and ensure the Company can operate with minimal impact during any health crisis.

2.2.2 Risk to securities holders

Are there any risk factors affecting securities holders? : Yes

Risk 1 Shareholder Concentration Risk

Related risk topics : Risk to Securities Holder
- Return from investment of securities holder
- Risk of the company having a majority shareholder holding > 25% of shares

Risk characteristics

• Return from investment of securities holder

The key factors influencing the payment of dividends include the Company's financial performance, the economic conditions, and the stability of industries related to the Company's operations. These factors contribute to the uncertainty surrounding the rate of return or dividend that shareholders may receive.

• Risk of the company having a majority shareholder holding > 25% of shares

The Company has a major shareholder, the Han family, who holds 28.62% of the total shares as of 29 November 2024. As a result, they can exercise their right to influence the resolutions of the shareholders' meeting on matters as specified in the Company's Articles of Association or related laws requiring a majority vote or a vote of not less than three-fourths of the shareholders' meeting who attended the meeting and voted.

Risk-related consequences

• Return from investment of securities holder

The Company may pay a lower rate of dividend or may not pay a dividend to shareholders due to a reduction in net cash flow resulting from a decline in operating profit. As a result, shareholders may receive a lower rate of return or dividend than initially expected.

• Risk of the company having a majority shareholder holding > 25% of shares

The Han family's ownership of over 25% may influence shareholder resolutions that require a majority vote or a vote of not less than three-fourths of the shareholders present at the meeting. As a result, other shareholders may face challenges in gathering enough votes to counter proposals raised by the major shareholders.

Risk management measures

• Return from investment of securities holder

The Company manages the risks associated with shareholder investments by enhancing its ability to improve revenue and profit margins. This strategy ensures the achievement of financial goals and strengthens the Company's overall financial position. The Company focuses on key areas such as cost reduction, improving operational efficiency, maintaining high production standards, and fostering continuous development to ensure the highest quality of products and services. Furthermore, the Company actively adjusts its business strategies to address economic changes, market fluctuations, and other external factors that could impact its operations.

• Risk of the company having a majority shareholder holding > 25% of shares

Each share carries equal rights, ensuring fairness as outlined in the Company's good corporate governance policy. The Company's Board of Directors comprises 50% of independent directors, with the Chairman being an independent director, further promoting transparency and fairness. Shareholder meeting notices shall include the Board of Directors' opinions, providing shareholders with the necessary information to make informed decisions. Additionally, in the case of a connected transaction requiring shareholder approval, shareholders with a vested interest in the transaction will be excluded from voting on that agenda item.

2.2.3 Risk to securities holders from investing in foreign securities (applicable to only foreign companies)

Are there any risk factors affecting securities holders from investing in foreign securities? : No

3. Business sustainability development

3.1 Policy and goals of sustainable management

Sustainability Policy

Sustainability Policy : Yes

Hana recognizes that our long-term success depends on our ability to manage operations soundly and efficiently in an increasingly complex environment. We are committed to creating value for our stakeholders, contributing to society, and minimizing our environmental impact.

Our Policy: The Board of Directors is committed to ensuring that Hana conducts its business in accordance with Environmental, Social, and Governance (ESG) responsibilities, with respect for all stakeholders. It is the Board's policy to operate the business with the highest professional standards, guided by the principles of good corporate governance, to achieve continuous and sustainable growth.

We recognize the importance of protecting human rights, consumer rights, and environmental management, and we are dedicated to complying with applicable laws and regulations. Additionally, we are committed to contributing to community development to ensure the long-term success of the Company, society, and all stakeholders.

Our core commitment is to create long-term shared value that benefits both the environment and our stakeholders, fostering sustainability and a positive impact across all areas of our operations.

Our Vision: To operate our business in harmony with society and the environment, creating mutual benefits for our stakeholders, the community, and our planet.

Our approach: Hana operates in a highly competitive business environment, where continuous growth and improvement of production capabilities and productivity are key priorities. The Board, management, and staff are committed to sustainable development, carefully reviewing each change to ensure it aligns with our sustainability objectives, considering its economic, social, and environmental impacts.

To drive this commitment, the Company therefore has established a Corporate Governance and Sustainability Committee, supported by sub-committee representatives from various departments. The Committee is tasked with deploying the Company's sustainability policies, goals, action plans, and practices. Additionally, the Committee oversees the sustainability reporting process, ensuring that all content is thoroughly reviewed, discussed, and approved before being finalized. It is also responsible for monitoring progress, ensuring that sustainability initiatives are implemented, and driving continuous improvements across the organization.

Reference link for sustainability policy : https://www.hanagroup.com/File/ViewDoc/3040

Page number of the reference link : 1 - 2

Sustainability management goals

Does the company set sustainability management goals : Yes

At Hana, we are committed to sustainable business development by growing our business while balancing economic growth, environmental care, and social well-being. We integrate the United Nations Sustainable Development Goals (SDGs) into our organizational practices to ensure that sustainability is embedded in every aspect of our operations. Our goal is to ensure that as we grow, we contribute positively to society and the environment, creating long-term value for all stakeholders.

A Responsible Business of Our Sustainable Future - Hana is committed to conducting business with the highest standards of governance, integrity, and accountability. We manage business performance by driving profitable growth while ensuring positive returns for shareholders. Innovation is at the core of our strategy as we continuously focus on enhancing operational efficiency, improving product quality, and providing exceptional customer service. Additionally, we are dedicated to making a meaningful contribution to sustainable development across our value chain, ensuring that business growth goes together with social and

environmental responsibility.

A Society for Our Sustainable Future – Hana is committed to fostering a society that upholds human rights, non-discrimination, and inclusive growth. We prioritize employee development by providing opportunities for learning and growth, aiming to build a skilled and adaptable workforce. We focus on creating a healthy, safe, and inclusive workplace that supports well-being, diversity, and work-life balance. Additionally, we work to create opportunities for underprivileged communities through career development programs and support initiatives that improve skills and income prospects. By collaborating with local organizations, we aim to enhance education, public health, and social welfare, ultimately striving to create a more equitable and resilient society for the future.

A Better Environment with Our Sustainable Future – Hana is dedicated to contributing to a sustainable environment by transitioning toward a circular, low-carbon economy. We are committed to managing and reducing our greenhouse gas emissions, improving resource efficiency, promoting the sustainable use of natural resources, waste reduction, and improving ecosystems, aiming to leave a positive impact on the environment for future generations.

United Nations SDGs that align with the organization's sustainability management goals	:	Goal 1 No Poverty, Goal 2 Zero Hunger, Goal 3 Good Health and Well-being, Goal 4 Quality Education, Goal 5 Gender Equality, Goal 6 Clean Water and Sanitation, Goal 7 Affordable and Clean Energy, Goal 8 Decent Work and Economic Growth, Goal 9 Industry, Innovation and Infrastructure, Goal 10 Reduce Inequalities, Goal 11 Sustainable Cities and Communities, Goal 12 Responsible Consumption and Production, Goal 13 Climate Action, Goal 14 Life below Water, Goal 15 Life on Land, Goal 16 Peace, Justice and Strong Institutions, Goal 17 Partnerships for the Goals

Review of policy and/or goals of sustainable management over the past year

Has the company reviewed the policy and/or goals of sustainable management over the past year	:	Yes
Has the company changed and developed the policy and/or goals of sustainable management over the past year	:	No

3.2 Management of impacts on stakeholders in the business value chain

3.2.1 Business value chain

Hana is an EMS provider where the Company's activity mainly focuses on product manufacturing serving customers around the world. We are committed to operating sustainably across the value chain, which is divided into primary activities and support activities, to ensure responsible business practices. Our goal is to meet the expectations of stakeholders both within our organization and across the entire value chain. By adhering to sustainable practices, we aim to create long-term value, foster trust, and drive positive environmental, social, and economic outcomes for all stakeholders involved.

Business value chain diagram



3.2.2 Analysis of stakeholders in the business value chain

Details of stakeholder analysis in the business value chain

Group of stakeholders	Stakeholders' expectations	Responses to stakeholder expectations	Channels for engagement and communication
Internal stakeholders			
• Shareholders	• Consistent dividend payment • Steady growth • Environment, Social and Governance	• Dividends paid each year based on the Company's cash flow • Company vision for constantly strives to grow and be competitive • Corporate governance scorecard • Environmental management	• Visit • Press Release • Annual General Meeting (AGM) • Others • ESG Questionnaire
• Employees	• Appropriate compensation and welfare • Occupational health, safety and environment • Career development	• Employee satisfaction survey • Orientation, exit interview • Training and workshop • Complaint channels • Operation meeting • Risk assessment	• Online Communication • Internal Meeting • Complaint Reception • Employee Engagement Survey • Satisfaction Survey • Training / Seminar
External stakeholders			
• Customers	• Quality products with on-time delivery and competitive product pricing • Ethical and environmentally responsible • Occupational health, safety and environment	• Customer audits • Customer satisfaction survey • Customer visits • Risk assessment	• Visit • Online Communication • Internal Meeting • Complaint Reception • Satisfaction Survey
• Suppliers • Others • Supplier	• Fair and transparent supplies selection • Payment on time • Supply chain management	• Supplier audit • Supplier quality management • Risk assessment	• Visit • Online Communication • Internal Meeting • External Meeting
• Community	• Operate with no impact to the environment • Support low-income and disadvantaged communities • Employment opportunities for local people • Support local business	• Activities conducted outside the Company • Advice/feedback from Industrial Estate • Community visit program • Recruitment • Procurement	• Visit • Social Event • External Meeting • Complaint Reception • Satisfaction Survey

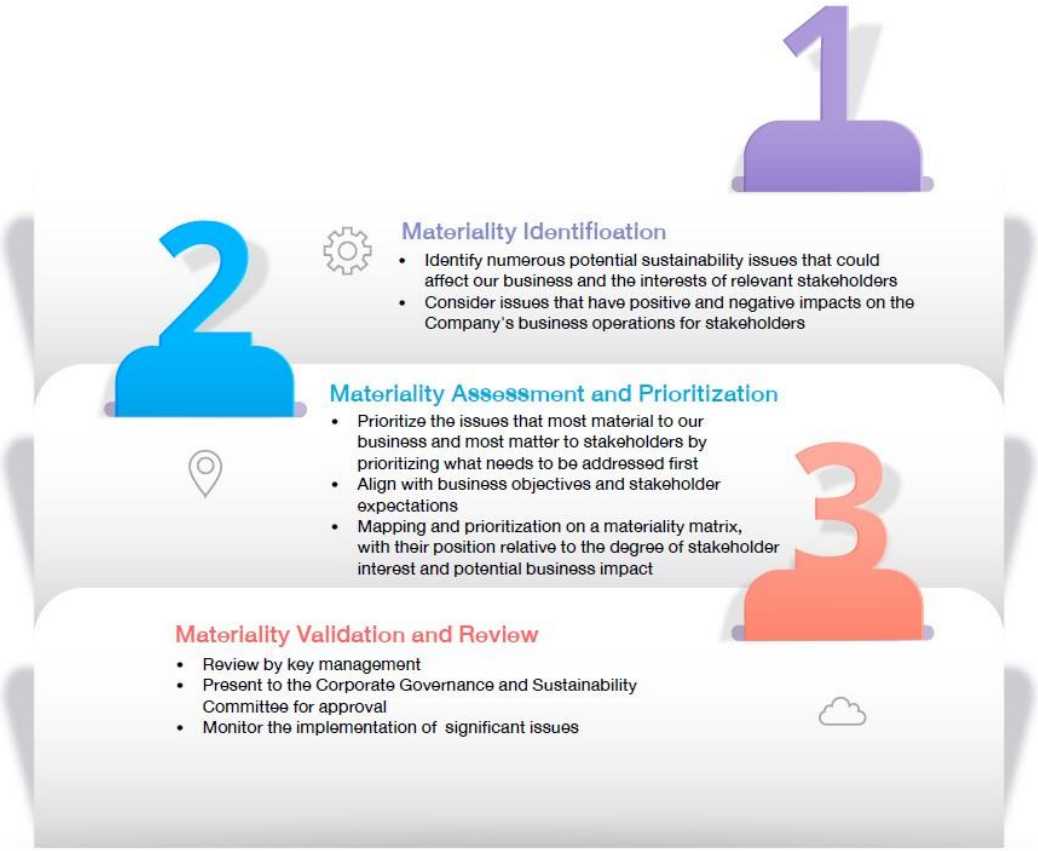
Diagram of the stakeholder analysis in the business value chain

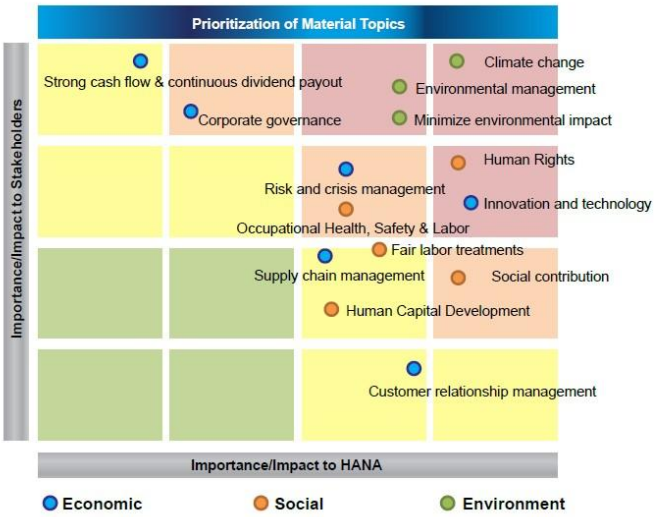
Stakeholder Analysis Power-Interest Matrix



Categorize and analyze stakeholders based on their influence and interest, helping to understand their impact on the value chain and enable to define engagement strategies with each stakeholder.

Materiality Processes





Economic:
Risk and crisis management
Innovation and technology
Good governance
Supply chain management
Strong cash flow & continuous dividend payout

Social:
Human Rights
Fair labor treatments
Occupational health, safety & environment
Customer relationship management
Social contribution

Environment:
Climate change
Environmental management
Minimize environmental impact

STATUS TOWARDS SUSTAINABLE IN 2024		
Environment (E)	**Social (S)**	**Governance (G)**
• **Energy Consumption Intensity:** Target: 18% reduction | Performance: 14% reduction	• **Promote Quality Education, Career Advancement, and Better Quality of Life** Target 10,000 people | Performance 35,055 people	• **Dividend Payout Ratio** Target 30% - 100% | Performance 74%
• **Water Consumption Intensity:** Target: 20% reduction | Performance: 24% reduction	• **Training Hours Per Employee Per Year** Target 50 hours | Performance 57 hours	• **Well-run Board of Directors with Annual Board Member Training** Target 100% | Performance 100%
• **Waste Intensity:** Target: 18% reduction | Performance: 32% reduction	• **Employee Satisfaction (Daily and Monthly)** Target 78% | Performance 80% and 84%	• **Women in the Boardroom** Target 2 | Performance 2
• **Greenhouse Gas Emission Intensity:** Target: 18% reduction | Performance: 18% reduction	• **Customer Satisfaction** Target 85% | Performance 91%	• **Board Violations of Code of Conduct (Case)** Target 0 | Performance 0
• **Landfill Waste Reduction:** Target: 40% reduction | Performance: 58% reduction	• **Employee Engagement in Organizational Innovation towards Hana 4.0 Roadmap** Target 80% | Performance 90%	• **Violation of SEC Rules and Regulations (Case)** Target 0 | Performance 0
• **Complaints on Environmental Pollution:** Target: 0 complaints | Performance: 0 complaints	• **Workplace Accident (Case):** Target: 0 | Performance: 0	• **Corruption or Misconduct by the Board of Directors (Case)** Target 0 | Performance 0

3.3 Management of environmental sustainability

3.3.1 Environmental policy and guidelines

Environmental policy and guidelines

Environmental policy and guidelines	:	Yes
Environmental guidelines	:	Electricity Management, Renewable/Clean Energy Management, Water resources and water quality management, Waste Management, Biodiversity Management, Greenhouse Gas and Climate Change Management, Air Quality Management, Noise Pollution Management

Hana's Environmental Policy and Guidelines

At Hana, we recognize the critical role that environmental sustainability plays in our long-term success. As we respond to the challenges of climate change, we are committed to minimizing our environmental impact while promoting sustainable practices that benefit both our business and society. Our environmental policy is designed to ensure that all aspects of our operations reflect our responsibility to protect the environment, conserve resources, and address environmental challenges proactively.

We are committed to:

• **Reducing Environmental Impact:** Integrating sustainability into all facets of our business, including energy use, water consumption, waste management, and emissions reduction.

• **Resource Efficiency:** Striving to maximize the efficiency of the resources we use in every process, from sourcing raw materials to production and distribution, to minimize waste and reduce our carbon footprint.

• **Preventing Pollution:** Implementing measures that minimize pollution, whether air, water, or soil, through advanced technologies and cleaner production methods.

• **Compliance with Legal Requirements:** Ensuring full compliance with environmental laws, regulations, and industry standards, as well as voluntarily adopting best practices beyond the minimum legal requirements.

• **Circular Economy Principles:** Promoting the use of renewable materials, reducing single-use products, and encouraging recycling and reuse to minimize waste generation.

• **Innovation for Sustainability:** Continuously looking for and using new technologies and methods to reduce our environmental impact, save energy, and use fewer natural resources.

Hana's Occupational Health, Safety, and Environment (OH&S) Policy

While our environmental policy outlines our broader commitment to sustainability, Hana's Occupational Health, Safety, and Workplace Environment Policy prioritizes the health and safety of employees, business partners, contractors, visitors, and the community. This is achieved by promoting a safe working environment, ensuring good health, and protecting the environment of the communities in which we operate. We are committed to maintaining positive relationships with all stakeholders and complying with laws, international standards, and other relevant regulations.

We aim to:

• Provide safe and healthy working conditions to prevent work-related injuries and illnesses by addressing occupational health and safety risks and opportunities.

• Eliminate hazards and minimize occupational health and safety risks to ensure a safe and healthy working environment.

• Support occupational health and safety consultation and encourage the participation of employees and their representatives, in managing the organization's internal environment.

• Protect the environment through sustainable resource use, enhance applicable technologies to reduce the negative environmental impacts of our business, prevent pollution, and minimize the use of hazardous substances in all production processes.

• Fulfill and comply with applicable occupational health, safety, environmental and other specific commitments or obligations relevant to the organization's context (e.g., the Responsible Business Alliance (RBA) Code of Conduct, social responsibility, and sustainable development goals).

• Enhance the continuous improvement of the environmental and occupational health and safety management systems and activities.

Communication and Engagement

We believe that clear communication is essential for fostering awareness of both our environmental and OH&S policies. To ensure that employees are aligned with our sustainability and safety objectives, we communicate these policies through various channels such as noticeboards, the Company's intranet website, and internal guidelines. All employees are encouraged to actively engage in initiatives that promote sustainable and safe practices.

Additionally, we extend our commitment to the environment and OH&S to our external stakeholders. Our policies are made publicly available, posted at the factory entrance, and shared with business partners to ensure that our entire supply chain is aware of and aligned with our sustainability and safety goals.

Sustainable Reporting and Continuous Improvement

At Hana, we understand that our commitment to sustainability must be supported by measurable results. We actively monitor and report on our environmental performance, setting goals for greenhouse gas emissions, energy use, water management, waste reduction, and pollution control. Our environmental management systems are subject to regular reviews, and we constantly drive for continuous improvement through employee engagement and feedback.

Climate Change Governance Roles and Responsibilities

As climate change becomes one of the most global challenges, Hana recognizes the need to prioritize sustainability and environmental responsibility within our business operations. Our governance structure for climate change is designed to ensure effective oversight, strategy development, and implementation across the organization.

• Board of Directors

The Board is responsible for oversight and governance to ensure that the organization develops the necessary plans, targets, and strategies to transition toward a lower-carbon economy. The Board monitors progress and ensures alignment with the Company's sustainability policies and framework, ensuring that action plans comply with sustainability objectives.

• Corporate Governance and Sustainability Committee (CGS Committee)

The CGS Committee is responsible for setting the Company's sustainability policies, goals, and implementation plans. The Committee monitors the performance of the sustainability strategy, and ensures that efforts align with the established policy framework and goals. The CGS Committee also reports progress to the Board of Directors.

• Chief Executive Officer (CEO)

The CEO integrates sustainability into the corporate vision and leads the development of strategies for climate change mitigation and adaptation. The CEO oversees governance, financial planning, and risk management, ensuring that the organization's performance aligns with sustainable operations and objectives.

• Climate Change Leader, Sub-Committee, and Climate Change Coordinator

The Climate Change Leader and the Sub-Committee are responsible for developing the environmental business plan in line with corporate objectives. They monitor progress, provide regular reports, and take necessary actions to ensure performance targets are met.

The Climate Change Coordinator supports the Climate Change Leader and Sub-Committee by implementing the climate change agenda. This includes leading specific projects or areas related to climate change, ensuring the effective execution of climate-related initiatives.

Review of environmental policies, guidelines, and/or goals over the past year

Review of environmental policies, guidelines, and/or goals over the past year : Yes

3.3.2 Environmental operating results

Information on energy management

Energy management plan

The company's energy management plan : Yes

Major focus areas of energy consumption reduction projects are as follows:

Energy-Efficiency Programs: Hana is committed to improving energy efficiency across its operations by continuously assessing and upgrading its machinery and equipment to reduce energy consumption. Each year, Hana's factories implement energy conservation projects to optimize electricity usage and contribute to environmental sustainability.

For 2024, Hana continues its commitment to energy conservation with a series of energy efficiency initiatives, including:

• **VSD for Energy Savings:** The installation of Variable Speed Drives (VSDs) for energy savings has optimized energy use across various systems, including air compressor cooling pumps, chiller cooling pumps, vacuum pumps, and UF pumps. Additionally, VSDs have also been added to multiple Air Handling Unit (AHU) fan motors to regulate airflow efficiently based on demand, minimizing energy consumption, and enhancing overall energy savings.

• **Cooling and Air Conditioning Improvements:** Upgrading cooling tower fans to more energy-efficient models have successfully reduced both energy consumption and greenhouse gas emissions. Additionally, replacing traditional air conditioning systems with inverter-based units has improved energy efficiency, reduced electricity consumption, and enhanced cooling performance.

• **Technology Upgrade:** Upgrading to high-efficiency air compressors has further improved energy savings and reduced emissions. The installation of ultra high-efficiency LEDs and VSD speed control optimizes energy use across operations. Hana also optimized air compressor operations during weekends and addressed CDA leakage through enhanced water separators, boosting energy efficiency.

• **Heat Recovery and System Optimization:** The installation of heat recovery units has enabled the capture and reuse of waste heat, leading to reduced energy consumption. Additionally, optimizing chiller water temperature settings and adjusting steam pressure in boilers have enhanced energy efficiency and reduced CNG consumption.

• **Energy Conservation:** Fostering values and promoting awareness of energy-efficient use by ensuring that machines, lights, gas, and water are turned off when not in use, including air conditioning and lighting during breaks or outside office hours. This also includes turning off non-essential equipment without disconnecting critical systems and ensuring that RO water continues to flow for processes that require it during idle times.

These initiatives collectively enhance operational efficiency, reduce environmental impact, and support Hana's sustainability goals by cutting both energy costs and emissions.

Renewable Energy Strategy: Hana recognizes the importance of renewable energy in ensuring a sustainable environment and mitigating climate change. Since 2020, we have integrated solar energy into our operations by installing solar panels on the roofs of our factories in Lamphun and Ayutthaya. These initial installations marked the beginning of our commitment to renewable energy, and we have continuously expanded our efforts since then.

In 2024, we further enhanced our renewable energy infrastructure by adding additional solar panels across three more factories in Lamphun, Ayutthaya, and our Jiaxing facility. This expansion increased our solar energy capacity to a total of 10.6 MW, up from 5.8 MW in 2023, demonstrating a substantial growth in our renewable energy commitment.

Our focus on renewable energy is a key part of our climate change mitigation strategy, and we are dedicated to continually increasing the share of clean energy in our operations. This integration of renewable energy into our business practices supports our sustainability goals, reduces our reliance on non-renewable power sources, and lowers our carbon footprint.

Looking ahead, Hana plans to continue expanding its use of renewable energy through additional projects in 2025 and the near future. We are committed to exploring and implementing innovative renewable energy solutions that align with our long-term environmental objectives and contribute to a sustainable, low-carbon future.

Setting goals for managing electricity and/or oil and fuel [3]

Does the company set goals for electricity and/or fuel management : Yes

Details of setting goals for electricity and/or fuel management

Target(s)	Base year(s)	Target year(s)
Reduction of electricity purchased for consumption	2020	2030 : Reduced by 40%

Remark : [3] *2020: Energy Intensity Reduction*
2030: 40% Energy Intensity Reduction

Performance and outcomes of energy management

Performance and outcomes of energy management : Yes

In 2024, the Company and its subsidiary in Thailand aimed for 18% reduction in energy intensity across operations. While progress was made, the overall performance fell short of the target, achieving a total reduction of 14%. This outcome varied between the two factories: Hana Lamphun achieved a significant reduction, while Hana Ayutthaya saw a more modest reduction.

Key Points for the 2024 Performance:

• Hana Lamphun, as the Company, exceeded expectations with a 33% reduction in energy intensity, demonstrating the successful implementation of energy-efficiency measures and the effectiveness of the facility's energy management programs.

• Hana Ayuthaya, as a subsidiary, faced challenges in meeting the target, with a less significant reduction. Contributing factors included operational challenges, external variables, and the impact of lower sales, which reduced economies of scale and made energy reduction efforts more difficult as fixed costs were spread across lower production volumes.

Although 2024 presented challenges for the subsidiary, the overall energy reduction across both factories is still considered a success in moving towards the long-term goal of a 40% reduction in energy intensity by 2030.

Energy Management and SDGs Alignment:

Hana's energy management initiative projects align with the following United Nations Sustainable Development Goals (SDGs):

• Goal 7: Affordable and Clean Energy by increasing the share of renewable energy in our operations, we provide clean and affordable energy alternatives, reducing non-renewable power sources.

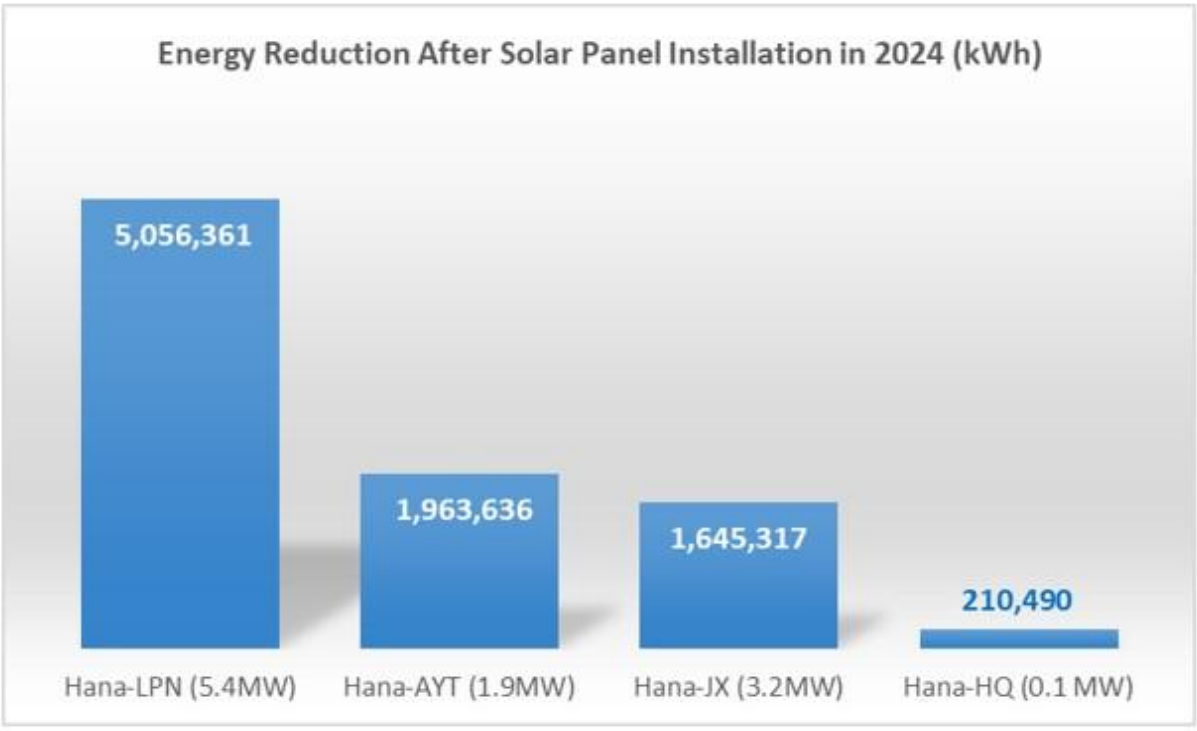
• Goal 9: Industry, Innovation, and Infrastructure by investing in energy-efficient technologies and sustainable industrial practices foster innovation and promote sustainable infrastructure.

• Goal 12: Responsible Consumption and Production by minimizing waste and optimizing resource use, and promoting responsible consumption.

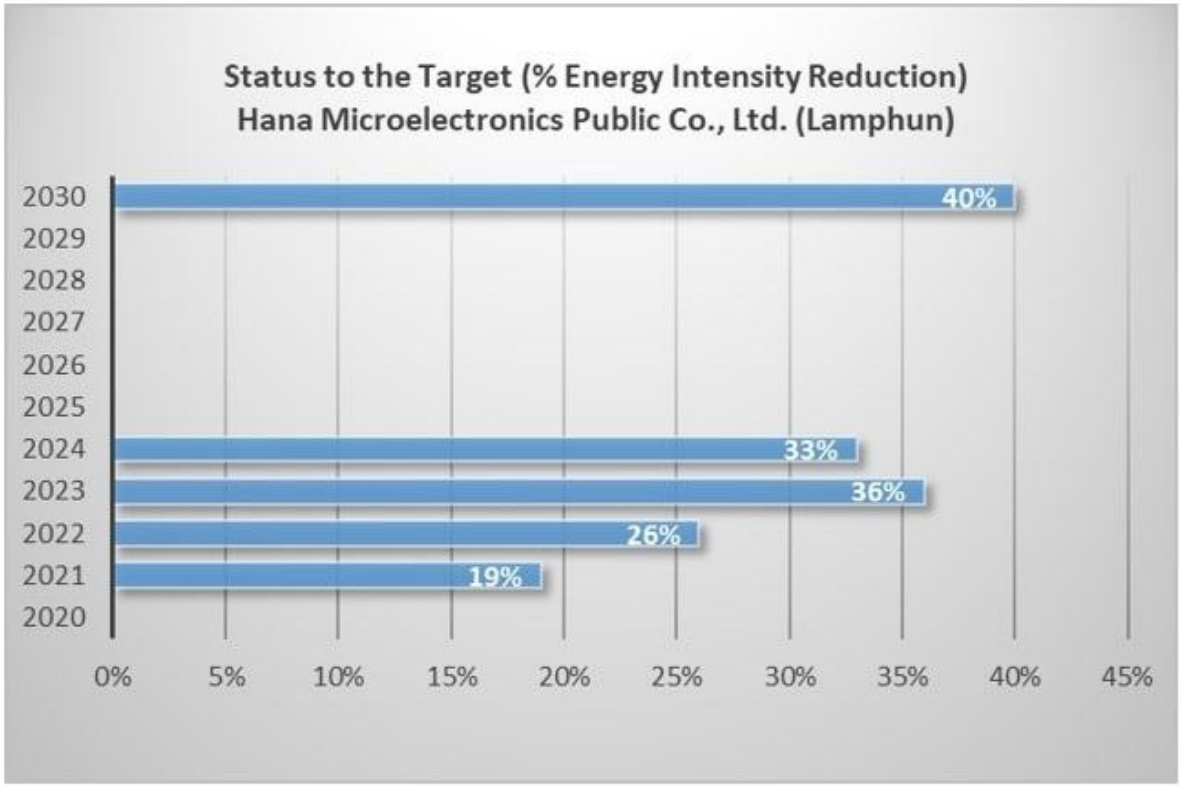
• Goal 13: Climate Action by reducing emissions and improving energy efficiency, directly contributing to climate change mitigation and lowering our carbon footprint.

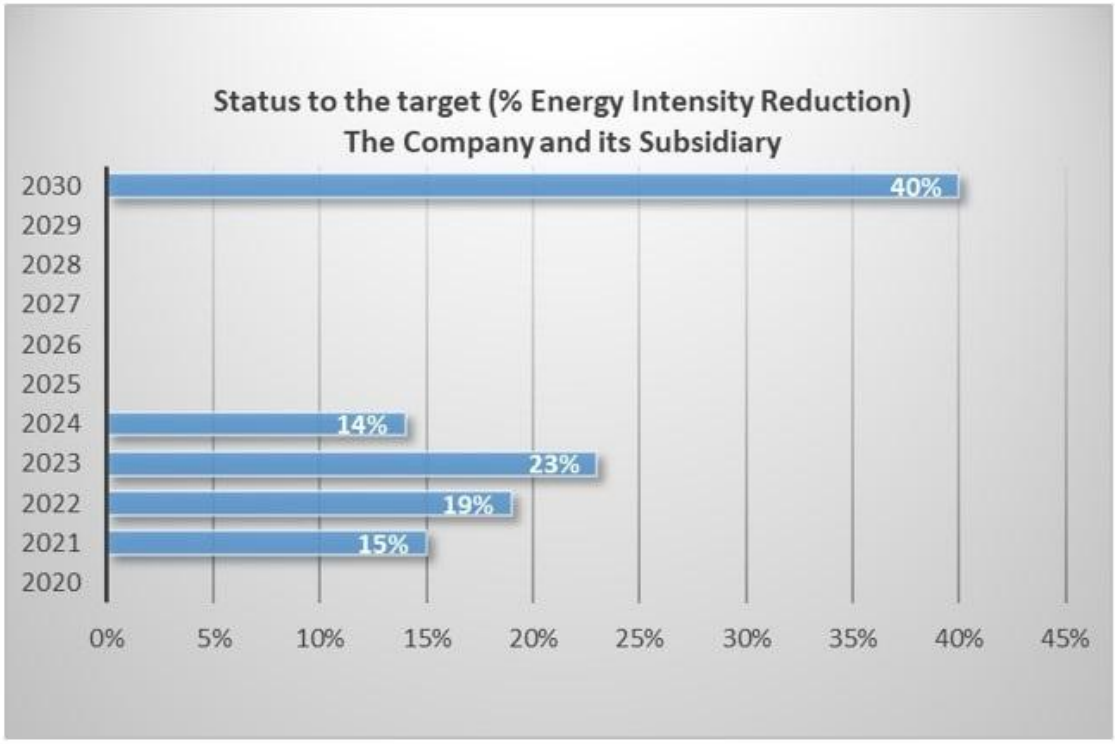
• Goal 16: Peace, Justice, and Strong Institutions by adhering to good governance practices, ensuring regulatory compliance, transparency, and accountability in all our energy management efforts.

Diagram of Performance and outcomes of energy management



Year	Energy intensity (kWh: Million THB of Sale Revenue)			Target	Performance
	Hana Lamphun	Hana Ayutthaya	Total		
2020 (base year)	5,859	13,966	**19,825**		
2021	4,749	12,121	**16,870**	-5%	-15%
2022	4,332	11,631	**15,963**	-10%	-19%
2023	3,765	11,427	**15,192**	-14%	-23%
2024	3,941	13,054	**16,995**	-18%	-14%


Status to the Target (% Energy Intensity Reduction)
Hana Microelectronics Public Co., Ltd. (Lamphun)
2030
2029
2028
2027
2026
2025
2024
2023
2022
2021
2020
40%
33%
36%
26%
19%
0%
5%
10%
15%
20%
25%
30%
35%
40%
45%


Status to the target (% Energy Intensity Reduction)
The Company and its Subsidiary
2030
2029
2028
2027
2026
2025
2024
2023
2022
2021
2020
40%
14%
23%
19%
15%
0%
5%
10%
15%
20%
25%
30%
35%
40%
45%

Energy management: Electricity consumption

	2022	2023	2024
Total electricity consumption within the organization (Kilowatt-Hours)	155,855,603.66	133,489,537.94	128,367,146.90
Electricity purchased for consumption from non-renewable energy sources (Kilowatt-Hours)	151,684,279.10	128,902,049.00	121,402,465.40
Electricity purchased or generated for consumption from renewable energy sources (Kilowatt-Hours)	4,171,324.56	4,587,488.94	6,964,681.50

Information on water management

Water management plan

The Company's water management plan : Yes

Water Quality Measures: The Company tracks key water-related metrics, including water consumption, wastewater volume, water balance, water use intensity, and wastewater intensity. These metrics are continuously reviewed and improved each year to enhance water quality management.

The wastewater treatment system is monitored daily, with regular checks on the quality of the effluent discharged from the factory. Monthly reports are generated to ensure that the wastewater treatment process is compliant with regulatory standards and consistently meets or exceeds government requirements. This proactive approach helps maintain high-quality water discharge and supports our commitment to environmental responsibility.

Water Resource Management: The Company has implemented the 3Rs strategies of water conservation: Reduce, Reuse, and Recycle to minimize water consumption and wastewater discharge across its operations.

• **Water Reduce:** We have taken significant steps to minimize water usage by optimizing machine water flow and adjusting system pressure. Our "Zero Chemical Usage" project has successfully reduced drainage from the cooling tower system. Additionally, we have upgraded the chiller system to further reduce water consumption. In 2024, we continue implement further measures to decrease water consumption in the Scrubber and Cooling Tower Systems. These include switching to low conductivity make-up water, extending water cycle times, and adjusting conductivity and pH blowdown set points. Moreover, we installed an RO concentrated water recovery system, which recycles up to 200 cubic meters of RO water per day by passing RO concentrated water through Reverse Osmosis membranes.

• **Water Reuse:** In alignment with our sustainability goals, we have placed a strong focus on water reuse across various processes. We reuse wastewater from our RO and DI (Deionized) supply systems by treating and integrating RO and DI reject water back into production lines. This process ensures that we are efficiently utilizing water resources, reducing the need for fresh water from external sources. Additionally, we collect rainwater in the gutters around our factory, which is then used for landscaping and gardening purposes. This further reduces our reliance on city water and helps us manage water more sustainably.

• **Water Recycle**: Hana enhances water conservation efforts by implementing advanced water recycling systems throughout its operations. This includes improving wastewater quality through a Reverse Osmosis (RO) system, which allows treated wastewater to flow back into the chilled water loop, Wet Scrubber System, and plant watering systems. Furthermore, we recycle wastewater from RO brine and retreat it through Reverse Osmosis (RO) for reuse. Wastewater from the sawing production process is also re-treated using an Ultrafiltration (UF) system and reused in the air-conditioning cooling tower system. We have installed ultrafiltration in our wastewater system to further reduce reliance on city water by reusing wastewater across various processes. This initiative not only minimizes the consumption of city water but also supports the sustainable use of water within the manufacturing process.

Setting goals for water management [4]

Does the company set goals for water management : Yes

Details of setting goals for water management

Target(s)	Base year(s)	Target year(s)
Reduction of water consumption	2020	2030 : Reduced by 45%

Remark : [4] 2020: Water Intensity Reduction
2030: 45% Water Intensity Reduction

Performance and outcomes of water management

Performance and outcomes of water management : Yes

Hana has made progress in reducing water intensity since 2020, with consistent improvements over the years:

• In 2021, Hana Lamphun and Hana Ayutthaya achieved a 13% reduction in water intensity compared to the target 5% reduction from the base year (2020), setting a strong foundation for further improvements.

• In 2022, water intensity reduction increased to 17%, exceeding the 10% target and reflecting the Company's continued commitment to water efficiency initiatives.

• In 2023, Hana achieved a more reduction, reaching 27% in water intensity savings from 15% target, showcasing the effectiveness of implemented water-saving measures.

• In 2024, the reduction slightly decreased to 24% from 20% target. This decrease can be attributed to various operational challenges, but the reduction still represents a meaningful achievement compared to previous years.

Hana's target for 2030 is a 45% reduction in water intensity. Despite the minor setback in 2024, the Company remains focused on achieving this long-term goal through continuous improvements in water management strategies.

Water Management and SDGs Alignment:

Hana's water management initiative projects align with the following United Nations Sustainable Development Goals (SDGs):

• SDG 6: Clean Water and Sanitation by reducing water consumption, reusing and recycling water, and improving wastewater treatment directly support SDG 6.

• SDG 9: Industry, Innovation, and Infrastructure by investing in advanced water treatment technologies, such as Reverse Osmosis and Ultrafiltration systems, aligns with SDG 9 in driving innovation in water management processes.

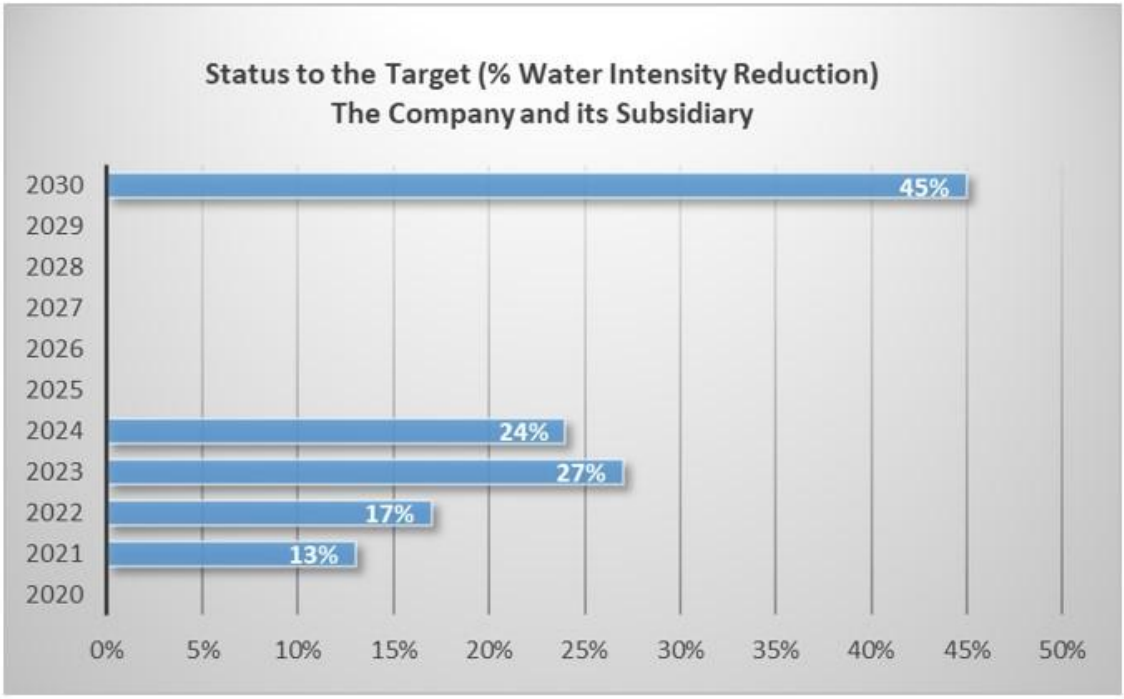
• SDG 12: Responsible Consumption and Production by applying the 3Rs strategy: Reduce, Reuse, Recycle, supports responsible production practices by minimizing water waste and promoting sustainable resource use.

• SDG 13: Climate Action by executing efficient water management, such as reducing water consumption and improving wastewater treatment, can reduce the Company's carbon footprint and support climate change mitigation efforts by promoting sustainability across operations.

By integrating water-saving technologies and reducing environmental impact, Hana's water management contributes to global sustainability goals, reinforcing the Company's commitment to long-term environmental stewardship.

Diagram of performance and outcomes in water management

Year	Water Consumption (Cubic Meters per Million THB of Sale Revenue)			Target	Performance
	Hana Lamphun	Hana Ayutthaya	Total		
2020 (base year)	48.72	130.30	**179.02**		
2021	32.30	123.57	**155.87**	-5%	-13%
2022	28.46	119.32	**147.78**	-10%	-17%
2023	26.55	103.53	**130.08**	-15%	-27%
2024	26.72	109.15	**135.87**	-20%	-24%



Water management: Water withdrawal by source

	2022	2023	2024
Total water withdrawal (Cubic meters)	1,403,425.00	1,102,566.00	689,533.00
Water withdrawal by third-party water (cubic meters)	1,403,425.00	1,102,566.00	689,533.00

Water management: Water discharge by destinations

	2022	2023	2024
Percentage of treated wastewater (%)	80.00	80.00	80.00
Total wastewater discharge (cubic meters)	330,627.38	317,300.08	303,537.40
Wastewater discharged to third-party water (cubic meters)	330,627.38	317,300.08	303,537.40

Water management: Water consumption

	2022	2023	2024
Total water consumption (Cubic meters)	1,072,797.62	785,265.92	385,995.60

Water management: Recycled water consumption

	2022	2023	2024
Total recycled water for consumption (Cubic meters)	440,797.00	447,929.00	452,613.00

Information on waste management

Waste management plan

The company's waste management plan : Yes

Hana is committed to sustainable waste management for resource-efficient consumption both in the production process and the supporting departments, by promoting awareness among those involved both inside and outside organization as well as the campaign to raise awareness among employees to effectively reduce waste and promote better waste management.

Waste management - The Company maintains a comprehensive waste inventory, waste profile, and waste flow diagram, including the separation waste by implementing a waste management system based on the 3Rs principle (Reduce, Reuse, Recycle), which serves as a guideline for managing unused materials in the factory, aimed at reducing waste, creating value-added opportunities, and maximizing resource efficiency.

Operation Process Improvement - Hana is committed to finding ways to improve production processes in order to reduce waste and by-products, by optimizing resource use and minimizing waste generation at the source.

Employee Awareness - The Company promotes waste reduction and better waste management practices among employees through awareness campaigns, emphasizing the importance of reducing waste at the source.

Hazardous Waste Control - Hana focuses on minimizing hazardous waste by improving production processes and replacing harmful materials with environmentally friendly alternatives whenever possible. The Company also separates hazardous substances and ensures their safe disposal through licensed companies authorized by the Ministry of Industry.

Landfilled Waste Reduction - Hana has implemented landfill waste management across its facilities. Waste disposal projects have been introduced for production waste, such as carrier tapes and molding compounds, which were previously sent to landfills in Saraburi. These materials are now processed using the combustion method, converting them into Refuse Derived Fuel (RDF). This process not only generates energy but also significantly reduces the amount of waste sent to landfills. The combustion gases are fully eliminated, and the resulting ash is repurposed as raw material for cement production, supporting a more sustainable approach to waste management.

Air Pollution Control - The Company has managed to monitor and control the emission of air pollution in the production process and throughout the organization to minimize impact on society and environment through the air pollution control system i.e., the high efficiency wet scrubber technology method that can eliminate more than 99% of airborne particulate matter. The air emission monitoring has been conducted regularly to measure pollutant levels in the surrounding and outdoor air and compare it to clean air standards to effectively and timely improve air quality, protect public health, and ensure compliance with regulations and the customers' standard requirement.

Water Pollution Control - Hana applies the 3Rs strategy to water management: Reduce, Reuse, Recycle, by minimizing water consumption and discharging minimal wastewater. The Company's wastewater treatment system efficiently removes chemicals and

contaminants, ensuring that the quality of the effluent is in compliance with regulatory standards and customer requirements. This also includes detecting and repairing any water leakage channels that could lead to water wastage, helping to conserve water and reduce pollution. Regular monitoring ensures that the treated water meets discharge standards, preventing water pollution and safeguarding local ecosystems.

Environmental Monitoring - The Company regularly monitors air, water, and soil pollution levels to ensure the safe disposal and management of hazardous waste, with a focus on minimizing harmful emissions and the contamination of natural resources.

Long-Term Goals and Continuous Improvement – Hana's waste and pollution management plan is an ongoing process of continuous improvement, ensuring that the organization's waste and pollution management practices are environmentally responsible and align with sustainability targets.

Setting goals for waste management [5]

Does the company set goals for waste management : Yes

Details of setting goals for waste management

Target(s)	Base year(s)	Target year(s)	Waste management methods
Reduction of waste generation Waste type: Non-hazardous waste	2020	2030 : Reduced by 40%	• Reuse • Recycle • Landfilling • Incineration with energy recovery • Incineration without energy recovery
Reduction of waste generation Waste type: Hazardous waste	2020	2030 : Reduced by 40%	• Reuse • Recycle • Landfilling • Incineration with energy recovery • Incineration without energy recovery

Remark : [5] 2020: Waste Generation Intensity Reduction
2030: 40% Waste Generation Intensity Reduction

Performance and outcomes of waste management

Performance and outcomes of waste management : Yes

Waste and pollution management performance in 2024:

Waste Generation Intensity (Kg per Million THB of Sale Revenue): Waste generation has consistently decreased since the base year (2020). In 2024, the combined performance of Hana Lamphun and Hana Ayutthaya resulted in a total reduction of 32%, significantly surpassing the target reduction of 18%.

- 2021: A 5% reduction in waste generation was achieved compared to the base year.
- 2022: A 19% reduction was achieved, exceeding the target of 10%.
- 2023: A 30% reduction was achieved, surpassing the 14% target.
- 2024: The total reduction reached 32%, exceeding the target of 18%.

This consistent progress shows Hana's strong commitment to reducing waste generation across its operations, successfully surpassing all set targets.

Waste Recovery: The amount of waste recovered for reuse reached 87.5% of the total waste, surpassing the target of 80%.

Air Emissions: Air emission discharge quality met all performance targets, ensuring that discharge did not exceed the established limit standards.

Effluent Wastewater: The quality of effluent wastewater at all discharge points met performance targets, with no exceedance of the wastewater discharge limit standards.

Zero Spills: There were zero oil and chemical spills.

Landfill Waste Reduction: Landfill waste was reduced by 58%, surpassing the 2024 target of 40%.

Waste Management and SDGs Alignment:

Hana's waste management initiative projects align with the following United Nations Sustainable Development Goals (SDGs):

• SDG 3: Good Health and Well-being by controlling air pollution, improving air quality and reducing harmful emissions to help protect the health of its workforce and the surrounding community

• SDG 6: Clean Water and Sanitation by ensuring availability and sustainable management of water and sanitation for communities and industries.

• SDG 9: Industry, Innovation, and Infrastructure by adopting technology and innovation to manage waste and pollution, building resilient infrastructure, and promoting sustainable industrialization.

• SDG 12: Responsible Consumption and Production by promoting sustainable consumption through the 3Rs strategy: Reduce, Reuse, Recycle, to minimize waste generation, optimize resource use, and enhance recycling processes, ensuring that operations are environmentally responsible and resource-efficient.

• SDG 13: Climate Action by reducing waste, increasing recycling, and generating energy from waste which calls for action to combat climate change.

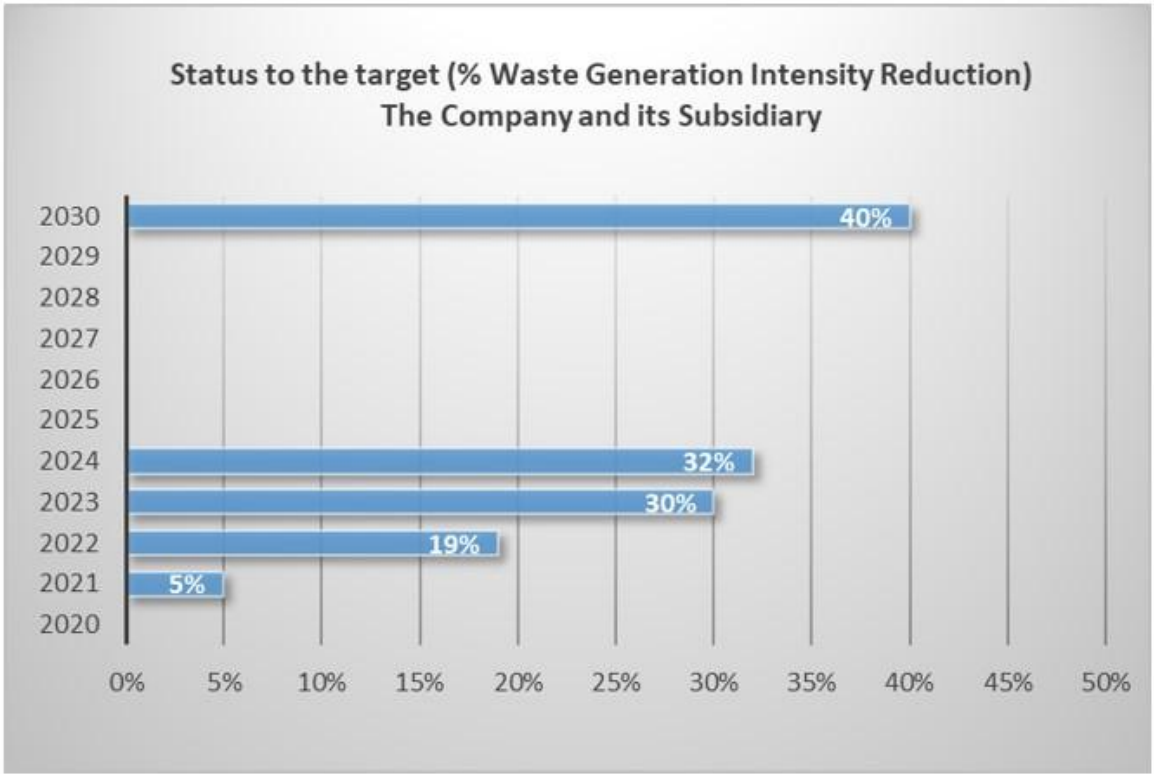
• SDG 17: Partnerships for the Goals by collaborating with licensed waste disposal companies authorized by the Ministry of Industry to ensure the safe handling and disposal of hazardous waste, which focuses on strengthening global partnerships to achieve the SDGs.

Hana's waste management plan demonstrates its alignment with key SDGs, contributing to environmental sustainability, resource efficiency, and public health. By integrating innovative solutions, optimizing waste reduction, and enhancing reusing and recycling processes, minimizing its environmental footprint.

Diagram of Performance and outcomes of waste management



Year	Waste Generation (Weight in Kg per Million THB of Sale Revenue)			Target	Performance
	Hana Lamphun	Hana Ayutthaya	Total		
2020 (base year)	57.32	231.66	**288.98**		
2021	61.38	214.12	**275.50**	-5%	-5%
2022	43.29	189.36	**232.65**	-10%	-19%
2023	38.30	163.61	**201.91**	-14%	-30%
2024	36.39	161.01	**197.40**	-18%	-32%



Waste management: Waste Generation

	2022	2023	2024
Total waste generated (Kilograms)	2,205,930.04	1,679,394.85	1,411,533.00
Total non-hazardous waste (kilograms)	1,902,667.04	1,409,452.85	1,183,088.30
Non-hazardous waste - Landfilling (Kilograms)	548,216.20	153,230.50	156,778.70
Non-hazardous waste - Incineration with energy recovery (Kilograms)	0.00	0.00	0.00
Non-hazardous waste - Incineration without energy recovery (Kilograms)	0.00	0.00	0.00
Non-hazardous waste – Others (kilograms)	1,354,450.84	1,256,222.35	1,026,309.60
Total hazardous waste (kilograms)	303,263.00	269,942.00	228,444.70
Hazardous waste - Landfilling (Kilograms)	25,540.00	19,226.00	15,213.00
Hazardous waste - Incineration with energy recovery (Kilograms)	100,555.00	87,840.00	45,095.00
Hazardous waste - Incineration without energy recovery (Kilograms)	0.00	0.00	0.00
Hazardous waste – Others (kilograms)	177,168.00	162,876.00	168,136.70

Waste management: Waste reuse and recycling

	2022	2023	2024
Total reused/recycled waste (Kilograms)	1,495,468.84	1,381,717.35	1,144,781.30
Reused/Recycled non-hazardous waste (Kilograms)	1,354,450.84	1,256,222.35	1,026,309.60
Reused non-hazardous waste (Kilograms)	0.00	0.00	0.00
Recycled non-hazardous waste (Kilograms)	1,354,450.84	1,256,222.35	1,026,309.60
Reused/Recycled hazardous waste (Kilograms)	141,018.00	125,495.00	118,471.70
Reused hazardous waste (Kilograms)	0.00	0.00	0.00
Recycled hazardous waste (Kilograms)	141,018.00	125,495.00	118,471.70

Information on greenhouse gas management

Greenhouse gas management plan

The company's greenhouse gas management plan : Yes

To reduce the carbon footprint of its operations and value chain, Hana is committed to adopting an integrated approach to mitigate greenhouse gas (GHG) emissions, aiming for a sustainable low-carbon economy by 2030. Our strategy focuses on improving operational efficiency, adopting renewable energy, and building industry partnerships to promote sustainable practices. Our greenhouse gas emission management efforts include:

Energy Conservation: Hana is committed to energy conservation through Industry 4.0 initiatives that enhance production process technologies and optimize energy use.
By implementing automation systems and utilizing advanced data analytics, we streamline workflows, increase productivity, and maximize resource utilization while reducing waste and costs. In addition, we actively reduce greenhouse gas emissions, playing a key role in supporting sustainable operations that are both energy-efficient and environmentally friendly.

Improving Operational Efficiency: Hana is committed to enhancing energy efficiency across its operations through various initiatives, including the improvement of more efficient machinery and equipment, energy-saving programs, optimization projects for various systems in the factory, and initiatives to enhance the capabilities and teamwork of personnel to address issues and develop the organization through QCC group activities. These efforts help reduce energy consumption, lower greenhouse gas emissions, and support Hana's sustainability goals by improving operational efficiency and minimizing environmental impact.

Renewable Energy Integration: The major source of greenhouse gas emissions in our operations comes from electricity consumption in production and supporting functions. In 2020, we initiated the installation of solar panels on the roofs of our factories in Thailand as part of our strategy to mitigate environmental impacts. In 2024, we approved an investment of THB 104 million to further expand renewable energy by installing additional solar rooftops at Hana Lamphun, Hana Ayutthaya, and Hana Jiaxing factories. This move supports our goal of increasing renewable energy in our operations.

Carbon Credit Projects: We aim to implement carbon credit initiatives to offset emissions, actively supporting global efforts to mitigate climate change and advancing towards a low-carbon economy and society.

ISO and Environmental Certifications: Hana continues to adhere to international standards, including ISO 14001 (Environmental Management) and ISO 45001 (Occupational Health and Safety), as part of our commitment to environmental stewardship. We are also pursuing future relevant standards to ensure the sustainability of our operations.

Strategic Partnerships: Hana collaborates with external partners, such as the Industrial Estate Authority of Thailand (IEAT), to join greenhouse gas reduction networks. We aim for carbon neutrality in line with the national policies on climate change and the United Nations Framework Convention on Climate Change (UNFCCC). We are also involved in the pilot project "GHG Reduction for Net

Zero Emissions" led by the Thailand Greenhouse Gas Management Organization (TGO).

Carbon Footprint Monitoring and Reporting: To reduce environmental impacts and ensure the reliability of greenhouse gas emissions data, the Company and its subsidiaries in Thailand have been arranging the organization's carbon footprint report. In 2024, marking the fourth year, the report is prepared in accordance with the Greenhouse Gas Emission and Removal Reporting Standards set by the Greenhouse Gas Management Organization (TGO), and has been audited by registered verifiers with TGO. This report will serve as a guide for the Company in identifying effective strategies to reduce greenhouse gas emissions.

Through this integrated approach, Hana aims to meet its target of a low-carbon economy by 2030, focusing on operational efficiency, renewable energy adoption, and continuous GHG reduction. Our proactive approach in measuring, reducing, and reporting GHG emissions demonstrates our dedication to creating a sustainable future while meeting global climate objectives.

Compliance with principles and standards for greenhouse gas or climate change management

Principles and standards for greenhouse gas or climate change management : Thailand Greenhouse Gas Management Organization (TGO)

Setting greenhouse gas emission goals

Does the company set greenhouse gas management goals : Yes

Company's existing targets : Setting other greenhouse gas reduction targets

Setting other greenhouse gas reduction targets

Details of setting other greenhouse gas reduction targets

Greenhouse gas emission scope	Base year(s)	Short-term target year	Long-term target year
Scope 1	2020 : Greenhouse gas emissions 1,517.00 tCO_2e	2024 : Reduced by 18% in comparison to the base year	2030 : Reduced by 40% in comparison to the base year
Scope 2	2020 : Greenhouse gas emissions 63,136.00 tCO_2e	2024 : Reduced by 18% in comparison to the base year	2030 : Reduced by 40% in comparison to the base year

Performance and outcomes of greenhouse gas management

Performance and outcomes of greenhouse gas management : Yes

Hana's GHG Emission Intensity Reduction:

Hana is committed to reducing its environmental impact and supporting global efforts to combat climate change. As part of its environmental sustainability goals, the Company has set a target to reduce the greenhouse gas (GHG) emission intensity for Scope 1 and Scope 2, measured in tons of CO2e per million baht of sales revenue. The Company aims for an 18% reduction in 2024 and a goal of 40% reduction by 2030, with 2020 as the base year.

Since 2020, Hana has made progress in reducing GHG emission intensity against the target for scope 1 and scope 2 emissions as follows:

- 2021: Achieved a 14% reduction compared to 2020, surpassing the target of 5%.
- 2022: Achieved a 22% reduction compared to 2020, exceeding the 10% target.
- 2023: Achieved a 26% reduction compared to 2020, surpassing the 14% target.
- 2024: Achieved an 18% reduction compared to 2020, meeting the 18% target. However, this marks a slight setback compared to the previous year's 26% reduction.

Despite the 2024 performance below the previous year's achievement, the overall trend since 2020 demonstrates Hana's continued commitment to reducing GHG emissions and its continued progress toward reaching its 40% reduction target by 2030.

GHG Emission Management and SDGs Alignment:

Hana's greenhouse gas emission management contributes directly to the following United Nations Sustainable Development Goals (SDGs):

• SDG 3: Good Health and Well-being by controlling pollution and minimizing harmful emissions from production processes, Hana helps mitigate the risks associated with pollution, leading to healthier lives for employees and surrounding communities.

• SDG 6: Clean Water and Sanitation by implementing resource conservation efforts that ensure the availability and sustainable management of natural resources and sanitation.

• SDG 7: Affordable and Clean Energy by adopting renewable energy through advancing the transition to clean energy. This contributes to the reduction of greenhouse gas emissions, helps minimize reliance on fossil fuels, and supports affordable and sustainable energy practices within the Company and its supply chain.

• SDG 9: Industry, Innovation, and Infrastructure by investing in energy-efficient technologies and sustainable production processes, including process automation and renewable energy adoption, supports the development of resilient infrastructure and innovative industrial practices.

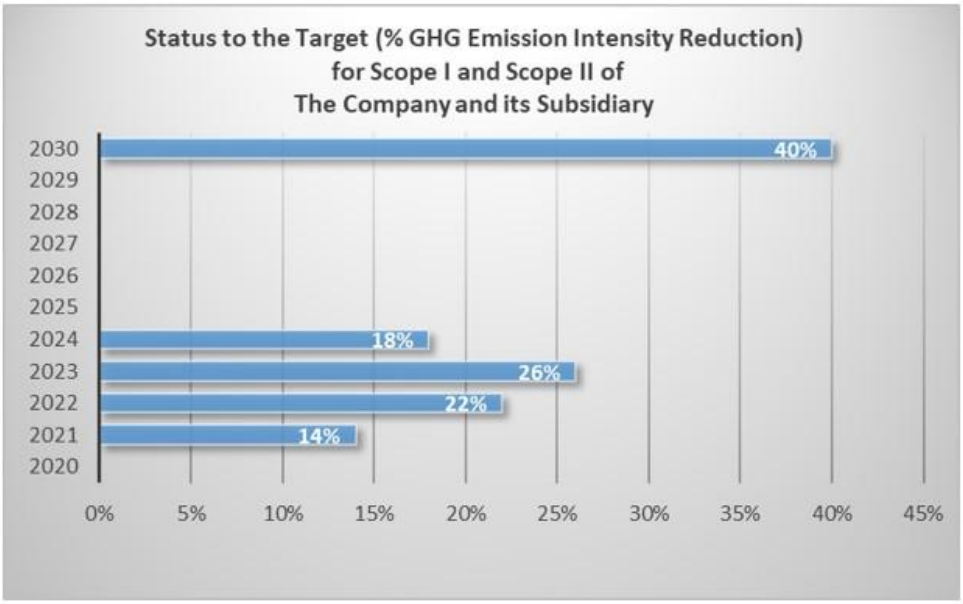
• SDG 12: Responsible Consumption and Production by reducing waste generation, promoting recycling, and reducing the environmental impact of its operations

• SDG 13: Climate Action by reducing greenhouse gas emissions and planning for carbon offset projects, Hana is actively supporting global efforts to mitigate climate change and working towards low-carbon economy.

• SDG 17: Partnerships for the Goals by collaborating with external partners to drive greenhouse gas reduction and promoting sustainability on a larger scale.

Diagram of Performance and outcomes of greenhouse gas management

Greenhouse Gas Emission (Ton CO2eq)						
GHG Protocal	2022 (Verified)		2023 (Verified)		2024 (Verified)	
	Hana-LPN	Hana-AYT	Hana-LPN	Hana-AYT	Hana-LPN	Hana-AYT
Scope 1 - Direct emission	502	1,125	500	381	467	1,718
Scope 2 - Indirect emission	23,271	42,992	22,022	34,709	21,479	31,296
	23,773	**44,117**	**22,522**	**35,090**	**21,946**	**33,014**
Total ESG emission of Hana Thailand factorie	**67,890**		**57,612**		**54,960**	



Greenhouse gas management : Corporate greenhouse gas emission

	2022	2023	2024
Total greenhouse gas emissions (Metric tonnes of carbon dioxide equivalent)	23,773.00	22,522.00	21,946.00
Total greenhouse gas emissions - Scope 1 (Metric tonnes of carbon dioxide equivalent)	502.00	500.00	467.00
Total greenhouse gas emissions - Scope 2 (Metric tonnes of carbon dioxide equivalent)	23,271.00	22,022.00	21,479.00

Greenhouse gas management: Verification of the company's greenhouse gas emissions over the past year

Verification of the company's greenhouse gas emissions : Yes

List of greenhouse gas verifier entity : Other : Assoc. Prof. Dr. Sate Sampattagul and Mr. Varoon Raksakulkan, Research Unit for Energy Economics & Ecological management, Multidisciplinary Research Institute, Chiang Mai University

Information on incidents related to legal violations or negative environmental impacts

Number of cases and incidents of legal violations or negative environmental impacts

	2022	2023	2024
Number of cases or incidents of legal violations or negative environmental impact (cases)	0	0	0

3.4 Social sustainability management

3.4.1 Social policy and guidelines

Social and human rights policy and guidelines	:	Yes
Social and human rights guidelines	:	Employee rights, Migrant/foreign labor, Child labor, Consumer/customer rights, Community and environmental rights, Safety and occupational health at work, Non-discrimination, Supplier rights

Hana conducts the business with social responsibility to reduce the impacts arising from the business activities by adhering to the principles of accountability, transparency, ethics, respect for human rights and focus in the needs and expectations of stakeholders throughout the value chain. The Company endeavors to meet sustainable development goals by providing high quality products and services to meet customer satisfaction whilst contributing to community development and the promotion of the well-being of society, as well as improving the environment and complying with applicable laws, regulations and relevant international guidelines.

Compliance with human rights principles and standards

Human rights management principles and standards	:	Thai Labour Standard: Corporate Social Responsibility of Thai Businesses (TLS 8001-2010) by the Ministry of Labour, The UN Guiding Principles on Business and Human Rights, Others : Universal Declaration of Human Rights: UDHR

Review of social and human rights policies, guidelines, and/or goals over the past year

Review of social and human rights policies, guidelines, and/or goals over the past year	:	Yes
Changes in social and human rights policies, guidelines, and/or goals	:	Employee rights, Child labor, Consumer/customer rights, Community and environmental rights, Safety and occupational health at work, Non-discrimination, Supplier rights

-

Human Rights Due Diligence : HRDD

Does the company have an HRDD process	:	Yes

Human Rights Due Diligence

Goals and Objectives

Hana places importance on and respect human rights in all aspects and conducts business with due care to prevent human rights violations and discrimination, while respecting the equality, diversity and inclusion of all stakeholders regardless of their race, nationality, origin, ethnicity, religion, gender, sexual orientation, language, age, color, education, disability, beliefs, political opinions, marital status, pregnancy status, social status, culture, traditions or any other status protected by law.
The Company has complied with applicable laws and international standards with a particular focus on the Universal Declaration of Human Rights (UDHR), United Nations Global Compact (UNGC), United Nations Guiding Principles on Business and Human Rights (UNGP) and the International Labor Organization Declaration on Fundamental Principles and Rights at Work (ILO) to ensure that the Company's operations are free from human rights violations of stakeholders throughout the business value chain.

Human Rights Due Diligence Framework

1. Human Rights Policy Commitment
2. Risk Identification and Impact Assessment
3. Integrating and Addressing Impacts
4. Monitoring, Reviewing and Reporting
5. Grievance Mechanisms and Remediation

1. Human Rights Policy Commitment

Hana has had the Human Rights Policy in place since 2020, demonstrating our commitment to respecting the human rights of all stakeholders. This policy reserves as a guiding tool to govern the Company's operations, ensuring respect for human rights across all stakeholders in the value chain.

The Human Rights Policy applies to all activities and all employees of the Company, emphasizing the importance of respecting and promoting human rights within its framework. The Company also encourages its business partners to adhere to ethical business practices that address human rights issues.

2. Risk Identification and Impact Assessment

To identify human rights risks, the Company shall assess both actual and potential adverse human rights risks, evaluating the impacts arising from its own activities or as a result of business relationships. This process includes:

2.1 Risk identification

The Company shall identify actual and potential adverse human rights risks to stakeholders across its value chain through cross-departmental risk identification, undertake thorough risk assessments with suppliers, contractors, and business partners to evaluate their adherence to human rights standards, review and analyze complaints and grievance mechanisms to identify human rights risks, and engage with stakeholders to gather feedback and identify concerns regarding human rights issues.

The potential human rights risks are as follows:

Rights of Employees

- Employment/Working Condition
- Health & Safety
- Data Security & Privacy
- Discrimination
- Forced & Child Labor
- Freedom of Association & Right to Collective Bargaining

Rights of Suppliers/Subcontractors

- Employment/Working Condition
- Health & Safety
- Data Security & Privacy
- Discrimination
- Forced & Child Labor, Human Trafficking

Rights of Local Communities and Environment

- Health & Safety
- Waste & Pollution

Rights of Customers

- Data Security & Privacy
- Responsible Sourcing of Conflict Minerals

2.2 Impact Assessment

The impact assessment and risk prioritization process are designated to evaluate the likelihood and potential impact to prioritize human rights risks on stakeholders, including employees, suppliers, customers, and local communities.
The Company has established risk criteria for human rights issues, which are divided into 5 levels: Very Low, Low, Medium, High, and Very High.

The assessment considers two factors: Likelihood (the chance of occurrence) and Impact (the severity of the potential consequences). This approach allows the Company to develop appropriate measures and strategies to reduce the impact in line with the potential consequences that may arise simultaneously.

3. Integrating and Addressing Impacts

From the assessment of human rights risks in the Company's operations including stakeholders, no high-risk issues were identified, only low and medium residual risks.

The Company has developed control measures and strategies for addressing and mitigating key human rights risks that are relevant to its business operations as follows:

3.1 Rights of Employees

3.1.1 Risk Issues

• Employment/Working Condition
• Health & Safety
• Data Security & Privacy
• Discrimination
• Forced & Child Labor
• Freedom of Association & Right to Collective Bargaining

3.1.2 Risk Management and Impact Mitigation

• Establish, communicate and ensure compliance with labor laws, Corporate Governance Policy, Corporate Code of Conduct, Human Rights Policy, Occupational Health, Safety and Environment Policy, Responsible Business Alliance (RBA) Code of Conduct, and rules and regulations

• Develop and implement occupational health and safety management system in accordance with ISO 45001 standard and information security management system in accordance with ISO/IEC 27001 standard

• Establish a welfare committee and an occupational health and safety committee to oversee employee well-being

• Provide a safe and healthy working environment, personal protective equipment, create work instructions, provide annual employee health checks, perform safety analysis, evaluate potential risks and emergency situations, develop emergency plans and regularly conduct fire and emergency evacuation drills

• Provide health and safety training and awareness program for all employees

• Establish, communicate, ensure compliance with Personal Data Protection Act and implement a Personal Data Privacy Policy to safeguard employee data

• Establish, communicate, and enforce a Whistleblowing Policy, ensuring employees have accessible channels to report concerns or provide feedback, such as suggestion boxes/red boxes or employee satisfaction surveys.

• Monitor the implementation to ensure compliance with legal requirements, the Company’s policies, and guidelines

3.2 Rights of Business Partners/Subcontractors

3.2.1 Risk Issues

• Employment/Working Condition
• Health & Safety
• Data Security & Privacy
• Discrimination
• Forced & Child Labor, Human Trafficking

3.2.1 Risk Management and Impact Mitigation

• Establish, communicate and ensure compliance with labor laws, Corporate Governance Policy, Corporate Code of Conduct, Human Rights Policy, Occupational Health, Safety and Environment Policy, Responsible Business Alliance (RBA) Code of Conduct, and rules and regulations including ensuring business partners to strictly comply with the aforesaid laws, policies, rules and regulations

• Develop and implement occupational health and safety management system in accordance with ISO 45001 standard and information security management system in accordance with ISO/IEC 27001 standard and encourage business partners to develop and implement the aforesaid standards

• Ensure business partners to provide a safe and healthy working environment, personal protective equipment, create work instructions, provide annual employee health checks, perform safety analysis, evaluate potential risks and emergency situations, develop emergency plans and regularly conduct fire and emergency evacuation drills

• Ensure business partners to provide health and safety training and awareness program for all employees

• Establish, communicate, ensure compliance with Personal Data Protection Act and Personal Data Privacy Policy, non-disclosure agreements and mutual contracts including ensuring business partners to strictly comply with the aforesaid law, policy, agreements and contracts

• Establish, communicate, and enforce a Whistleblowing Policy, ensuring employees have accessible channels to report concerns or provide feedback, such as suggestion boxes/red boxes or employee satisfaction surveys.

• Provide business partners channels for expressing opinions/complaints and resolve/improve if there is any complaint/concern to prevent reoccurrence

• Monitor the implementations of both the Company and business partners to ensure compliance with legal requirements, the Company's policies, and guidelines

3.3 Rights of Local Communities and Environment

3.3.1 Risk Issues

• Health & Safety
• Waste & Pollution

3.3.2 Risk Management and Impact Mitigation

• Establish, communicate and comply with environmental laws, Corporate Governance Policy, Corporate Code of Conduct, Code of Conduct for Suppliers, Human Rights Policy, Occupational Health, Safety and Environment Policy, Responsible Business Alliance (RBA) Code of Conduct, and rules and regulations

• Develop and implement occupational health and safety management system in accordance with ISO 45001 standard and environmental management system in accordance with ISO 14001 standards

• Perform safety analysis, evaluate potential risks and emergency situations, develop emergency plans and regularly conduct fire and emergency evacuation drills with surrounding communities

• Provide surrounding communities channels for expressing opinions/complaints and strengthen relationships with them, and resolve/improve if there is any complaint/concern to prevent reoccurrence

• Monitor the implementation to ensure compliance with legal requirements, the Company's policies, and guidelines

3.4 Rights of Customers

3.4.1 Risk Issues

• Data Security & Privacy
• Responsible Sourcing of Conflict Minerals

3.4.2 Risk Management and Impact Mitigation

• Establish, communicate and ensure compliance with Personal Data Protection Act and Personal Data Privacy Policy, non-disclosure agreements and mutual contracts, Corporate Governance Policy, Corporate Code of Conduct, Human Rights Policy, Responsible Business Alliance (RBA) Code of Conduct, and rules and regulations

• Develop and implement information security management system in accordance with ISO/IEC 27001 standard

• Provide customers channels for expressing opinions/ complaints and resolve/improve to prevent reoccurrence

• Commit to responsible sourcing of conflict minerals and require suppliers to comply with the Hana Conflict Minerals Policy, ensuring materials are sourced from verified conflict-free sources

• Require suppliers to establish and implement policies for sourcing conflict-free minerals, including traceability to at least the smelter level, and must maintain records for five years to ensure transparency and compliance with legal and ethical sourcing standards

• Require suppliers to adhere to the Responsible Business Alliance (RBA) Code of Conduct, ensuring materials are sourced from socially responsible suppliers and prohibiting the use of conflict minerals from the Democratic Republic of Congo and surrounding regions

• Monitor the implementation to ensure compliance with legal requirements, the Company's policies, and guidelines including agreements and contracts with customers

4. Monitoring, Reviewing and Reporting

The Company will oversee and monitor the implementation of guidelines and measures aimed at preventing and addressing human rights impacts. This ensures that the established guidelines and measures effectively mitigate or control human rights risks. If necessary, adjustments will be made, and the results will be reported to the management and relevant stakeholders. Additionally, a review will be conducted at least annually to reassess the validity of the existing human rights risk assessment. This includes considering any significant changes in business activities, operations, or legal requirements.

5. Grievance Mechanisms and Remediation

5.1 Grievance Mechanisms

The Company provides accessible channels for both internal and external stakeholders to raise any issues or concerns and open opportunity for feedback regarding the human rights impacts that may arise from the Company's activities, as outlined below:

• **Mailing Address:** Hana Microelectronics Public Co., Ltd., 65/98, Soi Vibhavadi-Rangsit 64 Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok 10210

• **Email:**

1. Chairman of the Board of Directors and the Audit Committee: john@ntasset.com
2. Chairman of Risk Management Committee: terry@hanabk.th.com
3. Chief Executive Officer: richardh@hanabk.th.com
4. Corporate HR Business Partner Sr. Director: tappawong@hanabk.th.com
5. Corporate Secretary and Head of Internal Audit Department: jirapak@hanabk.th.com

• **Internal Whistleblower Channel:** Employees can report concerns through their direct supervisor (manager level or above), the head of the Human Resources Department at each location, a suggestion box (or red box) available at each Hana location, or through the aforementioned channels.

5.2 Human Rights Remediation

In the event of a human rights violation caused or contributed to by the Company's operations, the Company is committed to taking responsibility and implementing appropriate measures to address and remediate the impact on the affected individuals or communities. The process involves:

1. Investigation and Analysis: The Company will investigate the facts, the causes, and assess the scope of the violation. The Company will cooperate with relevant government authorities if a complaint regarding human rights violations related to or contributed to its activities is raised.

2. Corrective Actions: Appropriate corrective actions will be taken to remedy the situation and prevent further harm. This may include financial and non-financial remedies.

3. Sanctions: The Company will apply appropriate sanctions, including but not limited to warnings, job reassignment, suspension, or termination, depending on the severity of the violation.

4. Engagement with Affected Parties: The Company will engage with affected parties to ensure that their concerns are addressed and to restore their rights.

5. Monitoring and Reporting: Ongoing monitoring will be conducted to ensure that the remediation efforts are effective, and results will be reported to relevant stakeholders, including to the independent directors.

6. Preventive Measures: The Company will analyze lessons learned from the incident and implement measures to prevent future violations.

2024 Human Rights Performance:

- 100% of business operations and activities have been assessed.
- 100% of business operations and activities identified with human rights risks have corresponding response measures in place.
- No cases of human rights violations have been reported in 2024.

3.4.2 Social operating results

Information on employees and labor

Employees and labor management plan

The company's employee and labor management plan	:	Yes
Employee and labor management plan implemented by the Company in the past year	:	Fair employee compensation, Employee training and development, Promoting employee relations and participation, Child labor, Safety and occupational health at work, Others : Conflict-Free Minerals Sourcing, Women in the Workplace, Disability Inclusion at Work

Empowering Human Capital

Employees

Employees as internal stakeholders within the organization play an important role in contributing to the long-term success and performance of the corporation. Our key focus is to retain deserving and talented employees while employee satisfaction is important for them to remain happy and also deliver their level best.

Our guidelines and operating results with responsibility towards employees are as follows:

Respect Human Rights

Hana aims to conduct its business with ethics holding on to our responsibility to society and all groups of stakeholders based on the corporate governance principles and the code of conduct. For human rights protection, the Company has complied with laws and international standards especially giving support to and complying with Universal Declaration of Human Rights (UDHR), United Nations Global Compact (UNGC), United Nations Guiding Principles on Business and Human Rights (UNGP) and the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work. The Company recognizes and has put in place labor practices by respecting human rights in regard to the fairness, equality and non-discrimination both in terms of employment, compensation, promotion, training and development without discrimination of age, gender, educational institution, race and religion, as well as supporting employment for disadvantaged groups in order to create opportunities, career path and a more income with the goals achieving the Sustainable Development Goals (SDGs).

Employment/Termination - Hana supports the principles of equal opportunities in employment, promotion or termination and is opposed to all forms of discrimination, including those on the grounds of race, nationality, color, religion, gender, age, disability, marital status, political affiliation, union membership, or any other status protected by the country laws.
All employees will be treated as individuals solely according to their ability to meet job requirements. The Company has implemented the procedures starting with the recruitment process by not having on the employment application form any requirement for candidates to complete the specific information of age, religion, gender, nationality, and disability in order to avoid discrimination in hiring.

Child Labor - Hana has a policy of prohibition of employment of children below the legal age in each country we operate and do not support child labor within our supply chain which is in line with the Responsible Business Alliance (RBA) Code of Conduct in the Electronic Industry Citizenship Coalition (EICC), which has set standards to ensure that working conditions in the electronics industry or industries in which electronics is a key component and its supply chain are safe for employees. Child labor is not to be used in any stage of manufacturing.

Social Protection - Our compensation policy is fair and reasonable according to employees' capability by considering the packages with the same industry and in accordance with their position, experience and their performance in the Company as well as the economic and social situation. Moreover, the Company provides various employees' welfare for example annual vacation, overtime with the consent of employees, medical treatment, employees' cooperatives and other welfares such as group life and accident insurances, annual health check, special vaccination such as Influenza vaccine, employee fitness center, library at certain location, etc. More importantly, the Company provides the children education allowance for children of low income employees.

Employee Remuneration - The Company has a policy on remuneration and welfare for employees.
The employee performance appraisal is used as a method for regular review of an employee's job performance evaluation with specified criteria and feedback on their work taking into account the duties and responsibilities, economic conditions, living conditions, legal wage rate to justify employees' remuneration. Compensation paid to employees is complied with all applicable wage laws, including those relating to minimum wages, overtime payment, and legally mandated benefits. For remuneration process, aside from semi-annual individual employee performance appraisals and benchmark with employees in the same group along with the aforementioned conditions, our Corporate Human Resources Department also conducts an employee remuneration survey, on a yearly basis, in collaboration with the Electronic and Computer Employers' Association and the independent consulting firms for the remuneration survey with the same industry in consideration as the fairly basis of employees' remuneration adjustment to be in line with the industry and labor market conditions.

In addition, the Company provides the compensation to employees in line with their performance in both the short term such as bonuses and the long-term performance through Career Development Program which has been continuously provided to employees in order to define the development of skill sets and identify how individuals move through the organization. The career development process has considerable benefits from both an individual employee and an overall organizational perspective. The Company has set the policy and the committees to assess potential candidates, identify the core competencies and perform assessment to verify candidates' abilities and determine strengths and weaknesses to match with currently holding position and the readiness for advancement of each candidate, and plan for training and other development tools.

The Company has provided the long-term welfare benefits that retain and motivate employees, particularly for the retirement benefits and the provident fund to help employees to save a portion of their salary in the event of retirement, disability, sickness or unemployment. The Company's provident fund is an alternative saving scheme for retirement where employees contribute a portion of their salaries and the Company makes the contribution equal to the rate of the employee's savings. Employees will benefit from the savings provided by the provident fund management in the form of investment. In summary, the Company has provided various welfare programs for employees to provide them with better life, to make them happy and satisfied, to keep the moral and motivation of employees high, and to raise their standard of living so as to retain our employees for longer duration.

Summary of welfare program provided to employees:

Economic Betterment

- Retirement benefits
- Provident fund and social security fund
- Hana cooperative fund

• Shift allowance
• Attendance allowance
• Incentive for employees who contribute to CIP (Continuous Improvement Program)
• Long service award
• Outstanding employee award

Healthcare Improvement

• Life and accident insurance
• Annual physical check-up and specific test in case the work environment can affect health
• Influenza vaccination
• Medical benefits
• Nursing room for first aid clinic
• Fitness center and stadium
• Health promotion programs, including employee training on hypertension and high cholesterol, cancer in women, pulmonary tuberculosis, and training for pregnancy and childcare
• Provide helmets to employees for safe driving

Family Support

• Right to leave for vacation, sick leave, maternity leave, etc.
• Employee assistance program, i.e. maternity benefit, employee death benefit, disaster victim, etc.
• Child education support

Amenities and Others

• Uniform
• Canteen and low-price consumer goods
• Dormitory
• Transportation
• Recreation activities

Women in the Workplace - Hana promotes women's human rights and no gender-based discrimination in terms of employment, compensation, promotion, training and development of employees.

Disability Inclusion at Work - Hana supports projects of the government to protect the rights of disabled persons to provide them with employment opportunities. The Company employs persons who are disabled and arranges the appropriate job matching to their capability. The Company also improved workplace environment to enable employees with disabilities easier access to the Company's facilities. Furthermore, Hana also arranges a place for disabled persons to open shops in the factory compound at no cost, which gain the good support from employees.

Labor Relations - Hana's Welfare and Employee Relations Policy is committed to social responsibility and adheres to the good labor practices: listen to every voice of employees fairly, strengthen culture and working atmosphere, encourage teamwork, and realize that every employee is important and valuable to the Company's success and sustainable growth. The Welfare and Labor Relations Committee is to facilitates collective bargaining at the workplace including employee benefits and privileges, provide opportunities for executives and employees to discuss, make suggestions, file complaints, and suggest ideas with management for decision-making and problem solving.

Employee Satisfaction Survey - Hana realizes the importance of employee satisfaction. The Company conducts the employee satisfaction surveys for both daily and monthly employees twice a year to encourage them to provide comments and suggestions as to improve the organization in various areas covering wages and welfare, work environment, job assignment, career advancement, supervisor, colleague, etc.

Long Service Award - The Company recognizes the importance of employee engagement. There are also long service awards annually held to promote the morale and pride of employees who are dedicated to working with the Company for long time and are the important part of the success and growth of the Company.

Human Resources Development - Hana is committed to equal opportunities and to ensure that individuals are treated equally and fairly based on the assessment of employee's development needs, competencies, organizational needs irrespective of their gender, age, marital status, disability, race, color, ethnic or national origin or sexual orientation. Employees are expected and encouraged to take ownership and responsibility for their personal training and development including training evaluation/effectiveness monitoring in relation to their works, within the framework of support provided by the organization. This is to ensure that the employees have the competences to perform their jobs effectively and to encourage the employees to maximize their potential and contribution supporting the overall strategic business plan and objectives in short and long term. Besides, the Company has provided the employees of all levels the understanding of their future career opportunities. This leads to increased motivation, morale and job satisfaction among the employees.

Employee Training and Competency-Based Development - Hana has always recognized the need to develop its employees as the most important asset in the organization through employees' development program and employees' training program. The Company has provided training to employees both daily and monthly employees at all levels, including operators, staff and managers. The training focuses on short-term and long-term development, consists of new employee orientation in order to familiarize the employees to new organizational culture and environment, and other training needed for work such as quality system, health and safety at work, 5S, Code of Conducts, etc. from internal and external instructors to upskill and reskill the employees to effectively perform current job functions and to be prepared for future changes and work opportunities. In addition to external training from outside professional trainers, the Company also encourages expertise across departments by turning our employees into trainers with the goals to promote learning organizational culture including enhancing the competency of personnel in the organization.

Training Need Survey - The Company arranges the annual survey of training need from the opinion survey of management and supervisors in consideration of both internal and external factors. The internal factors are job positions, performance assessment according to the competency of each job position, project evaluation such as CPDP Program, technician and line leader development program and business strategic plan. The external factors are customers' requirements, technological advancement, requirement of legal and international standards, etc.

In addition, the Company provides opportunities for employees to participate in the introduction of useful training courses through the suggestion box and employee satisfaction survey forms. The result of the surveys is considered and carried out for annual training plan as well as individual development plan (IDP).

Safety, Health, and Environment at the Workplace - The Company prioritizes employee development and focuses on both their physical and mental well-being. Since 2005, the Company has been certified under OHSAS 18000 and TIS 18001, which are international and Thai occupational health and safety management systems. In 2019, the certification transitioned to the new ISO 45001 standard. The Company is committed to continuously improving environmental and safety standards, promoting the health and well-being of employees and stakeholders, and upholding social responsibility and labor standards while conducting business operations.

Improving Health and Well-Being at Work - The Company has established and annually approves a workplace health and safety plan aimed at preventing work-related injuries and diseases while fostering a healthy organization. In 2024, activities focused on improving employees' health and well-being included training and raising awareness about workplace health and safety, as well as implementing, monitoring, and evaluating measures such as epidemic prevention. Additionally, the Company provided training to promote employee safety and well-being.

Setting employee and labor management goals

• Training Hours Per Employee Per Year: Target 50 hours
• Employee Satisfaction: Target 78%
• Employee Engagement in Organizational Innovation towards Hana 4.0 Roadmap: Target 80%
• Workplace Accident: Target 0 cases

Does the company set employee and labor management goals	:	No

Performance and outcomes for employee and labor management

Performance and outcomes for employee and labor management	:	Yes

Human Rights, Fair Labor Practices, Employment/Termination, Child Labor - In 2024, there were no complaints or cases of human rights violations regarding labor.

Women in the Workplace - Gender information disclosure of employees classified by level in 2024 is as follows.

Total Number of Employees by Position and Gender (Person)

• Female Executive: 2
• Male Executive: 6
• Female Management: 76
• Male Management: 130
• Female Employee: 3,797
• Male Employee: 1,764

Employee Information by Company and Subsidiary:

Hana Microelectronics Public Co., Ltd

• Female Executive: 1
• Male Executive: 3
• Female Management: 39
• Male Management: 58
• Female Employee: 2,018
• Male Employee: 895

Hana Semiconductor (Ayutthaya) Co., Ltd.

• Female Executive: 1
• Male Executive: 3
• Female Management: 37
• Male Management: 72
• Female Employee: 1,779
• Male Employee: 869

Disability Inclusion at Work - According to Empowerment of Persons with Disabilities Act, B.E.2550 (2007) Section 33 and 35, the number of hiring persons with disability of the Company and its subsidiary in Thailand greater than the hiring ratio (1 disabled person to every 100 non-disabled employees – 1:100) stipulated by law as follows.

Number of People with Disabilities per Total Workforce
(as at the Report Date to the Department of Empowerment of Persons with Disabilities)

2024:

• Hana Microelectronics Public Co., Ltd. - 33 : 3,014
• Hana Semiconductor (Ayutthaya) Co., Ltd. - 53 : 2,761

• Total Hiring People with Disabilities - 86 : 5,775
• Total Payment to the Fund for Empowerment of Persons with Disabilities - 68,574.47 Baht

2023:
• Hana Microelectronics Public Co., Ltd. - 35 : 3,113
• Hana Semiconductor (Ayutthaya) Co., Ltd. - 60 : 4,292
• Total Hiring People with Disabilities - 95 : 7,405
• Total Payment to the Fund for Empowerment of Persons with Disabilities – 0 Baht

2022:
• Hana Microelectronics Public Co., Ltd. - 39 : 3,324
• Hana Semiconductor (Ayutthaya) Co., Ltd. - 55 : 4,110
• Total Hiring People with Disabilities - 94 : 7,434
• Total Payment to the Fund for Empowerment of Persons with Disabilities – 0 Baht

In addition, our Hana Jiaxing in China has continued hiring people with disabilities to suit their job positions even no legal obligation.

Labor Relations - In 2024, the Company did not have any significant labor disputes.

Employee Training and Development:
• **E-Leaning and Online Training** - Online training on the internet has been promoted as an advance technology by moving from the traditional training method which offers more convenience for employees to participate in more flexible training or seminar conducted by various organizations which can gain the learning outcomes according to the corporate objectives. In addition, employees can gain knowledge through Hana' s E-Learning website to minimize time constraints and restrictions of place. The instructors can customize learning ideas in numerous methods while learners can choose topics of study fitting their own interest on Hana's website which is to provide essential e-materials, VDO clips and self-test evaluation as options and opportunities for employees to learn anytime.

• **Cyber Security Courses by IT Team** - Technology has fundamentally changed the modern world, making it easier to connect computer technology with internet network both in manufacturing and office areas. The Company recognizes the importance of cyber security to reduce the risk of cyberattacks and protect sensitive information. Hence, the in-house trainings were organized for employees to realize the importance of information security systems and how to protect data and various cyber security measures, including the standard ISO/IEC 27001 for information security management systems.

• **Money Management Course for Employees' Wealth Management by Hana Lamphun Senior Management** - The Company places the importance on financial strengths both the firm and employees for financial sustainability. This course is organized to encourage employees to save and manage their money with effective discipline program.

Training Courses and Training Hours - Hana Lamphun and Hana Ayutthaya have organized a variety of training courses aligned with the business plan, strategies, and customer requirements, while also addressing the needs of supervisors and individual employees. In 2024, a total of 174,188.50 training hours were provided to employees across a broad range of courses, categorized as follows:
1. Technical Skills - 41,349.70 training hours, accounting for 23.74% of the total training hours, were dedicated to technical skills development.
2. Professional Re-certification - A total of 36,544 training hours, representing 20.98% of the total training hours, were dedicated to professional re-certification training.
3. Quality Skills - 29,677.60 training hours, representing 17.04% of the total training hours, were dedicated to quality skills development.
4. Management Skills - 24,148.80 training hours, representing 13.86% of the total training hours, were dedicated to management skills development.
5. General Skills - 19,447.50 training hours, representing 11.16% of the total training hours, were dedicated to general skills development.

6. Computer & Technology Skills - 11,449.60 training hours, representing 6.57% of the total training hours, were dedicated to computer and technology skills development.
7. Safety and EMS - 9,564.30 training hours, representing 5.49% of the total training hours, were dedicated to safety and Environmental Management System (EMS) development.
8. Multi-Skills - 1,518 training hours, representing 0.87% of the total training hours, were dedicated to multi-skills development.
9. Job Transfer - 489 training hours, representing 0.28% of the total training hours, were dedicated to job transfer training.

The annual average training hours per employee versus the KPI:
• 2022:
KPI: 40 hours/employee
Actual Performance: 46 hours/employee

• 2023:
KPI: 50 hours/employee
Actual Performance: 58 hours/employee

• 2024:
KPI: 50 hours/employee
Actual Performance: 57 hours/employee

The Company also has key initiatives for employee potential development programs:

• Career Path Development Program - To ensure sustainable business growth, the Company has continued the development program called "Career Path Development Program" or CPDP Program since 2011 and Talent Program since 2016. Employees reaching senior staff level (M1/T1 up) have equal chance to undergo the development program which includes the assessment and development activities for the succession plan, retention of potential personnel in the organization, and providing advancement or growth for employees. The participants have the opportunities to share their expertise, interests and perspectives with management. The program aims to align between the Company's expectation, goals and strategies, and the employee strength and contribution. Since start the programs, total 530 employees have been selected for training and development whereby 62 employees participated in the program in 2024, representing 18 % of employees at M1/T1 level and above who have not yet participated.

• Technician and Line Leader Development Program - To increase potential of employees whose duties required specialized expertise including a group of junior-level supervisors to grow further and retain potential personnel in the organization. The Company has initiated development programs for both potential groups to strengthen their skills in performing tasks and growing along with the organization. There were 87 and 91 employees selected to undergo the training programs in 2024, representing 33% and 74% respectively of employees in the same groups.

Both of the above projects create benefits to both employees and the organization such as:
Value to the Organization: To facilitate smooth and efficient internal promotion development plan, employees can apply the knowledge they have gained as a guideline for analytical thinking to reduce costs and working time and increase sales for the Company through the Continuous Improvement Program (CIP) including reducing turnover rate of targeted employees to 0.2% out of monthly employees' turnover rate at 0.44%

Value to Employees: To develop skills, abilities and expertise necessary to align with individual career goals, job stability and economic security encouraging opportunities to develop oneself along with the Company's growth.

• Sharing Expertise across Departments by Internal Trainers - To enhance employees' knowledge and skills to perform relating to their roles and responsibilities and improve employees' level of awareness, expertise, and experiences. In 2024, there were 100 internal instructors who provide in-house knowledge sharing.
Value to the Organization: To boost cross-team collaboration which support a culture of collaboration, cost-effective training method and be able to connect training to organizational goals, culture and challenges better than outsider trainers.

Value to Employees: To enable trainers to build their skill sets from sharing knowledge and experience with colleagues and enable employees to understand insight with more tailored implementation.

• **Engineer Development Program** - To develop engineers to support the expansion, growth and needs of the Company in preparing and developing middle management including to learn new technologies in innovation and automation in response to the Hana 4.0 policy, the Company has initiated a development program for employees in the engineering group. There were 100 employees selected to join the project in 2024, accounting for 64 percent of employees in the same group.

Value to the Organization: To facilitate smooth and efficient internal promotion development plan, employees can apply the knowledge they have gained as a guideline for analytical thinking to reduce costs and working time and increase sales for the Company through the Continuous Improvement Program (CIP) including reducing turnover rate of targeted employees to 0% out of monthly employees' turnover rate at 0.44%

Value to Employees: To develop skills, abilities and expertise necessary to align with individual career goals, job stability and economic security encouraging opportunities to develop oneself along with the Company's growth and enhance knowledge and skills to become middle and higher level executives.

• **Employee Scholarship Program** – To develop professional skills and career advancement of our employees and to support Hana 4.0 strategy in line with Thailand 4.0 development plan, the Company has signed a memorandum of understanding (MOU) with the Faculty of Engineering, Rajamangala University of Technology Lanna, Chiang Mai, aiming to promote cooperation in human resources development project qualitatively and sustainably. In 2022 Hana Lamphun granted scholarships to 20 employees for Bachelor's Degree in Electronics Engineering and Automatic Control Systems. In 2023, Hana Lamphun additionally granted 30 scholarships to employees for Bachelor's Degree in Electronics Engineering and Automatic Control Systems and Software Engineering. And in 2024, 21 more scholarships were granted to employees for Bachelor's Degree in Electronics Engineering and Automatic Control Systems and Software Engineering, including 3 scholarships were awarded for Master's Degree in Electrical Engineering. Therefore, there are totally 74 scholarships granted worth of 6.7 million Baht.

Engaging Employees in Sustainability:

Employee engagement in the innovation-driven organization towards Hana 4.0 roadmap - The Company has implemented the innovation-driven organization project to support the Hana 4.0 strategy, focusing on sustainably enhancing operational efficiency through driving innovation from within the organization, especially in terms of continuous improvement and the implementation of technology to increase efficiency in work processes (Process Innovation) with the aim of promoting an organizational culture that supports systematic analytical thinking, encouraging employees at all levels to participate in improving operational performances, reducing unnecessary waste and costs, developing teamwork skills and environmental awareness, and driving environmentally and socially friendly production processes (Eco Process).

The Company has established a Continuous Improvement Program (CIP) Department as a key mechanism to drive continuous improvement activities throughout the organization, with a primary role in systematically transmitting policies from senior management to operational levels, to encourage employees to participate in proposing solutions to improve operational performance, creating innovations that can be practically applied, and continuously participating in quality development activities such as Quality Control Circle (QCC), Quality Improvement Project & Kaizen activities through the competitions on CIP Day which is held twice a year. Outstanding projects will be selected to compete in national competitions organized by the Technology Promotion Association (Thailand-Japan), such as the Thailand Quality Prize and the Thailand Kaizen Award. This will benefit the company, the environment, and the community in terms of increasing production efficiency, reducing waste, reducing resource usage, creating innovations that meet actual operational needs, promoting knowledge and learning among employees in the organization, creating organizational engagement and a culture of development that supports ESG (Environmental, Social, Governance) goals for the sustainability of society.

Regarding this organizational culture, the following projects have been created as examples:

• **Paperless Solution** - An innovation that brings the organization into digital transformation, enhance work efficiency by transition from paper-based processes to paperless both in the office and production. The responsible team consists of management, staff of each department and concerned departments played a key role in supporting and driving the paperless initiative. This made the working process more clear because all workflows are systematic including improve speed and increase

efficiency and most importantly saving costs to the Company while reducing the use of natural resources resulting in the reduction of greenhouse gases, as follows.

1. Cost reduction total saving: 1,832,965 Baht/year divided into:
• Labor cost 1,553,750 Baht
• Print & photocopy cost 252,413 Baht
• Paper cost 26,802 Baht

2. GHG emission reduction 1,932 kgCO2e
Employee Engagement Goals and Performance: The Company has consistently exceeded its employee engagement targets under the Hana 4.0 strategy from 2022 to 2024. In 2022 and 2023, the KPI for employee engagement was set at 75%, with actual performance reaching 86% and 85%, respectively. In 2024, the KPI was raised to 80%, and performance surpassed this target, achieving 90%. This demonstrates a strong and sustained commitment to employee engagement and the Hana 4.0 strategy over the past three years.

Employee Satisfaction Survey Results - The Company has analyzed the employee satisfaction survey results for further improvement plans. The improvement project from employees' feedback in the latest year was about health facilitation by providing in-house dental services. The Company furthermore reduced office working hours by half an hour per day from Monday to Thursday to create a good work-life balance for more happiness of employees and it also can increase work efficiency. The Company also has additional facility improvement projects to enhance employees' quality of working life.

Below are the employee satisfaction survey results compared with the KPIs:
• 2022:
Survey Result: 80%
KPI: 75%
Performance exceeded the KPI by 5%.

• 2023:
Survey Result: 78%
KPI: 75%
Performance exceeded the KPI by 3%.

• 2024:
Survey Result: 82%
KPI: 78%
Performance exceeded the KPI by 4%.

Overall, the company has consistently exceeded the employee satisfaction KPIs, with a notable improvement in 2024 compared to previous years. The results of the employee satisfaction survey has been summarized and communicated to employees through public relations boards, canteen bulletin boards, radio communication and the Company's intranet.

Employee Initiative Projects - Hana Lamphun arranged "Table Tennis Court and Outdoor Fitness Equipment Project" from the survey of their needs by providing table tennis tables and courts and various outdoor fitness equipment for employees including improvement of rest area and surrounding landscape to provide more green areas to reduce heating and lower stress levels to promote their quality of working lives, increase morale and make them happy by using the available space within the factory and dormitory to maximize benefit as well as bringing greater connection between employees and management in doing activities together.

Long Service Award - In 2024, a total of 583 employees across Hana group, both domestically and internationally, received the Long Service Award for their dedication. Employees were recognized for their service milestones ranging from 10 to 40 years, highlighting the commitment and loyalty of staff at various stages of their careers. The recognition reflects the Company's appreciation for long-term contributions and the value of sustained service to the organization.

Promoting Employee Health, Quality of Life and Well-being

Health and Safety Implementation - The Company has provided a safe and healthy workplace that is suitable for our employees such as quality of light, sound/noise level, air, humidity and temperature to be in accordance with the standards and requirements. The Company further supports the good health of employees both physical and mental health by furnishing Hana Sport Complex available as a gym and/or fitness related activities for employees to get greater health benefits, for example, workout, external and internal sport competitions (e.g. weight loss, singing and dancing competitions) including the stress management training program in collaboration with the Mental Health Center 1, Chiang Mai, to assess employee stress in order to promote mental well-being among employees. In addition, the Company provides flexibility of working hours and workplace (e.g. female employees are able to work at home along with taking care of kid). Pregnant employees are not allowed to work overtime or work on holidays. The Company also facilitates "Breastfeeding Corner" and breast milk refrigerator in the workplace to help breastfeeding women feel more at ease during working hours and also protect the milk from infectious diseases.

Workplace Environment Measurement - The Company regularly monitors the extent to which employees are protected from work-related hazards and risks by measuring physical, chemical and biological hazards present in the workplace that may affect employee well-being such as the noise level, temperature, light intensity, humidity, ventilation, concentration of substances to ensure employees working in a safe and healthful environment. In 2024, the result of work environment measurement is as follows.

• Light Measurement
Total Areas Checked: 1,077 areas
Results: All areas met the standards by law.

• Sound/Noise Measurement
Total Areas Checked: 97 areas
Results: There were 4 areas greater than 85 dB(A) over the standards.

• Heat Measurement
Total Areas Checked: 93 areas
Results: All areas met the standards by law.

• Chemical Measurement
Total Areas Checked: 50 areas
Results: All areas met the standards by law.

Managing Excessive Noise Level in the Workplace - There are certain areas exposed to noise level above the standard due to the running of equipment whereby has been arranged to locate in isolated areas. The Company took the control measures and preventive measures by implementing a hearing conservation program with the warning signs are posted and workers in posted noise hazard areas must wear hearing protection throughout the working hours, providing hearing test for new employees and all employees exposure to noise on an annual health check-up in order to monitor and follow up to evaluate the impact of their health including regular maintenance of equipment and machinery. The level of noise that exceeds the standard is limited to specific areas in the factory and have no impact to the community.

Epidemic Prevention Measures - To comply with the Company's epidemic prevention measures, the Company arranged hospital staff to provide employees and their families Influenza vaccination, which achieved 84% of all employees.

With regard to our care and concern for employee health, the Company contributed to plenty of health promotion and awareness activities through various accessible methods for the benefit of employees with all ages, like for instance, health promotion training, safety in workplace, recreation activities to reduce tension and stress in working and to strengthen concrete relationship among coworkers and between employees and management including with specific disease information training courses, for example, training on hypertension and high cholesterol, cancers in women, pulmonary tuberculosis, preparation for pregnancy and pregnancy care, and first-aid, CPR and AED.

Influenza-Free Community – To reduce the spread of influenza both at the workplace and in communities, the Company foresaw the need to protect the public health by providing vaccines to 80% of all employees.

Oral Health Awareness – The Company cared about the oral health of employees so jointly collaborated with Princ Lamphun Hospital by offering in-house dental scaling, teeth extraction, oral and check-up for employees. In 2024, the number of employees participated in oral check was 238 employees.

We Care Activity – To continuously support the Drive Safe campaign, the Company promoted safety awareness among employees and their families by offering low-cost helmets to provide protection from severe injuries for the 11th consecutive year.

Employee and Family Support – The Company together with employees at all levels collaboratively raised fund and stuff to assist co-workers faced with accidents and serious illnesses, e.g., Leukemia and kidney disease including with those confronting with natural disasters.

Child Scholarship Program for Low-Income and Disabled Employees - Hana has supported scholarships to children of low-income and disabled employees. In 2024, the Company has granted 812 scholarships amount to Baht 1.357 million.

Ad Hoc Team for Flood Relief and Recovery – Regarding severe flood in northern Thailand in late 2024, the Company had set up a project to assist flood-affected employees in Chiang Mai and Lamphun and had also continued to assist employees after the flood.

Provide Training to Promote Employee's Safety and Health - In 2024, the Company provided occupational health, safety and environment training for newly hired and existing employees, including our partners and subcontractors to ensure full awareness of safety, occupational hazards and environment at work and relevant safety laws in order to encourage and promote safety in the workplace as follows:

- **Safety, Occupational Health and Environment Training for Newly Hired Employees** – The Company aims to equip newly hired employees with the essential knowledge and skills to ensure their competence in safety, health, and environmental aspects of their work. In 2024, a total of 242 newly hired employees attended the training. Their understanding of health, occupational health, and environmental topics was assessed through a questionnaire distributed before and after the session.
- **Prevention of Musculoskeletal Disorders in the Workplace** - The ergonomic training was provided to 96 employees that help lessen muscle fatigue, increase productivity and reduce the number and severity of work-related musculoskeletal disorders such as office syndrome.
- **Safety in Using Chemicals and How to Use Personal Protective Equipment** - The Company provided training to 1,113 employees to provide them with knowledge and understanding about chemicals and hazardous materials, to store, transport, move chemicals and hazardous materials, and to select and use personal protective equipment to perform their work appropriately and safely.
- **Publishing Information to Promote Well-Being** - The Company provided health and nutrition information/news on the bulletin boards to promote health care and good nutrition.

Workplace Accidents or Injuries: The accident statistics report is displayed on the bulletin board, detailing the targets and accident data, and is updated daily. Although there were no accidents in 2024, the Company continues to review safety risk management, improve accident prevention processes, and enhance monitoring mechanisms to prevent future accidents. The Safety Management Program, led by the safety officer, is in place to assess and mitigate work-related accident risks. This program involves reviewing and investigating incidents to implement corrective actions and prevent accidents, ensuring that safety targets are met.

Workplace Accidents or Injuries (Case)

2024

Total number of injury (case): KPI – 0 vs Case - 0
Total number of lost-time injury (case): KPI – 0 vs Case - 0
Lost Time Injury Frequency Rate of Employee (LTIFR) per 1,000,000 hours worked: KPI – 0 vs Case - 0

2023

Total number of injury (case): KPI – 0 vs Case - 1
Total number of lost-time injury (case): KPI – 0 vs Case - 0
Lost Time Injury Frequency Rate of Employee (LTIFR) per 1,000,000 hours worked: KPI – 0 vs Case - 0

2022

Total number of injury (case): KPI – 0 vs Case - 2

Total number of lost-time injury (case): KPI – 0 vs Case - 2

Lost Time Injury Frequency Rate of Employee (LTIFR) per 1,000,000 hours worked: KPI – 0 vs Case – 0.19639

Summary of Employees and Labor Performances and Achievements in 2024

• Hana Ayutthaya received a prize of "The excellent organization that support persons with disabilities" given by Mr. Varawut Silpa-archa, Minister of Social Development and Human Security, as being recognized by the Ministry of Social Development and Human Security as a business organization that supports people with disabilities for 12th consecutive years including being selected as 1 of 3 excellent organizations to be granted the highest prestigious award of empowerment for persons with disabilities at an honorary level from the Ministry of Social Development and Human Security. This esteemed award was given to organizations having outstanding performance in giving excellent support to persons with disabilities for the five years in a row which is greater than required by laws with resulting in empirical outcome in potential and quality of life development of persons with disabilities. This represents our commitment to promote and create opportunities for hiring people with disabilities and improving their well-being. In addition, Hana Ayutthaya received the certificate for "Outstanding Organization that Support People with Disabilities" from the Senate Standing Committee on Social Development and Children, Youth, Women, the Elderly, the Disabled and the Underprivileged Affairs to have continuously supported careers of people with disabilities for over 10 years.

• Hana Lamphun received the gold and diamond awards for "Excellent Safety, Occupational Health and Environment in the Workplace" at a country level, given by the Ministry of Labour for the seventh consecutive years which demonstrates the systematic management of Safety, Occupational Health and Environment in the workplace to international standard level.

• Hana Lamphun received the award for achievement of "Outstanding Establishment in Labour Relations and Labour Welfare" from the Ministry of Labour for the fourth consecutive years.

• Hana Lamphun received the certificate for the "National Award for Safe, No Disease, and Happy Workplace" from the Department of Disease Control, the Ministry of Public Health, for the seventh consecutive year.

• Hana Lamphun received the "Good Labor Practices" certificate given by the Lamphun Office of Labour Protection and Welfare, Ministry of Labour for the third consecutive year presenting the importance and cooperation between an employer and employees in compliance with laws as part of social responsibility for labor resulting in improving the quality of life of employees, increase productivity and promote collaboration in the workplace.

• Hana Lamphun received the certificate for "Outstanding Mental Health Promotion in Employee Mental Health Care in the Workplace" from the Department of Mental Health, the Ministry of Public Health, for the collaboration between the Department of Mental Health and the Company to promote mental health assessment access to employees, stress level measurements and comprehensive mental health consultation services, where the Company can use the obtained data for in-depth analysis and design of activities that help reduce stress as well as promoting appropriate mental health for employees, reflecting the Company's commitment to continuously taking care of employees' mental health, which is part of the sustainable development of the organization and society.

Diagram of performance and outcomes for employee and labor management



Employee and labor management: Employment

Hiring employees

	2022	2023	2024
Total employees (persons)	3,324	3,113	3,014
Male employees (persons)	991	960	956
Female employees (persons)	2,333	2,153	2,058

Employment of workers with disabilities

	2022	2023	2024
Total employment of workers with disabilities (persons)	37	41	40
Total number of employees with disabilities (persons)	33	37	37
Total male employees with disabilities (persons)	19	21	20
Total female employees with disabilities (persons)	14	16	17
Total number of workers who are not employees with disabilities (persons)	4	4	3
Contributions to empowerment for persons with disabilities fund	Yes	Yes	Yes

Employee and labor management: Remuneration

Employee remuneration

	2022	2023	2024
Total employee remuneration (baht)	1,262,699,967.00	1,128,571,933.22	1,163,668,865.46
Total male employee remuneration (Baht)	452,316,846.00	460,126,420.79	494,695,672.87
Total female employee remuneration (Baht)	810,383,121.00	668,445,512.43	668,973,192.59

Employee and labor management: Employee training and development

Employee training and development

	2022	2023	2024
Average employee training hours (hours / person / year)	46.00	58.00	59.00
Training and development expenses for employees (baht)	314,028.20	511,537.68	123,061.00

Employee and labor management: Safety, occupational health, and environment at work

Safety, occupational health, and environment at work

	2022	2023	2024
Total number of lost time injury incidents by employees (cases)	2	0	0

Employee and labor management: Employee engagement and internal employee groups

Employee engagement

	2022	2023	2024
Total number of employee turnover leaving the company voluntarily (persons)	453	401	268
Total number of male employee turnover leaving the company voluntarily (persons)	83	91	62
Total number of female employee turnover leaving the company voluntarily (persons)	370	310	206
Proportion of voluntary resignations (%)	13.63	12.88	8.89

	2022	2023	2024
Evaluation result of employee engagement	Yes	Yes	Yes

Employee internal groups

Employee internal groups : Yes

Types of employee internal groups : Welfare committee, Labor relations committee, Employee

committee, Labor union

Information about customers

Customer management plan

Company's customer management plan	:	Yes
Customer management plan implemented by the company over the past year	:	Responsible production and services for customers, Communication of product and service impacts to customers/consumers, Development of customer satisfaction and customer relationship, Consumer data privacy and protection

Hana places the highest value on our customers, with the long-term relationships we have built serving as a testament to this commitment. The Company aims to meet or exceed our customer expectations for product quality, delivery, reliability, and competitive prices. The Company and its subsidiaries continue to support supply chain management solutions particularly for customers, coordinating business activities and processes to minimize their total costs while maximizing their effectiveness in the marketplace.

Policy on Product and Service Development for Consumer Health and Safety

Hana is dedicated to ensuring the safety and health of customers and consumers through high-quality material sourcing and assembly processes. As an Electronics Manufacturing Services (EMS) and Outsourced Semiconductor Assembly and Test (OSAT), Hana works closely with its customers to ensure that all products meet relevant safety, quality, and regulatory standards throughout production, prioritizing the safety and well-being of end consumers.

1. Material Sourcing: Hana ensures that all materials sourced for assembly meet the required safety and quality standards. We work closely with our suppliers to ensure that all components comply with customer specifications and relevant regulations, including:

• RoHS (Restriction of Hazardous Substances): Limits the use of specific hazardous materials in electrical and electronic products, aiming to reduce environmental and health risks.

• REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals): Regulates the safe use of chemicals within the European Union, particularly those that could harm human health or the environment.

• Persistent Organic Pollutants (POPs): Refers to substances that are hazardous to human health and the environment due to their long-lasting effects. This regulation aims to eliminate or restrict their use.

• PBT (Persistent, Bioaccumulative, and Toxic) under TSCA section 6(h): Addresses chemicals that are persistent, bioaccumulative, and toxic, regulating their use to protect human health and the environment.

• California Proposition 65: Requires businesses to warn consumers if their products expose them to chemicals known to cause cancer or reproductive harm.

• PFAS (Per- and Polyfluoroalkyl Substances): A group of chemicals that are persistent in the environment and human body, potentially posing health risks. Regulations focus on reducing exposure to these chemicals.

• Conflict-free Minerals: The use of minerals that are sourced in a way that does not armed conflict or human rights abuses, particularly in regions like the Democratic Republic of the Congo (DRC) and surrounding areas in order to meet the requirements of the Responsible Business Alliance (RBA) to uphold human rights across our supply chain.

These compliances ensure that the products we assemble are safe for end consumers and comply with health, safety, and environmental protection standards.

2. Assembly Process: Although Hana does not design products, we ensure that all products are assembled according to customer specifications, which include health, safety, and environmental standards for the end consumer. We follow stringent assembly procedures and industry standards to ensure that the final product meets all relevant safety and health regulations. In addition to our core commitment to product safety, Hana is certified with the following ISO standards, which reinforce our dedication to maintaining high-quality and safe assembly processes:

• ISO 9001: General Quality Management System focusing on customer satisfaction, process efficiency, and continual improvement
• ISO 13485: Medical Devices Quality Management System focusing on safety, regulatory compliance, and risk management related to medical devices
• IATF 16949: Automotive Quality Management System focusing on defect prevention, waste reduction, and continuous improvement in the automotive supply chain
• ISO 14001: Environment Management System focusing on pollution prevention, waste reduction, energy efficiency, and compliance with regulations
• ISO 45001: Occupational Health and Safety Management System focusing on risk identification, hazard control, employee well-being, and legal compliance
• ISO/IEC 27001: Information Security Management System focusing on data security, risk management, access control, and compliance with regulations

3. Quality Control: Hana implements quality control measures at every stage of the assembly process, starting from the inspection of incoming materials, through final assembly, testing, and delivery to customers. This process includes detailed inspections, performance testing, and reliability monitoring to ensure that each product meets the required safety and quality standards, as well as specific customer requirements.

4. Operations and Initiatives:
Process Improvements for Safe Product Assembly: Hana continuously enhances its assembly processes by integrating Industry 4.0 technologies, lean manufacturing principles, and other improvement methodologies such as Poka Yoke, Quality Control Circles (QCC), Equipment Management Systems (EMS), Smart Manufacturing Platforms, and Kaizen. These principles help enhance productivity, reduce human errors, optimize efficiency, and ensure continuous improvement, while maintaining high standards of safety, quality, and performance.

New Product Assembly: While Hana does not design products, the Company supports the assembly of new products that may have specific safety or health considerations. This could include working with customers in the medical device, automotive, or consumer electronics industries, where safety is paramount.

5. Cybersecurity Measures: Hana takes steps to ensure data protection and cybersecurity, especially when handling sensitive customer or product data. This is particularly important for preventing any unauthorized access and cyberattacks to product designs or tampering with assembly instructions that could compromise confidentiality, integrity or product safety.

Responsibility for Communicating Product and Service Information to Customers
Hana adopts a clear and transparent approach in communicating product and service information to customers. As a contract manufacturer, the Company assembles products based on customer specifications, ensuring that all relevant details, including product labels and shipment information, are provided in accordance with customer requirements.

Our Customer Service Department plays a key role in addressing customer complaints, resolving issues, and collecting valuable feedback. We work with our customers to provide problem solving solutions regarding customer complaints, listen to their recommendations, meeting their needs, and honoring our commitments. Customer partnership is a foundation of success that also requires commitment to nurture new relationships and build and foster long-term relationships by creating synergies of knowledge, security, sustainability, and adaptability for both parties.

In the case of quality complaints or product returns, Hana follows a structured process to address the issue. Our team promptly investigates the matter, identifies the underlying cause, and implements immediate corrective actions. A comprehensive review of the production process and related procedures is carried out to ensure that necessary improvements are made. Additionally, we have strengthened our inspection protocols to ensure the highest level of product quality before delivery. Customers are informed about the corrective actions taken and the rationale behind these measures.

Our dedicated customer service department ensures that we address all concerns promptly, resolve issues effectively, and maintain the highest standards of product quality and service to guarantee customer satisfaction.

Product and Customer Responsibility

Quality Assurance – Hana is accredited with ISO standards as our commitment to adhere to the industry best practice in aspects of quality management, environmental management, information security management, process improvement, regulation compliance, and continuous monitoring to maintain a high level of quality of the products and our manufacturing operations. Below is our key ISO certification.

• ISO 9001 is a quality management system where the Company can demonstrate procedures to consistently provide products that meets customer, applicable statutory and regulatory requirements.
• IATF 16949 is a quality management system for automotive industry which focuses on the technical production of high quality automotive parts, defect prevention, waste reduction, and continuous improvement.
• ISO 13485 is a quality management system used in the medical device industry which mostly focuses on the products' quality and safety for the consumers and related personnel.
• ISO 14001 is the environmental management system (EMS) as part of the management system used to manage environmental aspects, make businesses strive beyond environmental compliance by focusing on pollution prevention, waste reduction, energy efficiency and environmental preservation.
• ISO 45001 is an occupational health and safety management system emphasizing the importance of preventing accidents and occupational diseases to reduce the risk in the workplace, hazard control and create safe working environment for employees and those who are involved.
• ISO/IEC 27001 is an international standard to manage information security and access control emphasizing requirements for establishing, implementing, maintaining, and continually improving information security management systems.

Responsible Sourcing – The Company's product is manufactured to meet all applicable standards and the customers' specification and requirements. Hana established the responsible sourcing of raw materials policy to ensure procurement of material not containing Conflict Minerals (Tin, Tantalum, Tungsten, Gold, Cobalt, Mica and other relevant minerals) contributing to abuses of human rights in Democratic Republic of Congo and adjoining countries and being consistently followed the guidelines of relevant regulations. Hana also requires our suppliers not to supply aforesaid minerals acquired from these conflict areas by collaboration with the customers and suppliers to identify their sources of origin in compliance with the requirements throughout the supply chain as well as communicating our Conflict Minerals Policy on the principle of the Responsible Minerals Initiative (RMI)/Conflict Minerals.

Quality Improvement and Innovation Development - Hana is committed to sustainable growth in recognizing the importance of the "quality" of our products supplied and services rendered as to meet customer expectations and satisfactions as well as end-consumer product safety by ensuring the quality put in place throughout the value chain starting from raw material procurement, production process until delivery and after-sales service. By integrating people development and continuous improvement, the Company continues its efforts towards Continuous Improvement Program (CIP) as a fundamental framework to achieve improvements of processes and product quality. Quality Control Circle (QCC) by small group activity is a systematic and step-by-step process for solving problems whereby create an effective incentive program for employees. Poka-Yoke measurement system is also implemented and developed both in mechanics and software to eliminate all human dependent factors and to get high quality and reliability. In addition, the Kaizen principle has been implemented to continuously develop and improve to their own work processes efficiency. This is a clear policy and concrete support from the management that results in the success of Hana. Our quality improvement programs have been continuously developed and recognized by both internal and external organizations. Hana also places importance on corporate innovation development to increase competitiveness in business including with expansion of creativity and innovation towards sustainable growth.

Customer Relationship Management - Customer satisfaction surveys are conducted annually to improve the Company's products, services and other business processes in order to meet or exceed the customers' needs and requirements enabling the Company to maintain and expand its customer base in the long term. Our guiding principle to our customers is to operate our business in compliance with applicable laws, rules and regulations as well as compliance with Responsible Business Alliance (RBA) which is the code of conduct for electronic industry best practices.

Setting customer management goals

Customer satisfaction: Target 85%

Does the company set customer management goals : No

Performance and outcomes of customer management

Performance and outcomes of customer management : Yes

Achievement of Quality Control and Innovation Development Project Implementation

Customer Recognition:

Regarding our responsibility to our products and customers, we are committed to develop, improve and be ultimately responsible for the highest standard of product quality and safety to enhance customer satisfaction and trust as to robustly grow further as a reliable partner along with our customers' journey. Hana never stops innovating to improve production processes to serve the customers beyond their expectation, enhancing the utmost satisfaction.

In 2024 Hana Lamphun is very proud to present that we have successfully achieved **the Reliable Quality Spotlight Award and Delivery Spotlight Award** from our world's well known customer of "LEDs and Lighting Solutions". These esteemed recognitions were given to Hana Lamphun as the successful partner for our exceptional contributions to continuous process improvement in enhancing product quality and delivery performance in fostering agility and responsiveness to customer requests, efficiently resolving issues, and adapting to changing market conditions. These achievements underscore Hana's unwavering commitment to customer satisfaction and the awards received are a testament to our reliability and professional partnership, which significantly strengthen our customer's supply chain.

National Recognition:

In order to promote quality awareness mindset to all employees, the recognition aims to honor those with quality awareness that emphasizes quality at all stages of their works to produce products to meet the standards and customer requirements. The Company promotes innovation projects in the organization and award those as the organizational innovation and invention promotion are valued to encourage our employees to initiate new body of knowledge, products and work procedures as well as serve the customer needs as the customers will gain from our development of our products and services at every step of our production until delivery for maximum customer satisfaction and benefits. It can also result in changing customer's perception of Hana from a manufacturing service provider to be a reliable partner having product design capabilities.

- **Innovative Management and Smart Manufacturing at Hana Ayutthaya** - Regarding our culture of innovation, Hana Ayutthaya has developed a management system featuring patented innovations, including alternative designs of proximity sensors that utilize a light-blocking compound, along with several sensor packages created by our Hana Technology. The implementation of digital technology has resulted in a Smart Manufacturing System that incorporates automated systems to enhance productivity, quality, energy efficiency, cost-effectiveness, and resource consumption reduction.

As part of our ongoing innovation efforts, Hana Ayutthaya was proudly recognized as one of only six outstanding companies in Thailand to receive "the Prime Minister's Industry Award 2024 for Outstanding Achievement in Manufacturing and Services of the Future". This prestigious award was granted for the invention of an IoT sensor—a proximity sensor utilizing an IR block molding compound, which is a prime example of how the Company's innovation drives ESG benefits as follows:

Environmental:

- **Resource Efficiency:** The new proximity sensor design leads to a reduction in material usage, contributing to a more sustainable production process.
- **Energy Efficiency:** The Smart Manufacturing System optimizes energy consumption, enhancing the overall energy efficiency of operations.
- **Waste Reduction:** The smaller sensor design reduces raw material consumption, resulting in less waste.

Social:

• **Employee Development:** This innovation opens opportunities for skill growth, fostering creativity, and continuous learning among employees.

• **Improved Working Environment:** The drive for technological advancements creates a dynamic, innovation-driven workplace culture, enhancing employee engagement and job satisfaction.

• **Nationwide Positive Social Impact:** Hana Ayutthaya is positively contributing to the wider community by developing impactful innovations, enhancing competitiveness, and driving the sustainable growth of society and the country's economy.

Governance:

• **Industry and Nation Recognition:** The Prime Minister's Industry Award reflects Hana Ayutthaya's leadership in innovation and its contribution to the advancement of Thailand's manufacturing industry under the "Thailand 4.0" model.

• **Long-Term Strategic Vision:** The Company's ongoing focus on innovation and sustainability aligns with its long-term governance strategy to ensure both economic and environmental resilience.

• **Cost Reduction and Efficiency:** While sales revenue in 2024 faced challenges, the sensor innovation project resulted in a 40% cost reduction, enhancing Hana's operational efficiency and effectively managing costs during a period of softened industry demand, thereby positioning the Company for long-term growth.

This esteemed award acknowledges organizations that enhance the industry through significant innovations in products and processes. Hana Ayutthaya's dedication to Industry 4.0 principles. This recognition underscores Hana's position as a trusted and reliable partner, contributing to the sustainable growth of Thailand's economy and society, while remaining committed to fostering innovation, creativity, and sustainability across all

• **Employee Engagement and Achievements in Quality Improvement at Hana Lamphun** - Our employees participated in group activities for Thailand Quality Prize and Thailand Kaizen Award organized by Technology Promotion Association (Thailand-Japan) whereby Hana Microelectronics Public Co., Ltd. have been received 114 awards since 2009 to 2024 with long journey of striving for organization of excellence, efficiency, sustainable growth and quality administration.

In 2024, the Company received totally 13 prizes consisting of QCC Consistency Award, 3 golden and 2 silver awards of Thailand Quality Prize Award (QCC) and 1 diamond, 2 golden and 3 silver awards for Thailand Kaizen Award (Kaizen) and 1 golden award of Kano Quality Award (KANO). Those are the performance of small groups of staffs working together to contribute to the improvement of production processes aiming for waste reduction or zero defect enabling the cost reduction to the Company more than Baht 105 million per year. The group activity program leads to employees' involvement and participation at all levels working toward common goals for continuous quality improvement as an approach to identify, investigate, analyze and solve their work-related problems so enhance productivity and quality while achieving customer satisfaction. CIP program is also a tool to increase the morale of employees, promote human relations, reduce accidents at work, improve two-way communication with the management and encourage both employees and management at all levels to focus on continuous improvement of our manufacturing processes.

Customer Relationship Management - Customer satisfaction surveys are conducted annually. Customer satisfaction survey vs. KPI of 2024 compared with previous years was as follows:

• 2022:
KPI: 80%
Actual Performance: 85%

• 2023:
KPI: 80%
Actual Performance: 89%

• 2024:
KPI: 85%
Actual Performance: 91%

The results of the customer satisfaction survey are evaluated so we can provide further improvement on the key items our customers find important. The continuous improvement metrics we use to increase our customer satisfaction are as follows.

Quality Excellence & Capability Upgrades through Hana 4.0 Strategy

• Advanced Assembly & Test Lines: Adopting Hana 4.0 streamlines both front- and back-end processes, reducing waste and boosting efficiency through in-house automation and cost-effective strategies

• AI-Based Inspection Systems: Implementing AI-driven Automated Optical Inspection (AOI) enables early defect detection at all stages—ensuring higher quality in incoming quality assurance, production, and final inspection

• Data Analytics for Continuous Improvement: Leveraging Big Data analytics helps identify trends to improve quality, optimize efficiency, and reduce costs, driving continuous operational improvements

• Ongoing CAPEX Investments: Regular technology upgrades to ensure enhanced performance, scalability, and flexibility to stay competitive and efficient

• CIP in DNA: Embedding Continuous Improvement Practices (CIP) across all functions, ensuring a culture of ongoing enhancement, boosting collaboration and operational agility

Supply Chain Strengthening & Service Excellence

• Local Supply Chain Strengthening: Strengthen local supply chains by developing local supplier networks and adopting a dual sourcing strategy for critical components to reduce reliance on overseas suppliers and capitalize on China-plus-one opportunities

• Inventory Optimization: Use Warehouse Management Systems to optimize space, inventory tracking, and reduce stock-outs/over-stocks

• Leverage Economies of Scale: Aggregate demand across product lines and implement a centralized purchasing system to streamline procurement and improve operational efficiency

• Structured short-, medium-, and long-term plan: to navigate challenges and opportunities related to Geopolitical Tensions, Regional Competition, and Supply Chain Integration effectively

• Customer Communication & Service: Provide Transparent Updates, Faster Responses, and Dedicated Account Management

Sustainability & Compliance Initiatives

• RoHS & REACH Compliance: Conduct strict supplier audits to ensure materials comply with RoHS and REACH regulations

• Waste Reduction: Striving for zero-waste strategies by optimizing material use, recycling packaging materials, and implementing closed-loop systems wherever possible

• Energy Efficiency: Expand investment in solar panels, renewable energy, and energy-efficient lighting and machinery to reduce emissions

• Carbon Footprint Reduction: Collaborate with customers to understand their sustainability goals and provide comprehensive carbon footprint reports, highlighting the environmental impact of manufacturing processes and ensuring compliance with ISO 14001 or other relevant environmental standards

• Foster Employee Well-being, Community Engagement & Workforce Development: Invest in employee health and work-life balance, support local community initiatives, and offer scholarships and training opportunities to engineering students, ensuring a skilled, engaged workforce while strengthening company-community ties

Diagram of performance and outcomes of customer management



Customer management: Customer satisfaction

Customer satisfaction

	2022	2023	2024
Evaluation results of customer satisfaction	Yes	Yes	Yes

Information on community and society

Community and social management plan

Company's community and social management plan : Yes

Community and social management plan implemented by the company over the past year : Employment and professional skill development, Education

Social and Community Development

The Company engages employees at all levels to participate in the community and social activities and promote the volunteer spirits to realize the importance of caring for the environment both internal and external and to improve better quality of lives with social contribution.

Our sustainable development strategies continue to focus on self-reliance as one of approaches of effective social and community development by increasing academic ability through education, developing careers, improving the quality of life of those in need in society, and protecting natural resources and environment.

Setting community and social management goals

• Support quality education, career advancement, and better quality of life for both internal and external stakeholders including persons with disabilities and underprivileged: Target 10,000 people per year

Does the company set community and social management goals : No

Performance and outcomes of community and social management

Performance and outcomes of community and social management : Yes

In 2024, the Company encourages employees to participate in activities to support community and social development participation. The Company has set goals to support society and community development by promoting quality education, career advancement, and an improved quality of life for both internal and external stakeholders, including individuals with disabilities and those from underprivileged backgrounds. The target and execution results are as follows:

- **Target**: 10,000 people
- **Actual Performance:** 35,055 people

The Company has conducted various projects and activities for social and community development in the following areas:

Promotion of Knowledge and Education:

External Knowledge Sharing - The Company continued to empower employees to transfer knowledge to the community. The quality management system and organizational management under the Hana 4.0 strategy has been provided to the teachers and students of Rajamangala University of Technology Lanna. In addition, knowledge sharing regarding customs standards related to supply chain security among Thai, Lao and Chinese customs authorities was also arranged for up-to-date information and mutual understanding to contribute to innovation and enhance working efficiency.

Internship Program - Hana recognizes the importance of education and career exploration for college and undergraduate students. Our internship program gives students the opportunity to apply knowledge from their fields of study and gain real work experience in preparation for future work. In 2024, Hana Lamphun and Hana Ayutthaya granted a total of 52 internships from undergraduate and college students.

Internship Add Value - In 2024, the interns and Hana Lamphun technical team jointly initiated 3 projects as follows:

- **Traceability System & Integrated with Shopfloor Project** - This project is a computer program and creation of new database to record and integrate test data of products in the inspection process of the attenuator product which can reduce the working time of operators approximately by 8,000 hours per year or equivalent to 600,000 Baht.
- **Test Data Compiler** - It is a program for data comparison by converting data into digital form to detect abnormalities of products more easily.
- **Auto Export Data** - It is a program to export data from a manual system to an automatic system which can reduce the working time of operators approximately by 450 hours per year or equivalent to 33,750 Baht.

Career Advancement:

The Company promotes social engagement and development with the strategy aiming the communities to be self-reliant in a sustainable manner as follows.

Support Project "Careers for Persons with Disabilities under Act Section 35" - The Company made the donation and necessary items to persons with disabilities including their families in Lamphun to develop their careers and sustainable income totally 3 projects: the construction of a barber shop and the support for 2 service contract projects. Those 3 individuals were granted and expected to raise their income by Baht 455,160.

Smart Farm for Sustainable Community - The Company had organized the smart farm for sustainable community for Wat Nong Lom School and nearby communities in Lamphun by building greenhouses for vegetable plots, installing automated water system, water tank and pump to create a learning center within the school. The Company had organized training on the automated water system and automation in agriculture to practice vocational skills, enabling 140 people benefit to this project with expect to generate extra income for students and communities by Baht 28,800.

Smart Vegetable Farm and Thai Dessert Cooking for Sustainable Community - The Company jointly with Wat Sankayom Shool and Makhua Chae Community in Lamphun to build a smart vegetable greenhouse for the school and community, provide knowledge sharing on solar energy system innovation and automation to increase the efficiency of farming for the community and organize training to provide knowledge in making Thai desserts as a source of vocational skills, including creating additional careers and income for the community.This project can support school lunches, promote food sustainability including energy sustainability by using renewal energy from solar, enabling 635 people benefit to this project with expect to generate extra income for students and communities by Baht 28,800.

Promoting Quality of Life and Well-Being Community:

• **Financial Support for Hospitals** - The Company provided financial support for the purchase of medical equipment and medical development to Lamphun Hospital and Sansai Hospital, Chiang Mai for treating and helping people with illness.

• **Financial Support for Red Cross** – Hana Cambodia provided financial support, food and first aid supplies to Koh Kong Red Cross office in Cambodia for disaster relief and to promote the livelihoods of impoverished communities.

• **Blood Donation** – Hana employees joined with the Thai Red Cross in donating blood, organs and body for the public benefit. In 2024, there were 1,017 employees and the blood donated was totally 345,950 milliliters.

• **Community Volunteers** - The Company organized volunteer activities with employees to repair gates, fences and playground for remote communities in Chiang Dao District, to replace light bulbs with LEDs for Wat Chan Hospital and to distribute suppliers and food to children living in Kalayaniwattana District in Chiang Mai, and to promote prevention of diabetes, tuberculosis and coronary artery diseases to school students through information activity and notice boards at Wat Nong Lom School, Muang District in Lamphun.

• **Financial Support for Orphan Center** – Hana Cambodia and employees provided financial support, school supplies and scholarships to Koh Kong Orphan Center in Cambodia to improve their quality of life in terms of education and nutrition.

• **Financial Support for Local Communities -** Hana Cambodia together with employees provided financial support to the local communities i.e., purchasing school supplies, books and wooden pallets to build a classroom to the needed primary school, making merit to the local temples, to promote relationships and create a sense of community.

Promoting Environmental Conservation:

• **Renewable Energy Project:** Solar Panel Installation at Local Temple – Hana Ayutthaya recently organized a volunteer activity with our employees to install solar panels and renovate Ban Pas Temple in Bang Pa-in District of Ayutthaya. The newly installed solar panels are capable of producing an average of 7,462 kWh of energy annually, resulting in an estimated savings of 29,849 baht per year on the temple's electricity costs.

By switching to solar power, the temple will not only benefit from reduced energy expenses but also contribute to environmental sustainability by lowering its carbon footprint. The solar panels provide a long-term, eco-friendly energy solution, ensuring the temple's energy needs are met while supporting the broader community's efforts to promote renewable energy.

• **SET Environmental Conservation Project** - The Company seeks to contribute to improve the quality of life and reduce inequities for the underprivileged in society. Mr. Terrence Philip Weir, an executive director, made the cash donation and 886 old desk calendars which were donated by employees from Hana HQ, Lamphun and Ayutthaya, to the Education Technology for the Blind Center, Foundation for the Blind in Thailand under the Royal Patronage of Her Majesty the Queen. For those old desk calendars, the Foundation will use them to produce Braille word cards as well as educational materials for students of the Bangkok Blind School. This project is one of the projects that help reduce waste in the organization with the principles of 3Rs - Reduce, Reuse, Recycle, in line with the Stock Exchange of Thailand environmental project.

• **SAY NO TO FOAM & NO PLASTIC PROGRAM** - The Company joined the government sector in signing a Memorandum of Understanding Ceremony for reducing or banning foam food. The Company has further enhanced the project "HANA NO PLASTIC PROGRAM" along with awareness raising and communication campaign including training provided to all employees to reduce plastic consumption such as plastic cups, plastic bags and switch to use reusable cups/bags/bottles to promote a healthy and safe environment.

• **General Waste Management Project** - The Company promotes the waste and energy reduction to increase green spaces and reduce greenhouse gas emissions by raising awareness to employees to realize the environment is not far away and is a matter for everyone. All must take care of the globe for sustainability. Throughout 2024, we have enhanced the process of bringing waste to recycle disposal and other non-recyclable materials turn into fuel.

• **Sustainable Waste Disposal Improvement** – The Company encourages employees to participate in sustainable waste management. Certain packaging waste was non-reusable from the production process. Before improvement taking place, a method of landfill waste

disposal in Saraburi incurred negative factors i.e., transportation costs, landfill disposal costs, labor costs, and pollution. A group of employees has then analyzed to find ways for improvement by design and selection of waste compactor machine that can compress large quantities of waste enabling environmentally friendly disposal. As a result, the Company can save costs by 52% compared to prior method and can create value for waste to be reused as fuel and cement components so reduce emissions from landfills and reduce the impact on the community. The project initiative by our staffs is part of our goal towards zero landfill waste.

• **Firebreak Activity** - Hana Lamphun together with the Office of the Northen Industrial Estate Lamphun and the Department of Probation, conducted volunteer activities for society, community, and environment by jointly creating firebreaks at Mae Tip Reservoir, Makhuea Chae Subdistrict, Lamphun

• **Build a Natural Dam** - Hana Lamphun in collaboration with the Office of the Northen Industrial Estate Lamphun and Makhua Chae Municipality joined the activity to build a natural dam according to the Royal Initiative Project at Mae Tip Reservoir, Makhua Chae Subdistrict, Lamphun.

• **Clean-up Canal Activity** - Hana Lamphun provided drinking water to officials dredging Kuang Canal in collaboration with the Office of the Northen Industrial Estate Lamphun to alleviate flood in surrounding communities.

Community and Social Management and SDGs Alignment:
Hana's community and social management is in line with the United Nations Sustainable Development Goals (SDGs) as follows:
• Goal 1: No Poverty by supporting poverty alleviation for its communities through career development initiatives, which provide sustainable income opportunities.
• Goal 2: Zero Hunger by initiating projects like the Smart Farm for Sustainable Community, which helps local communities produce food sustainably, as well as providing food relief during disasters.
• Goal 3: Good Health and Well-being by promoting community health and well-being through education, financial support, and health promotion activities to improve the well-being of local communities.
• Goal 4: Quality Education by offering internships, knowledge-sharing programs, and vocational training programs and CSR activities to upgrade the quality of life of communities and provide scholarships to people with disadvantages in communities.
• Goal 5: Gender Equality by fostering gender equality through its non-discrimination policies in the workplace and within the communities it serves.
• Goal 6: Clean Water and Sanitation by improving water sanitation and sanitation services, including supporting wastewater treatment projects for local communities.
• Goal 7: Affordable and Clean Energy by promoting renewable energy usage to raise awareness among communities to use clean energy to become sustainable communities.
• Goal 8: Decent Work and Economic Growth by promoting fair and equal employment, career development programs, and projects for people with disabilities to foster economic growth.
• Goal 9: Industry, Innovation and Infrastructure by upgrading infrastructure and improving industry efficiency to make the production process more environmentally friendly.
• Goal 10: Reduced Inequalities by promoting equal opportunities in education, employment, and career advancement through its support for disadvantaged communities and initiatives to improve living conditions.
• Goal 11: Sustainable Cities and Communities by investing in local community development projects like smart farms and vocational training, helps reduce urban concentration and spread prosperity to rural areas.
• Goal 12: Responsible Consumption and Production by promoting sustainable consumption and less waste to reduce food waste, increasing resource efficiency and promoting recycling to enable operations environmentally responsible and resource efficiency.
• Goal 13: Climate Action by participating in climate action through renewable energy projects like solar panel installations, reducing its carbon footprint and contributing to environmental sustainability, as well as, supporting initiatives to mitigate the impact of climate change on local communities.
• Goal 15: Life on Land by helping conserve ecosystems and prevent land degradation through environmental projects like firebreak creation, building natural dams, and supporting biodiversity conservation.
• Goal 16: Peace, Justice and Strong Institutions by supporting programs that prevent violence and promote ethical practices and ensuring that their operations are aligned with human rights principles.
• Goal 17: Partnerships for the Goals by participating and collaborating with various organizations, including educational institutions and local governments, to advance sustainable development.

Summary Awards of ESG Performances and Achievements in 2024

• **2024 Corporate Governance Report Rating (CGR)** – Hana achieved "excellent" in Corporate Governance Rating (CGR) or 5-star corporate governance assessment in 2024 honored by the Thai Institute of Directors Association (IOD) for the 11th consecutive year, reaffirming Hana's continuous development of good corporate governance to steer the organization towards sustainable growth and enhance investor confidence.

• **2024 SET ESG Ratings** – Hana has ranked by the SET ESG Ratings of "AA" for the year 2024 from the Stock Exchange of Thailand (SET). The result underscores Hana's sustainable business operation on the basis of good corporate governance principles with social and environmental responsibility.

• **2024 ESG100 Certificate** – Hana received an outstanding sustainability performance on Environmental, Social and Governance (ESG) recognized by Thaipat Institute as one amongst selected TOP 100 listed companied assessed for the year 2024 which reflects our commitment and success in integrating ESG with our business strategy toward sustainability.

• **2024 AGM Checklist Rating** - Hana achieved a perfect 100 score for the fourth year in a row from the Annual General Meeting Assessment (AGM Checklist) in 2024, assessed by the Thai Investors Association and the Federation of Thai Capital Market Organizations.

• **2024 Sustainability Disclosure Acknowledgement** - Hana was honoured with the Sustainability Disclosure Acknowledgement 2024 from Thaipat Institute, presenting a testament to Hana's consistent efforts in sustainable information disclosure covering ESG to the maximum benefits of stakeholders and responding to Sustainable Development Goal 12.6.

• **2024 Thailand's Top Corporate Brands Values** - Hana has been recognized as the outstanding organization with the highest corporate brand values in Thailand for the year 2024 in electronic component sector which Hana's brand value is THB 15,424 million worth. This award is organized by Chulalongkorn Business School in collaboration with the Stock Exchange of Thailand (SET) and Manager Online to quantify brand values of companies listed on the Stock Exchange of Thailand by systematically integrating marketing, financial, and accounting principles by using a 3-year average of each company's financial data in their respective industries to derive a financial brand value to influences decision-making for partners, investors, and stakeholders while encouraging their executives to develop their brand for long-term sustainable growth and success in the long run through principles of good governance.

• **Eco-Factory Award** - Hana Lamphun received the "Eco-Factory Award" for Eco-Excellence level which honors industrial factories that focus on business and industry development to grow together with the community and the environment by adhering to environmentally friendly business operations for sustainable development covering 5 dimensions: physical, economic, social, environment and management.

• **Green Industry Award** - Hana Lamphun and Hana Ayutthaya received the "Green Industry Award" Level 4 (Green Culture) from the Ministry of Industry as a result of environmentally friendly operations in all aspects of business operations towards green industry and sustainable development.

• **Green Star Award** - Hana Lamphun received the "IEAT Green Star Award" in recognition of outstanding performance on environmental management, safety, and social responsibility.

• **CSR-DIW Continuous Award** - Hana Lamphun received the "CSR-DIW Continuous Award" from the Department of Industrial Works for sustainable development for the eighth consecutive years.

Diagram of performance and outcomes in community and social management



Information on incidents related to legal or social and human rights violations

Number of cases and incidents of significant legal or social and human rights violations

	2022	2023	2024
Total number of cases or incidents of significant legal or social and human rights violations (cases)	0	0	0
Total number of cases or incidents leading to significant labor disputes (cases)	0	0	0
Total number of incidents or complaints related to business partner's rights violations (cases)	0	0	0
The total number of cases or complaints related to partner rights violations (Cases)	0	0	0
Total number of cases or incidents leading to disputes with the community/society (cases)	0	0	0
Total number of cases or incidents related to cybersecurity or customer data breaches (cases)	0	0	0
Total number of cases or incidents related to workplace safety and occupational health (cases)	0	0	0

4. Management Discussion and Analysis (MD&A)

4.1 Operation, financial condition and material changes

Operational overview

Overall Group Performance

Hana Microelectronics Group 'Hana' Sales Revenue decreased -5% year on year, at THB 24,801 million in year 2024 from THB 26,152 million in year 2023. Sales Revenue in USD terms decreased by -6% to USD 703 million in 2024 from USD 751 million in 2023. Normalised Profit decreased -31% to THB 1,201 million in 2024 from THB 1,747 million in 2023.

Net profit decreased by -136% to THB -634 million in 2024 from THB 1,761 million in 2023 due to lower sales in IC assembly divisions from a continuing downturn in the semiconductor cycle in 2024, increased loss at IC Korea, and impairment of IC Korea.

Group sales decreased -5% in 2024 to THB 24,801 million from 2023 at THB 26,152 million driven by a continued downturn in the semiconductor cycle. USD sales were -6% lower in 2024 at USD703 million down from USD751 million in 2023. The average THB/USD exchange rate weakened -1% to THB/USD 35.3 in 2024 from THB/USD 34.8 in 2023.

The Microelectronics divisions' sales revenue in USD decreased -1% [-1% in THB terms] in 2024 over 2023. The microelectronics operation in Lamphun sales decreased -3% [-2% in THB terms] and Jiaxing increased by 5% [7%] in 2024.

In 2024 IC assembly sales overall decreased by -20% [-19% in THB terms]. Specifically, IC AYT sales decreased -19% [-18%] and IC JXG USD sales decreased by -20% [-19% in THB terms].

Hana Technologies Inc 'HTI', sales increased 15% [17% THB] for the year.

Diagram of operational overview

The annual sales split was:

	2024	2023	2022
PCBA (Thailand)	49%	47%	41%
PCBA (China)	14%	12%	14%
PCBA (Cambodia)	1%	2%	1%
IC (Thailand)	24%	28%	33%
IC (China)	3%	3%	5%
HTI (USA)	7%	6%	5%
IC (Korea)	2%	2%	1%
	100%	100%	100%

Analysis on the operation and financial condition

Operating results and profitability

Gross Profit / Cost of Sales Analysis and Sales and Administration Analysis

Gross profit decreased by THB -786 million with the gross margin decreasing -2% point to 9% in 2024 from 11% in 2023 due to the lower sales in the IC divisions and IC Korea increased loss on operations.

Operating Profit Analysis

Normalised profit margin decreased to 31% in 2024 from 28% in 2023 due to lower sales revenue, gross profit and other income. SGA including R&D expenses were 4% higher in 2024.

Asset management capability

Financial Status

Net cash reserves and financial investments were THB 10.2 billion at the 31st December 2024 up from THB 7.8 billion at the 31st December 2023.

Liquidity and capital adequacy

Liquidity

The group has THB 10.2 billion in net cash and financial investments. Liquidity ratios are high at over 3 times current liabilities.

Operating cashflow (EBITDA) was THB 1,293 million in 2024, -36% lower than THB 3,600 million in 2023 and THB 3,852 million in 2022.

Net cash and financial investments in 2024 increased to THB 10.2 billion, due to EBITDA 2.6 billion less final dividend THB 0.4 billion 2023 paid in Q224, interim dividend Q424 THB 0.2 billion, net capital expenditure THB 1.7 billion, other items THB 2.1 billion.

Net cash and financial investments in 2023 increased to THB 7.8 billion, due to EBITDA 3.5 billion less final dividend THB 0.4 billion 2022 paid in Q223, interim dividend Q423 THB 0.4 billion, net capital expenditure THB 2.7 billion, share capital increase THB 4.6 billion, other items THB -0.4 billion.

Net cash and financial investments in 2022 decreased to THB 3.6 billion, due to EBITDA 4.1 billion less final dividend THB 0.8 billion 2021 paid in Q222, interim dividend Q422 THB 0.4 billion, net capital expenditure THB 2.9 billion, other items THB -2.5 billion.

Capital Expenditure

Capital expenditure was THB 1,667 million in 2024, THB 2,689 million in 2023, and THB 2,876 million in 2022.

Capital expenditure in 2024 & 2023 was mainly for IC Korea plant due to investment in expansion of Silicon Carbide devices and building purchase for Hana Technologies expansion, whereas in 2022 capital expenditure was across the IC divisions.

Generally, capital expenditure for production equipment will follow the increase in sales, particularly in the IC division. However, there is a 6 to 12 month time lag due to the ordering lead time. Plant expansion will depend on the current building utilisation and lead time to construct new plant or expand in an existing plant.

Source of Financial Capital

As the group as no interest bearing debt and operating working capital is positive the groups funding is from the shareholders equity.

Debt obligations and management of off-balance sheet

Asset Quality

Accounts Payable

Credit terms with suppliers are mostly open account with credit terms varying from cash in advance to 90 days. The credit term has been determined in accordance with the principles of fair dealing between the Company and suppliers.

Accounts payable were 52 days in 2024, 59 days in 2023 and 60 days in 2022.

Inventory

In general, Hana's production is based on clients' order, consequently, the majority of inventory are raw materials, expendable tools and work in process with little finished goods pending for customer delivery. The group companies normally write-off out-of-date inventory, and make provision for aged inventory and depletion in the value of fixed assets, if material, each quarter.

Inventory days were 130 days in 2024, 145 days in 2023 and 127 days in 2022.

Accounts Receivable

Most of customers are well known and have good reputation in the IC, and electronics industry. Provision is made of amounts outstanding over 90 days and amounts which the management believe may be doubtful.

Accounts receivable were 71 days in 2024, 71 days in 2023 and 64 days in 2022.

Diagram of debt obligations and management of off-balance sheet

Trade Receivables '000	2024	2023	2022
Less than 3 months	4,165,292	4,846,118	4,754,011
3 - 6 months	83,927	45,888	31,736
6 - 12 months	67,395	20,445	97
More than 12 months	5,411	8,950	3,418
Total accounts receivable - other companies	4,322,025	4,921,401	4,789,262
Less : Allowance for doubtful accounts	(4,002)	(15,964)	(13,289)
	4,318,023	**4,905,437**	**4,775,973**

Material Transaction (MT) and Related Party Transaction (RPT)

There were no material transactions and related party transactions.

Tax Payment

The corporate tax policy of Hana group has been set as a framework for tax management and practices to be in accordance with legal, rules and regulations governing the taxes of each country in which the business operates.

Hana operations in Thailand have paid the corporate income tax expenses lower than the normal tax rate as received the promotional privileges for tax exemption under the Investment Promotion from the Board of Investment (BOI) while the overseas operations have paid lower than the normal tax rates due to the operating loss.

Diagram of Tax Payment

Description	Thailand operations	Overseas operations	Total
Total revenues (Million Baht)	18,120	6,681	24,801
Profit before income tax expenses (Million Baht)	2,265	(2,813)	(548)
Normal income tax rate (%)	20%	0 - 25%	0 - 25%
Income tax expenses per normal tax rate (Million Baht)	453	(902)	(449)
Actual income tax expenses (Million Baht)	59	27	86
Actual income tax rate (%)	3%	-1%	

Payout Analysis

- In Q424 THB 221 million dividend of THB 0.25 per share was paid as an interim dividend from the profits of 2024.
- In Q224 THB 443 million final dividend of THB 0.50 per share was paid during the quarter from the profits of 2023.
- In Q423 THB 442 million dividend of THB 0.50 per share was paid as an interim dividend from the profits of 2023.

• In Q223 THB 402 million final dividend of THB 0.50 per share was paid during the quarter from the profits of 2022.
• In Q422 THB 402 million dividend of THB 0.50 per share was paid as an interim dividend from the profits of 2022.
• In Q222 THB 805 million final dividend of THB 1.00 per share was paid during the quarter from the profits of 2021.

Foreign Exchange Rates

The THB/USD currency movements reflected the decrease in relative interest rates compared to USD in 2023 whereas 2024 was similar to 2022 rate. The average rate for 2024 was THB/USD 35.26 which was 1% weaker than THB/USD 34.80 in 2023, which was 1% stronger than THB/USD 35.07in 2022.

Exceptional Items

• On 9th August 2024, a subsidiary, received from Credit Suisse, USD 8,535,821 (THB 299 million) being the final payment due from the voluntary redemption offer for the termination of Credit Suisse Asset Management (Switzerland) AG Supply Chain Fund in 2021.
• On 31st December 2024, -THB 1,844m impairment provision due the revaluation of IC Korea (Powermaster).
• The company issued 80.5m new shares in 2023 at THB 57 baht per share raising THB 4.6 billion.
• There were no Exceptional Items in 2022.

Subsequent Event

Sale of land held for dormitory development in Cambodia USD 1,318,182 in February 2025.

Business Operations Driven Sustainability

Rising Labor and Energy Costs:

In 2024, the daily minimum wage for Thai workers, who accounted for nearly 80% of the total group workforce, has been raised. While electricity prices in Thailand remain stable for the time being, they are expected to increase in the future. To mitigate the impact of these rising labor and energy costs on production expenses, the Company is focusing on sustainable development aligned with Environmental, Social, and Governance (ESG) principles.

Hana Group continues to prioritize energy efficiency, automation, and the adoption of renewable energy sources to optimize production costs. By integrating sustainable practices across its operations, the Company aims to reduce reliance on traditional energy sources and enhance labor productivity, which will help offset these increasing costs. This approach ensures that Hana can remain competitive while contributing to a sustainable future.

• Focusing on Automation Efforts

Hana has continued to invest in automating manufacturing processes to align with Industry 4.0 standards. This approach offers several benefits, including reduced reliance on human labor, cost savings, enhanced competitiveness, and improved customer satisfaction. By leveraging these advancements, the Company ensures it remains at the forefront of innovation and sustains its competitive edge.

• Investing in Renewable Energy and Energy-Saving Measures

In 2024, Hana Group made significant progress in its commitment to sustainability by installing additional solar panels at three facilities located in Lamphun, Ayutthaya, and Jiaxing, with an additional investment of THB 104 million. As a result, the group renewable energy capacity increased from 5.8 MW in 2023 to 10.6 MW, further enhancing its renewable energy infrastructure. This expansion enables Hana to achieve annual cost savings of THB 20 million in 2024, while also reducing greenhouse gas emissions by 5,157 tons of CO2 equivalent (tCO2e).

Looking ahead, Hana Group plans to further increase its renewable energy capacity in 2025 as part of its ongoing sustainability initiatives. In addition to investing in solar energy, the Company continues to focus on energy-saving programs through internal initiatives and collaborative efforts with external partners. Hana is actively involved in the greenhouse gas reduction network, in partnership with the Industrial Estate Authority of Thailand (IEAT) and the Thailand Greenhouse Gas Management Organization (TGO). The Company is participating in the pilot project “GHG Reduction for Net Zero Emissions” to accelerate its journey towards a carbon-neutral future.

These efforts are a key part of Hana Group's environmental strategy, which prioritizes the adoption of renewable energy and energy efficiency improvements in various projects to reduce environmental impact and contribute to the global transition to a green economy.

• Increasing Labor Productivity and Improving Quality

We continue to optimize our operations to enhance productivity, improve quality, and reduce costs through Quality Improvement Programs: QCC (Quality Control Circle), Kaizen, etc. as we believe that efficient manufacturing processes consume less energy, use fewer resources, and produce less waste. One of the most effective ways to improve operational efficiency is by directly linking it to an incentive program. Offering rewards gives employees a sense of ownership in the outcome of a project or task. These awards also enable our employees to actively participate in the Company's growth while fostering their own career development.

• Development and Retention of Human Capital

Human capital is the most important for the organization's innovation and future growth. The Company continues to focus on our human capital development to attract and retain skilled workers along with career development opportunities and employee recognition programs. These initiatives are designed to foster a motivated, skilled workforce that contributes to the Company's long-term success. In addition, Hana focused on fostering a positive work environment that supports employee well-being, engagement, and career advancement. By investing in its people, the Company aims to retain top talent, ensuring long-term sustainability and continued operational success.

Green Business:

Power Master Semiconductor (PMS), a subsidiary of the Company, manufactures Silicon Carbide power solutions that enhance the energy efficiency of end-product applications, including electric vehicles (EVs), EV chargers, solar power (PV), cloud servers, and electric motors in industrial and consumer products. These products contribute to reducing CO2 emissions, aligning with the Company's commitment to sustainability. PMS's innovative solutions will generate increased green revenue for the Group, further supporting the transition to a green economy.

Issuance of debt securities with an obligation to maintain financial ratios

Is there an issuance of debt securities with an obligation to maintain financial ratios? : No

4.2 Potential factors or incidents that may materially affect the financial condition or the operating results

Significant factors or incidents that may materially affect the future financial condition or the operating results

The company business is that of an electronics manufacturing service company. The company manufactures products on behalf of its customers for shipment to them or their customers. Therefore, the company's performance is mostly affected by its ability to win and retain business from the existing and new customers. In turn, customer demand is affected by world economic growth and the customer's sales growth.

The groups sales revenue are in foreign currency (primarily USD) and USD currency costs are approximately 60% percent of sales revenues. The Group operating profit sensitivity to change in the Thai Baht/USD and Chinese CNY/USD exchange rates is currently about Baht 200 million per quarter for every 10% change in the average Baht/USD and CNY/USD rates (i.e. (1- 0.60) x Sales Revenue x 10%).

Out of the groups foreign exchange exposure, as of the 30th September 2023 all foreign exchange contracts to hedge the Baht against the USD have been unwound so there is zero net outstanding THB/USD contracts. This action was taken due to weakening THB/USD and high interest rate differential between USD and THB. At the end of Q223 USD 120 million was hedged (sell USD buy THB).

Whilst the book value of the offshore companies are represented in foreign currency, the effect of the change in the exchange rate is shown by the movement of the foreign currency 'Translation Adjustment' in the shareholders funds section of the balance sheet. There is no cash affect concerning its movement.

For Hana being an export group of companies the currency movements cause volatility in earnings due to effects on the operating margins and also inventory valuations (which the management report each quarter when there is a material effect on the profits) and margins.

Other factors which may affect operating performance of the company are (but not limited to):
Customer retention, winning new customers, product price erosion, customers products success in their respective markets and lifecycle of such products, consistently manufacturing products to agreed specifications and delivery schedules with customers, recall, product liability risks in the event of product failures, suppliers price and consistent supply of raw materials to agreed specifications, supplier financial solvency, fluctuation in foreign exchange rates for each of our operations compared to both product sales currency which is primarily USD, materials purchasing currency which is primarily USD and the operating currency in each country which we operate, wages and salaries increases, availability and turnover of direct labour and skilled staff, credit risks, market, liquidity and funding, insurance, operational, regulatory compliance, strategic, reputation, legal and regulatory environment, competitive and systemic risks. Our success in executing and completing mergers and acquisitions and subsequent operational risks. Our success in developing and marketing new products and factory processes. Success in protecting intellectual property developed. Macro-economic stability of the countries in which we, our customers and suppliers operate. Global financial stability which may affect interest rates and access of funding of the company, its customers and suppliers.

4.3 Information from financial statements and significant financial ratios

Information from financial statements

Summary of financial position statements

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Assets			
Cash And Cash Equivalents (MillionTHB)	2,374.71	6,954.42	6,689.07
Trade And Other Receivables - Current - Net (MillionTHB)	4,981.04	5,178.14	4,480.72
Inventories - Net (MillionTHB)	9,456.93	8,969.35	7,096.00
Other Current Financial Assets (MillionTHB)	1,259.38	1,938.10	4,055.51
Other Current Financial Assets - Others (MillionTHB)	1,259.38	1,938.10	4,055.51
Other Current Assets (MillionTHB)	171.17	119.37	98.06
Other Current Assets - Others (MillionTHB)	171.17	119.37	98.06
Total Current Assets (MillionTHB)	18,243.23	23,159.37	22,419.37
Investment In Subsidiaries, Associates And Joint Ventures Using The Equity Method - Net (MillionTHB)	0.00	0.00	369.58
Investment In Associates (MillionTHB)	0.00	0.00	369.58
Other Non-Current Financial Assets (MillionTHB)	0.15	0.15	0.14
Other Non-Current Financial Assets - Others (MillionTHB)	0.15	0.15	0.14
Investment Properties - Net (MillionTHB)	72.30	72.30	158.21

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Property, Plant And Equipment - Net (MillionTHB)	10,853.45	11,701.47	9,327.59
Intangible Assets - Net (MillionTHB)	403.13	328.98	161.19
Intangible Assets - Others (MillionTHB)	403.13	328.98	161.19
Deferred Tax Assets (MillionTHB)	10.64	18.65	26.26
Other Non-Current Assets (MillionTHB)	120.50	25.02	53.51
Other Non-Current Assets - Others (MillionTHB)	120.50	25.02	53.51
Total Non-Current Assets (MillionTHB)	11,460.18	12,146.59	10,096.48
Total Assets (MillionTHB)	29,703.41	35,305.96	32,515.85

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Liabilities			
Bank Overdrafts And Short-Term Borrowings From Financial Institutions (MillionTHB)	0.00	1,076.41	509.36
Trade And Other Payables - Current (MillionTHB)	4,160.84	3,390.55	3,026.41
Current Portion Of Long-Term Debts (MillionTHB)	0.00	24.04	46.56
Financial Institutions (MillionTHB)	0.00	24.04	46.56
Current Portion Of Lease Liabilities (MillionTHB)	273.84	4.99	0.68
Short-Term Provisions (MillionTHB)	345.62	342.23	339.88
Income Tax Payable (MillionTHB)	68.76	50.82	39.98
Other Current Liabilities (MillionTHB)	178.27	145.02	135.08
Total Current Liabilities (MillionTHB)	5,027.34	5,034.05	4,097.95
Non-Current Portion Of Long-Term Debts (MillionTHB)	0.00	203.34	334.32
Financial Institutions (MillionTHB)	0.00	203.34	334.32
Non-Current Portion Of Lease Liabilities (MillionTHB)	0.00	0.73	1.57
Contract Liabilities And Unearned Rental Income - Non-Current (MillionTHB)	59.87	124.59	170.82
Deferred Revenue - Others (MillionTHB)	59.87	124.59	170.82
Provisions For Employee Benefit Obligations - Non-Current (MillionTHB)	709.39	765.95	798.78

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Deferred Tax Liabilities (MillionTHB)	44.18	30.57	34.16
Total Non-Current Liabilities (MillionTHB)	813.93	1,125.18	1,339.66
Total Liabilities (MillionTHB)	5,841.27	6,159.24	5,437.61

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Shareholders' equity			
Authorised Share Capital (MillionTHB)	974.40	885.37	885.37
Authorised Ordinary Shares (MillionTHB)	974.40	885.37	885.37
Issued And Paid-Up Share Capital (MillionTHB)	804.88	885.37	885.37
Paid-Up Ordinary Shares (MillionTHB)	804.88	885.37	885.37
Premium (Discount) On Share Capital (MillionTHB)	1,723.22	6,230.54	6,230.54
Premium (Discount) On Ordinary Shares (MillionTHB)	1,723.22	6,230.54	6,230.54
Retained Earnings (Deficits) (MillionTHB)	20,770.41	21,671.67	20,337.34
Retained Earnings - Appropriated (MillionTHB)	536.31	541.63	549.11
Legal And Statutory Reserves (MillionTHB)	536.31	541.63	549.11
Retained Earnings (Deficits) - Unappropriated (MillionTHB)	20,234.10	21,130.04	19,788.23
Other Components Of Equity (MillionTHB)	563.63	359.15	-375.00
Share-Based Payment Transactions (MillionTHB)	0.00	40.45	69.17
Other Components Of Equity - Others (MillionTHB)	563.63	318.70	-444.17
Equity Attributable To Owners Of The Parent (MillionTHB)	23,862.14	29,146.72	27,078.25
Total Equity (MillionTHB)	23,862.14	29,146.72	27,078.25
Total Liabilities And Equity (MillionTHB)	29,703.41	35,305.96	32,515.85

Summary of income statement

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Statement of Comprehensive Income			
Revenue From Operations (MillionTHB)	27,167.16	26,152.12	24,801.34
Revenue From Sales (MillionTHB)	27,167.16	26,152.12	24,801.34
Interest And Dividend Income (MillionTHB)	2.25	0.08	0.12
Dividend Income (MillionTHB)	2.25	0.08	0.12
Other Income (MillionTHB)	486.09	438.67	641.66
Total Revenue (MillionTHB)	27,655.51	26,590.87	25,443.11
Costs (MillionTHB)	23,506.16	23,172.09	22,607.05
Cost Of Sales (MillionTHB)	23,506.16	23,172.09	22,607.05
Selling And Administrative Expenses (MillionTHB)	1,694.59	1,631.19	1,691.27
Selling Expenses (MillionTHB)	211.84	210.41	215.46
Administrative Expenses (MillionTHB)	1,482.76	1,420.78	1,475.81
(Reversal Of) Loss On Impairment (MillionTHB)	-3.53	-21.46	1,844.42
Total Cost And Expenses (MillionTHB)	25,197.23	24,831.25	26,142.74
Share Of Profit (Loss) From Investments Accounted For Using The Equity Method (MillionTHB)	0.00	0.00	12.91
Other Gains (Losses) (MillionTHB)	-236.32	138.25	203.54
Gains (Losses) On Foreign Currency Exchange (MillionTHB)	-319.83	41.28	9.78

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Other Gains (Losses) - Others (MillionTHB)	83.51	96.97	193.76
Profit (Loss) Before Finance Costs And Income Tax Expense (MillionTHB)	2,221.96	1,897.87	-483.17
Finance Costs (MillionTHB)	12.51	51.83	64.33
Income Tax Expense (MillionTHB)	107.38	85.47	86.17
Profit (Loss) For The Period From Continuing Operations (MillionTHB)	2,102.07	1,760.57	-633.67
Net Profit (Loss) For The Period (MillionTHB)	2,102.07	1,760.57	-633.67
Net Profit (Loss) For The Period / Profit (Loss) For The Period From Continuing Operations (MillionTHB)	2,102.07	1,760.57	-633.67
Gains (Losses) On Investment In Debt Instruments Measured At Fair Value Through Other Comprehensive Income (MillionTHB)	-223.83	14.26	-20.85
Currency Translation Adjustments (MillionTHB)	116.38	-259.19	-725.80
Gains (Losses) On Change In Value Of Foreign Currency Basis Spreads (MillionTHB)	0.00	0.00	-16.22
Remeasurement Of Employee Benefit Obligations (MillionTHB)	16.75	-14.19	-36.63
Other Comprehensive Income (Expense) - Net Of Tax (MillionTHB)	-90.70	-259.12	-799.50
Total Comprehensive Income (Expense) For The Period (MillionTHB)	2,011.37	1,501.45	-1,433.17

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Net Profit (Loss) Attributable To : Owners Of The Parent (MillionTHB)	2,102.07	1,760.57	-633.67
Total Comprehensive Income (Expense) Attributable To : Owners Of The Parent (MillionTHB)	2,011.37	1,501.45	-1,433.17
Basic Earnings (Loss) Per Share (Baht/Share) (MillionTHB)	2.61	2.14	-0.72
EBITDA (MillionTHB)	3,851.79	3,600.16	1,293.41
Normalised EBITDA (MillionTHB)	3,848.26	3,578.71	3,137.83
Operating Profit (MillionTHB)	1,966.40	1,348.84	503.02
Normalize Profit (MillionTHB)	2,418.37	1,747.25	1,200.97

Summary of cash flow statement

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Cash flow statement			
Profit (Loss) Before Finance Costs And/Or Income Tax Expense (MillionTHB)	2,209.45	1,846.04	-547.50
Depreciation And Amortisation (MillionTHB)	1,629.83	1,702.30	1,776.58
Depreciation (MillionTHB)	1,528.09	1,636.41	1,688.02
Amortisation (MillionTHB)	101.74	65.89	88.56
(Reversal Of) Expected Credit Losses (MillionTHB)	2.17	2.67	-11.96
(Reversal Of) Loss From Diminution In Value Of Inventories (MillionTHB)	26.36	404.02	277.66
Share Of (Profit) Loss From Investments Accounted For Using The Equity Method (MillionTHB)	0.00	0.00	-12.91
Share-Based Payments (MillionTHB)	0.00	40.45	28.72
(Gains) Losses On Foreign Currency Exchange (MillionTHB)	93.39	18.14	-74.51
(Gains) Losses On Disposal And Write-Off Of Fixed Assets (MillionTHB)	1.32	25.94	8.76
Loss On Write-Off Of Fixed Assets (MillionTHB)	1.32	25.94	8.76
(Gains) Losses On Disposal And Write-Off Of Other Assets (MillionTHB)	39.29	30.28	-61.03
Loss On Write-Off Of Other Assets (MillionTHB)	39.29	30.28	-61.03

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Gains (Losses) On Modification Of Debt Instruments (MillionTHB)	56.99	0.71	-9.63
Dividend And Interest Income (MillionTHB)	-95.95	-97.05	-193.87
Dividend Income (MillionTHB)	-2.25	-0.08	-0.12
Interest Income (MillionTHB)	-93.70	-96.97	-193.76
Finance Costs (MillionTHB)	3.81	44.22	55.63
Employee Benefit Expenses (MillionTHB)	59.85	64.40	66.29
Other Reconciliation Items (MillionTHB)	-28.78	28.44	1,558.05
Cash Flows From (Used In) Operations Before Changes In Operating Assets And Liabilities (MillionTHB)	3,997.73	4,110.55	2,860.27
(Increase) Decrease In Trade And Other Receivables (MillionTHB)	-536.32	-195.78	800.51
(Increase) Decrease In Inventories (MillionTHB)	-2,666.00	83.56	1,656.71
(Increase) Decrease In Other Operating Assets (MillionTHB)	55.26	115.72	79.46
Increase (Decrease) In Trade And Other Payables (MillionTHB)	598.18	-670.73	-320.98
Increase (Decrease) In Provisions For Employee Benefit Obligations (MillionTHB)	-52.70	-21.95	-70.35
Increase (Decrease) In Other Operating Liabilities (MillionTHB)	4.54	-16.51	-13.51
Cash Generated From (Used In) Operations (MillionTHB)	1,400.69	3,374.59	4,992.12

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Income Tax (Paid) Received (MillionTHB)	-58.97	-124.30	-114.63
Net Cash From (Used In) Operating Activities (MillionTHB)	1,341.72	3,250.29	4,877.49
(Increase) Decrease In Short-Term Investments (MillionTHB)	562.69	-2,037.35	-3,080.20
Proceeds From Investment (MillionTHB)	632.62	1,327.00	951.57
Proceeds From Redemption Of Debt Securities (MillionTHB)	0.00	0.00	289.94
Payment For Purchase Of Investment In Subsidiaries, Associates And Joint Ventures (MillionTHB)	0.00	0.00	-372.89
Proceeds From Disposal Of Fixed Assets (MillionTHB)	20.85	34.97	13.71
Property, Plant And Equipment (MillionTHB)	20.85	34.97	13.71
Payment For Purchase Of Fixed Assets (MillionTHB)	-2,491.39	-2,923.43	-1,157.70
Property, Plant And Equipment (MillionTHB)	-2,491.39	-2,653.93	-1,071.79
Investment Properties (MillionTHB)	0.00	0.00	-85.91
(Increase) Decrease In Restricted Deposits (MillionTHB)	0.00	0.00	0.01
Dividend Received (MillionTHB)	2.25	0.08	0.12
Interest Received (MillionTHB)	108.49	90.62	192.26
Other Items (Investing Activities) (MillionTHB)	-4.47	95.47	-31.81

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Net Cash From (Used In) Investing Activities (MillionTHB)	-1,168.96	-3,412.62	-3,195.00
Increase (Decrease) In Bank Overdrafts And Short-Term Borrowings - Financial Institutions (MillionTHB)	0.00	1,945.42	26.02
Proceeds From Borrowings (MillionTHB)	0.00	238.73	212.24
Proceeds From Long-Term Borrowings (MillionTHB)	0.00	238.73	212.24
Proceeds From Long-Term Borrowings - Financial Institutions (MillionTHB)	0.00	238.73	212.24
Repayments On Borrowings (MillionTHB)	0.00	-806.29	-624.16
Repayments On Short-Term Borrowings (MillionTHB)	0.00	-803.88	-588.45
Repayments On Short-Term Borrowings - Financial Institutions (MillionTHB)	0.00	-803.88	-588.45
Repayments On Long-Term Borrowings (MillionTHB)	0.00	-2.40	-35.71
Repayments On Long-Term Borrowings - Financial Institutions (MillionTHB)	0.00	-2.40	-35.71
Repayments On Lease Liabilities (MillionTHB)	-10.08	-9.55	-5.35
Dividend Paid (MillionTHB)	-1,207.32	-845.12	-664.02
Interest Paid (MillionTHB)	-0.93	-37.99	-138.68
Net Cash From (Used In) Financing Activities (MillionTHB)	-1,218.33	5,073.01	-1,193.95

	THB		
	31 Dec 2022	31 Dec 2023	31 Dec 2024
	Consolidate	Consolidate	Consolidate
	AUDITED	AUDITED	AUDITED
Net Increase (Decrease) In Cash And Cash Equivalent (MillionTHB)	-1,045.58	4,910.68	488.54
Differences Of Foreign Currency Exchange On Financial Statements Translation (MillionTHB)	116.11	-330.98	-753.88
Cash And Cash Equivalents, Beginning Balance (MillionTHB)	3,304.17	2,374.71	6,954.42
Cash And Cash Equivalents, Ending Balance (MillionTHB)	2,374.71	6,954.42	6,689.07

Key financial ratios

	2022	2023	2024
Liquidity ratio			
Current ratio (times)	3.60	4.60	5.50
Quick ratio (times)	1.70	2.80	3.70
Cash flow liquidity ratio (times)	0.30	0.60	1.20
Average account recievable turnover (times)	5.70	5.15	5.14
Average collection period (days)	64.05	70.89	71.07
Average finish goods turnover (times)	22.22	20.71	20.05
Average finish goods turnover period (days)	16.40	17.60	18.20
Average inventory turnover (times)	2.88	2.52	2.81
Average inventory turnover period (days)	126.66	145.12	129.69
Average account payable turnover (times)	6.13	6.14	7.05
Average payment period (days)	59.50	59.50	51.80
Average cash cycle (days)	131.80	156.54	148.96
Profitability ratio			
Gross profit margin (%)	13.00	11.00	9.00
Operating margin (%)	7.00	5.00	2.00
Other income to total income (%)	2.00	2.00	3.00
Cash from operation to operating profit (%)	0.68	2.41	9.70
Net profit margin (%)	8.00	7.00	-3.00
Return on equity (ROE) (%)	9.00	6.00	-2.00
Net Profit before Exceptional Margin (Net Profit After Tax before exceptional and exchange) (%)	9.00	6.00	5.00

	2022	2023	2024
Net Profit after Exceptional Margin (Net Profit After Tax before exceptional and exchange) (%)	8.00	7.00	-3.00
Financial policy ratio			
Total debts to total equity (times)	0.20	0.20	0.20
Interest coverage ratio (times)	178.00	37.00	-8.00
Interest bearing debt to EBITDA ratio (times)	N/A	0.37	0.77
Debt service coverage ratio (times)	N/A	1.30	1.00
Dividend payout ratio (%)	57.00	48.00	-105.00
Efficiency ratio			
Return on asset (ROA) (%)	7.00	5.00	-2.00
Return On Fixed Assets (%)	20.00	15.00	-7.00
Asset turnover (times)	0.91	0.74	0.76

5. General information and other material facts

5.1 General information

General information

Securities registrar

Name of securities registrar	:	Thailand Securities Depository Co., Ltd.
Address/location	:	93 Ratchadaphisek Road
Subdistrict	:	Din Daeng
District	:	Din Daeng
Province	:	Bangkok
Postcode	:	10400
Telephone	:	02-009-9000
Facsimile number	:	02-009-9991

Auditing firm

Name of auditing firm*	:	EY OFFICE LIMITED
Address/location	:	33RD FLOOR, LAKE RAJADA OFFICE COMPLEX, 193/136-137 RAJADAPISEK ROAD
Subdistrict	:	KHLONG TOEI
District	:	KHLONG TOEI
Province	:	Bangkok
Postcode	:	10110
Telephone	:	+66 2264 9090
Facsimile number	:	+66 2264 0789-90
List of auditors	:	Miss KAMONTIP LERTWITWORATEP
License number	:	4377
List of auditors	:	Mrs SARINDA HIRUNPRASURTWUTTI
License number	:	4799
List of auditors	:	Mr WICHART LOKATEKRAWEE
License number	:	4451

5.2 Other material facts

5.2.1 Other information that may significantly influence investors' decision making

Other information that may influence investors' decision making	:	No

5.2.2 Restrictions of foreign shareholders

Are there restrictions on foreign shareholders?	:	No

5.3 Legal disputes

Legal disputes

Is there any legal dispute? : No

5.4 Secondary market

Secondary market

Has the company's security been listed on a stock exchange in another country?	:	No

5.5 Financial institution with regular contact (in case of debt securities offeror)

Financial institution with regular contact

Are there any debt securities offered? : No

Part 2 Corporate Governance

6. Corporate governance policy

6.1 Overview of the policy and guidelines

Overview of the policy and guidelines

Corporate governance policy and guidelines : Yes

The long-term success of a company is largely determined by the support we earn from our employees, customers, business partners, investors, local community and other stakeholders. Hana believes that good corporate governance will enhance the credibility and reputation of the Company as well as promoting and safeguarding the interests of shareholders and other stakeholders. Hana is committed to good corporate governance by compliance with the best practices of corporate governance wherever possible and practical for the Company. We will continue to seek improvements to our solid foundation in good corporate governance to achieve sustainable long-term growth.

The Board realizes and commits to conduct the Company's business with the good corporate governance in conformance with the principles of corporate governance in making an organization more efficiency, transparency, enhancing the credibility and strengthening sustainable growth. The Board has established and approved the corporate governance policy and the corporate code of conducts as the guidelines for the directors, executives and employees in discharging their duties.

The Company has established the corporate governance policy based on the 5 Principles of Good Corporate Governance for Listed Companies 2012 of the Stock Exchange of Thailand (SET), and annually reviews the application of the Corporate Governance Code for Listed Companies 2017 (the "CG Code"), developed by the Securities and Exchange Commission (SEC), by means that are suitable for the Company's business towards 8 Principles as follows.

SET CG Principles

Principle 1: Rights of Shareholders
Principle 2: Equitable Treatment of Shareholders
Principle 3: Role of Stakeholders
Principle 4: Disclosure and Transparency
Principle 5: Responsibilities of the Board

Compliance with the SEC CG Code

Principle 1: Establish Clear Leadership Role and Responsibilities of the Board
Principle 2: Define Objectives that Promote Sustainable Value Creation
Principle 3: Strengthen Board Effectiveness
Principle 4: Ensure Effective CEO and People Management
Principle 5: Nurture Innovation and Responsible Business
Principle 6: Strengthen Effective Risk Management and Internal Control
Principle 7: Ensure Disclosure and Financial Integrity
Principle 8: Ensure Engagement and Communication with Shareholders

The Company's Corporate Governance Policy has been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject
- Corporate Governance Policy.

Reference link for the full version of corporate governance policy and guidelines : https://www.hanagroup.com/File/ViewDoc/97
Page number of the reference link : 3 - 16

6.1.1 Policy and guidelines related to the board of directors

Are there policy and guidelines related to the board of directors : Yes
Guidelines related to the board of directors : Nomination of directors, Determination of director remuneration,

Independence of the board of directors from the management, Director development, Board performance evaluation, Corporate governance of subsidiaries and associated companies, Other guidelines regarding the board of directors

Nomination of directors

The Board is responsible for the corporate governance, management and strategic direction of the organization and for delivering accountable corporate performance in accordance with the organization's goals and objectives. The Board has a fiduciary duty with respect to the shareholders and must act in the best interest of the Company.

The Board of Directors of Hana consists of 8 directors of whom four are executive directors and 4 are independent directors which is accounted for 50% of the Board. The Chairman of the Board is not the same person who holds the Chief Executive Officer position and the Chairman is an independent director.

The Board of Directors has appointed 5 subcommittees as follows:
1. Executives Committee
2. Audit Committee
3. Corporate Governance and Sustainable Committee
4. Nomination Committee
5. Risk Management Committee

Those consist of directors with knowledge, ability and experience in the performance of duties in accordance with the responsibilities. All directors have freedom to express their opinions on the Company's operations. The Board shall annually review the structure in terms of size, composition, proportion of independent directors and the board diversity to ensure its leadership role in achieving the Company's objectives.

Director Selection and succession plan

For the director nomination, a director shall be a person whose qualifications are complete pursuant to the Public Limited Companies Act and other qualifications not contrary to any regulations of the Securities Exchange of Commission or the Company's policies. The Company also considers the Board Skill Matrix by having the Nomination Committee to review and ensure the Board selection process and qualified candidates before proposing to the Board and/or shareholders for approval.
The Company's succession plan on the key executive positions has been set up and reviewed by the Nomination Committee and proposed to the Board annually to ensure the proper transition planning of the Company.

Board Diversity

The Company is open wide to the diversity of the structure of the Board of Directors. The diversity policy has been adopted to promote a diverse and inclusive membership on the Board. The person who will serve as a director should provide complementary qualification to the existing directors for the necessary skills which are still lacking on the Board as well as professional areas of expertise, specialized experiences, gender diversity, age, regardless of nationality or race. The increase proportion of female member is the ultimate goal in terms of gender diversity, with a commitment to have at least 2 female representation on the Board.

The Company's Charters of Board and Committees have been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Corporate Governance > Charters of Board and Committees.

Reference link for the nomination of directors policy and guidelines	:	https://www.hanagroup.com/File/ViewDoc/1333
Page number of the reference link	:	1 - 2

Determination of director remuneration

The remuneration for directors (excluding the executive committee, who receive compensation as employees of the Company) is reviewed and approved annually by the shareholders' meeting. The basis for determining director remuneration is aligned with the Company's performance, the individual director's responsibilities, and the need to remain competitive within the industry. The remuneration structure is benchmarked against similar listed companies in the same sector to ensure it is sufficient to attract, retain, and motivate qualified directors who will contribute to achieving both short-term and long-term organizational goals.

The Company provides remuneration to independent directors in the form of meeting allowances and bonuses, with the rates determined based on the level of responsibility held by each director. No additional benefits are provided. As the executive directors receive remuneration in their capacity as employees, the Company has not established a separate Remuneration Committee. Instead, the Board, in its entirety, considers and reviews the remuneration for independent directors. The remuneration is subject to approval by shareholders annually.

Reference link for determination of the director remuneration policy and guidelines : https://www.hanagroup.com/File/ViewDoc/97

Page number of the reference link : 13

Independence of the board of directors from the management

The roles and responsibilities of the Board and management are clearly defined so as to ensure independence and ensure that business is efficiently, accurately and transparently administered by the management.

Reference link for the policy and guidelines related to independence of the board of directors from the management : https://www.hanagroup.com/File/ViewDoc/97

Page number of the reference link : 12

Director development

The Board development policy is to ensure the directors gain more understanding and enable them to fulfill their roles. The Company supports the director development in forms of orientation, undertaking specific training for continual improvement, updating best practices/director manual, providing access to relevant papers and reports, annual evaluation and factory tours. The Board promotes the directors to receive training through seminars, webinars, forums, workshops, events that enhance the effectiveness of the board roles on an annual basis, such as SET, SEC, IOD or the audit firm, etc.

In 2024, the directors attended the training courses/seminars as disclosed in Attachment 1 - Details of the Board of Directors, Executives, and the Corporate Secretary.

Board performance evaluation

Performance Assessment of the Board of Directors

The Board has conducted its annual performance for individual and as a group evaluation by adopting the self-assessment method from the Stock Exchange of Thailand to assess performance in the latest year.

The Board self-assessment questionnaire allowed the Board to assess their effectiveness into 6 aspects:

1. Board structure and qualifications
2. Roles, duties and responsibilities of the Board
3. The Board meeting
4. Duties of directors
5. Relationship with management
6. Director's self-improvement and management training

Further, the Board also can provide feedback in the assessment form to improve the Board's performance. The Corporate Secretary concludes the Board's group performance and reports to the Board meeting. In 2024, the overall performance of the Board's group was assessed at "very good" ranking, equivalent to 90.25%.

The Board also has conducted the performance evaluation of an individual director using the self-assessment method with evaluation criteria. In 2024, the corporate secretary concluded the Board's individual performance and reported to the Board meeting with the average performance equivalent to 89.75%.

Performance Assessment of the Sub-committees

The Board has also annually conducted the performance evaluation of all sub-committees that are the Audit Committee, the Nomination Committee, the Corporate Governance and Sustainability Committee and the Risk Management Committee. Those Committees

evaluate their own assessment and the Corporate Secretary reports the result to the Board. In 2024, each sub-committee got the average score as "very good", equivalent to 90.75%.

Performance Assessment of CEO

On an annual basis, the performance of the CEO is evaluated by the independent directors, using the key performance indicators (KPIs) that cover both financial and non-financial indicators. The financial KPIs include earnings per share (EPS) and the dividend payment rate, aligned with the Company's policy. Non-financial KPIs focus on ESG performance, covering corporate governance, greenhouse gas reduction, and employee and customer satisfaction.

The areas assessed for the CEO's performance, based on the evaluation criteria derived from the guidance of the Stock Exchange of Thailand, include:

1. Leadership and vision,
2. Strategy formulation,
3. Strategy execution,
4. Financial planning and performance
5. Relationships and communication with the Board,
6. External relations
7. Human resources management and employee relations,
8. Succession plan
9. Product and service knowledge
10. Personal qualities

This framework ensures that the CEO's performance is evaluated based on KPIs that are directly the Company's goals and objectives. In 2024, the independent directors assessed the CEO with an average score of 89.25%.

Corporate governance of subsidiaries and associated companies

The Board has its mechanisms to manage and oversight the subsidiaries and associated companies. The Board has delegated to the Executive Committee to oversee and responsible for the operations of its subsidiaries and associated companies include appointing the representative to be a director or a controlling person and shall report to the Board accordingly. From the Board's resolution No. 6/2013, the Board has resolved that the appointed person must be approved by the Board prior to vote on important matters in the same approval levels of the Company that has to be approved by the Board. This includes the connected transaction and the acquisition or disposition of assets by the rules relating to the disclosure of information and the transaction is in line with the rules of the Company. In addition, the maintenance of information and accounting records of the subsidiaries can be verified and financial statements can be consolidated within timelines.

Other guidelines related to the board of directors

Service on Other Boards

In order to give proper attention and contribution to the assigned responsibilities, the Board has the policy that the directors including the CEO shall limit their services to not more than 3 boards of publicly traded companies with no exception.

6.1.2 Policy and guidelines related to shareholders and stakeholders

Are there policy and guidelines and measures related to shareholders and stakeholders	:	Yes
Guidelines and measures related to shareholders and stakeholders	:	Shareholders, Employee, Customer, Business competitors, Suppliers, Creditors, Government agencies, Community and society, Other guidelines and measures related to shareholders and stakeholders

Shareholders

The Company attempts to achieve long-term growth in earnings for its shareholders. Board members and executive management are selected based on their qualifications and a clear understanding of their roles in corporate governance. They exercise sound business judgment in the best interests of both the Company and its shareholders, including the accurate, complete, and timely preparation and disclosure of financial and non-financial information. They are committed to dedicating the necessary time and expertise to fulfill their responsibilities.

Our approach to shareholder treatment aligns with principles of good corporate governance, ensuring the rights and equitable

treatment of all shareholders. Disclosures will be made consistently, completely, and truthfully, providing transparent information regarding the Company's status, operating results, financial standing, accounts, and other relevant reports. There will be no disclosure of inside information to individuals connected with management or directors that could harm the shareholders.

Reference link for the policy, guidelines and measures related to shareholders	:	https://www.hanagroup.com/File/ViewDoc/97
Page number of the reference link	:	4 - 6, 8

Employee

Employees, as internal stakeholders, play a crucial role in contributing to the long-term success and performance of the company. Our employment policy is established with the principles of non-discrimination and human rights. The Company is committed to ensuring equality of opportunity for all employees in all aspects of personnel matters, including recruitment, training, promotion, transfer, benefits, and dismissal, without regard to race, color, religion, gender, national origin, or disability status. All employees will be treated as individuals, based solely on their abilities to meet job requirements. Furthermore, the Company ensures reasonable accommodation for employees' religious practices.

Compensation provided to employees fully complies with all applicable wage laws, including those relating to minimum wages, overtime payment, working and overtime hours, and legally mandated benefits. The Company also offers long-term welfare benefits designed to retain and motivate employees, particularly through retirement benefits and a provident fund to allow employees to save a portion of their salary for retirement, disability, illness, or unemployment. The Company's provident fund serves as a retirement savings scheme, where employees contribute a percentage of their salary, and the Company matches that contribution. Employees benefit from the growth of their savings through investment management provided by the fund.

Additionally, the Company has established a human resource management policy on salary management, with clear criteria for employee compensation. These criteria take into account factors such as job assignments, duties and responsibilities, competency, performance evaluation results, cost of living, and compensation benchmarks within the local industry. The Company also considers its financial capacity when determining compensation. This policy ensures that compensation is equitable, transparent, fair, and impartial, following approved procedures for assessment and approval.

The Company's compensation guidelines are designed to align with both short-term performance, such as bonuses, and long-term career growth. These guidelines are supported by the Career Development Program, which is tailored to help employees enhance their skills, knowledge, competencies, and capabilities according to their individual needs. The Company also offers opportunities for individual career advancement in line with corporate growth. These personnel development initiatives benefit both employees and the organization as a whole. Additionally, the Company has established policies and committees to assess and verify individual employees' core competencies. Assessment methods have been defined, along with their advantages and disadvantages, to ensure that employees are appropriately matched to their roles and positioned for future advancement. The Company also provides training plans and other development tools to support continuous employee growth.

The Company is committed to prioritizing the quality of life, a healthy environment, and the occupational health and safety of its employees. The Company systematically implements policies, operational guidelines, and occupational health and safety management system standards to prevent potential hazards across all activities and work areas. These preventive actions aim to reduce negative impacts and protect labor rights by ensuring employees have access to a safe and decent working environment that meets international standards. The Company closely monitors pandemic trends to establish appropriate measures and guidelines for minimizing infection risks in the workplace. Additionally, the Company regularly promotes employee well-being through various health promotion initiatives.

Reference link for the policy, guidelines and measures related to employee	:	https://www.hanagroup.com/File/ViewDoc/97
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Customer

Hana places the highest value on our customers, with the long-term relationships we have built serving as a testament to this commitment. The Company aims to meet or exceed our customer expectations for product quality, delivery, reliability, and competitive prices. The Company and its subsidiaries continue to support supply chain management solutions particularly for customers, coordinating business activities and processes to minimize their total costs while maximizing their effectiveness in

the marketplace.

Policy on Product and Service Development for Consumer Health and Safety

Hana is dedicated to ensuring the safety and health of customers and consumers through high-quality material sourcing and assembly processes. As an Electronics Manufacturing Services (EMS) and Outsourced Semiconductor Assembly and Test (OSAT), Hana works closely with its customers to ensure that all products meet relevant safety, quality, and regulatory standards throughout production, prioritizing the safety and well-being of end consumers.

1. Material Sourcing: Hana ensures that all materials sourced for assembly meet the required safety and quality standards. We work closely with our suppliers to ensure that all components comply with customer specifications and relevant regulations, including:

• **RoHS (Restriction of Hazardous Substances):** Limits the use of specific hazardous materials in electrical and electronic products, aiming to reduce environmental and health risks.
• **REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals):** Regulates the safe use of chemicals within the European Union, particularly those that could harm human health or the environment.
• **Persistent Organic Pollutants (POPs):** Refers to substances that are hazardous to human health and the environment due to their long-lasting effects. This regulation aims to eliminate or restrict their use.
• **PBT (Persistent, Bioaccumulative, and Toxic) under TSCA section 6(h):** Addresses chemicals that are persistent, bioaccumulative, and toxic, regulating their use to protect human health and the environment.
• **California Proposition 65:** Requires businesses to warn consumers if their products expose them to chemicals known to cause cancer or reproductive harm.
• **PFAS (Per- and Polyfluoroalkyl Substances):** A group of chemicals that are persistent in the environment and human body, potentially posing health risks. Regulations focus on reducing exposure to these chemicals.
• **Conflict-free Minerals:** The use of minerals that are sourced in a way that does not armed conflict or human rights abuses, particularly in regions like the Democratic Republic of the Congo (DRC) and surrounding areas in order to meet the requirements of the Responsible Business Alliance (RBA) to uphold human rights across our supply chain.

These compliances ensure that the products we assemble are safe for end consumers and comply with health, safety, and environmental protection standards.

2. Assembly Process: Although Hana does not design products, we ensure that all products are assembled according to customer specifications, which include health, safety, and environmental standards for the end consumer. We follow stringent assembly procedures and industry standards to ensure that the final product meets all relevant safety and health regulations. In addition to our core commitment to product safety, Hana is certified with the following ISO standards, which reinforce our dedication to maintaining high-quality and safe assembly processes:

• ISO 9001: General Quality Management System focusing on customer satisfaction, process efficiency, and continual improvement
• ISO 13485: Medical Devices Quality Management System focusing on safety, regulatory compliance, and risk management related to medical devices
• IATF 16949: Automotive Quality Management System focusing on defect prevention, waste reduction, and continuous improvement in the automotive supply chain
• ISO 14001: Environment Management System focusing on pollution prevention, waste reduction, energy efficiency, and compliance with regulations
• ISO 45001: Occupational Health and Safety Management System focusing on risk identification, hazard control, employee well-being, and legal compliance
• ISO/IEC 27001: Information Security Management System focusing on data security, risk management, access control, and compliance with regulations

3. Quality Control: Hana implements quality control measures at every stage of the assembly process, starting from the inspection of incoming materials, through final assembly, testing, and delivery to customers. This process includes detailed inspections, performance testing, and reliability monitoring to ensure that each product meets the required safety and quality standards, as well as specific customer requirements.

4. Operations and Initiatives:

Process Improvements for Safe Product Assembly: Hana continuously enhances its assembly processes by integrating Industry 4.0 technologies, lean manufacturing principles, and other improvement methodologies such as Poka Yoke, Quality Control Circles

(QCC), Equipment Management Systems (EMS), Smart Manufacturing Platforms, and Kaizen. These principles help enhance productivity, reduce human errors, optimize efficiency, and ensure continuous improvement, while maintaining high standards of safety, quality, and performance.

New Product Assembly: While Hana does not design products, the Company supports the assembly of new products that may have specific safety or health considerations. This could include working with customers in the medical device, automotive, or consumer electronics industries, where safety is paramount.

5. Cybersecurity Measures: Hana takes steps to ensure data protection and cybersecurity, especially when handling sensitive customer or product data. This is particularly important for preventing any unauthorized access and cyberattacks to product designs or tampering with assembly instructions that could compromise confidentiality, integrity or product safety.

Responsibility for Communicating Product and Service Information to Customers

Hana adopts a clear and transparent approach in communicating product and service information to customers. As a contract manufacturer, the Company assembles products based on customer specifications, ensuring that all relevant details, including product labels and shipment information, are provided in accordance with customer requirements.

Our Customer Service Department plays a key role in addressing customer complaints, resolving issues, and collecting valuable feedback. We work with our customers to provide problem solving solutions regarding customer complaints, listen to their recommendations, meeting their needs, and honoring our commitments. Customer partnership is a foundation of success that also requires commitment to nurture new relationships and build and foster long-term relationships by creating synergies of knowledge, security, sustainability, and adaptability for both parties.

In the case of quality complaints or product returns, Hana follows a structured process to address the issue. Our team promptly investigates the matter, identifies the underlying cause, and implements immediate corrective actions. A comprehensive review of the production process and related procedures is carried out to ensure that necessary improvements are made. Additionally, we have strengthened our inspection protocols to ensure the highest level of product quality before delivery. Customers are informed about the corrective actions taken and the rationale behind these measures.

Our dedicated customer service department ensures that we address all concerns promptly, resolve issues effectively, and maintain the highest standards of product quality and service to guarantee customer satisfaction.

Reference link for the policy, guidelines and measures related to customer	:	https://www.hanagroup.com/File/ViewDoc/97
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Business competitors

The Board focuses on operating its business with open and fair competition, adhering to ethical standards and ensuring that no unfair practices are employed against competitors. The Company refrains from engaging in actions such as dumping, persecution, or exerting undue influence to undermine competition. It also avoids any actions that would violate the intellectual property or copyrights of competitors, and does not use dishonest methods to discredit competitors or engage in trade secret violations. The Company strictly complies with competition laws, antitrust laws, and other relevant regulations both domestically and internationally. This includes adherence to laws, policies, and guidelines on trade competition in the countries where the Company operates, as well as during any mergers or acquisitions.

In 2024, there were no disputes or lawsuits between the Company and any competitors.

Reference link for the policy, guidelines and measures related to business competitors	:	https://www.hanagroup.com/File/ViewDoc/97
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Suppliers

Ethical business practices are embedded in Hana's corporate culture. The Company promotes and communicates the importance of ethics and commitments as it continues to grow. These principles have become core values for the entire organization. Hana has a long-standing tradition of building trust and fostering strong partnerships with key suppliers and business partners. To ensure that our suppliers adhere to legal standards and high ethical requirements, Hana has established a Supplier Code of Conduct. We

expect our suppliers to be responsible stewards of both society and the environment. Suppliers are provided with the Supplier Code of Conduct, are required to sign it for acknowledgment, and must strictly adhere to its guidelines.

Supplier Selection - Hana is committed to promoting and practicing fair and open competition in the procurement of goods and services. The selection of suppliers and the purchasing of goods and services are based on following principles:
• **Price:** Suppliers must offer competitive and fair pricing that aligns with the product specifications, quality, performance, and other relevant factors.
• **Quality:** Suppliers are expected to consistently meet high-quality standards to ensure that products and services meet or exceed customer requirements and expectations.
• **Delivery:** Timely and reliable delivery is essential. Suppliers must meet delivery deadlines and demonstrate the ability to provide on-time shipments or services to ensure smooth business operations.
• **Flexibility:** Suppliers should be adaptable and capable of accommodating changes in demand, product specifications, or delivery requirements to meet evolving business needs.
• **Reliability:** Suppliers must consistently meet performance expectations, demonstrating dependability in providing products and services without significant disruptions.
• **Responsiveness:** Suppliers should be proactive in addressing inquiries, issues, or changes in requirements promptly and efficiently, ensuring effective communication and prompt problem resolution.
• **Compliance with Laws and Respect for Human Rights:** Suppliers must comply with all applicable laws, regulations, and industry standards, including environmental, safety, and labor laws, while respecting human rights by ensuring fair labor practices, safe working conditions, and preventing child labor, forced labor, and discrimination.

Supply Chain Management – Suppliers play a vital role in Hana's sustainability. We prioritize fostering transparent communication and strong partnerships to align our goals, expectations, and values with those of our suppliers. The following principles guide our approach to supply chain management:
• Impartial and Fair Selection: The selection process ensures impartiality, fairness, and equal opportunity for all capable and responsible suppliers.
• Maximizing Competition: The Company strives to maximize competition and avoids antitrust or anti-competitive practices.
• Environmental, Social, and Governance (ESG) Standards: We collaborate with suppliers who take practical steps towards reducing their environmental impact, ensuring fair labor practices, and upholding ethical business standards.
• Continuous Improvement: We support suppliers who demonstrate innovation and a commitment to continuous improvement. This ensures that the supply chain remains agile, adaptable, and capable of meeting evolving market demands.
• Collaboration and Mutual Growth: Our supply chain is built on collaboration, where both Hana and its suppliers work together towards shared goals of growth, cost efficiency, and enhanced performance.

Supplier Risk Management - Hana has established criteria to categorize suppliers into different tiers, including Critical Tier 1 and Critical Non-Tier 1 suppliers. This approach allows the Company to assess risks and develop appropriate action plans for each tier.

Criteria for Classifying Critical Tier 1 and Critical Non-Tier 1 Partners:

1. Critical Tier 1 Partners

• Direct Supplier: Critical Tier 1 partners are those suppliers that supply key products or services directly to Hana. These suppliers are crucial to Hana’s core operations and product manufacturing.
• Essential Contribution to Operations: These partners provide key components or raw materials that are integral to our production processes or the finished products. Without those parts, the Company cannot meet its operational needs or deliver products to our customers.
• High Impact of Disruption: Any disruption in the supply chain from a Tier 1 partner will directly affect the Company’s production, delivery schedules, and ability to meet customer demands.
• Volume and Consistency of Supply: Tier 1 partners provide a large volume of goods with a consistent supply that is critical to the production line. Any fluctuation or shortage in supply would directly impact operations.

2. Critical Non-Tier 1 Partners

• Indirect Supplier Relationship: Critical Non-Tier 1 partners supply goods, services, or materials to Tier 1 suppliers, who in turn provide critical components to Hana. Although they do not directly supply to Hana, their operations are integral to the supply chain.
• Risk of Indirect Impact: A failure or disruption in the operations of these partners could delay the production process or lead

to shortages, impacting Hana's ability to deliver products on time. The risk is more indirect but still significant.
• Critical to the Supply Chain Continuity: Even though these partners are not directly involved with Hana, they are crucial in ensuring the smooth functioning of the supply chain. Their products or services support key processes that affect Hana's ability to maintain consistent production and meet customer demands.

By categorizing suppliers into Critical Tier 1 and Critical Non-Tier 1 suppliers, this approach enables the Company to assess risks and develop action plans for each supplier group to ensure business continuity and stability within the supply chain as follows:
• Critical Tier 1 Suppliers: We work closely with our Critical Tier 1 suppliers, who are essential to our core operations, to mitigate potential disruptions by monitoring their performance, conducting risk assessments regularly, and opening communication to ensure continuity of supply and minimize risks that could impact production schedules or product quality.
• Critical Non-Tier 1 Suppliers: We also recognize the importance of Critical Non-Tier 1 suppliers, who indirectly support our operations by supplying critical materials or services to our Tier 1 suppliers. To manage the risks associated with these suppliers, we monitor the performance of our Tier 1 suppliers and assess the potential impact of disruptions in their supply chain. Additionally, we work with our Tier 1 suppliers to ensure they have contingency plans in place and provide support to help mitigate risks that may arise from their reliance on Critical Non-Tier 1 suppliers.

Localized Sourcing – Hana has implemented local supply chain management by acquiring second-source suppliers or new suppliers for specific production materials. Our localization strategy aims to reduce reliance on overseas suppliers, lower material and supply chain costs, increase flexibility, ensure faster delivery, enhance customer satisfaction, and foster a self-sufficient local ecosystem by strengthening capabilities of local partners and promoting employment and domestic economic development.

In 2024, Hana Lamphun strengthened its business partnership with local suppliers through additional project collaborations and a development support program. This program includes a training curriculum that benefits both parties by facilitating knowledge sharing, material sourcing, process capability and new technology studies, production technology enhancement, and risk management. As a result, the localized supply chain provides the following benefits to the Company in 2024:

Number of Project Accomplishment: 72 Projects
Cost Saving: THB 30 million per year
Target Achievement: 100 %

Supplier Audit – Hana regularly conducts supplier audits, utilizing both self-assessment and site visits, to develop and strengthen relationships with strategic suppliers, particularly those classified as tier 1. These audits are a key tool for identifying, assessing, and mitigating potential risks within the supply chain, such as raw material shortages or other emerging threats. Critical suppliers are required to implement business continuity plans, and Hana also reviews the risks associated with the geographic concentration of critical suppliers. In response, we re-evaluate the possibility of qualifying suppliers in different geographical regions to ensure supply chain flexibility and continuity.

For supplier assessment, the suppliers also need to pass our sustainability criteria covering social and environmental aspects/GI2 (Green Industry Level 2) or equivalent such as occupational health, safety and environment, RBA Code of Conduct which covers labor, human rights, health and safety, environment, ethics and management system, as well as in compliance with Supplier Code of Conduct. In 2024, Hana Lamphun selected suppliers for On-site Audits based on various factors, such as being new suppliers, customer recommendations, or those requiring re-evaluation from previous assessments. We successfully completed On-site Audits with 8 suppliers, meeting our target for the year.

Supplier Development – In 2024, Hana Lamphun and Hana Ayutthaya strengthened partnerships with 8 suppliers through training courses aimed at sharing technical knowledge on process design, material selection, material processes and properties, and the latest technology updates. These sessions also covered new software tools relevant to Hana’s needs, as well as defect features and attributes. This collaboration enabled Hana to enhance its ability to manage defects, minimize waste, leverage technological advantages, and increase productivity.

Green Procurement – To promote sustainability, Hana actively supports programs that are environmentally friendly and focus on community impact. By partnering with key partners, we aim to minimize both environmental and social impacts. Green Procurement is a proactive approach to combat climate change and promote environmental sustainability. The Company integrates the partner’s environmental performance considerations into the procurement decision-making process, with clear quantitative targets. The

Company has encouraged the local and overseas first-tier suppliers with the top 500 purchase amount of products and services to acquire Green Industry Level 2 or higher or ISO 14001.

In 2024, 53% of our first-tier suppliers meeting the above criteria consequently acquired the aforesaid certification in Level 2 or higher or ISO 14001 which exceeded the target set at 50%.

Note: To certify as a green industry, the supplier must be an industry that adheres to environmentally friendly operations by passing 3 assessment criteria; improving the efficiency of the production process, environmental management for continuous improvement, and corporate social responsibility both internally and externally throughout the supply chain. The green industry certificate rating level 2 so called Green Activity must have an environmental policy, communicating environmental policy in the organization, and environmental planning covering objectives, targets, action steps, responsible persons and completed time frame as well as environmental execution to achieve such results.

Reference link for the policy, guidelines and measures related to suppliers	:	https://www.hanagroup.com/File/ViewDoc/97
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Creditors

The Company treats creditors with responsibility, honesty, equality, and fairness, ensuring a fair return for both parties and adhering to the terms of agreements, including any guarantees, loan repayment conditions, and cash flow management to meet payment obligations. The Company will inform creditors of any payment defaults and comply with the Consumer Protection Law and other applicable regulations. In case of default, the Company will notify creditors in advance and collaborate to find solutions to remedy the situation and prevent losses. The Company's policy ensures responsible management of guaranteed conditions, loan repayment terms, and measures in case of payment defaults.

In 2024, there were no disputes or lawsuits between the Company and any creditors.

Reference link for the policy, guidelines and measures related to creditors	:	https://www.hanagroup.com/File/ViewDoc/97
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Government agencies

Hana requires its directors, executives, and employees to understand and comply with applicable laws, regulations, policies, and procedures in the performance of their duties, including the proper payment of taxes to the government. The Board of Directors has established a corporate tax policy to provide a framework for tax management and practices, ensuring compliance with legal requirements and tax regulations in each country where the business operates. This policy is aligned with principles of good corporate governance, business ethics, and social responsibility.

The Company's Corporate Tax Policy is publicly available in both Thai and English on the company website (www.hanagroup.com), under the section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, specifically titled Corporate Tax Policy.

Reference link for the policy, guidelines and measures related to government agencies	:	https://www.hanagroup.com/File/ViewDoc/99
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Community and society

Hana conducts its business with a sustainable commitment to responsibility toward communities, society, and the environment. This includes the efficient use of resources, energy conservation, the adoption of renewable energy, effective waste management, and efforts to reduce waste and pollution, carbon emissions, and greenhouse gases, as well as addressing climate change. The Company strictly adheres to all applicable health, safety, and environmental laws and regulations in the countries and communities where it operates.

Our policy emphasizes the manufacturing, handling, and disposal of waste in compliance with relevant laws, ensuring that these activities are carried out responsibly without posing risks or harm to human health, communities, society, or the environment. Sustainability is a key focus for the Company, and we have set it as one of our long-term strategies to respond proactively to future challenges, such as energy transitions and climate change.

Hana has been certified with ISO 14001:2015 – Environmental Management Systems (EMS), which provides practical tools for managing not only the company's environmental responsibilities but also its business development. By focusing on pollution prevention and environmental protection, this certification helps reduce the overall environmental impact while also contributing to the reduction of operating costs for the business.

Hana is also an ISO 45001:2018 certified company for Occupational Health and Safety Management Systems. The Company's policy reflects a strong commitment to not only addressing health and safety within the workplace but also implementing measures to prevent health problems and accidents, ensuring the well-being of both employees and the surrounding community.

The Company encourages the efficient use of resources and the adoption of renewable energy by implementing various energy-saving projects, including the installation of solar rooftops. The Board supports training for all employees to foster a better understanding of environmental issues and raise awareness. In 2024, a range of environmental training courses were provided to 2,445 employees, facilitated by both internal and external instructors. These courses included:

Environmental Aspects' Assessment: This training focuses on identifying environmental issues arising from the Company's activities, products, and services within the scope of the environmental management system. It helps the Company plan for improvements by evaluating the environmental aspects and impacts associated with its operations.

ISO 14001 Environmental Management: This training aims to develop the knowledge and skills required to effectively implement and maintain the ISO 14001 environmental management system, ensuring that employees understand the standards and practices necessary for environmental compliance and continuous improvement.

Energy Conservation Awareness: The purpose of this training is to raise awareness about natural resource issues and the importance of energy conservation. It equips employees with the knowledge and skills needed to apply energy-saving practices both in the workplace and in their daily lives, in line with the Company's relevant policies and environmental goals.

Intensive Use of Chemical Safety: This training is designed for employees involved in work related to chemicals, emergency teams, and other relevant functions. It ensures that employees understand the chemical hazards present in the workplace, their effects on health and the environment, and the necessary control measures for managing hazardous chemicals.

Safety, Occupational Health, and Working Environment: This training aims to provide management, staff, and contract workers on-site with the knowledge and awareness of safe work practices and preventive measures. The goal is to reduce occupational risks, minimize hazards, prevent accidents, injuries, and diseases, and improve overall workplace health and safety.

Basic Fire Safety Training Course: This course raises awareness of fire hazards in the workplace and trains employees on how to act safely in the event of a fire emergency. It also covers the preparation of fire prevention and suppression plans to ensure safety during such situations.

By offering these courses, the Company can better prioritize and set objectives to eliminate hazards, reduce risks, and foster continuous improvement. Additionally, the Company benefits from the efficient use of resources and more effective environmental management.

Reference link for the policy, guidelines and measures related to community and society	:	https://www.hanagroup.com/File/ViewDoc/97
Page number of the reference link	:	8

Other guidelines and measures related to shareholders and stakeholders

Intellectual Property

Hana has the policy on the intellectual property and copyrights in order to safeguard the tangible and intellectual property of those with whom we do business, which may be used in fulfilling work assignments, and we will comply with all regulations or contractual requirements governing the use of such property. Any reward and copyrights received from the assignment/work given by the Company or any byproduct assignment/work that originated or resulted from training/tutoring by the Company shall belong to the Company.

Directors, management and employees shall use computer and information technology related work according to Computer-Related Crime Act and other local intellectual property and copyright laws. All employees are required to sign for acknowledgement of the agreement of compliance with intellectual property and copyrights and related laws.

6.2 Business code of conduct

Business code of conduct

Business code of conduct : Yes

The Board of Directors attempts to operate its worldwide business in accordance with the highest ethical standards and relevant laws. The Company expects and requires that its directors, executives and employees perform their duties with the highest standards of integrity in the conduct of business. The Board ensures the implementation and enforces compliance with the code of conducts by setting adequate mechanisms to be in place through the processes as follows.

1. Policy Establishment

The corporate code of conduct has been written as the Company's policy and procedure in order to provide the general guidance for those in recognizing and resolving ethical and legal issues while conducting the Company's business.

2. Training and Education

Conduct regular training sessions to educate employees for the code of conduct and its importance. In 2024 to ensure that employees have the knowledge and understanding of the policies and practices of business ethics, the Company conducted trainings for employees and provided the post tests to evaluate the training results. For the new hired employees, 100% has been trained for the code of conduct as part of orientation whereas 100% for monthly employees were trained in 2024.

3. Ethical Hotline and Whistleblower Protection

Implement a confidential reporting mechanism to encourage employees and stakeholders to report any ethical concerns or violations.

4. Regular Audits and Assessments

Conduct periodic audits and assessments to evaluate the effectiveness of the code of conducts. The internal audit department also monitored the implementation and compliance for the code of conducts.

5. Leadership Accountability

The Board, executives and management lead by example and demonstrate a commitment to ethical behavior and ensure they are actively promoting ethical practices throughout the organization. The compliance to the code of conduct is regularly monitored by senior management. All the directors and executives (accounted for 100%) are required to sign a certification of acknowledgement and compliance with the code of conducts of the Board of Directors.

6. Continuous Improvement

Regularly review and identify any gaps or areas for improvement and take appropriate actions to prevent re-occurrence.

7. Reporting

The summary of the code of conduct monitoring and compliance is reported to the Audit Committee at least once a year.

Violation: The Company shall not tolerate any illegal or unethical acts. Anyone violating the code of conduct will be disciplined including termination of employment. For the available whistleblowing channels, there was no case of compliant or dispute regarding a breach of the code of conduct. The Audit Committee was reported no violation of the code of conduct from the internal audit department in 2024.

The Company's Code of Conduct has been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subjects - Corporate Code of Conduct and Business Code of Conduct of the Board of Directors.

Policy and guidelines related to business code of conduct : https://www.hanagroup.com/File/ViewDoc/82

Page number of the reference link : 3-12

Policy and guidelines related to business code of conduct

Guidelines related to business code of conduct : Prevention of conflicts of interest, Anti-corruption, Whistleblowing and Protection of Whistleblowers, Preventing the misuse of inside information, Money laundering prevention, Gift giving or receiving,

entertainment, or business hospitality, Compliance with laws, regulations, and rules, Information and assets usage and protection, Anti-unfair competitiveness, Information and IT system security, Environmental management, Human rights, Safety and occupational health at work

Prevention of conflicts of interest

The Company has the policy in place to deal with conflicts of interest. The Board of Directors has established the policy and procedure for directors and executives to report on conflicts of interest to ensure that they are abided by their fiduciary duties in the way that they must not have personal interest, whether directly or indirectly, in the matter under their decision. Directors and executives are required to disclose any material interest in transactions or matters affecting the Company and its subsidiaries through the established form approved by the Board of Directors. The Corporate Secretary is responsible for receiving reports from directors and executives who disclose their interests and those of their related parties to the Chairman of Audit Committee and the Chairman of the Board respectively.

Related party transactions between the Company and a director or executive and/or connected persons, which may lead to the potential conflicts of interest, must be considered by the Audit Committee. For material related party transactions, such transaction must be approved by the Board of Directors and/or the shareholders' meeting depending on the nature and the size of transaction as required by Notification of the Capital Market Supervisory Board where those directors and executives shall be excluded from decision making involving transactions in which they have vested interests or are connected.

The Company's Conflict of Interest Guidelines have been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject – Business Code of Conduct of the Board of Directors.

In 2024, there was no conflict of interest from directors and executives or connected persons reported to the Board.

Reference link for prevention of conflicts of interest : https://www.hanagroup.com/File/ViewDoc/86

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Anti-corruption

Anti-Corruption Policy - The Company established the anti-corruption policy and has been approved and reviewed by the Board yearly. The anti-corruption policy is as follows.

"Hana has a zero tolerance of bribery and corruption. The Company prohibits the Board of Directors, management, employees or third parties in their relationship with the Company, being involved in any act of corruption in any form in all business transactions to benefit directly or indirectly and shall comply with the applicable laws and regulations in all the countries in which the Company operates."

Risk Assessment - The Risk Management Committee assessed the potential corruption risks by conducting the corruption risks separate from other risks. The risk profile was reported to the Board by having the Compliance Unit perform compliance audit in mitigated risks with the established policy.

Training and Communication - The Company communicated and provided training to employees regarding its anti-corruption policy and related policies, i.e., corporate code of conducts, gifts and hospitality policy, conflict of interest policy, etc. Employees can get access to the policies via the Company's bulletin boards and intranet website. The supplier code of conduct covering the anti-corruption policy has been communicated with both overseas and local suppliers for their acknowledgment and compliance.

Monitoring and Review - The Audit Committee reviews the anti-corruption policy on an annual basis and proposes any amendment to the Board for approval. The Audit Committee also monitors the implementation of the policy and makes recommendations accordingly. Internal control systems and procedures shall be reviewed periodically by an internal audit department to ensure that they are effective in countering bribery and the audit results are to be discussed with relevant operational personnel and reported to senior management and the Audit Committee. In 2024, the risk assessment included the anti-corruption was reported to the Board for consideration.

Certification - The Company has re-certified for the third time as a member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) in the end of March 2025, for the Company's actions and effort to support the mobilization of the private sector in the fight against corruption since 2013.

Collective Impact - Hana encourages our business partners and subcontractors to become a part of CAC by inviting our business partners through an open letter posted on the Company website. With the collaboration for impact, this can help reduce corruption risks and help promote a transparent and sustainable business environment. In addition, the Company and its subsidiaries yearly announces "No Gift Policy" and communicates with its business partners and discloses to the public as the guideline for directors and employees not to accept or give gifts by cooperating with other business sectors for the fight against corruption.

The Company's Anti-Corruption Policy has been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Anti-Corruption.

Reference link for anti-corruption : https://www.hanagroup.com/File/ViewDoc/84

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Whistleblowing and Protection of Whistleblowers

Whistleblowing and Channels of Complaints

The Board provides channels for stakeholders to communicate any concerns about illegal, any suspected fraud or corruption, human right violation, unethical conduct or violation of the good corporate governance, any suggestion or any complaints regarding to activities or conduct of the Company or any of its staff or business partners relating to the Company. Stakeholders can report such complaint or concern in good faith directly to following channels.

Contact persons list name

- Mr. John Thompson, Chairman of the Board of Directors and the Audit Committee john@ntasset.com
- Mr. Terrence Philip Weir, Chairman of Risk Management Committee terry@hanabk.th.com
- Mr. Richard David Han, Chief Executive Officer richardh@hanabk.th.com
- Mrs. Tappawong Na Tarlang, Corporate Human Resources Business Partner/Training & Administration Senior Director tappawong@hanabk.th.com
- Ms. Jirapa Kongmanee, Corporate Secretary and the Head of Internal Audit Department jirapak@hanabk.th.com

Mailing Address - Hana Microelectronics Public Co., Ltd., 65/98, Soi Vibhavadi-Rangsit 64 Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok 10210, Thailand.
Any whistleblower in Hana group should initially make a complaint or report any act of misconduct or suspicions through the respective channels such as through an employee's direct supervisor (manager level and above), the head of Human Resource Department of each Hana location or a suggestion/red box available at each Hana location. If employees cannot go to their respective channels, they could report to the above channels.

Handling of Complaints - The Company will decide how to respond in a responsible and appropriate manner. An investigation will be conducted as speedily and sensitively as possible in accordance with all relevant laws and regulations. The Internal Audit Department will report the details of complaints and investigation results to the Executive Committee or the Audit Committee and the Board depending on the complaint, dispute or issue raised.

Protection of Reporting Individual including Witness and Concerned Personnel - It is a policy that the Company will not discharge, demote, suspend, threaten, harass or in any other actions against any person reporting any such complaint that made in good faith.

Violation - In 2024, the Board did not receive any complaints about corruption/fraud, breach of business ethics and corporate governance, a civil action or fines from SEC, human right violation or no complaint that damage to the Company's reputation due to the administration of the Board of Directors, as well as no legal dispute concerning labour, human rights, and the environment.

The Company's Whistleblowing Policy has been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investors Relation > Sustainable Development > Corporate Governance > CG Related Policies, on the subject - Whistleblowing Policy.

Reference link for whistleblowing and protection of : https://www.hanagroup.com/File/ViewDoc/100

whistleblowers

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Preventing the misuse of inside information

The Company has the policy to prevent directors and executives complying with the notification of the Securities and Exchange Commission from taking advantage of inside information, from dishonest dealing for themselves and their related parties. Insider trading is prohibited. Hana has established a system to prevent the use of inside information for personal benefits as follows.
• Communicate the compliance of the policy of Business Code of Conduct of the Board of Directors and executives. The directors and executives are required to sign on acknowledgement of the policy on an annual basis.
• Inform the Board and executives by a circular letter that those who may gain inside information shall avoid trading the Company' s securities for the period of one month before the Company announces its financial statements to the public and at least 24 hours after the information is widely spread out to the public.
• Require the Board and executives to inform to the Board or the Corporate Secretary at least 1 day in advance before actual trading of the Company's securities.
• Inform the Board and executives for the duties to report the Company securities holdings and movements to the Securities Exchange Commission (SEC) under the Securities and Exchange Act B.E. 2535 and the Stock Exchange of Thailand's regulations.
• Confirm the shareholding status with individual director and executive through the Corporate Secretary on a monthly basis.
• Report to the Board for the shareholding status of individual director and executive at every Board meeting.

In 2024, no director or executive traded the Company's shares by using inside information, and during the silent periods.

Reference link for misuse of inside information : https://www.hanagroup.com/File/ViewDoc/86

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Money laundering prevention

Directors, executives and employees must comply with the applicable laws in the strictly-practices, transparent and responsible manner. The Company shall comply with all laws on preventing money laundering and the financing of terrorism. Money laundering involves obfuscating illegal sources of funds by introducing such funds into legal business and financial systems. All payments must comply with tax laws, accounting principles, as well as anti-money laundering and anti-corruption regulations worldwide.

Gift giving or receiving, entertainment, or business hospitality

Directors, executives and employees must comply with the applicable laws in the strictly-practices, transparent and responsible manner. Directors, executives and employees shall aware to offer gifts and shall not accept any offer, gift or anything of value from customers, suppliers, shareholders and stakeholders that is perceived as intended to influence any business decision, any act or failure to act or any commission of fraud.

Compliance with laws, regulations, and rules

To ensure that the Company's operations comply with relevant laws, regulations and rules, the Company requires its executive, directors and employees to understand and abide by the laws, regulations, policies, and procedures that apply to them in the performance of their job duties with honesty, integrity and morality.

Information and assets usage and protection

Safeguarding HANA assets is the responsibility of all directors, executives, employees and the Company representatives. Directors, executives and employees must use and maintain such assets with care and respect while guarding against waste and abuse. HANA's ability to serve its customers requires the efficient and proper use of the Company's assets and resources, including property information, technology data, software, information system resources, land, buildings, equipment, components, raw materials, inventory, and cash.

Anti-unfair competitiveness

The Board focuses on operating its business with open and fair competition and have a practical guidance for the competitors by not involving in the competition by the dumping, persecution or deprivation influence in order to avoid competition, not taking any action that violates the intellectual property or copyright of competitors, not using dishonest methods to discredit a competitor or no trade secret violations, strictly complying with competition laws, antitrust laws, and related laws while doing business both domestic and abroad in compliance with laws, regulations, policies and guidelines regarding trade competition of the countries in which the Company do business with including any case of mergers and acquisitions.

In 2024, there was no dispute or lawsuit between the Company and any competitors.

Information and IT system security

Cyber Security and Personal Data Protection

The Board is committed to protect the data privacy and information security, maintain the confidentiality of information, data integrity of the Company's physical assets and all electronic information in order to ensure that the safe and responsible use of information technology to meet operational and contractual confidentiality obligations and continuous improvement.

Data Privacy Protection - The Company has realized the importance of the safety of personal information from using the service and protection of the personal information of all stakeholders responsibly. The data privacy policy has been established and disclosed to the public for transparency in supervision of the responsible personal data protection and supervision of the operational framework administration unit in accordance with the Personal Data Protection Act (PDPA) in order to gain confidence in the security of information to our stakeholders. There are 5 guidelines for personal data protection as follows:

1. Definition of personal data

Understand the overall strategy of data security both important information of the company and personal information according to the Act, then define the scope of the target including developing data model structures and classification of data into categories.

2. Find out what data is being used

Search, analysis and classification of various types of information including understanding the data environment, structure and lifecycle in order to set measures to protect each type of data effectively.

3. Establish basic guidelines for the protection of confidential information

Establish a baseline for the protection of importance of the company data and personal data in accordance with the Act, evaluate processes and necessary control measures as well as conducting risk assessments and performing gap analysis to determine solutions to cope with associated risks.

4. Plan, design and implement data security protection

Plan and prioritize processes to protect sensitive the company data and personal information both technical and business processes. Then, design and implement actions to secure those data to be consistent with business goals.

5. Observe the protection of sensitive data

Develop the good governance framework, risk metrics and surveillance processes to ensure that the practices and controls implemented are working objectively and efficiently. In addition, the strategy and methods of data protection shall be regularly reviewed.

Protect Confidential Information - The Board is committed to protect customers' personal information and privacy including business partners' confidentiality by operating in adherence to applicable laws and regulations of personal information when personal data is collected, stored, processed, transmitted and shared. The practice is to sign an agreement on confidentiality information with every customer and/or business partner. The Company shall not disclose any information to anyone or other agencies without official authorization from the customers or business partners.

IT and Cyber Security Governance Structure - To ensure proper policy management as well as at the operational level, the Company has a 3-level governance structure consisting of (1) supervisory level, (2) management level, and (3) operational level.

(1) Supervisory level

- The Board of Director
- Audit Committee

(2) Management level

- Executive Committee
- Executive Vice President Chief Financial Officer

(3) Operational level

- Data Protection and Cyber Security, Information Technology (IT) Department

Security Awareness Training - To enhance employees' information security awareness and employees' security policy compliance, IT together with Training Department have provided training to all employees and management, which is accounted 100% of employees who received trainings and passed the post-tests in 2024.

Channels for Contacting and Complaining about Personal Data - In the event that the owner of the personal data wants to inspect the collection of personal data/purpose of data use/controller and the office of the personal data controller, can address to our Human Resources Management Department as follows:

1. Hana Microelectronics Public Co., Ltd., Headquarters:
65/98 Soi Vibhavadi-Rangsit 64
Juction 2, Kwang Talad Bankhen,
Khet Laksi, Bangkok 10210
Telephone No.: 02 551 1297-8

2. Hana Microelectronics Public Co., Ltd., Lamphun Branch 1:
101/2 Moo 4, EPZ Northern Region Industrial Estate,
Chiangmai – Lampang Road, T. Baan-Klang,
A. Muang Lamphun, Lamphun 51000
Telephone No.: 053 581 567-73

3. Hana Microelectronics Public Co., Ltd., Lamphun Branch 2:
123 Moo 5, Saha Group Industrial Park,
T. Pa Sak, A. Muang Lamphun, Lamphun 51000
Telephone No.: 053 521 361

4. Hana Semiconductor (Ayutthaya) Co., Ltd.
100 Moo 1, T. Baan Lane,
A. Bang Pa-in, Ayutthaya 13160
Telephone No.: 035 350 805

Implementation Outcome

1. Hana Semiconductor (Ayutthaya) Co., Ltd. and Hana Microelectronics (Jiaxing) Co., Ltd., the subsidiaries, are ISO/IEC 27001 certified for 80% of the total technology infrastructures.
2. No incidents of breaches and data leaks.

Information Security/Cybersecurity in 2024 (Target = 0)

- Number of data breach incident such as information leakage, theft and loss of data of customers = 0
- Number of employees and customers who are impacted from information leakage = 0
- Amount of fines or penalties arising of breach of security information or other cybersecurity incidents = 0

Personal Data Protection

- Customer complaints with supporting evidence of customers' personal data breach = 0
- Complaints from third party = 0
- Complaints from government agencies = 0

The Company has disclosed the Personal Data Protection Policy in both Thai and English versions on the Company website (www.hanagroup.com) under section About Us > Privacy Policy (PDPA).

Reference link for information and IT system security : https://www.hanagroup.com/AboutUs/Privacy

Environmental management

To ensure sustainable development and response to climate change that threatens both economic and social sustainable development, Hana's environmental policy is approved by management to suit the context and support the strategic direction of the organization in showing its commitment to protect the environment, use resources efficiently, reduce the impact on the environment including complying with legal requirements and continuously promoting employee participation in environmental management initiatives.

Human rights

Hana places importance on and respect human rights in all aspects and conducts business with due care to prevent human rights violations and discrimination, while respecting the equality, diversity and inclusion of all stakeholders regardless of their race, nationality, origin, ethnicity, religion, gender, sexual orientation, language, age, color, education, disability, beliefs, political opinions, marital status, pregnancy status, social status, culture, traditions or any other status protected by law. The Company has complied with applicable laws and international standards with a particular focus on the Universal Declaration of Human Rights (UDHR), United Nations Global Compact (UNGC), United Nations Guiding Principles on Business and Human Rights (UNGP) and the International Labor Organization Declaration on Fundamental Principles and Rights at Work (ILO) to ensure that the Company's operations are free from human rights violations of stakeholders throughout the business value chain.

Reference link for human rights : https://www.hanagroup.com/File/ViewDoc/1336

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Safety and occupational health at work

The Company provide and manage a safe and healthy work environment and to manage its business in ways that are sensitive to the environment. The Company will provide a workplace that is free from safety or health hazards or will control such hazards to acceptable levels.

Worker exposure to potential safety hazards shall be controlled through proper design, engineering and administrative controls, preventative maintenance, safe work procedures, and ongoing safety training. Where hazards cannot be controlled through these means, workers should be provided with appropriate, well maintained personal protective equipment. Workers shall not be disciplined for raising safety concerns. Emergency situations and events are to be identified and assessed, their impact minimized by implementing emergency plans and response procedures. This should include emergency reporting, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities and recovery plans.

Procedures and systems are to be in place to prevent, manage, track and report occupational injury and illness, including provisions to; encourage worker reporting, classify and record injury and illness cases, provide necessary medical treatment, to investigate cases and implement corrective actions to eliminate their causes, and to facilitate the return of workers to work.

Promotion of compliance with the business code of conduct

Promotion for the board of directors, executives, and employees to comply with the business code of conduct : Yes

The Board, executives and management lead by example and demonstrate a commitment to ethical behavior and ensure they are actively promoting ethical practices throughout the organization. The compliance to the code of conduct is regularly monitored by senior management. All the directors and executives (accounted for 100%) are required to sign a certification of acknowledgement and compliance with the code of conducts of the Board of Directors.

Reference link for the process of promotion for the board of directors, executives, and employees to comply with the business code of conduct : https://www.hanagroup.com/File/ViewDoc/86

Page number of the reference link : 2 - 5

Participation in anti-corruption networks

Participation or declaration of intent to join anti-corruption networks : Yes

Anti-corruption networks or projects the company has joined or declared intent to join : Thai Private Sector Collective Action Against Corruption (CAC)

CAC membership certification status : Certified

6.3 Material changes and developments in policy and corporate governance system over the past year

6.3.1 Material changes and developments related to the review of policy and guidelines in corporate governance system or board of directors' charter

In the past year, did the company review the corporate governance policy and guidelines, or board of directors' charter	:	Yes
Material changes and developments in policy and guidelines over the past year	:	No

The Board of Directors places importance on conducting business under the principles of good corporate governance. The corporate governance policy has been reviewed at least once a year.

In 2024, the position of Chairman of the Corporate Governance and Sustainability Committee has changed to be an independent director, in order to enhance the independent oversight roles in accordance with the principles of good governance and strengthen efficiency the sustainable operations of the Company.

6.3.2 Implementation of the CG Code for listed companies

Implementation of the CG Code as prescribed by the SEC	:	Mostly used in practice

In 2024, the Board of Directors has reviewed our corporate governance practices and there are certain areas that the Company adapted alternative approaches, having regard to the Company's particular circumstances. As a result, the Company has not complied with CG Code and corporate governance best practices as major items as follows.

1. Independent directors more than 50%

The Board should consist of more than 50% of independent directors.

Reasons:

The board structure of the Company consists of four independent directors and four executive directors, which is accounted for 50% of the Board, whereby:

1. The Chairman of the Board and the Chief Executive Officer (CEO) is not the same person;
2. The Chairman of the Board is an independent director;
3. The Chairman of the Board and the CEO are not immediate family members;
4. The Chairman of the Board is not part of the management team.

2. Appointment of Remuneration Committee

The Remuneration Committee should be appointed and composed of majority of independent directors with specified sets of duties and responsibilities and held at least 2 meetings per year.

Reasons:

As the remuneration structure of the Board has been set for the independent directors only, whereas the remuneration of executive directors is paid as senior company employees. The Company has not established the Remuneration Committee as the Board of Directors is capable of reviewing the remuneration of the independent directors by the Board as a whole. The Board is responsible for determining remuneration policy and structure of compensation for independent directors with transparency, benchmarking with prevailing industry and considering each director according to individual duties and responsibilities. For the Board's remuneration in all kinds, the Board has proposed to shareholders for final approval annually.

3. Disclosure of CEO Remuneration

Reasons:

The Board is of opinion that the compensation disclosure is highly sensitive as the CEO receives remuneration as a managerial employee of the Company, not as a director. The Company has disclosed the remuneration in the form of group executives, the policy on CEO remuneration and performance evaluation of the CEO. Therefore, the disclosure of CEO's remuneration to the public may be considered as deemed appropriate in future.

6.3.3 Other corporate governance performance and outcomes

2024 Corporate Governance Report

Hana achieved “excellent” in Corporate Governance Rating (CGR) or 5-star corporate governance assessment in 2024 honored by the Thai Institute of Directors Association (IOD) for the 11th consecutive year, reaffirming Hana’s continuous development of good corporate governance to steer the organization towards sustainable growth and enhance investor confidence.

The Company attempts to achieve growth in earnings for shareholders over the long term. The board members and executive management shall be qualified for their positions and have a clear understanding of their roles in corporate governance and exercise sound business judgment in the best interest of the Company and shareholders including the preparation and disclosure of financial and non-financial information accurately, completely and timely and devote the time and ability to perform their duties. Our treatment toward shareholders shall comply with the good corporate governance principles for the right and equitable treatment of all shareholders. The disclosures shall be made on a consistent basis, completely and truthfully in regards to the status of the Company, its operating results, financial standing, accounts and other reports. There shall be no disclosure of inside information to individuals associated with the management or directors, which cause damage to the shareholders as a whole.

1. Rights of Shareholders

Hana recognizes the importance of shareholders’ rights and treats all shareholders either individual investors or institutional investors equitably, fairly and in line with relevant laws where no actions shall be taken to materially diminish shareholders’ rights. The Company shall not obstruct or cause obstacles for communication opportunities among shareholders. If any shareholder agreement is to be executed by any shareholder, the Company shall endeavor to ensure that such shareholder agreement will not materially affect the Company or other shareholders.

- **Rights to Attend the Shareholders’ Meeting and Vote**

One of the basic rights of shareholders is the right to attend and vote at shareholders’ meetings. To encourage shareholders to exercise their rights in shareholders’ meetings, the Company takes following actions:

Before the meeting day:

The Company sets the date, time and place of the meeting by taking into consideration the convenience of shareholders in attending and encouraging shareholders, including institutional investors, to attend the meeting. The Company holds the Annual General Meeting of Shareholders (AGM) within 4 months after financial year ends. In 2024, the Company held the AGM on 30 April 2024 at 14:00 hrs. at its head office located at 65/98 Soi Vibhavadi-Rangsit 64, Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok making it convenient for shareholders including institutional investors to travel and attend the meeting. The Company arranged with the Thailand Securities Depository Co., Ltd. (TSD) which is the Company’s securities deposit registrar send the notice of shareholders’ meeting by posted mail on 5 April 2024 which was 21 days prior to the meeting date in order to provide sufficient time for shareholders and institutional investors to review the details of information disclosed in the notice of meeting. The notice of meeting expressly indicated the matters to be tabled at the meeting, whether for acknowledgement, approval or consideration, including the Board’s opinion on each agenda. Other supporting information and documents were also attached to the notice. In addition to the direct delivery, the notice of meeting was made available to the shareholders through the Company website (www.hanagroup.com) on 29 March 2024 which was 30 days in advance and the notice of meeting was published through SET’s information system or “SET Link” in both Thai and English versions, which were the same as the original notice mailed to shareholders.

The Company also provides opportunities for shareholders to submit questions or enquiries prior to the meeting with the procedures enclosed in the notice of meeting and available on the Company website. Further, the Company encourages the exercising of voting rights by shareholders who cannot attend the shareholders’ meeting by appointing their proxies to participate in the meeting or appoint the Company’s independent directors on their behalf to attend the meeting and vote by providing the proxy form B on which shareholders are able to specify their votes, with the notice of meeting.

On the meeting day:

The Board of Directors is to ensure that the meeting is conducted transparently and efficiently as well as to facilitating the exercise of shareholders’ rights. The quorum including the total number of shareholders in attendance in person or by proxies, voting procedures and voting count method are clearly advised to the meeting prior to the discussion of the agenda items. Each shareholder has one vote for each share and a resolution passed by a majority of votes, except where it requires otherwise in accordance with the Company’s Article of Association. In case of directors and/or shareholders who have vested interests or

involvement in any particular agenda, the directors with vested interests or involvement in aforesaid agenda shall leave the meeting room and abstain from voting and the votes are not allowed for shareholders who have vested interests or involvement related to any particular agenda item.

The chairman shall convene the meeting according to the terms and conditions in line with the Company's Articles of Association and manage appropriate time for each agenda set forth in the meeting invitation. During the meeting, shareholders are given the opportunities to raise questions, recommendations as well as providing their opinions on the Company's performance or other concerns on an equitable basis.

In regards to the AGM conducted in 2024, 8 out of 8 directors (100%) attended the meeting which included the chairman of the Board, the chairman of all subcommittees, Chief Executive Officer, Chief Financial Officer and Chief Operating Officers. The external auditor also attended the meeting with the directors so that they could listen to shareholders' opinions or suggestions and also answer any questions.

The Board has adopted the technology in using the barcode system for registration and vote counting in order to bring more accuracy and the results of voting can be announced in a timely manner. Each matter of the agenda is required the use of barcode voting card so that shareholders are able to vote as they deem appropriate. Ballots are collected in the event of an objection or abstention or invalid and kept for further evidence and verification.

In addition, the Company arranges the lawyer as the inspector who is an independent person to count and check the votes in the meeting and clearly inform the voting results as agree, disagree, abstain and invalid ballot. Duty stamps are made available to shareholders with no charge.

After the meeting day:

The meeting minutes recording the course of the meeting, the list of directors and executives attending the meeting, voting procedures, vote counting methods, the agenda discussed, the results of shareholder voting counts on each agenda and the decisions made by the meeting with the number of votes of shareholders casting affirming, opposing, abstaining and invalid votes including shareholders' questions and answers are made available within the appropriate time to shareholders.

The minutes of the 2024 AGM has been disclosed both in Thai and English on the Company website (www.hanagroup.com) within the following business day after the meeting and at the same time sent to the Stock Exchange of Thailand under section Investor Relations > SET News, on the subject - Minutes of Annual General Meeting of Shareholders year 2024 and also the video clip of 2024 AGM of Shareholders. If shareholders have any inquiries or comments on the minutes, they can contact to the Corporate Secretary. The minutes are maintained at the Company's head office for further reference.

• Rights in Addition to Voting Rights

The Company has provided shareholders rights in addition to voting rights as follows:

• The rights to be counted as a shareholder, for example, a right to buy, sell, transfer shares or a right to inspect shareholder records, etc.;

• The right to receive full and fair returns without inequitable treatment from any group of shareholders.;

• The right to access the Company's information such as the quarterly financial results, the minutes of shareholders' meeting, the right to request the Company's visit, etc.;

• The right to participate in decision-making for material matters such as the appointment or dismissal of the Company's directors and approval of their remuneration, appointment of auditors and approval of their remuneration, etc.;

• The right to inspect the management of the Board of Directors, who are representatives of shareholders, such as to inspect the Company's books and records through the Company's public filings including 56-1 One Report, etc.;

• The right to obtain a redress or a rectification for any violations of their rights.

In 2024, the Company had no actions that violated the right of shareholders, such as not changing or adding agenda items without notifying shareholders in advance or which limit the access to the Company's information that was released to public. In addition, the Company did not prevent or obstruct any opportunities for shareholders to communicate with each other.

2. Equitable Treatment of Shareholders

Hana pays special attention to the interest of the Company's owners - the shareholders. Equitable treatment is given with fairness to all categories of shareholders as follows:

Treat all classes equally:

The Company ensures fair treatment of shareholders irrespective of the size of each of their shareholdings. Foreign shareholders and owners of small stakes (minority shareholders) as well as individual investors or institutional investors are treated equally. All of shareholders, in respect of each class of shares, are entitled to the same dividend payments, and have equal rights in the event of share capital increases. The Company's shareholder meetings are open to all shareholders, and all shares of the same class have the same voting rights. Voting at the shareholders' meeting is done by the principle of one share, one vote.

Protect minority shareholders' rights:

The Company has the policies to promote the right of minority shareholders by allowing minority shareholders to propose agenda items and nominate candidates to be elected as the directors in advance at the AGM. During October - December, shareholders have the right to submit proposals for the upcoming AGM to the Board of Directors for consideration.

The procedures and criteria to propose agenda items and nominate the directors to the Board of Directors have been posted on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject - Procedures to Propose AGM Agenda Items and Nomination of Board Members.
However, in 2024 there were no shareholder proposals sent to the Board of Directors for consideration.
The matters discussed in the AGM and voting were in sequence as given in the invitation letter without changing important information or adding agenda items without notifying shareholders in advance so shareholders had the opportunity to adequately study the information before making the decision. Further, the Board of Directors allowed shareholders to elect each director eligible for election on individual basis.

3. Disclosure and Transparency

The Company ensures timely disclosure of all material matters and all relevant information is reported to the Stock Exchange of Thailand in accordance with the disclosure requirements. It is critical to have as much information as can be available so that continuous evaluation of investment performance may be conducted. The Company will make the effort to disclose information broadly and proactively through channels of communication that allow equal access to market participants. New information that is likely to materially influence the valuation of the Company's shares shall be disclosed to the market immediately and the information disclosed to investors will be accurate, not misleading and sufficient for investors to make decisions.

In addition to the information disclosure in accordance with relevant regulations, through the channels of the Stock Exchange of Thailand and 56-1 One Report, the Company also discloses information in both Thai and English versions through other channels such as the Company website with regularly post and update. The Company has the Communication and Disclosure Policy to ensure all information relevant and material disclosure in an appropriate, equal and timely manner.

There was no violation that Hana breached the disclosure rules and regulations. The financial reports have been disclosed in a timely manner during the past years.
The Company has not set up the Investor Relations Department, but the Company's executive directors are actively involved in the role of investor relations on a continuous basis as the Company believes that their ability to deliver confidence and clear presentation is as important a skill as technical and managerial capabilities. The Corporate Affairs Department is also available to provide basic information upon request. The Company has the IR Code of Conduct to set clear directions and support the investor relations function and ensure the effective communication among the Company, investors, shareholders, the financial community and other stakeholders. The Company usually arranges an analyst meeting each quarter to inform the investor community of the financial result and also clarify all inquiries from institutional investors, fund managers and analysts who attend the meeting. Additionally, the Company's visits by interested analysts are also welcome and can be arranged by appointment.

In 2024, the Company participated in the investor relation's activities as follows:
- Analyst Meeting - 4 times by online
- SET's Opportunity Day - 3 times by online
- Meeting with Foreign Investors - 9 times physical meeting / 19 times by online
- Meeting with Local Investors - 7 times physical meeting / 9 times by online
- Company Visit - 1 time

All investors can access the Company's financial and non-financial information through the SET's Public disclosure system and on

the Company website (www.hanagroup.com) or contact to following persons.

- Ms. Jirapa Kongmanee / Corporate Affairs jirapak@hanabk.th.com telphone number 0 2551 1297 # 117
- Ms. Penpimol Kotchabhakdi / Corporate Affairs penpimol_k@hanabk.th.com telphone number 0 2551 1297 # 226
- Ms. Sopida Klinklao / Corporate Affairs sopidak@hanabk.th.com telphone number 0 2551 1297 # 195

The Company's Communication and Disclosure Policy and Corporate Code of Conduct for Investor Relations have been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subjects - Communication and Disclosure Policy and Corporate Code of Conduct for Investor Relation.

7. Corporate governance structure and significant information related to the board of directors, subcommittees, executives, employees, and others

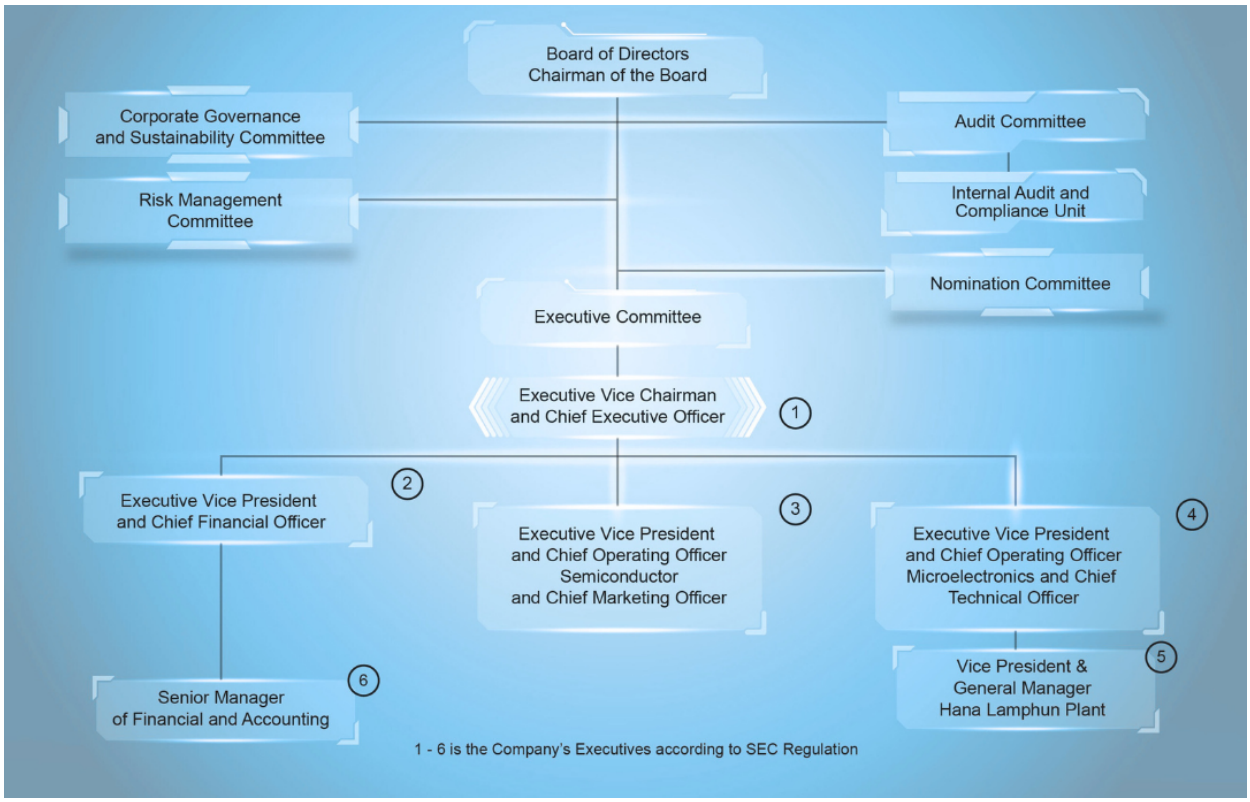
7.1 Corporate governance structure

Corporate governance structure diagram

The Company's organization structure includes the Board of Directors and 5 sub-committees: Executive Committee, Audit Committee, Nomination Committee, Corporate Governance and Sustainability Committee, Risk Management Committee and the management of key business units.

Corporate governance structure as of date : 31 December 2024

Corporate governance structure diagram



7.2 Information on the board of directors

7.2.1 Composition of the board of directors

	Number (persons)	Percent (%)
Total directors	**8**	**100.00**
Male directors	6	75.00
Female directors	2	25.00
Executive directors	4	50.00
Non-executive directors	4	50.00
Independent directors	4	50.00
Non-executive directors who have no position in independent directors	0	0.00

7.2.2 The information on each director and controlling person

List of the board of directors

List of directors	Position	First appointment date of director	Skills and expertise
1. Mr. John Thompson Gender: Male Age : 60 years Highest level of education : Master's degree Study field of the highest level of education : Accounting Thai nationality : Yes Residence in Thailand : Yes Family relationship between directors and executives : Doesn't Have Legal offenses in the past 5 years (*) : Doesn't Have DAP course : Yes DCP course : No **Shareholding in a company** • Direct shareholding : 0 Shares (0.000000 %) • Shareholding by persons related to directors, executives according to Section 59 (**) : 0 Shares (0.000000 %) <u>Indirect shareholding details</u> None	Chairman of the board of directors (Non-executive directors, Independent director) Authorized directors as per the company's certificate of registration : Yes Type of director : Existing director	1 Jan 2017	Accounting, Risk Management, Strategic Management, Leadership

List of directors	Position	First appointment date of director	Skills and expertise
2. Mr. Richard David Han Gender: Male Age : 67 years Highest level of education : Master's degree Study field of the highest level of education : Business Administration Thai nationality : No Residence in Thailand : Yes Family relationship between directors and executives : Doesn't Have Legal offenses in the past 5 years (*) : Doesn't Have DAP course : Yes DCP course : No **Shareholding in a company** • Direct shareholding : 1,040,000 Shares (0.117465 %) • Shareholding by persons related to directors, executives according to Section 59 (**) : 0 Shares (0.000000 %) <u>Indirect shareholding details</u> None	Director (Executive Directors) Authorized directors as per the company's certificate of registration : Yes Type of director : Continuing director (Full term of directorship and being re-appointed as a director)	26 Jul 1993	Electronic Components, Strategic Management, Risk Management, Leadership

List of directors	Position	First appointment date of director	Skills and expertise
3. Mr. Terrence Philip Weir Gender: Male Age : 65 years Highest level of education : Bachelor's degree Study field of the highest level of education : Economics Thai nationality : No Residence in Thailand : Yes Family relationship between directors and executives : Doesn't Have Legal offenses in the past 5 years (*) : Doesn't Have DAP course : No DCP course : Yes **Shareholding in a company** • Direct shareholding : 400,000 Shares (0.045179 %) • Shareholding by persons related to directors, executives according to Section 59 (**) : 0 Shares (0.000000 %) <u>Indirect shareholding details</u> None	Director (Executive Directors) Authorized directors as per the company's certificate of registration : Yes Type of director : Continuing director (Full term of directorship and being re-appointed as a director)	26 Jul 1993	Risk Management, Accounting, Strategic Management, Leadership

List of directors	Position	First appointment date of director	Skills and expertise
4. Ms. Pornphan Abhamongkol Gender: Female Age : 60 years Highest level of education : Master's degree Study field of the highest level of education : Business Administration Thai nationality : Yes Residence in Thailand : Yes Family relationship between directors and executives : Doesn't Have Legal offenses in the past 5 years (*) : Doesn't Have DAP course : Yes DCP course : No **Shareholding in a company** • Direct shareholding : 0 Shares (0.000000 %) • Shareholding by persons related to directors, executives according to Section 59 (**) : 0 Shares (0.000000 %) <u>Indirect shareholding details</u> None	Director (Non-executive directors, Independent director) Authorized directors as per the company's certificate of registration : Yes Type of director : Continuing director (Full term of directorship and being re-appointed as a director)	1 Jan 2022	Strategic Management, Risk Management, Accounting, Leadership

List of directors	Position	First appointment date of director	Skills and expertise
5. Mr. Sanjay Nirendra Mitra Gender: Male Age : 60 years Highest level of education : Master's degree Study field of the highest level of education : Engineering Thai nationality : No Residence in Thailand : Yes Family relationship between directors and executives : Doesn't Have Legal offenses in the past 5 years (*) : Doesn't Have DAP course : Yes DCP course : No **Shareholding in a company** • Direct shareholding : 0 Shares (0.000000 %) • Shareholding by persons related to directors, executives according to Section 59 (**) : 0 Shares (0.000000 %) <u>Indirect shareholding details</u> None	Director (Executive Directors) Authorized directors as per the company's certificate of registration : Yes Type of director : Existing director	29 Apr 2022	Electronic Components, Strategic Management, Risk Management, Leadership

List of directors	Position	First appointment date of director	Skills and expertise
6. Mr. Insuk Klm Gender: Male Age : 61 years Highest level of education : Bachelor's degree Study field of the highest level of education : Engineering Thai nationality : No Residence in Thailand : Yes Family relationship between directors and executives : Doesn't Have Legal offenses in the past 5 years (*) : Doesn't Have DAP course : Yes DCP course : No **Shareholding in a company** • Direct shareholding : 0 Shares (0.000000 %) • Shareholding by persons related to directors, executives according to Section 59 (**) : 0 Shares (0.000000 %) <u>Indirect shareholding details</u> None	Director (Executive Directors) Authorized directors as per the company's certificate of registration : Yes Type of director : Existing director	29 Apr 2022	Strategic Management, Electronic Components, Leadership, Risk Management

List of directors	Position	First appointment date of director	Skills and expertise
7. Mrs. Sunun Thongbai Gender: Female Age : 63 years Highest level of education : Master's degree Study field of the highest level of education : Business Administration Thai nationality : Yes Residence in Thailand : Yes Family relationship between directors and executives : Doesn't Have Legal offenses in the past 5 years (*) : Doesn't Have DAP course : Yes DCP course : No **Shareholding in a company** • Direct shareholding : 0 Shares (0.000000 %) • Shareholding by persons related to directors, executives according to Section 59 (**) : 0 Shares (0.000000 %) <u>Indirect shareholding details</u> None	Director (Non-executive directors, Independent director) Authorized directors as per the company's certificate of registration : Yes Type of director : Existing director	1 Dec 2022	Accounting, Strategic Management, Leadership, Risk Management

List of directors	Position	First appointment date of director	Skills and expertise
8. Mr. Stephanus Josephus Hendrikus Brader Gender: Male Age : 63 years Highest level of education : Bachelor's degree Study field of the highest level of education : Technology in Physical Electronics (honors) Thai nationality : No Residence in Thailand : Yes Family relationship between directors and executives : Doesn't Have Legal offenses in the past 5 years (*) : Doesn't Have DAP course : Yes DCP course : No **Shareholding in a company** • Direct shareholding : 0 Shares (0.000000 %) • Shareholding by persons related to directors, executives according to Section 59 (**) : 0 Shares (0.000000 %) <u>Indirect shareholding details</u> None	Director (Non-executive directors, Independent director) Authorized directors as per the company's certificate of registration : Yes Type of director : Existing director	1 Dec 2022	Electronic Components, Risk Management, Strategic Management, Leadership

Additional explanation :
(*) Any offense under the Securities and Exchange Act B.E. 2535 (1992) or the Derivatives Act B.E. 2546 (2003),only in the following cases:
(1) Dishonest act or gross negligence
(2) Disclosure or dissemination of false information or statements that may be misleading or conceal material facts that should be notified, which may affect decision making of shareholders, investors or other parties involved
(3) Unfair acts or exploitation of investors in trading securities or derivatives, or participation in, or support to, such acts.
(**) Shareholdings by persons related to directors or executives as prescribed in Section 59 of the Securities and Exchange Act B.E. 2535 (1992), such as spouses or cohabiting couple (unmarried couples living together openly), minor children, etc.

List of the board of directors by position

List of the board of directors	Position	Executive directors	Non-executive directors	Independent directors	Non-executive directors who have no position in independent directors	Authorized directors as per the company's certificate of registration
1. Mr. John Thompson	Chairman of the board of directors		✔	✔		✔
2. Mr. Richard David Han	Director	✔				✔
3. Mr. Terrence Philip Weir	Director	✔				✔

List of the board of directors	Position	Executive directors	Non-executive directors	Independent directors	Non-executive directors who have no position in independent directors	Authorized directors as per the company's certificate of registration
4. Ms. Pornphan Abhamongkol	Director		✔	✔		✔
5. Mr. Sanjay Nirendra Mitra	Director	✔				✔
6. Mr. Insuk Klm	Director	✔				✔
7. Mrs. Sunun Thongbai	Director		✔	✔		✔
8. Mr. Stephanus Josephus Hendrikus Brader	Director		✔	✔		✔
Total (persons)		4	4	4	0	8

Overview of director skills and expertise

Skills and expertise	Number (persons)	Percent (%)
1. Electronic Components	4	50.00
2. Accounting	4	50.00
3. Leadership	8	100.00
4. Strategic Management	8	100.00
5. Risk Management	8	100.00

Information about the other directors

The chairman of the board and the highest-ranking executive are from the same person	:	No
The chairman of the board is an independent director	:	Yes
The chairman of the board and the highest-ranking executive are from the same family	:	No
Chairman is a member of the executive board or taskforce	:	No
The company appoints at least one independent director to determine the agenda of the board of directors' meeting	:	Yes

The measures for balancing the power between the board of directors and the Management

The measures for balancing the power between the board of directors and the Management	:	Yes
Methods of balancing power between the board of directors and Management	:	Appointing an independent director to jointly consider the agenda of the board of directors' meeting, Others : Theres is segregation between roles and responsibilities between the Board and management clearly in Charter of the Board of Directors

Segregation of Duties between the Board of Directors and Management

The roles and responsibilities between the Board and management are clearly segregated as follows.

Board of Directors

• To have the ultimate responsibility for the Company's long-term prosperity
• To approve the large projects/investment, major transactions, policies, etc.
• To oversee the overall performance of the Company and to monitor the efficiency and effectiveness of the implementation of the policies and plans

Duties and Responsibilities of the Chairman of the Board of Directors:

The Chairman of the Board has additional responsibilities more than other directors as follows.
1. To steer, oversee and ensure that the Board efficiently carries out its duties to achieve the Company's objectives
2. Together with CEO, to call the Board and shareholders' meetings and set the agendas of the meetings which important matters should be included
3. To allocate sufficient time to discuss important matters and encourage directors to exercise independent judgment
4. To act as a chairperson at the meetings of the Board and shareholders including review and sign minutes of meetings
5. To cast a vote to break a tie for the Board and shareholders' meetings
6. To ensure that all directors promote the Company's ethical culture and good corporate governance
7. To promote constructive relationship between independent directors and executive directors, and between the Board and management

Management

• To run the business of the Company and set its business strategies in accordance with the delegated authority of the Board
• To have the authority to approve day-to-day operational expenditures, investment, commercial agreement, etc. according to the limited amount approved by the Board
• To report results to the Board

The Board delegates authority and responsibility for the conduct of the Company's business to CEO who has following responsibilities:

1. To manage and monitor the Company's daily operations and performance consistent with the Company's objectives, strategies and relevant policies
2. To recommend to the Board any significant operational changes and major capital expenditures beyond delegated authority
3. To propose appropriation of earnings to the Board for interim and/or annual dividend payments
4. To assign responsibilities to the senior management and supervise the work of executive directors
5. To empower the engagement and commitment for the Company in accordance with all applicable laws and the Company's standards and policies
6. To conduct other duties in accordance with the resolutions of the Board meetings and/or shareholders' meetings

The Board has approved the separation of duties and authorization of management such as approval limits of day-to-day operational expenses. However, such authorization shall not include that where the grantee can approve the transaction of which he or she is a person who might have any conflict of interest with the Company or its subsidiaries regarding such transaction.

Reference link for the measures for balancing the power between the board of directors and the management : https://www.hanagroup.com/File/ViewDoc/64

Page number of the reference link : 3

7.2.3 Information on the roles and duties of the board of directors

Board charter : Yes

The board has set this Charter to outline their roles and responsibilities, the board composition and other criteria by adopting principles of good corporate governance and practice, and in accordance with applicable laws.

Reference link for the board charter : https://www.hanagroup.com/File/ViewDoc/64

Page number of the reference link : 1-6

7.3 Information on subcommittees

7.3.1 Information on roles of subcommittees

Roles of subcommittees

Audit Committee

Role

• Audit of financial statements and internal controls

Scope of authorities, role, and duties

1. To review the Company's financial reporting process in order to ensure that it is accurate and adequate
2. To review the Company's internal control system and internal audit system to ensure that they are suitable and efficient, to determine an internal audit unit's independence, as well as approving the appointment, transfer and dismissal of the head of an internal audit department
3. To review the Company's compliance with the laws on securities and exchange, the regulations of the SET and other laws relating to the Company's business
4. To consider, select and nominate external auditors including propose their remuneration including consider the performance of auditors and dismissal as well as attending the meeting at least once a year with the external auditors without executive management being present
5. To review the connected transactions or transactions that may lead to conflicts of interests in order to ensure that they are in compliance with the SET regulations and applicable laws, and are reasonable and for the highest benefit of the Company
6. To prepare and disclose in the Company's annual report, an Audit Committee's report which shall be signed by the Chairman of Audit Committee and consisted of at least the following information:
   6.1 an opinion on the accuracy, completeness and creditability of the Company's financial report;
   6.2 an opinion on the adequacy of the Company's internal control system;
   6.3 an opinion on the compliance with related laws i.e. the Securities and Exchange Act, the SET regulations, or the laws relating to the Company's business;
   6.4 an opinion on the suitability of an auditor;
   6.5 an opinion on the transactions that may lead to conflicts of interests;
   6.6 the number of the Audit Committee meetings, and the attendance of such meetings by each committee member;
   6.7 an opinion or overview comment received by the Audit Committee from its performance of duties in accordance with the charter;
   6.8 other transactions which, according to the Audit Committee's opinion, should be known to the shareholders and general investors, subject to the scope of duties and responsibilities assigned by the Board of Directors
7. To support and monitor the risk management systems and ensure the measures of the Company are appropriate
8. To review the Company's compliance with private sector's anti-corruption and certification program, including the Collective Action Coalition Against Corruption's Self-Evaluation Tool
9. In its performance of duties, if it is found or suspected that there is a transaction or any of the following acts which may materially affect the Company's financial condition and operating results, the Audit Committee shall report it to the Board of Directors for rectification within the period of time that the Audit Committee thinks fit:
   9.1 a transaction which causes a conflict of interest;
   9.2 any fraud, irregularity, or material defect in an internal control system;
   9.3 an infringement of the SET regulations or any law relating to the Company's business
10. If the Board of Directors or management fails to make a rectification within the period of time under the first paragraph, any Audit Committee may report on the transaction or act under the first paragraph to the SEC and the SET.
11. To perform any other duties as assigned by the Board of Directors
12. To review and revise the Audit Committee Charter and propose any revision to the Board of Directors for approval

Reference link for the charter

https://www.hanagroup.com/File/ViewDoc/68

Executive Committee

Role

- Others
  - Perform and manage the Company's business

Scope of authorities, role, and duties

1. To perform and manage the Company's business to comply with the policies, mission and business plans as determined by the Board of Directors
2. To determine budget and the management's authorities of the Company
3. To monitor and follow up the operation of the Company's policies to ensure its efficiency
4. To monitor and follow up the performance of the Company to ensure its compliance with the business plan
5. To have the authorization for approval limits of day-to-day operational expenses in accordance with the approval authorization policy of the Company and to consider the large investment projects such as a joint venture, a construction of new plant etc. and any significant transactions over than THB 100,000,000 shall be proposed to the Board for approval
6. To perform other duties as assigned by the Board of Directors

Reference link for the charter

-

Nomination Committee

Role

- Director and executive nomination

Scope of authorities, role, and duties

1. To ensure a formal and transparent procedure for the appointments of new directors and key executive management to the Board
2. To select the potential candidates whose qualifications best meet the criteria and propose to the Board
3. To propose and review the executive management succession plan
4. To review annually the size and composition of the Board and recommend any proposed changes to the Board

Reference link for the charter

https://www.hanagroup.com/File/ViewDoc/1333

Corporate Governance and Sustainability Committee:

Role

- Corporate governance
- Sustainability development

Scope of authorities, role, and duties

Corporate Governance Oversight:

1. To consider, review and revise the corporate governance policy continually at least once a year to keep the company's corporate governance policy updated and in line with the international standards, laws, criteria, rules and regulations
2. To monitor and evaluate at the end of each year, the performance of the directors and executives in compliance with best practices as specified in the corporate governance policy
3. To prepare the annual report on corporate governance including any necessary opinions and suggestions and propose to the Board
4. To perform any other duties assigned by the Board

Sustainability Development Oversight:

1. To set the Company's sustainability policy framework, goals, strategies, and plans for implementation covering ESG dimensions
2. To approve the budget plan related to sustainability development
3. To appoint the working team to assist the Committee as well as appointing the consultant/expert in performing their duties
4. To monitor the performance of the sustainability strategy to be in line with the policy framework and specified goals
5. To regularly report performance progress to the Board for acknowledgement

Reference link for the charter

https://www.hanagroup.com/File/ViewDoc/70

Risk Management Committee

Role

- Risk management
- Climate-related risks and opportunities governance

Scope of authorities, role, and duties

The Risk Management Committee has the duties and responsibility that have been approved by the Board in implementing the risk management policy, reviewing the effectiveness of risk management profile, presenting the Company's overall risks and solutions to effectively prevent and limit Hana's overall risks at an acceptable level, and reporting the results to the Board periodically.

Reference link for the charter

https://www.hanagroup.com/File/ViewDoc/60

7.3.2 Information on each subcommittee

List of audit committee

List of directors	Position	Appointment date of audit committee member	Skills and expertise
1. Mr. John Thompson(*) Gender: Male Age : 60 years Highest level of education : Master's degree Study field of the highest level of education : Accounting Thai nationality : Yes Residence in Thailand : Yes Expertise in accounting information review : Yes	Chairman of the audit committee (Non-executive directors, Independent director) Director type : Existing director	1 Jan 2017	Accounting, Risk Management, Strategic Management, Leadership
2. Ms. Pornphan Abhamongkol(*) Gender: Female Age : 60 years Highest level of education : Master's degree Study field of the highest level of education : Business Administration Thai nationality : Yes Residence in Thailand : Yes Expertise in accounting information review : Yes	Member of the audit committee (Non-executive directors, Independent director) Director type : Continuing director (Full term of directorship and being re-appointed as a director)	1 Jan 2022	Strategic Management, Risk Management, Accounting, Leadership
3. Mrs. Sunun Thongbai(*) Gender: Female Age : 63 years Highest level of education : Master's degree Study field of the highest level of education : Business Administration Thai nationality : Yes Residence in Thailand : Yes Expertise in accounting information review : Yes	Member of the audit committee (Non-executive directors, Independent director) Director type : Existing director	1 Dec 2022	Accounting, Strategic Management, Leadership, Risk Management
4. Mr. Stephanus Josephus Hendrikus Brader Gender: Male Age : 63 years Highest level of education : Bachelor's degree Study field of the highest level of education : Technology in Physical Electronics (honors) Thai nationality : No Residence in Thailand : Yes Expertise in accounting information review : No	Member of the audit committee (Non-executive directors, Independent director) Director type : Existing director	1 Dec 2022	Electronic Components, Risk Management, Strategic Management, Leadership

Additional explanation :
(*) Directors with expertise in accounting information review

List of executive committee members

List of directors	Position	Appointment date of executive committee member
1. Mr. Richard David Han Gender: Male Age : 67 years Highest level of education : Master's degree Study field of the highest level of education : Business Administration Thai nationality : No Residence in Thailand : Yes	The chairman of the executive committee	26 Jul 1993
2. Mr. Terrence Philip Weir Gender: Male Age : 65 years Highest level of education : Bachelor's degree Study field of the highest level of education : Economics Thai nationality : No Residence in Thailand : Yes	Member of the executive committee	26 Jul 1993
3. Mr. Sanjay Nirendra Mitra Gender: Male Age : 60 years Highest level of education : Master's degree Study field of the highest level of education : Engineering Thai nationality : No Residence in Thailand : Yes	Member of the executive committee	29 Apr 2022
4. Mr. Insuk Klm Gender: Male Age : 61 years Highest level of education : Bachelor's degree Study field of the highest level of education : Engineering Thai nationality : No Residence in Thailand : Yes	Member of the executive committee	29 Apr 2022

Other Subcommittees

Subcommittee name	Name list	Position

Subcommittee name	Name list	Position
Nomination Committee	Ms. Pornphan Abhamongkol	The chairman of the subcommittee (Independent director)
	Mr. Richard David Han	Member of the subcommittee
	Mrs. Sunun Thongbai	Member of the subcommittee (Independent director)
	Mr. Stephanus Josephus Hendrikus Brader	Member of the subcommittee (Independent director)
Corporate Governance and Sustainability Committee:	Mr. Stephanus Josephus Hendrikus Brader	The chairman of the subcommittee (Independent director)
	Mr. Terrence Philip Weir	Member of the subcommittee
	Ms. Pornphan Abhamongkol	Member of the subcommittee (Independent director)
	Mrs. Sunun Thongbai	Member of the subcommittee (Independent director)
Risk Management Committee	Mr. Terrence Philip Weir	The chairman of the subcommittee
	Ms. Pornphan Abhamongkol	Member of the subcommittee (Independent director)
	Mrs. Sunun Thongbai	Member of the subcommittee (Independent director)
	Mr. Stephanus Josephus Hendrikus Brader	Member of the subcommittee (Independent director)

7.4 Information on the executives

7.4.1 List and positions of the executive

List of the highest-ranking executive and the next four executives

List of executives	Position	First appointment date	Skills and expertise
1. Mr. Richard David Han Gender: Male Age : 67 years Highest level of education : Master's degree Study field of the highest level of education : Business Administration Thai nationality : No Residing in Thailand : Yes Highest responsibility in corporate accounting and finance : No Accounting supervisor : No	President and Chief Executive Officer (The highest-ranking executive)	26 Jul 1993	Electronic Components, Marketing, Leadership, Strategic Management, Risk Management
2. Mr. Terrence Philip Weir(*) Gender: Male Age : 65 years Highest level of education : Bachelor's degree Study field of the highest level of education : Economics Thai nationality : No Residing in Thailand : Yes Highest responsibility in corporate accounting and finance : Yes Accounting supervisor : No	Vice President and Chief Financial Officer (The highest-ranking executive)	26 Jul 1993	Risk Management, Accounting, Strategic Management, Leadership
3. Mr. Sanjay Nirendra Mitra Gender: Male Age : 60 years Highest level of education : Master's degree Study field of the highest level of education : Engineering Thai nationality : No Residing in Thailand : Yes Highest responsibility in corporate accounting and finance : No Accounting supervisor : No	Executive Vice President and COO for Semiconductor (The highest-ranking executive)	29 Apr 2022	Electronic Components, Strategic Management, Risk Management, Leadership
4. Mr. Insuk KIm Gender: Male Age : 61 years Highest level of education : Bachelor's degree Study field of the highest level of education : Engineering Thai nationality : No Residing in Thailand : Yes Highest responsibility in corporate accounting and finance : No Accounting supervisor : No	Executive Vice President & COO for Microelectron (The highest-ranking executive)	29 Apr 2022	Strategic Management, Electronic Components, Leadership, Risk Management

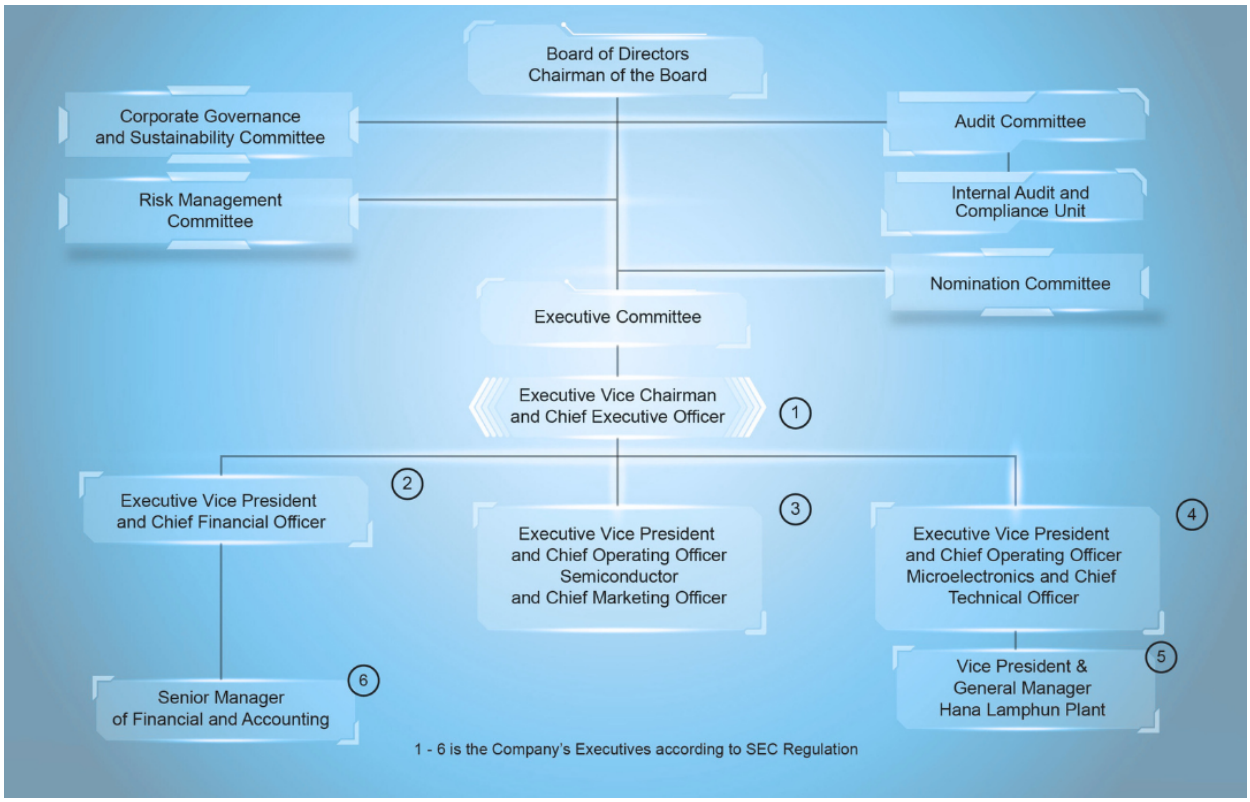
List of executives	Position	First appointment date	Skills and expertise
5. Mr. Wichai Sukprasertkul Gender: Male Age : 57 years Highest level of education : Bachelor's degree Study field of the highest level of education : Engineering Thai nationality : Yes Residing in Thailand : Yes Highest responsibility in corporate accounting and finance : No Accounting supervisor : No	Vice President And General Manager Hana-Lamphun	1 Jan 2022	Electronic Components, Engineering, Marketing, Corporate Management, Strategic Management
6. Ms. Achara Chaicharncheep(**) Gender: Female Age : 55 years Highest level of education : Bachelor's degree Study field of the highest level of education : Accounting Thai nationality : Yes Residing in Thailand : Yes Highest responsibility in corporate accounting and finance : No Accounting supervisor : Yes	Finance and Accounting Senior Manager	14 Oct 2013	Accounting, Finance

Additional Explanation :
(*) Highest responsibility in corporate accounting and finance
(**) Accounting supervisor
(***) Appointed after the fiscal year end of the reporting year

Organization structure diagram of the highest-ranking executive and the next four executives

Organization structure of the highest-ranking executive and the next four executives as of date : 31 Dec 2024

Organization structure diagram of the highest-ranking executive and the next four executives from the top executive



7.4.2 Remuneration policy for executive directors and executives

The Company is to ensure that key executive remuneration enhance its ability to attract, retain and motivate competent and experienced staff. Remuneration of executives of short and long terms is in accordance with performance of each executive. The remuneration of executives including CEO comprises of base salary, cash bonuses (annual and performance-based bonuses) and employee welfare such as provident funds, medical benefits, life insurance, etc. The provident fund is a part of the incentive programs to offer executives, management and employees a secure income in the case of death, disability, resignation or retirement. The Company contributes at the rate of 3 - 7.5 percent of their salaries depending on the length of service year with the Company. Other long-term incentive program is the retirement benefit which is eligible to receive when retires from the Company.

Does the board of directors or the remuneration committee have an opinion on the remuneration policy for executive directors and executives : Yes

The Board delegates the CEO compensation process to the executive committee. The short-term incentive depends on the group's financial performance and on the CEO's own success evaluated by the independent directors. For the long-term incentive, the CEO shall be eligible for long-term incentive programs with the same terms and conditions as employees. For other long-term incentives of the CEO if any, the executive committee shall seek recommendation from the Board.

7.4.3 Remuneration of executive directors and executives

Monetary remuneration of executive directors and executives

	2022	2023	2024
Total remuneration of executive directors and executives (baht)	35,010,006.00	34,377,265.00	31,660,804.00

	2022	2023	2024
Total remuneration of executives (baht)	35,010,006.00	34,377,265.00	31,660,804.00

The remuneration for the CEO and executive directors is designed to align their compensation with the Company's performance, ensuring that it is competitive within the industry and reflective of the responsibilities and contributions of their roles. The policy is structured to provide both fixed and performance-based compensation, which incentivizes executives to contribute to the Company's success.

The remuneration for the CEO and executives is considered based on the overall financial performance of the Company, individual achievements, and market benchmarking against industry standards to ensure competitiveness. Any changes to the remuneration structure are made to align the compensation with Hana's strategic goals and to retain and motivate the executives to meet the Company's annual objectives. The remuneration for the CEO and executives is reviewed and approved by the executive committee.

Other remunerations of executive directors and executives

	2022	2023	2024
Company's contribution to provident fund for executive directors and executives (Baht)	1,503,184.00	1,532,665.00	1,566,108.00
Employee Stock Ownership Plan (ESOP)	No	No	No
Employee Joint Investment Program (EJIP)	No	No	No

Executive directors and executives receive the remuneration in the form of salary, bonus and provident fund, there is no other compensation.

Outstanding remuneration or benefits of executive directors and executives

Outstanding remuneration or benefits of executive directors and executives in the past year : 0.00

Estimated remuneration of executive directors and executives in the current year : 0.00

7.5 Information on employees

Information on the company's employees

Employees

	2022	2023	2024
Total employees (persons)	3,324	3,113	3,014
Male employees (persons)	991	960	956
Female employees (persons)	2,333	2,153	2,058

Number of employees by position and department

Number of male employees by position

	2022	2023	2024
Total number of male employees in operational level (Persons)	937	901	895
Total number of male employees in management level (Persons)	52	56	58
Total number of male employees in executive level (Persons)	2	3	3

Number of female employees by position

	2022	2023	2024
Total number of female employees in operational level (Persons)	2,290	2,119	2,018
Total number of female employees in management level (Persons)	42	33	39
Total number of female employees in executive level (Persons)	1	1	1

Number of employees categorized by department over the past year

Department / Line of work / Unit / Business group	Number of employees
CEO Office	4
Customer Service and Business Development	36
Finance and Accounting	20
Human Resources/Administration/ Training	67
Management Information System (MIS)	41
Operation Support	247

Department / Line of work / Unit / Business group	Number of employees
Production	2,231
Quality Assurance	338
Supply Chain Management	30
Total number of employees	**3,014**

Significant changes in the number of employees

Significant changes in number of employees over the past 3 Years : No

Information on employee remuneration

Employee remuneration

	2022	2023	2024
Total employee remuneration (baht)	1,262,699,967.00	1,128,571,933.22	1,163,668,865.46
Total male employee remuneration (Baht)	452,316,846.00	460,126,420.79	494,695,672.87
Total female employee remuneration (Baht)	810,383,121.00	668,445,512.43	668,973,192.59

Provident fund management policy

Provident fund management policy : Have

The provident fund is an investment fund that is jointly established by the company and employees to serve as a long-term savings to support employees upon retirement. The Company has setup a provident fund (PVD) according to Provident Fund Act B.E 2530 since 8 April 1999. Currently, the provident fund is under the management of SCB Asset Management Company Limited.

As the provident fund is considered a retirement savings fund for employees, the Company has a policy to support the Company's Provident Fund Committee to perceive the principle of the Investment Governance Code (I Code) and select fund comply with the I Code and/or manage investments responsibly, with policies regarding to environmental, social and good governance (Environmental, Social, and Governance: ESG) as it is an investment approach which can lead to the best interests of the fund members who are the Company's employees in long term.

Provident fund for employees (PVD)

	2022	2023	2024
Number of employees joining in PVD (persons)	3,119	2,909	2,827
Proportion of employees who are PVD members (%)	93.83	93.45	93.80
Total amount of provident fund contributed by the company (baht)	45,190,525.00	46,110,655.50	46,652,615.68

7.6 Other significant information

7.6.1 Assigned person

List of persons assigned for accounting oversight [6]

General information	Email	Telephone number
1. Ms. Achara Chaicharncheep	acharach@hanabk.th.com	-
2. Ms. Kwanrak Wongpin	kwanrakw@hanabk.th.com	02 551 1297-8 #248

Remark : [6] Ms. Achara Chaicharncheep was the chief accountant until 31 December 2024.

Ms. Kwanrak Wongpin is the chief accountant on 1 January 2025.

List of the company secretary

General information	Email	Telephone number
1. Ms. Jirapa Kongmanee	jirapak@hanabk.th.com	02 551 1297 - 8 #117

List of the head of internal audit or outsourced internal auditor

General information	Email	Telephone number
1. Ms. Jirapa Kongmanee	jirapak@hanabk.th.com	02 551 1297 - 8 #117

List of the head of the compliance unit

General information	Email	Telephone number
1. Ms. Jirapa Kongmanee	jirapak@hanabk.th.com	02 551 1297 - 8 # 117

7.6.2 Head of investor relations

Does the Company have an appointed head of investor relations : Yes

List of the head of investor relations

General information	Email	Telephone number
1. Mr. Terrence Philip Weir	terry@hanabk.th.com	-

7.6.3 Company's auditor

Details of the company’s auditor

Audit firms	Audit fee (Baht)	Other service fees	Names and general information of auditors
EY OFFICE LIMITED 33RD FLOOR, LAKE RAJADA OFFICE COMPLEX, 193/136-137 RAJADAPISEK ROAD KHLONG TOEI KHLONG TOEI Bangkok 10110 Telephone +66 2264 9090	2,450,000.00	Types of non-audit service: 1. BOI audit fee 2. Inventory destruction fee 3. Tax consulting service fee Details of non-audit service: Amount paid during the fiscal year 1. Inventory destruction fee = 40,000 Baht 2. Tax consulting service fee = 330,000 Baht Amount to be paid in the future: 1. BOI audit fee = 630,000 Baht Amount paid during the fiscal year: 370,000.00 baht Amount to be paid in the future: 630,000.00 baht Total non-audit fee: 1,000,000.00 baht	1. Ms. KAMONTIP LERTWITWORATEP Email: Kamontip.Lertwitworatep@th.ey.com Telephone: 02-264-9090 #77027 License number: 4377 2. Mrs. SARINDA HIRUNPRASURTWUTTI Email: Sarinda.hirunprasurtwutti@th.ey.com Telephone: 02-264-9090 License number: 4799 3. Mr. WICHART LOKATEKRAWEE Email: Wichart.Lokatekrawee@th.ey.com Telephone: 02-264-9090 License number: 4451

Details of the auditors of the subsidiaries

Audit firms	Audit fee (Baht)	Other service fees	Names and general information of auditors
EY OFFICE LIMITED 33RD FLOOR, LAKE RAJADA OFFICE COMPLEX, 193/136-137 RAJADAPISEK ROAD KHLONG TOEI KHLONG TOEI Bangkok 10110 Telephone +66 2264 9090	1,750,000.00	Types of non-audit service: 1. BOI audit fee 2. Inventory destruction fee 3. Tax consulting service fee Details of non-audit service: Hana Semiconductor (Ayutthaya) Co., Ltd. - Amount paid during the fiscal year: Inventory destruction fee = 20,000 Baht - Amount to be paid in the future: BOI audit fee = 270,000 Baht 2.Hana Semiconductor International Ltd. - Amount paid during the fiscal year: Tax consulting service fee = 150,000 Baht - Amount to be paid in the future: Tax consulting service fee = 150,000 Baht Amount paid during the fiscal year: 170,000.00 baht Amount to be paid in the future: 420,000.00 baht Total non-audit fee: 590,000.00 baht	1. Ms. KAMONTIP LERTWITWORATEP Email: Kamontip.Lertwitworatep@th.ey.com License number: 4377 2. Mrs. SARINDA HIRUNPRASURTWUTTI Email: Sarinda.hirunprasurtwutti@th.ey.com License number: 4799 3. Mr. WICHART LOKATEKRAWEE Email: Wichart.Lokatekrawee@th.ey.com License number: 4451

7.6.4 Assigned personnel in case of a foreign company

Does the company have any individual assigned to be representatives in Thailand : No

8. Report on key operating results on corporate governance

8.1 Summary of duty performance of the board of directors over the past year

Summary of duty performance of the board of directors over the past year

Board of Directors' Meetings

The Board of Directors sets the meeting schedules in advance by informing in the meeting agenda before each year-ending so that the directors can arrange their time to attend the meetings. In 2024, the Company held 7 meetings of the Board of Directors, which are the normal agenda items. The total number of directors attending the meetings must be no less than one half of the total number of directors to constitute a quorum. The chairman of the Board and CEO set the agenda of the Board meetings. Any director may suggest agenda items and may raise at meetings other matters that they consider importance of discussion. Information and data for the Board's understanding of the business to be discussed at meetings are distributed in advance of meetings according to the policy that is to provide 5 days in advance. To prepare for meetings, directors are responsible for reviewing the materials that are sent to them in advance. If there are additional inquiries, the directors can contact the CEO, the corporate secretary or designated executives. At the Board meetings, ample time is scheduled to allow full discussion of important matters. Management presentations are scheduled to permit an appropriate portion of the Board meeting time to be available for discussion and comments. The Board's policy is to vote on the agenda item by having at least 2 out of 3 of total directors present in the meeting for each agenda item. The minutes of Board of Directors' meeting are properly made and contain key facts such as the timing of start and finish, name of directors present and absent, summary of items of major discussion and resolutions, the minute taker and certifier. The minutes are maintained at the Company's head office and cannot be edited without prior consent of the Board's approval.

The Meeting without Attendance of Management

The Board encourages the non-executive directors to have a separate meeting in absence of management to encourage more open discussion without management present. In 2024, the independent directors conducted a meeting without attendance of management one time on 13 November 2024. The meeting was conducted with the participation of internal and external auditors with the agenda discussion on the significant matters and other concerns related to financial statements and internal control audits by the auditors during the year 2024 including review if there is any connected transaction in 2024 that may lead to conflicts of interest, any fraud findings, as well as the cooperation from management and staff to support the auditors and any limitation related to the audit works, and report to the Board meeting subsequently.

Reviewing Vision, Mission and Corporate Objectives

The Board of Directors annually reviews and approves the Company's vision, mission and corporate objectives or the long-term goals as well as overseeing the implementation and monitoring the performance of the management. The Board of Directors' Meeting No. 7/2024 held on 11 December 2024 reviewed and approved the Company's vision, mission and corporate objectives or the long-term goals. The CEO has reported to the Board for the execution summary with the Company's strategies once a year in addition to report the operating performance for each meeting.

Board Composition and Diversity

In 2024, the Board maintained a diverse and independent composition, ensuring a broad range of skills and expertise. The Board's composition is based on factors such as professional experience, gender, age, and includes directors from various nationalities. The Board set a target to have at least two women on the Board, and this target was successfully met with two female directors in 2024.

Risk Management Oversight

Throughout the year, the Board remained in overseeing the Company's risk management to review the risk profiles including identifying, mitigating, and reporting on key risks to the business. This included discussing the Company's approach to emerging risks and ensuring sufficient contingency plans were in place.

Performance Monitoring and Accountability

The Board regularly monitored the performance of the CEO and senior management, staying informed about the Company's progress toward its objectives. This was accomplished through quarterly performance reviews, which included discussions on business

challenges, management strategies to overcome these challenges, and identification of opportunities for growth.

Sustainability Policy and Execution

In 2024, the Board reviewed the sustainability policy and ensure that the Company integrates environmental, social, and governance (ESG) principles into its operations and implementing sustainability initiatives across organization, wherever applicable. This includes promoting responsible environmental practices, fostering a positive social impact, and adhering to governance standards. The Board also monitored the progress of these initiatives to ensure alignment with the Company's long-term goals and commitment to sustainable growth.

8.1.1 Selection, development and evaluation of duty performance of the board of directors

Information about the selection of the board of directors

List of directors whose terms have ended and have been reappointed

List of directors	Position	First appointment date of director	Skills and expertise
Mr. Richard David Han	Director (Executive Directors)	26 Jul 1993	Electronic Components, Strategic Management, Risk Management, Leadership
Mr. Terrence Philip Weir	Director (Executive Directors)	26 Jul 1993	Risk Management, Accounting, Strategic Management, Leadership
Ms. Pornphan Abhamongkol	Director (Non-executive directors, Independent director)	1 Jan 2022	Strategic Management, Risk Management, Accounting, Leadership

Selection of independent directors

Criteria for selecting independent directors

A person who serves as an independent director of the Company shall possess the knowledge, abilities and personal contribution. At least one member of the Audit Committee must have financial knowledge and other qualifications not contrary to any regulations of the Securities and Exchange of Commission (SEC) or the Company policies.

To ensure that the Board includes such directors who can exercise their best judgment, all independent directors shall be affirmatively determined that such director meets the requirement set by the Securities and Exchange of Commission (SEC). In particular, an independent director is a director who:

1. Must hold shares less than 0.5% of the total shares eligible to vote of the Company, subsidiaries, associates, or controlling parties, including the shares held by the related parties of such an independent director (This shareholding threshold of the Company shares held by the independent directors is stricter than the minimum requirements of the SEC and SET).
2. Must not be an executive director, an employee, or a consultant who receives regular remuneration from the Company or any of its subsidiaries, and is also neither a controlling person of the Company or subsidiaries nor a related person at least for the past two years.
3. Must not be the person who has relationship by means of descent or legal registration as parents, spouses, siblings, and children, including spouses of children of any other directors, management, major shareholders, controlling party/person or any person to be nominated as a director, management or controlling person of the Company or its subsidiaries.
4. Must never have engaged or not engage in a business relationship with the Company, its subsidiaries, associates, major shareholders, controlling person that deprives his/her exercise of independent discretion including must never have been or be a significant shareholder or controlling person of related person/party who has business with the Company, its subsidiaries and

associates, major shareholders or controlling person unless the foregoing status ended at least two years. This also includes normal business transactions for operation, rent or lease of fixed assets, asset or service transactions, financial assistance involving loan granting or receiving, guarantee, provision of assets as collateral or other related transactions obliged the Company or its contractual party for the liability to pay the other party that is accounting from 3% or more of net tangible assets of the Company or twenty million baht whichever is lower.
5. Must never have been or not be an auditor for the Company, its subsidiaries, associates, major shareholders, or controlling person, and must not be a significant shareholder, controlling person, or partner of an auditing firm in which an auditor of the Company, its subsidiaries, associates, major shareholders or controlling person serves unless the foregoing status ended at least two years before.
6. Must never have been or not be a professional service provider, including legal or financial advisor with a service fee of more than two million baht per year paid by the Company, its subsidiaries, associates, major shareholders, or controlling person, and must not be a significant shareholder, controlling person, or partner of the above mentioned service firms unless the foregoing status ended at least two years before.
7. Must not be the director who is nominated to be the representative of directors of the Company, a major shareholder, or any other shareholder related to the Company's major shareholders.
8. Must not conduct the same business and compete significantly with the Company or its subsidiaries, and must not be a significant partner in partnerships or executive director, staff, employee, paid advisor or hold more than 1% of voting shares of other companies which have the same business and compete significantly with the Company or its subsidiaries.
9. Must not have any other conditions that be unable to exercise independent opinions regarding the business operation of the Company.

Term of Service of Independent Directors - The Board of Directors has set the term of service for independent directors to a maximum of nine years from their first appointment, with re-appointment subject to a satisfactory evaluation of their performance and continued independence.

Business or professional relationships of independent directors over the past year

Business or professional relationships of independent directors over the past year	:	No

Selection of directors and the highest-ranking executive

Method for selecting directors and the highest-ranking executive

Method for selecting persons to be appointed as directors through the nomination committee	:	Yes
Method for selecting persons to be appointed as the highest-ranking executive through the nomination committee	:	Yes

Number of directors from major shareholders

Number of directors from each group of major shareholders over the past year (persons)	:	1

Rights of minority shareholders on director appointment

The Company has the policies to promote the right of minority shareholders by allowing minority shareholders to propose agenda items and nominate candidates to be elected as the directors in advance at the AGM. During October - December, shareholders have the right to submit proposals for the upcoming AGM to the Board of Directors for consideration.

The procedures and criteria to propose agenda items and nominate the directors to the Board of Directors have been posted on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject - Procedures to Propose AGM Agenda Items and Nomination of Board Members. However, in 2024 there were no shareholder proposals sent to the Board of Directors for consideration.

The matters discussed in the AGM and voting were in sequence as given in the invitation letter without changing important information or adding agenda items without notifying shareholders in advance so shareholders had the opportunity to adequately study the information before making the decision. Further, the Board of Directors allowed shareholders to elect each director eligible for election on individual basis.

Method of director appointment : Method whereby each director requires approval votes more than half of the votes of attending shareholders and casting votes

Setting qualifications for the selection of directors

Details of qualifications for the selection of directors

Qualifications, knowledge, or experience	Skill and expertise
A person who serves as a director of the Company shall possess the knowledge, abilities, personal contribution and shall have at least the following qualifications: 1. To have qualifications and have no prohibited characteristics as specified by the Public Limited Companies Act including have no manner indicating a lack of trustworthiness to manage the Company from the view of shareholders according to the regulations of Securities and Exchange Commission (SEC). 2. To have knowledge, skills, expertise, experiences, education and gender as the Board deems appropriate for its composition, diversity and such qualifications can contribute to the Company' s strategies. In addition, at least 1 director has an experience in the electronic industry or related to the Company's business. 3. To devote time especially for making key decisions and handling duties for the best interest of the Company and being able to participate in all the Board and shareholders' meetings unless necessary or emergency. 4. To have a moral, ethical, and any other features that may be required by laws or deemed appropriate by the Board.	Electronic Components, Accounting, Strategic Management, Risk Management, Governance/ Compliance

Information on the development of directors

Development of directors over the past year

Details of the development of directors over the past year

List of directors	Participation in training in the past financial year	History of training participation
1. Mr. John Thompson Chairman of the board of directors	Participating	Other • 2024: Sustainability Disclosure Standards: IFRS S1 & S2 by Ross Maynard, Fellow Certified Management Accountant (FCMA)
2. Mr. Richard David Han Director	Participating	Other • 2024: Sustainability Disclosure Standards: IFRS S1 & S2 by Ross Maynard, Fellow Certified Management Accountant (FCMA)
3. Mr. Terrence Philip Weir Director	Participating	Other • 2024: ACMF-ISSB Virtual Technical Training on the IFRS Sustainability Disclosure Standards for Corporate by The Securities and Exchange Commission • 2024: Fraud awareness and resilience in the digital age by HSBC • 2024: Financials Investigation and Forensic Accounting by CPA Australia
4. Ms. Pornphan Abhamongkol Director	Participating	Other • 2024: Sustainability Disclosure Standards: IFRS S1 & S2 by Ross Maynard, Fellow Certified Management Accountant (FCMA) • 2024: Preventing, Deterring and Suppressing improper behaviors of listed companies by The Securities and Exchange Commission • 2024: SET ESG Professionals Forum 2024 - Innovative and Adaptive Governance: Leading Boards Excellence by the Stock Exchange of Thailand • 2024: ESG-related risks and management: A practical guide for listed companies by the Stock Exchange of Thailand • 2024: Key concerns of Audit Committees - in the age of great transformation by EY Office Limited • 2024: Fraud awareness and resilience in the digital age by HSBC
5. Mr. Sanjay Nirendra Mitra Director	Participating	Other • 2024: Sustainability Disclosure Standards: IFRS S1 & S2 by Ross Maynard, Fellow Certified Management Accountant (FCMA)
6. Mr. Insuk KIm Director	Participating	Other • 2024: Sustainability Disclosure Standards: IFRS S1 & S2 by Ross Maynard, Fellow Certified Management Accountant (FCMA)

List of directors	Participation in training in the past financial year	History of training participation
7. Mrs. Sunun Thongbai Director	Participating	Other • 2024: Preventing, Deterring and Suppressing improper behaviors of listed companies by The Securities and Exchange Commission • 2024: ACMF-ISSB Virtual Technical Training on the IFRS Sustainability Disclosure Standards for Corporate by The Securities and Exchange Commission • 2024: SET ESG Professionals Forum 2024 - Innovative and Adaptive Governance: Leading Boards Excellence by The Stock Exchange of Thailand • 2024: ESG-related risks and management: A practical guide for listed companies by The Stock Exchange of Thailand • 2024: Key concerns of Audit Committees - in the age of great transformation by EY Office Limited
8. Mr. Stephanus Josephus Hendrikus Brader Director	Participating	Other • 2024: Sustainability Disclosure Standards: IFRS S1 & S2 by Ross Maynard, Fellow Certified Management Accountant (FCMA) • 2024: ACMF-ISSB Virtual Technical Training on the IFRS Sustainability Disclosure Standards for Corporate by The Securities and Exchange Commission • 2024: Fraud awareness and resilience in the digital age by HSBC • 2024: How to Prevent Fraud in Business by Alison

Information on the evaluation of duty performance of directors

Criteria for evaluating the duty performance of the board of directors

The Board has conducted its annual performance for individual and as a group evaluation by adopting the self-assessment method from the Stock Exchange of Thailand to assess performance in the latest year.
The Board self-assessment questionnaire allowed the Board to assess their effectiveness into 6 aspects:
1. Board structure and qualifications
2. Roles, duties and responsibilities of the Board
3. The Board meeting
4. Duties of directors
5. Relationship with management
6. Director's self-improvement and management training

Further, the Board also can provide feedback in the assessment form to improve the Board's performance. The Corporate Secretary concludes the Board's group performance and reports to the Board meeting.

Evaluation of the duty performance of the board of directors over the past year (7)

In 2024, the overall performance of the Board as a group was evaluated with a "very good" ranking, achieving a score of 3.61/4, or 90.25%. This result reflects the Board's effective governance, strategic oversight, and alignment with the Company's objectives. Additionally, an individual performance evaluation was conducted with an average individual performance score for the directors in 2024 was 3.59/4, or 89.75%. These evaluations reflect the commitment of each director to their role, ensuring that they continue to effectively contribute to the Company's success.

The performance evaluation also extended to the sub-committees of the Board, including the Audit Committee, Nomination Committee,

Corporate Governance and Sustainability Committee, Risk Management Committee, and the Executive Committee. The evaluation of the sub-committees was based on their respective responsibilities, and the results of these assessments were reviewed to ensure alignment with the Company's goals and objectives, further reinforcing the Board's and sub-committees' commitment to effective governance.

Remark : [7] The performance of Executive Committee and CEO were assessed by independent committee.*

Details of the evaluation of the duty performance of the board of directors

List of directors	Assessment form	Grade / Average score received	Grade / Full score
Audit Committee	Group assessment	3.79	4
	Self-assessment	3.59	4
	Cross-assessment (assessment of another director)	None	None
Nomination Committee	Group assessment	3.51	4
	Self-assessment	3.59	4
	Cross-assessment (assessment of another director)	None	None
Corporate Governance and Sustainability Committee:	Group assessment	3.53	4
	Self-assessment	3.59	4
	Cross-assessment (assessment of another director)	None	None
Risk Management Committee	Group assessment	3.66	4
	Self-assessment	3.59	4
	Cross-assessment (assessment of another director)	None	None
Executive Committee	Group assessment	3.57	4
	Self-assessment	None	None
	Cross-assessment (assessment of another director)	None	None

8.1.2 Meeting attendance and remuneration payment to each board member

Meeting attendance of the board of directors

Meeting attendance of the board of directors

Number of the board of directors meeting over the past year (times) : 7

Date of AGM meeting : 30 Apr 2024

EGM meeting : No

Details of the board of directors' meeting attendance

List of directors	Meeting attendance of the board of directors			AGM meeting attendance			EGM meeting attendance		
	Attendance (times)	/	Meeting rights (times)	Attendance (times)	/	Meeting rights (times)	Attendance (times)	/	Meeting rights (times)
1. Mr. John Thompson (Chairman of the board of directors, Independent director)	7	/	7	1	/	1	N/A	/	N/A
2. Mr. Richard David Han (Director)	7	/	7	1	/	1	N/A	/	N/A
3. Mr. Terrence Philip Weir (Director)	7	/	7	1	/	1	N/A	/	N/A
4. Ms. Pornphan Abhamongkol (Director, Independent director)	7	/	7	1	/	1	N/A	/	N/A
5. Mr. Sanjay Nirendra Mitra (Director)	7	/	7	1	/	1	N/A	/	N/A
6. Mr. Insuk Klm (Director)	7	/	7	1	/	1	N/A	/	N/A
7. Mrs. Sunun Thongbai (Director, Independent director)	7	/	7	1	/	1	N/A	/	N/A
8. Mr. Stephanus Josephus Hendrikus Brader (Director, Independent director)	7	/	7	1	/	1	N/A	/	N/A

Remuneration of the board of directors

Types of remuneration of the board of directors

The Company provides the remuneration to the independent directors while the executive directors receive the remuneration as the role of employees of the Company. Therefore, the Company has not established the Remuneration Committee as the Board considers and reviews the remuneration of the independent directors by the whole Board. The Company provides the remuneration to the independent directors in forms of meeting allowances and bonus of which the rates are up to the responsibilities of the members. There is no other benefit. The remuneration for directors has been compared with the rate of the same industry and the structure of the remuneration of the Company. All types of the remuneration of directors have always been approved by shareholders every year.

Remuneration of the board of directors [8]

Details of the remuneration of each director over the past year

Names of directors / Board of directors	Company				Total monetary remuneration from subsidiaries (Baht)
	Meeting allowance	Other monetary remuneration	Total (Baht)	Non-monetary remuneration	
1. Mr. John Thompson (Chairman of the audit committee)			**663,250.00**		**N/A**
Audit Committee	663,250.00	0.00	663,250.00	No	
2. Ms. Pornphan Abhamongkol (Member of the audit committee)			**368,225.00**		**N/A**
Audit Committee	368,225.00	0.00	368,225.00	No	
Nomination Committee	0.00	0.00	0.00	No	
Risk Management Committee	0.00	0.00	0.00	No	
Corporate Governance and Sustainability Committee:	0.00	0.00	0.00	No	
3. Mrs. Sunun Thongbai (Member of the audit committee)			**368,225.00**		**N/A**
Audit Committee	368,225.00	0.00	368,225.00	No	
Nomination Committee	0.00	0.00	0.00	No	
Risk Management Committee	0.00	0.00	0.00	No	
Corporate Governance and Sustainability Committee:	0.00	0.00	0.00	No	
4. Mr. Stephanus Josephus Hendrikus Brader (Member of the audit committee)			**368,225.00**		**N/A**
Audit Committee	368,225.00	0.00	368,225.00	No	

Names of directors / Board of directors	Company				Total monetary remuneration from subsidiaries (Baht)
	Meeting allowance	Other monetary remuneration	Total (Baht)	Non-monetary remuneration	
Corporate Governance and Sustainability Committee:	0.00	0.00	0.00	No	
Nomination Committee	0.00	0.00	0.00	No	
Risk Management Committee	0.00	0.00	0.00	No	
5. Mr. Richard David Han (The chairman of the executive committee)			**0.00**		**N/A**
Executive Committee	0.00	0.00	0.00	No	
Nomination Committee	0.00	0.00	0.00	No	
6. Mr. Terrence Philip Weir (Member of the executive committee)			**0.00**		**N/A**
Executive Committee	0.00	0.00	0.00	No	
Risk Management Committee	0.00	0.00	0.00	No	
Corporate Governance and Sustainability Committee:	0.00	0.00	0.00	No	
7. Mr. Sanjay Nirendra Mitra (Member of the executive committee)			**0.00**		**N/A**
Executive Committee	0.00	0.00	0.00	No	
8. Mr. Insuk KIm (Member of the executive committee)			**0.00**		**N/A**
Executive Committee	0.00	0.00	0.00	No	

Summary of the remuneration of each committee over the past year

Names of board members	Meeting allowance	Other monetary remuneration	Total (Baht)
1. Audit Committee	1,767,925.00	0.00	1,767,925.00
2. Executive Committee	0.00	0.00	0.00
3. Nomination Committee	0.00	0.00	0.00
4. Corporate Governance and Sustainability Committee:	0.00	0.00	0.00
5. Risk Management Committee	0.00	0.00	0.00

Remark : *[8] The remuneration for independent directors is approved on an annual basis by the shareholders' meeting, while the executive committee members receive compensation as employees of the Company.*

Remunerations or benefits pending payment to the board of directors

Remunerations or benefits pending payment to the board of directors over the past year (Baht) : 0.00

8.1.3 Supervision of subsidiaries and associated companies

Mechanism for overseeing subsidiaries and associated companies

Does the Company have subsidiaries and associated companies : Yes

Mechanism for overseeing subsidiaries and associated companies : Yes

Mechanism for overseeing management and taking responsibility for operations in subsidiaries and associated companies approved by the board of directors : The appointment of representatives as directors, executives, or controlling persons in proportion to shareholding, The determination of the scope of duties and responsibilities of directors and executives as company representatives in establishing important policies, Disclosure of financial condition and operating results, Transactions between the company and related parties, Other significant transactions, Acquisition or disposal of assets, Internal control system of the subsidiary operating the core business is appropriate and sufficient in the subsidiary operating the core business

The Board has its mechanisms to manage and oversight the subsidiaries and associated companies. The Board has delegated to the Executive Committee to oversee and responsible for the operations of its subsidiaries and associated companies include appointing the representative to be a director or a controlling person and shall report to the Board accordingly. From the Board's resolution No. 6/2013, the Board has resolved that the appointed person must be approved by the Board prior to vote on important matters in the same approval levels of the Company that has to be approved by the Board. This includes the connected transaction and the acquisition or disposition of assets by the rules relating to the disclosure of information and the transaction is in line with the rules of the Company. In addition, the maintenance of information and accounting records of the subsidiaries can be verified and financial statements can be consolidated within timelines.

8.1.4 The monitoring of compliance with corporate governance policy and guidelines

Prevention of conflicts of interest

Operations for conflict of interest prevention over the past year

Has the company operated in preventing conflicts of interest over the past year : Yes

The Company has the policy in place to deal with conflicts of interest. The Board of Directors has established the policy and procedure for directors and executives to report on conflicts of interest to ensure that they are abided by their fiduciary duties in the way that they must not have personal interest, whether directly or indirectly, in the matter under their decision. Directors and executives are required to disclose any material interest in transactions or matters affecting the Company and its subsidiaries through the established form approved by the Board of Directors. The Corporate Secretary is responsible for receiving reports from directors and executives who disclose their interests and those of their related parties to the Chairman of Audit Committee and the Chairman of the Board respectively.

Related party transactions between the Company and a director or executive and/or connected persons, which may lead to the potential conflicts of interest, must be considered by the Audit Committee. For material related party transactions, such transaction must be approved by the Board of Directors and/or the shareholders' meeting depending on the nature and the size of transaction as required by Notification of the Capital Market Supervisory Board where those directors and executives shall be excluded from decision making involving transactions in which they have vested interests or are connected.

The Company's Conflict of Interest Guidelines have been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Corporate Governance > CG Related Policies, on the subject – Business Code of Conduct of the Board of Directors.

In 2024, there was no conflict of interest from directors and executives or connected persons reported to the Board.

Number of cases or issues related to conflict of interest

	2022	2023	2024
Total number of cases or issues related to conflict of interest (cases)	0	0	0

Prevention of the use of inside information to seek benefits

Operations for prevention of the use of inside information to seek benefits over the past year

Has the company operated in preventing the use of inside information to seek benefits over the past year : Yes

The Company has the policy to prevent directors and executives complying with the notification of the Securities and Exchange Commission from taking advantage of inside information, from dishonest dealing for themselves and their related parties. Insider trading is prohibited. Hana has established a system to prevent the use of inside information for personal benefits as follows.

• Communicate the compliance of the policy of Business Code of Conduct of the Board of Directors and executives. The directors and executives are required to sign on acknowledgement of the policy on an annual basis.
• Inform the Board and executives by a circular letter that those who may gain inside information shall avoid trading the Company's securities for the period of one month before the Company announces its financial statements to the public and at least 24 hours after the information is widely spread out to the public.
• Require the Board and executives to inform to the Board or the Corporate Secretary at least 1 day in advance before actual

trading of the Company's securities.
• Inform the Board and executives for the duties to report the Company securities holdings and movements to the Securities Exchange Commission (SEC) under the Securities and Exchange Act B.E. 2535 and the Stock Exchange of Thailand's regulations.
• Confirm the shareholding status with individual director and executive through the Corporate Secretary on a monthly basis.
• Report to the Board for the shareholding status of individual director and executive at every Board meeting.

In 2024, no director or executive traded the Company's shares by using inside information, and during the silent periods.

Number of cases or issues related to the use of inside information to seek benefits

	2022	2023	2024
Total number of cases or issues related to the use of inside information to seek benefits (cases)	0	0	0

Anti-corruption action

Operations in anti-corruption in the past year

Has the company operated in anti-corruption over the past year : Yes

Form of operations in anti-corruption : Review of appropriateness in anti-corruption, The participation in anti-corruption projects, Assessment and identification of corruption risk, Communication and training for employees on anti-corruption policy and guidelines, The monitoring of the evaluation of compliance with the anti-corruption policy, Review of the completeness and adequacy of the process by the Audit Committee or auditor

Anti-Corruption Policy - The Company established the anti-corruption policy and has been approved and reviewed by the Board yearly. The anti-corruption policy is as follows.

"Hana has a zero tolerance of bribery and corruption. The Company prohibits the Board of Directors, management, employees or third parties in their relationship with the Company, being involved in any act of corruption in any form in all business transactions to benefit directly or indirectly and shall comply with the applicable laws and regulations in all the countries in which the Company operates."

Risk Assessment - In 2024, the Risk Management Committee assessed the potential corruption risks by conducting the corruption risks separate from other risks. The risk profile was reported to the Board by having the Compliance Unit perform compliance audit in mitigated risks with the established policy.

Training and Communication - In 2024, the Company communicated and provided training to employees regarding its anti-corruption policy and related policies, i.e., corporate code of conducts, gifts and hospitality policy, conflict of interest policy, etc. Employees can get access to the policies via the Company's bulletin boards and intranet website. The supplier code of conduct covering the anti-corruption policy has been communicated with both overseas and local suppliers for their acknowledgment and compliance. In 2024, the Company received the signed acknowledgement from 1,433 suppliers, which was accounted for 100% from the goal of 100%.

Monitoring and Review - The Audit Committee reviews the anti-corruption policy on an annual basis and proposes any amendment to the Board for approval. The Audit Committee also monitors the implementation of the policy and makes recommendations accordingly. Internal control systems and procedures shall be reviewed periodically by an internal audit department to ensure that they are effective in countering bribery and the audit results are to be discussed with relevant operational personnel and reported to senior management and the Audit Committee. In 2024, the risk assessment included the anti-corruption was reported to the Board

for consideration.

Certification - The Company has re-certified for the third time as a member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) in the end of March 2025, which for the Company's actions and effort to support the mobilization of the private sector in the fight against corruption since 2013.

Collective Impact - Hana encourages our business partners and subcontractors to become a part of CAC by inviting our business partners through an open letter posted on the Company website. With the collaboration for impact, this can help reduce corruption risks and help promote a transparent and sustainable business environment.

In addition, the Company and its subsidiaries yearly announces "No Gift Policy" and communicates with its business partners and discloses to the public as the guideline for directors and employees not to accept or give gifts by cooperating with other business sectors for the fight against corruption.

The Company's Anti-Corruption Policy has been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investor Relations > Sustainable Development > Anti-Corruption.

Number of cases or issues related to corruption

	2022	2023	2024
Total number of cases or issues related to corruption (cases)	0	0	0

Whistleblowing

Operations related to whistleblowing over the past year

Has the company implemented whistleblowing procedures over the past year : Yes

The Board provides channels for stakeholders to communicate any concerns about illegal, any suspected fraud or corruption, human right violation, unethical conduct or violation of the good corporate governance, any suggestion or any complaints regarding to activities or conduct of the Company or any of its staff or business partners relating to the Company. Stakeholders can report such complaint or concern in good faith directly to following channels.

• **Mr. John Thompson**
Chairman of the Board of Directors and the Audit Committee
email: john@ntasset.com

• **Mr. Terrence Philip Weir**
Chairman of Risk Management Committee
email: terry@hanabk.th.com

• **Mr. Richard David Han**
President and Chief Executive Officer
email: richardh@hanabk.th.com

• **Mrs. Tappawong Na Tarlang**
Corporate Human Resources Business Partner/Training & Administration Senior Director
email: tappawong@hanabk.th.com

• **Ms. Jirapa Kongmanee**
Corporate Secretary and the Head of Internal Audit Department
email: jirapak@hanabk.th.com

Mailing Address - Hana Microelectronics Public Co., Ltd., 65/98, Soi Vibhavadi-Rangsit 64 Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok 10210, Thailand.

Any whistleblower in Hana group should initially make a complaint or report any act of misconduct or suspicions through the respective channels such as through an employee's direct supervisor (manager level and above), the head of Human Resource Department of each Hana location or a suggestion/red box available at each Hana location. If employees cannot go to their respective channels, they could report to the above channels.

Handling of Complaints - The Company will respond to complaints in a responsible and appropriate manner. An investigation will be conducted promptly and sensitively, in compliance with all relevant laws and regulations. The Internal Audit Department will report the details of complaints and the results of the investigation to the Executive Committee, Audit Committee, or Board, depending on the severity of the complaint, dispute, or issue raised.

Protection of Reporting Individual including Witness and Concerned Personnel - It is a policy that the Company will not discharge, demote, suspend, threaten, harass or in any other actions against any person reporting any such complaint that made in good faith.

Violation - In 2024, the Board did not receive any complaints about corruption/fraud, breach of business ethics and corporate governance, a civil action or fines from SEC, human right violation or no complaint that damage to the Company's reputation due to the administration of the Board of Directors, as well as no legal dispute concerning labour, human rights, and the environment.

The Company's Whistleblowing Policy has been disclosed both in Thai and English on the Company website (www.hanagroup.com) under section Investors Relation > Sustainable Development > Corporate Governance > CG Related Policies, on the subject - Whistleblowing Policy.

Number of cases or issues related to whistleblowing

	2022	2023	2024
Total number of cases or issues received through whistleblowing channels (cases)	0	0	0

The monitoring of compliance with other corporate governance policy and guidelines

Reviewing Vision, Mission and Corporate Objectives

The Board of Directors annually reviews and approves the Company's vision, mission and corporate objectives or the long-term goals as well as overseeing the implementation and monitoring the performance of the management. The Board of Directors' Meeting No. 7/2024 held on 11 December 2024 reviewed and approved the Company's vision, mission and corporate objectives or the long-term goals. The CEO has reported to the Board for the execution summary with the Company's strategies once a year in addition to report the operating performance for each meeting.

8.2 Report on the results of duty performance of the audit committee in the past year

8.2.1 Meeting attendance of audit committee

Meeting attendance of audit committee (times) : 4

List of directors	Meeting attendance of audit committee		
	Meeting attendance (times)	/	Meeting attendance rights (times)
1 Mr. John Thompson (Chairman of the audit committee)	4	/	4
2 Ms. Pornphan Abhamongkol (Member of the audit committee)	4	/	4
3 Mrs. Sunun Thongbai (Member of the audit committee)	4	/	4
4 Mr. Stephanus Josephus Hendrikus Brader (Member of the audit committee)	4	/	4

8.2.2 The results of duty performance of the audit committee

The detail is shown in Attachment 6.

8.3 Summary of the results of duty performance of subcommittees

8.3.1 - 8.3.2 Meeting attendance and the results of duty performance of subcommittees

Meeting attendance Executive Committee

Meeting Executive Committee (times) : 7

List of Directors	Meeting attendance Executive Committee		
	Meeting attendance (times)	/	Meeting attendance right (times)
1 Mr. Richard David Han (The chairman of the executive committee)	7	/	7
2 Mr. Terrence Philip Weir (Member of the executive committee)	7	/	7
3 Mr. Sanjay Nirendra Mitra (Member of the executive committee)	7	/	7
4 Mr. Insuk Klm (Member of the executive committee)	7	/	7

The results of duty performance of Executive Committee

The Executive Committee, managing the Company's business under the authority delegated by the Board, has carried out its responsibilities in line with the Company's objectives and strategies. Below are the key results of their performance:

1. Operational Oversight and Performance Management: The Executive Committee has effectively managed and monitored the Company's daily operations, ensuring alignment with strategic goals.

2. Operational Challenge and Capital Expenditure Decisions: Significant operational challenges and major capital expenditure have been assessed and presented to the Board. These decisions have led to enhanced efficiency and growth potential, ensuring the company stays competitive in its market.

3. Dividend Recommendations: The Executive Committee has proposed interim and annual dividend payments based on earnings appropriations, ensuring financial stability and shareholder satisfaction.

4. Management and Leadership Development: The Executive Committee has delegated responsibilities to senior management and provided guidance to executive directors, fostering leadership development and improving organizational performance.

5. Legal and Regulatory Compliance: The Executive Committee has ensured that the Company's operations are aware of and prepared for any new or changes to applicable laws and regulations. By proactively addressing these changes, the Committee implement risk mitigation for potential impacts on the Company's business.

6. Alignment with Strategic Resolutions: The Executive Committee has conducted its duties in accordance with the resolutions passed during Board and shareholder meetings, achieving the Company's short-term and long-term objectives while ensuring accountability and transparency.

Meeting attendance Nomination Committee

Meeting Nomination Committee (times) : 2

List of Directors	Meeting attendance Nomination Committee		
	Meeting attendance (times)	/	Meeting attendance right (times)
1 Ms. Pornphan Abhamongkol (The chairman of the subcommittee)	2	/	2
2 Mr. Richard David Han (Member of the subcommittee)	2	/	2
3 Mrs. Sunun Thongbai (Member of the subcommittee)	2	/	2
4 Mr. Stephanus Josephus Hendrikus Brader (Member of the subcommittee)	2	/	2

The results of duty performance of Nomination Committee

The detail is shown in Attachment 6.

Meeting attendance Corporate Governance and Sustainability Committee:

Meeting Corporate Governance and Sustainability Committee: (times) : 2

List of Directors	Meeting attendance Corporate Governance and Sustainability Committee:		
	Meeting attendance (times)	/	Meeting attendance right (times)
1 Mr. Stephanus Josephus Hendrikus Brader (The chairman of the subcommittee)	2	/	2
2 Mr. Terrence Philip Weir (Member of the subcommittee)	2	/	2
3 Ms. Pornphan Abhamongkol (Member of the subcommittee)	2	/	2
4 Mrs. Sunun Thongbai (Member of the subcommittee)	2	/	2

The results of duty performance of Corporate Governance and Sustainability Committee:

The detail is shown in Attachment 6.

Meeting attendance Risk Management Committee

Meeting Risk Management Committee (times) : 1

List of Directors	Meeting attendance Risk Management Committee		
	Meeting attendance (times)	/	Meeting attendance right (times)
1 Mr. Terrence Philip Weir (The chairman of the subcommittee)	1	/	1
2 Ms. Pornphan Abhamongkol (Member of the subcommittee)	1	/	1
3 Mrs. Sunun Thongbai (Member of the subcommittee)	1	/	1
4 Mr. Stephanus Josephus Hendrikus Brader (Member of the subcommittee)	1	/	1

The results of duty performance of Risk Management Committee

The detail is shown in Attachment 6.

9. Internal control and related party transactions

9.1 Internal control

Summary of the opinion of the board of directors regarding the internal control of the company

The Board of Directors is responsible for establishing and maintaining the internal control system. The Board has appointed the Audit Committee to review the appropriateness and effectiveness of the internal control system implemented by management. The Audit Committee shall ensure that the existing internal control systems are effective in achieving their objectives, providing reasonable assurance regarding the accuracy of financial statements, safeguarding assets against loss, unauthorized use, or fraud, and ensuring that transactions are executed in accordance with the Company's policies and procedures.

In 2024, the Board performed a self-assessment to evaluate the internal control system by applying the control assessment criteria from the Stock Exchange of Thailand. The Company has an Internal Audit Department and a Compliance Unit in place to monitor and oversee activities, ensuring they align with the established systems, applicable laws, and regulations. Additionally, the Risk Management Committee has been appointed to ensure the implementation of the risk management policy and to monitor and limit overall risks to an acceptable level.

At the Board of Directors' Meeting No. 7, held on 11 December 2024, with the Audit Committee in attendance, the Board assessed the Company's internal control system based on the five components of the COSO Internal Control Integrated Framework: Control Environment, Risk Assessment, Control Activities, Information & Communication, and Monitoring Activities. This comprehensive evaluation ensured that the internal control system effectively addresses the key areas of the Company's operations and provides reasonable assurance that organizational goals are met.

The Board, in agreement with the Audit Committee, concluded that the existing internal control system is considered appropriate and adequate. The Company is to continuously improve its internal control processes and align them with the best practices to ensure that operations remain efficient, compliant with regulatory requirements, and align with the Company's long-term goals.

9.1.1 Adequacy and appropriateness of the company's internal control system

Company's internal control system	:	The Committee of Sponsoring Organizations of the Treadway Commission (COSO), COSO - Enterprise Risk Management Framework (ERM)

The Committee of Sponsoring Organizations of the Treadway Commission (COSO)

The COSO (Committee of Sponsoring Organizations of the Treadway Commission) Internal Control Integrated Framework provides a comprehensive and structured approach to ensuring effective internal controls in organizations. The framework consists of five components that are designed to work together to support the achievement of organizational objectives, the reliability of financial reporting, compliance with laws and regulations, and the safeguarding of assets. Below is a summary of how the Company has implemented the key principles of the COSO framework:

1. Control Environment

The Company has established an organization structure, lines of control, and approval authorities for different managerial levels, and the charters of various committees to assist in fulfilling the duties and responsibilities of the Board of Directors. The Company also has written policies on corporate governance, a code of conduct, an anti-corruption policy, and operational policies and procedures that serve as guidelines for directors, executives, and employees to perform their duties with integrity.

2. Risk Assessment

The Risk Management Committee has been appointed to ensure implementation of the risk management policy, with the aim of monitoring and limiting overall risks at an acceptable level. Substantial risks are identified by considering both internal and

external factors, and are prioritized based on the impact and likelihood of the identified risks, leading to suitable risk mitigation actions. The Company also considers the potential for fraud and corruption when assessing risks to the achievement of its objectives. The Company's risk profile is regularly reviewed by the Risk Management Committee and proposed to the Board, while the risk management policy has been reviewed annually.

3. Control Activities

The Company implements general control activities to mitigate risks, such as the segregation of duties among approval, accounting entry, and asset custody. It also ensures the security of the information technology system and enforces policies that require transactions to be approved by individuals with no personal interest in the transactions.

4. Information and Communication

The Company's management provides the Board with adequate information to facilitate decision-making and ensures that notices or documents are sent to the Board in advance for proper preparation. Board meeting minutes are maintained to track and document the duties of the directors. Additionally, the Company has established whistleblower channels for both internal and external parties.

5. Monitoring Activities

The appropriateness and adequacy of the internal control system are regularly monitored through a combination of management reviews, self-assessments, the Compliance Unit, and both internal and external auditors. The results of internal and external audit, as well as compliance reviews, are reported to the Audit Committee on a regular basis. The Audit Committee ensures the Internal Audit function is independent, oversees the approval of audit plans, and ensures that the audit results are reviewed and addressed. Additionally, the Compliance Unit ensures that the Company complies with applicable laws, regulations, and internal policies. The results of audits and compliance reviews are reported to the Audit Committee regularly, ensuring that any issues or weaknesses are promptly addressed. This monitoring process ensures the internal control system remains effective and adaptive to the Company's evolving needs.

COSO - Enterprise Risk Management Framework (ERM)

The Company has developed a risk management policy that aligns with the COSO Enterprise Risk Management (ERM) Framework and is integrated with the company's internal control system. The framework is embedded within the corporate governance structure, with oversight from the Board of Directors and the Risk Management Committee. This committee is responsible for reviewing and overseeing the risk management framework, while the Risk Management Unit, an independent role separated from day-to-day operational management, ensures the implementation of the policy. The Executive Committee, led by the CEO, supports roles by managing day-to-day risks. The process includes identifying, assessing, and mitigating risks using a risk evaluation matrix that prioritizes risks based on their likelihood and impact. This ensures that the company's internal controls align with the broader risk management strategy.

In line with the COSO ERM Framework, the Company ensures that appropriate control activities are implemented to mitigate risks and enhance internal control effectiveness. Regular monitoring is carried out to ensure that the risk management process remains effective and adapts to the company's evolving needs.

9.1.2 Deficiencies related to the internal control system

	2022	2023	2024
Total number of deficiencies related to the internal control system (cases)	0	0	0

9.1.3 Opinions of the audit committee and auditor's observations on internal control

Does the audit committee have opinions on internal control different from the board of directors' opinions?	:	No
Does the auditor have any observations on the company's internal control?	:	No

9.1.4 Opinions of the audit committee on the position of the head of the internal audit unit

Head of the internal audit unit	:	Internal personnel

-

9.1.5 Appointment, discharge, and transfer of the head of the internal audit unit

Does the appointment, discharge, and transfer of the head of the internal audit unit require the audit committee approval?	:	Yes

9.2 Related party transactions

Related party transactions

Does the company have any related party transactions? : Yes

9.2.1 - 9.2.2 Names of the group of persons who may have a conflict of interest, nature of relationship, and information on related party transactions

Persons/entities with potential conflicts

Name of person or entity/type of business	Nature of relationship	Information as of date
Hana Semiconductor Co., Ltd. (Ayutthaya) Manufacturing	Subsidiary	31 Dec 2024
Hana Microelectronics (Cambodia) Co., Ltd. Manufacturing	Subsidiary	31 Dec 2024
Hana Microelectronics, Inc Agent and customer services	Subsidiary	31 Dec 2024
Hana Technologies, Inc. Manufacturing	Subsidiary	31 Dec 2024
Hana Semiconductor International Ltd. Trading	Subsidiary	31 Dec 2024
Omac Sales Ltd. Purchasing	Subsidiary	31 Dec 2024
Power Master Semiconductor Co., Ltd. Manufacturing	Subsidiary	31 Dec 2024

Details of related party transactions

Related party transactions	Transaction value at the end of the fiscal year (million baht)		
	2022	2023	2024
Hana Semiconductor Co., Ltd. (Ayutthaya)			
Transaction 1 Nature of transaction Purchase of materials Details Purchase based on cost plus mark-up Necessity/reasonableness These related party transactions were carried out in the ordinary course of business, on commercial terms, and in accordance with proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.	9.00	11.00	10.00
Hana Microelectronics (Cambodia) Co., Ltd.			
Transaction 1 Nature of transaction Sales of goods Details Prices agreed upon by the parties, reflecting the uniqueness of the products sold to each customer. Necessity/reasonableness These related party transactions were carried out in the ordinary course of business, on commercial terms, and in accordance with proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.	0.00	2.00	2.00
Transaction 2 Nature of transaction Sales of assets Details	0.00	3.00	3.00

Related party transactions	Transaction value at the end of the fiscal year (million baht)		
	2022	2023	2024
Sale based on cost plus mark-up Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.			
Transaction 3 Nature of transaction Purchase of materials Details Purchase based on cost plus mark-up Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.	0.00	2.00	43.00
Hana Microelectronics, Inc			
Transaction 1 Nature of transaction Marketing Service fee expense Details Marketing supportive services provided in accordance with the rates specified in the agreement Necessity/reasonableness These related party transactions were carried out in the ordinary course of business, based on commercial terms, and in compliance with appropriate terms and conditions. Audit committee's opinion	10.00	9.00	10.00

Related party transactions	Transaction value at the end of the fiscal year (million baht)		
	2022	2023	2024
The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.			
Hana Technologies, Inc.			
Transaction 1 Nature of transaction Sales of goods Details Prices agreed upon by the parties, reflecting the uniqueness of the products sold to each customer. Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.	152.00	161.00	145.00
Hana Semiconductor International Ltd.			
Transaction 1 Nature of transaction Purchase of materials Details Purchase based on cost plus mark-up Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.	266.00	239.00	101.00
Transaction 2 Nature of transaction Interest incomes	0.00	0.00	2.00

Related party transactions	Transaction value at the end of the fiscal year (million baht)		
	2022	2023	2024
Details Interest income from a loan to a subsidiary at 5.15% per annum Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.			
Omac Sales Ltd.			
Transaction 1 Nature of transaction Purchase of materials Details Purchase based on cost plus mark-up Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.	136.00	69.00	2.00
Transaction 2 Nature of transaction Purchase of assets Details Purchase based on cost plus mark-up Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion	1.00	0.00	1.00

Related party transactions	Transaction value at the end of the fiscal year (million baht)		
	2022	2023	2024
The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.			
Transaction 3 Nature of transaction Service fee expenses Details Procurement service fee based on cost plus mark-up Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.	2.00	2.00	2.00
Power Master Semiconductor Co., Ltd.			
Transaction 1 Nature of transaction Guarantee fee income Details Corporate guarantee fee of 0.5% per annum for the subsidiary's facility loan Necessity/reasonableness These related party transactions were conducted in the normal course of business, on commercial terms, and under proper terms and conditions. Audit committee's opinion The related party transactions were executed in accordance with standard business practices, on fair commercial terms, and at arm's length.	0.00	2.00	5.00

9.2.3 Policy and future trends of related party transactions and the compliance with the obligations specified in the prospectus of the company

Measures and procedures for approving related party transactions or connected transactions

In accordance with Section 89/12 (1) of the Securities and Exchange Act, normal business transactions with related parties, such as general trading conditions or transactions supporting the normal course of business, must be approved by the Board of Directors or comply with the principles previously approved by the Board of Directors.

For related party transactions that may present a potential conflict of interest, the Audit Committee shall review and approve the transaction, subject to the Board's approval. In cases where a transaction involves or may involve a conflict of interest for directors or related persons, those individuals must disclose the transaction to the Board and abstain from voting on the matter.

Additionally, the Company and its subsidiaries shall comply with the notifications and regulations established by the Securities and Exchange Commission and the Stock Exchange of Thailand. The related party transactions disclosed in the notes to the financial statements shall be reviewed by the Audit Committee on a quarterly basis to mitigate potential conflicts of interest.

Any material related party transactions requiring shareholder approval under the Stock Exchange of Thailand's notifications shall be disclosed to shareholders in advance of execution. The Company will provide the following minimum disclosures:

1. The name and relationship of the person with a conflict of interest.
2. The nature and volume of the transactions during the year, including ongoing or one-time transactions.
3. The reasons for engaging in the transaction with a person who may have a conflict of interest, the benefits to shareholders, and how the pricing policy and commercial terms are fair and reasonable.
4. The opinions of the Audit Committee.

The transaction shall be approved by the shareholders' meeting, with shareholders who have an interest in the transaction being excluded from voting. Therefore, the decision will be made by disinterested shareholders.

Future trends in related party transactions

The policies of the Company and its subsidiaries regarding future related transactions shall comply with the Securities and Exchange Act, the regulations of the Stock Exchange of Thailand, and the requirements related to the disclosure of connected transactions, as well as the acquisition or disposal of the Company's assets.

The Company is committed to conducting its business in the best interests of the Company and its subsidiaries. In the course of its operations, transactions between the Company and its subsidiaries within the group are necessary. As such, related party transactions will be carried out fairly, at market prices, and in accordance with standard business practices.

Investor Protection

For any future-related party transactions between the Company or its subsidiaries and related parties, the transaction must be approved by the Board of Directors. The Audit Committee will provide its opinion on the necessity and appropriateness of the transaction, ensuring that it serves the best interests of the Company. Directors with a vested interest in such transactions shall abstain from voting.

If the Audit Committee lacks the necessary expertise in the matter, the Company will seek an independent expert or the Company's auditor to provide an opinion to assist in the decision-making process by the Board or shareholders, as applicable. Furthermore, the Company will disclose these transactions in the notes to the financial statements, as audited by the Company's auditor.

9.2.4 Information on appraised assets and appraisal price in conjunction with the execution of related party transactions

Can be referred in attachment 4: assets for business undertaking and details of asset appraisal

Part 3 Financial Statement

Board of Directors' Responsibility Statement for the Financial Report

Board of Directors' Responsibility for Financial Statements

The Board of Directors is responsible for ensuring that the financial statements are prepared in accordance with generally accepted accounting principles and that appropriate accounting policies are consistently applied. This includes exercising careful and reasonable judgment in the preparation of the financial statements and all material information is fully disclosed in the notes to the financial statements. Additionally, the Board ensures that necessary clarifications and analyses regarding the financial positions and performance of the Company and its subsidiaries are provided and serve the interests of shareholders and investors.

The Board is responsible for maintaining the internal control system and risk management system to reasonably ensure that assets are safeguarded against unauthorized use or disposition, and that the accounting records are sufficiently reliable to enable the preparation of financial statements that conform in all material respects with generally accepted accounting principles.

The Board of Directors has appointed an Audit Committee, which meets throughout the year to review significant accounting, internal control, and auditing matters with management and the auditors.

The Board is of the opinion that the financial statements of Hana Microelectronics Public Company Limited and its subsidiaries for the year ending December 2024 are, in all material respects, accurate, complete, and reliable.



Mr. John Thompson
Chairman of the Board of Directors



Mr. Richard David Han
Executive Vice Chairman and
Chief Executive Officer

Auditor’s Report

Independent Auditor's Report

To the Shareholders of Hana Microelectronics Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of Hana Microelectronics Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2024, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including material accounting policy information, and have also audited the separate financial statements of Hana Microelectronics Public Company Limited for the same period (collectively "the financial statements").

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Hana Microelectronics Public Company Limited and its subsidiaries and of Hana Microelectronics Public Company Limited as at 31 December 2024, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Group in accordance with the Code of Ethics for Professional Accountants including Independence Standards issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

The key audit matters and how audit procedures respond for each matter are described below.

Revenue recognition

Revenue from sales are the accounting transactions that have significant volume of transactions and amounts, and directly affect profit or loss of the Group. The majority of the Group's sales transactions are conducted with a number of major overseas customers under a variety of arrangements and conditions which may impact the recognition of revenue of the Group causing risks with respect to the amount and timing of such revenue recognition.

I examined the revenue recognition of the Group by:

- Assessing and testing the Group's internal controls with respect to the revenue cycle by making enquiry of responsible executives, gaining an understanding of the controls and selecting representative samples to test the operation of the designed controls.
- Applying a sampling method to select sales to assess whether revenue recognition was consistent with the conditions or arrangement made with the customers, and whether it was in compliance with the Group's policy.
- On a sampling basis, examining supporting documents for actual sales transactions occurring during the year and near the end of the accounting period.
- Requesting for confirmations of consignment inventory balances located at customers' hubs at the end of the accounting period and on a sampling basis, examining supporting documents whether the consignment inventories were correctly excluded from sales for the year.
- Reviewing of credit notes that the Group issued after the end of the accounting period.
- Performing analytical procedures of disaggregated data to detect possible irregularities in sales transactions throughout the period, particularly for accounting entries made through journal vouchers.

Inventories

Estimating the net realisable value of inventory, as disclosed in the related accounting policies in Note 4.3 and Note 5.1 to the financial statements, is an area requiring significant management judgement, particularly with regard to the estimation of allowance for diminution in the value of slow-moving and obsolete inventory. This requires detailed analysis of the product life cycle, the competitive environment, economic circumstances and the situation within the high-technology industry. There is a risk with respect to the amount of provision set aside for diminution in the value of inventory.

I assessed and tested the Group's internal controls relevant to the determination of provision for diminution in the value of inventory by making enquiry of responsible executives, gaining an understanding of the controls and selecting representative samples to test the operations of the designed controls. In addition, I also assessed the method and the assumptions applied by management in determining such provision. The procedures that I performed included:

- Gaining an understanding of the basis applied in determining the provision for diminution in value of inventory and reviewing the consistency of the application of that basis, and the rationale for the recording of specific provisions.
- Comparing the inventory holding periods and inventory movements to identify product lines with indicators of lower than normal inventory turnover.
- Comparing details of sales transactions occurring after the date of the financial statements with the cost of inventory for each product line.
- Comparing historical data of actual losses on sales and write-offs of inventory during each of the previous years with the provision for diminution in value of inventory recorded at the preceding year-end.

Provision for long-term employee benefits

The valuation of long-term employee benefit obligations is one of significant accounting estimates to the financial statements because the Group has a large number of employees and has defined benefit plans as discussed in the related accounting policies in Note 4.13 and Note 5.5 to the financial statements. In addition, the calculation of long-term employee benefit obligations requires the management to select the calculation method and exercise a high degree of judgement in determining appropriate assumptions such as discount rates, future salary increases, mortality rates and staff turnover rates. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty. There is therefore a risk with respect to the amounts of the provision for long-term employee benefits.

I assessed and tested the Group's internal controls with respect to the assessment of provision for long-term employee benefits by making enquiry of responsible executives, gaining an understanding of internal controls and testing the method and significant assumptions both demographic and financial aspects used by the management to calculate the long-term employee benefit obligations and considering the impact of changes in key assumptions on the valuation of long-term employee benefit obligations. In addition, I reviewed the disclosure in the notes to the financial stalemates with respect to the provision for long-term employee benefits.

Impairment of non-financial assets

As discussed in Note 14 and 15 to the financial statements, a subsidiary recorded impairment loss on plant, equipment and intangible assets totaling Baht 1,844 million as expenses in the current year, which is material to the consolidated financial statements. In determination of the allowance for impairment of assets, management had to exercise significant judgement with respect to the projections of operating performance and the assessment of future plans, including the determination of an appropriate discount rate and key assumptions. There is thus a risk with respect to the amount of impairment loss recorded on the assets.

I assessed the management's identification of cash generating units and selection of a financial model, according to the type of assets, by gaining an understanding of management's decision-making process and evaluating whether the decisions were consistent with how assets are utilised. In addition, I gained an understanding of and assessed the following:

- The assumptions applied in preparing business plans and cash flow projections of the Group, by gaining understanding of the process at which the figures were arrived, comparison of the assumptions with external and internal sources of information and comparison of past cash flow projections with actual operating performance in order to assess the exercise of management judgement in estimating cash flow projections, and comparison of the long-term growth rate of the Group with economic and industry forecasts.
- The discount rate, through the comparison of the average cost of capital and other data with those used by comparable organisations.
- The disclosure of information relating to the estimation of impairment of the assets in the notes to the financial statements.

Other Information

Management is responsible for the other information. The other information comprises the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon. The annual report of the Group is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated.

When I read the annual report of the Group, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance for correction of the misstatement.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.

Kamontip Lertwitworatep
Certified Public Accountant (Thailand) No. 4377

EY Office Limited
Bangkok: 27 February 2025

Financial Statements

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of financial position

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Assets					
Current assets					
Cash and cash equivalents	*6*	6,689,073,469	6,954,416,159	4,405,961,314	4,986,595,129
Trade and other receivables	*7, 8*	4,480,721,798	5,178,140,817	2,282,965,861	2,540,679,369
Short-term loan to related party	*7*	-	-	507,444,000	-
Inventories	*9*	7,096,004,054	8,969,347,441	3,200,815,690	3,896,501,970
Other current financial assets	*10*	4,055,506,709	1,938,097,168	1,100,000,000	-
Other current assets		98,064,301	119,368,279	7,799,507	18,038,937
Total current assets		22,419,370,331	23,159,369,864	11,504,986,372	11,441,815,405
Non-current assets					
Investments in subsidiaries	*11*	-	-	4,674,950,156	4,129,629,264
Investment in associate	*12*	369,581,090	-	372,890,000	-
Investment properties	*13*	158,211,947	72,303,750	72,303,750	72,303,750
Property, plant and equipment	*14*	9,327,585,642	11,701,474,654	2,029,303,761	2,134,006,492
Intangible assets	*15*	161,189,753	328,983,403	34,721,152	41,264,281
Other non-current financial assets	*16*	143,200	150,000	97,000	97,000
Deferred tax assets	*28*	26,260,042	18,653,072	45,462,254	12,391,098
Other non-current assets		53,510,408	25,022,161	398,550	516,905
Total non-current assets		10,096,482,082	12,146,587,040	7,230,126,623	6,390,208,790
Total assets		32,515,852,413	35,305,956,904	18,735,112,995	17,832,024,195

The accompanying notes are an integral part of the financial statements.

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of financial position (continued)

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from financial institutions	*17*	509,355,000	1,076,407,950	-	-
Trade and other payables	*7, 18*	3,026,410,310	3,390,545,998	927,138,165	1,168,669,146
Current portion of long-term loans from financial institution	*21*	46,563,000	24,035,500	-	-
Current portion of lease liabilities	*19*	683,792	4,990,258	-	-
Short-term provisions	*20*	339,879,000	342,233,000	-	-
Income tax payable		39,975,660	50,816,390	8,432,874	16,590,626
Other current liabilities		135,083,334	145,024,991	41,730,621	32,489,322
Total current liabilities		4,097,950,096	5,034,054,087	977,301,660	1,217,749,094
Non-current liabilities					
Long-term loans from financial institution - net of current portion	*21*	334,322,340	203,340,330	-	-
Lease liabilities - net of current portion	*19*	1,574,171	732,858	-	-
Deferred income		170,822,494	124,586,707	-	-
Deferred tax liabilities	*28*	34,157,840	30,570,404	-	-
Provision for long-term employee benefits	*22*	798,779,007	765,952,019	409,892,941	368,265,776
Total non-current liabilities		1,339,655,852	1,125,182,318	409,892,941	368,265,776
Total liabilities		5,437,605,948	6,159,236,405	1,387,194,601	1,586,014,870

The accompanying notes are an integral part of the financial statements.

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of financial position (continued)

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Shareholders' equity					
Share capital					
Registered	*23*				
885,366,746 ordinary shares of Baht 1 each		885,366,746	885,366,746	885,366,746	885,366,746
Issued and fully paid-up					
885,366,660 ordinary shares of Baht 1 each		885,366,660	885,366,660	885,366,660	885,366,660
Share premium		6,230,535,782	6,230,535,782	6,230,535,782	6,230,535,782
Capital reserve for share-based					
payment transactions	*24*	69,173,321	40,449,982	-	-
Retained earnings					
Appropriated - statutory reserve	*25*	549,109,052	541,627,153	100,000,000	100,000,000
Unappropriated		19,788,234,118	21,130,039,200	10,132,015,952	9,030,106,883
Other components of shareholders' equity		(444,172,468)	318,701,722	-	-
Total shareholders' equity		27,078,246,465	29,146,720,499	17,347,918,394	16,246,009,325
Total liabilities and shareholders' equity		32,515,852,413	35,305,956,904	18,735,112,995	17,832,024,195

The accompanying notes are an integral part of the financial statements.

Directors

Hana Microelectronics Public Company Limited and its subsidiaries

Income statements

For the year ended 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Revenues					
Sales	*30,31*	24,801,339,649	26,152,116,286	12,258,742,752	12,474,673,507
Dividend income	*11*	115,875	83,250	115,875	240,083,230
Gain on exchange		9,780,117	41,283,448	66,702,892	67,838,102
Other income	*10*	641,656,199	438,666,051	62,612,999	53,120,268
Total revenues		25,452,891,840	26,632,149,035	12,388,174,518	12,835,715,107
Expenses	*27*				
Cost of sales		22,607,046,955	23,172,094,053	10,151,595,704	10,343,192,926
Selling and distribution expenses		215,461,648	210,411,575	72,088,581	65,320,335
Administrative expenses		1,475,807,568	1,420,777,686	272,037,922	299,898,294
Loss on derivatives		-	49,418,425	-	-
Loss on impairment of investments	*11*	-	-	169,719,107	-
Loss on impairment of non-financial assets	*14,15*	1,844,420,143	-	-	-
Reversal of impairment loss on financial assets	*10*	-	(21,456,192)	-	-
Total expenses		26,142,736,314	24,831,245,547	10,665,441,314	10,708,411,555
Operating profit (loss)		(689,844,474)	1,800,903,488	1,722,733,204	2,127,303,552
Share of profit from investment in associate		12,911,985	-	-	-
Finance income	*26*	193,758,227	96,965,468	72,613,992	19,150,386
Finance cost		(64,326,712)	(51,833,631)	(3,605,953)	(3,429,793)
Profit (loss) before income tax expenses		(547,500,974)	1,846,035,325	1,791,741,243	2,143,024,145
Income tax expenses	*28*	(86,171,133)	(85,468,004)	(10,300,645)	(19,594,973)
Profit (loss) for the year		(633,672,107)	1,760,567,321	1,781,440,598	2,123,429,172
Profit attributable to:					
Equity holders of the Company		(633,672,107)	1,760,567,321	1,781,440,598	2,123,429,172
Earnings (loss) per share	*29*				
Basic earnings (loss) per share					
Profit (loss) attributable to equity holders of the Company		(0.72)	2.14	2.01	2.59
Number of weighted average ordinary shares (shares)		885,366,660	821,196,935	885,366,660	821,196,935

The accompanying notes are an integral part of the financial statements.

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of comprehensive income

For the year ended 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Profit (loss) for the year		(633,672,107)	1,760,567,321	1,781,440,598	2,123,429,172
Other comprehensive income:					
Other comprehensive income to be reclassified					
to profit or loss in subsequent periods:					
Exchange differences on translation of financial statements in foreign currency - net of income tax	*28*	(725,802,446)	(259,191,109)	-	-
Gain (loss) on changes in value of debt instruments designated at fair value through other comprehensive income - net of income tax		(20,850,849)	14,257,851	-	-
Share of other comprehensive income from investment in associate - exchange differences on translation of financial statements in foreign currency		(16,220,895)	-	-	-
Other comprehensive income to be reclassified to profit or loss in subsequent periods - net of income tax		(762,874,190)	(244,933,258)	-	-
Other comprehensive income not to be reclassified					
to profit or loss in subsequent periods					
Actuarial gain (loss) - net of income tax	*22, 28*	(36,626,081)	(14,187,386)	(15,506,534)	4,441,768
Other comprehensive income not to be reclassified to profit or loss in subsequent periods - net of income tax		(36,626,081)	(14,187,386)	(15,506,534)	4,441,768
Other comprehensive income for the year		(799,500,271)	(259,120,644)	(15,506,534)	4,441,768
Total comprehensive income for the year		(1,433,172,378)	1,501,446,677	1,765,934,064	2,127,870,940
Total comprehensive income attributable to:					
Equity holders of the Company		(1,433,172,378)	1,501,446,677	1,765,934,064	2,127,870,940

The accompanying notes are an integral part of the financial statements.

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of changes in shareholders' equity

For the year ended 31 December 2024

(Unit: Baht)

		Consolidated financial statements									
							Other components of shareholders' equity				
							Other comprehensive income				
	Note	Issued and paid up share capital	Share premium	Capital reserve for share-based payment	Retained earnings: Appropriated - Statutory reserve	Retained earnings: Unappropriated	Fair value reserve of financial assets at FVOCI	Exchange differences on translation of financial statements in foreign currency	Share of other comprehensive income from associate	Total other components of shareholders' equity	Total shareholders' equity
Balance as at 1 January 2023		804,878,860	1,723,218,982	-	536,312,739	20,234,096,439	(9,293,899)	572,928,879	-	563,634,980	23,862,142,000
Profit for the year		-	-	-	-	1,760,567,321	-	-	-	-	1,760,567,321
Other comprehensive income for the year		-	-	-	-	(14,187,386)	14,257,851	(259,191,109)	-	(244,933,258)	(259,120,644)
Total comprehensive income for the year		-	-	-	-	1,746,379,935	14,257,851	(259,191,109)	-	(244,933,258)	1,501,446,677
Share capital increase	*23*	80,487,800	4,507,316,800	-	-	-	-	-	-	-	4,587,804,600
Recognition of expenses against capital reserve for share-based payment transactions	*24*	-	-	40,449,982	-	-	-	-	-	-	40,449,982
Dividend paid	*33*	-	-	-	-	(845,122,760)	-	-	-	-	(845,122,760)
Unappropriated retained earnings transferred to statutory reserve		-	-	-	5,314,414	(5,314,414)	-	-	-	-	-
Balance as at 31 December 2023		885,366,660	6,230,535,782	40,449,982	541,627,153	21,130,039,200	4,963,952	313,737,770	-	318,701,722	29,146,720,499
Balance as at 1 January 2024		885,366,660	6,230,535,782	40,449,982	541,627,153	21,130,039,200	4,963,952	313,737,770	-	318,701,722	29,146,720,499
Loss for the year		-	-	-	-	(633,672,107)	-	-	-	-	(633,672,107)
Other comprehensive income for the year		-	-	-	-	(36,626,081)	(20,850,849)	(725,802,446)	(16,220,895)	(762,874,190)	(799,500,271)
Total comprehensive income for the year		-	-	-	-	(670,298,188)	(20,850,849)	(725,802,446)	(16,220,895)	(762,874,190)	(1,433,172,378)
Recognition of expenses against capital reserve for share-based payment transactions	*24*	-	-	28,723,339	-	-	-	-	-	-	28,723,339
Dividend paid	*33*	-	-	-	-	(664,024,995)	-	-	-	-	(664,024,995)
Unappropriated retained earnings transferred to statutory reserve		-	-	-	7,481,899	(7,481,899)	-	-	-	-	-
Balance as at 31 December 2024		885,366,660	6,230,535,782	69,173,321	549,109,052	19,788,234,118	(15,886,897)	(412,064,676)	(16,220,895)	(444,172,468)	27,078,246,465

The accompanying notes are an integral part of the financial statements.

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of changes in shareholders' equity (continued)

For the year ended 31 December 2024

(Unit: Baht)

		Separate financial statements				
		Issued and		Retained earnings		Total
		paid up	Share	Appropriated		shareholders'
	Note	share capital	premium	Statutory reserve	Unappropriated	equity
Balance as at 1 January 2023		804,878,860	1,723,218,982	100,000,000	7,747,358,703	10,375,456,545
Profit for the year		-	-	-	2,123,429,172	2,123,429,172
Other comprehensive income for the year		-	-	-	4,441,768	4,441,768
Total comprehensive income for the year		-	-	-	2,127,870,940	2,127,870,940
Share capital increase	*23*	80,487,800	4,507,316,800	-	-	4,587,804,600
Dividend paid	*33*	-	-	-	(845,122,760)	(845,122,760)
Balance as at 31 December 2023		885,366,660	6,230,535,782	100,000,000	9,030,106,883	16,246,009,325
Balance as at 1 January 2024		885,366,660	6,230,535,782	100,000,000	9,030,106,883	16,246,009,325
Profit for the year		-	-	-	1,781,440,598	1,781,440,598
Other comprehensive income for the year		-	-	-	(15,506,534)	(15,506,534)
Total comprehensive income for the year		-	-	-	1,765,934,064	1,765,934,064
Dividend paid	*33*	-	-	-	(664,024,995)	(664,024,995)
Balance as at 31 December 2024		885,366,660	6,230,535,782	100,000,000	10,132,015,952	17,347,918,394

The accompanying notes are an integral part of the financial statements.

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of cash flows

For the year ended 31 December 2024

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cash flows from operating activities				
Profit (loss) before tax	(547,500,974)	1,846,035,325	1,791,741,243	2,143,024,145
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:				
Depreciation	1,688,019,399	1,636,406,249	361,904,606	360,345,314
Amortisation expenses	88,564,369	65,889,637	8,434,629	8,676,009
Allowance for expected credit losses (reversal)	(11,961,701)	2,674,872	(2,492,191)	-
Reduction of inventories to net realisable value	277,663,350	373,740,521	24,941,765	86,474,063
Write-off obsolete and damaged inventories (reversal)	(61,033,634)	30,279,573	(41,278,749)	30,279,573
Allowance for loss on impairment of investments in subsidiaries	-	-	169,719,107	-
Share of profit from investment in associate	(12,911,985)	-	-	-
Dividend income from subsidiaries	-	-	-	(239,999,980)
Dividend income from other companies	(115,875)	(83,250)	(115,875)	(83,250)
Loss (gain) on disposals/write-off of equipment and intangible assets	8,763,270	25,935,249	(2,800,763)	3,180,159
Allowance for impairment loss on plant and equipment	1,761,450,762	-	-	-
Allowance for impairment loss on intangible assets	82,969,381	-	-	-
Expenses for share-based payment transactions	28,723,339	40,449,982	-	-
Provision for vacation (reversal)	3,564,554	477,141	1,806,419	(333,641)
Provision for long-term employee benefits	66,286,675	64,402,195	34,636,850	32,810,659
Loss (gain) on sales of debt instruments at fair value through other comprehensive income	(9,632,467)	709,351	-	-
Reversal of allowance for impairment loss on other current financial assets	-	(21,456,192)	-	-
Income from the terminate fund	(289,937,933)	-	-	-
Unrealised loss (gain) on exchange	(74,511,842)	18,138,576	(54,179,127)	7,722,394
Unrealised loss on derivatives	-	49,418,425	-	-
Finance income	(193,758,227)	(96,965,468)	(72,613,992)	(19,150,386)
Finance cost	55,625,613	44,218,230	-	661,370
Profit from operating activities before changes in operating assets and liabilities	2,860,266,074	4,080,270,416	2,219,703,922	2,413,606,429

The accompanying notes are an integral part of the financial statements.

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of cash flows (continued)

For the year ended 31 December 2024

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Operating assets (increase) decrease				
Trade and other receivables	800,512,458	(195,781,567)	325,751,368	(433,791,913)
Inventories	1,656,713,671	83,560,406	712,023,264	186,552,386
Other current assets	33,224,900	51,013,400	10,239,430	7,238,256
Operating liabilities increase (decrease)				
Trade and other payables	(320,977,581)	(670,729,953)	(213,935,054)	(317,377,629)
Other current liabilities	(13,506,211)	(16,507,083)	7,434,880	91,651
Deferred income	46,235,787	64,712,101	-	-
Cash from operating activities	5,062,469,098	3,396,537,720	3,061,217,810	1,856,319,180
Cash paid for long-term employee benefits	(70,350,642)	(21,946,054)	(8,781,092)	(8,408,822)
Cash paid for income tax	(114,630,977)	(124,300,595)	(51,264,680)	(20,414,709)
Net cash from operating activities	4,877,487,479	3,250,291,071	3,001,172,038	1,827,495,649
Cash flows from investing activities				
Income in short-term loan to related party	-	-	(507,444,000)	-
Increase in other current financial assets	(3,080,197,075)	(2,037,345,416)	(1,100,000,000)	-
Cash paid for investment in subsidiary	-	-	(715,039,999)	(546,180,000)
Cash paid for investment in associate	(372,890,000)	-	(372,890,000)	-
Decrease in long-term fixed deposit	6,800	1,800	-	-
Interest received	192,261,385	90,621,328	73,811,987	10,077,993
Proceed from the terminate fund	289,937,933	-	-	-
Proceeds from sales of financial instruments	951,569,152	1,327,003,584	-	-
Dividend income from subsidiaries	-	-	-	239,999,980
Dividend income from other companies	115,875	83,250	115,875	83,250
Acquisitions of property, plant and equipment and intangible assets	(1,071,790,601)	(2,653,934,812)	(300,207,380)	(328,930,923)
Acquisition of investment properties	(85,908,197)	-	-	-
Acquisition of asset under lease agreement	-	(269,496,094)	-	-
Proceeds from disposals of equipment	13,711,026	34,974,544	3,754,304	3,515,877
Decrease (increase) in other non-current assets	(31,813,703)	95,473,885	118,355	(506,905)
Net cash used in investing activities	(3,194,997,405)	(3,412,617,931)	(2,917,780,858)	(621,940,728)

The accompanying notes are an integral part of the financial statements.

Hana Microelectronics Public Company Limited and its subsidiaries

Statements of cash flows (continued)

For the year ended 31 December 2024

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cash flows from financing activities				
Increase in short-term loans from financial institutions	26,017,253	1,945,416,600	-	-
Repayment of short-term loans from financial institutions	(588,446,883)	(803,881,750)	-	-
Decrease in short-term loan from related party	-	-	-	(200,000,000)
Cash receipt from long-term loans	212,242,800	238,734,740	-	-
Repayment of long-term loans	(35,712,800)	(2,403,550)	-	-
Payment of principal portion of lease liabilities	(5,351,704)	(9,548,960)	-	-
Proceeds from share capital increase	-	4,587,804,600	-	4,587,804,600
Interest paid	(138,675,331)	(37,988,036)	-	(889,315)
Dividend paid	(664,024,995)	(845,122,760)	(664,024,995)	(845,122,760)
Net cash from (used in) financing activities	(1,193,951,660)	5,073,010,884	(664,024,995)	3,541,792,525
Increase (decrease) in cash and cash equivalents	488,538,414	4,910,684,024	(580,633,815)	4,747,347,446
Translation adjustment	(753,881,104)	(330,975,455)	-	-
Net increase (decrease) in cash and cash equivalents	(265,342,690)	4,579,708,569	(580,633,815)	4,747,347,446
Cash and cash equivalents at beginning of year	6,954,416,159	2,374,707,590	4,986,595,129	239,247,683
Cash and cash equivalents at end of year (Note 6)	6,689,073,469	6,954,416,159	4,405,961,314	4,986,595,129
Supplemental cash flow information				
Non-cash related transactions from investing activities				
Net increase (decrease) in accounts payable for purchases of plant and equipment	24,604,238	(124,184,189)	(40,160,464)	(10,167,554)
Revaluation gain (loss) on changes in fair value of debt instruments at FVOCI	(20,850,849)	14,257,851	-	-
Transfer equipment to intangible assets	1,713,000	-	1,713,000	-
Transfer equipment to other non-current assets	3,325,456	-	-	-
Increase in right-of-use assets from lease agreements	2,026,494	7,330,763	-	-

The accompanying notes are an integral part of the financial statements.

Notes to the Financial Statements

Hana Microelectronics Public Company Limited and its subsidiaries
Notes to financial statements
For the year ended 31 December 2024

1. General information

Hana Microelectronics Public Company Limited ("the Company") was incorporated as a limited company under Thai law and transformed to be a public limited company under the Public Limited Companies Act on 27 January 1993. The Company operates its business in Thailand and is principally engaged in the manufacture and trading of electronic components. The registered office of the Company is at 65/98, Soi Vibhavadi-Rangsit 64, Junction 2, Kwang Talad Bangkhen, Khet Laksi, Bangkok.

2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Professions Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development, issued under the Accounting Act B.E. 2543.

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

2.2 Basis of consolidation

a) The consolidated financial statements include the financial statements of Hana Microelectronics Public Company Limited ("the Company") and the following subsidiary companies ("the subsidiaries") (collectively as "the Group"):

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2024	2023
			Percent	Percent
Held by the Company				
Hana Semiconductor (Ayutthaya) Company Limited	Manufacture and trading of electronic components	Thailand	58	58
Hana Semiconductor (BKK) Company Limited	Holding company	Thailand	100	100
Omac Sales Limited	Purchasing of electronic components and equipment	Hong Kong	100	100
Hana Microelectronics International Company Limited	Holding company	British Virgin Islands	100	100
Hana Microelectronics Investments Company Limited	Holding company	British Virgin Islands	100	100
Hana Microelectronics (Cambodia) Company Limited	Manufacture and trading of electronic components	Cambodia	100	100

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2024	2023
			Percent	Percent
Held through the subsidiaries				
Hana Semiconductor (Ayutthaya) Company Limited	Manufacture and trading of electronic components	Thailand	42	42
Hana Semiconductor International Limited	Trading of electronic components	British Virgin Islands	100	100
Hana Microelectronics Enterprises Company Limited	Holding company	British Virgin Islands	100	100
Hana Technologies, Inc.	Manufacture and trading of electronic components	USA	100	100
Hana Microelectronics, Inc.	Agent and customer services	USA	100	100
Hana Macao Commercial Offshore Limited	Customer services	Macao	100	100
Hana Microelectronics (Jiaxing) Company Limited	Manufacture and trading of electronic components	China	100	100
Power Master Semiconductor Company Limited	Manufacture and trading of electronic components	South Korea	100	100

b) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.

c) Subsidiaries are fully consolidated, being the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.

d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.

e) The assets and liabilities in the financial statements of overseas subsidiary companies are translated to Thai Baht using the exchange rate prevailing on the end of reporting period, and revenues and expenses translated using monthly average exchange rates. The resulting differences are shown under the caption of "Exchange differences on translation of financial statements in foreign currency" in the statements of changes in shareholders' equity.

f) Material balances and transactions between the Group have been eliminated from the consolidated financial statements.

2.3 The separate financial statements present investments in subsidiaries and associate under the cost method.

3. New financial reporting standards

3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised financial reporting standards which are effective for fiscal years beginning on or after 1 January 2024. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2025

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2025. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

4. Accounting policies

4.1 Revenue and expense recognition

Sales of goods

Revenue from sales of goods is recognised at the point in time when control of the asset is transferred to the customer, generally upon delivery of the goods. Revenue is measured at the amount of the consideration received or receivable, excluding value added tax, of goods supplied after deducting returns, discounts, allowances.

Interest income

Interest income is calculated using the effective interest method and recognised on an accrual basis. The effective interest rate is applied to the gross carrying amount of a financial asset, unless the financial assets subsequently become credit-impaired when it is applied to the net carrying amount of the financial asset (net of the expected credit loss allowance).

Dividends

Dividends are recognised when the right to receive the dividends is established.

Finance cost

Interest expense from financial liabilities at amortised cost is calculated using the effective interest method and recognised on an accrual basis.

4.2 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

4.3 Inventories

Raw materials, work in process, and finished goods are valued at the lower of cost (under weighted average method) and net realisable value. The cost of inventories is measured using the standard cost method, which approximates actual cost. Cost of finished goods and work in process include direct materials, direct labour, and factory overheads.

Allowance for diminution in inventory value is set up for obsolete, slow-moving or deteriorated inventories.

4.4 Investments in subsidiaries and associate

Investment in associate is accounted for in the consolidated financial statements using the equity method.

Investments in subsidiaries and associate are accounted for in the separate financial statements using the cost method.

Allowance for diminution in value of investments is set up when the recovering amount of investments is lower then the investment cost.

4.5 Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment property is stated at cost less accumulated depreciation and allowance for loss on impairment (if any).

Depreciation of investment properties is calculated by reference to their costs on the straight-line basis over estimated useful lives of 20 years. Depreciation of the investment properties is included in determining income. No depreciation is provided on investment properties on land.

4.6 Property, plant and equipment and depreciation

Land is stated at cost. Buildings and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any).

Depreciation of plant and equipment is calculated by reference to their costs on the straight-line basis over the following estimated useful lives:

Leasehold improvements	period of lease
Buildings	10 - 39 years
Fixtures	10 - 22 years
Other assets	2 - 22 years

Depreciation is included in determining income. No depreciation is provided on land, construction in progress and machinery under installation.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in the income statement when the asset is derecognised.

4.7 Intangible assets

Intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses (if any).

Research costs are expensed as incurred. An intangible asset arising from development expenditure on an individual project is recognised only when the Group can demonstrate the commercial and technical feasibility of completing the intangible asset and the availability to measure reliably the expenditure during the development. The cost will be amortised when the related products are commercially produced.

Intangible assets with finite lives are amortised on the straight-line basis over the economic useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to the income statement.

A summary of the intangible assets with finite useful lives is as follows:

	Useful lives
Computer software	3 - 10 years
Development costs	10 years

4.8 Leases

At inception of contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. At the commencement date of the lease (i.e. the date the underlying asset is available for use), the Group recognises right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

Right-of-use assets

Right-of-use assets is measured at cost, less accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognised, initial direct costs incurred, and lease payments made at or before the commencement date of the lease less any lease incentives received.

Depreciation of right-of-use assets is calculated by reference to their costs on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Land	50	years
Buildings	2 - 28	years
Machinery and equipment	5	years

If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Right-of-use assets are presented part of property, plant and equipment in the statement of financial position.

Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

The Group discounts the present value of the lease payments by the interest rate implicit in the lease or the Group's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognised as expenses on a straight-line basis over the lease term.

4.9 Related party transactions

Related parties comprise individuals or enterprises that control, or are controlled by, the Company, whether directly or indirectly, or which are under common control with the Company.

They also include associate, and individuals or enterprises which directly or indirectly own a voting interest in the Company that gives them significant influence over the Company, key management personnel, directors, and officers with authority in the planning and direction of the Company's operations.

4.10 Foreign currencies

The consolidated and separate financial statements are presented in Baht, which is also the Company's functional currency. Items of each entity included in the consolidated financial statements are measured using the functional currency of that entity.

Transactions in foreign currencies are translated into Baht at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into Baht at the exchange rate ruling at the end of reporting period.

Gains and losses on exchange are included in determining income.

4.11 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment, right-of-use assets, investment properties and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount. In determining value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by a valuation model that, based on information available, reflects the amount that the Group could obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the costs of disposal.

An impairment loss is recognised in profit or loss.

In the assessment of asset impairment, if there is any indication that previously recognised impairment losses may no longer exist or may have decreased, the Group estimates the asset's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of the asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the income statement.

4.12 Equity-settled share-based payments

The Group recognises equity-settled share-based payment transactions when services are rendered by employees, based on the fair value of the stock grants at the grant date. The expenses, together with a corresponding increase in "Capital reserve for share-based payment transactions" in shareholders' equity, are recognised over the service period as specified in the plan.

The fair value of the share-based payment transactions is determined by taking into consideration performance conditions. At the end of each reporting period, the Group reassesses its estimates of the number of stock grants that will ultimately vest.

4.13 Employee benefits

Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

Post-employment benefits

Defined contribution plans

The Group and its employees have jointly established a provident fund. The fund is monthly contributed to by the employees and the Group. The fund's assets are held in a separate trust fund and the Group’s contributions are recognised as expenses when incurred.

Defined benefit plans

The Group has obligations in respect of the severance payments they must make to employees upon retirement under labor law. The Group treats these severance payment obligations as a defined benefit plan.

The obligation under the defined benefit plan is determined based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefits plans are recognised immediately in other comprehensive income.

Past service costs are recognised in the income statement on the earlier of the date of the plan amendment or curtailment and the date that the restructuring-related costs are recognised.

Provision for vacation

The Group has set up provision for vacation which is calculated in accordance with the Group’s policy and formula, taking into consideration the employee's salary, the number of service years and the unused vacation days.

4.14 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Provision for product warranty

The Group records provision for product warranty, which is estimated by reference to obligation for product warranty under manufacturing contract.

4.15 Government grants

Government grants are recognised when there is reasonable assurance that the grants will be received, and all attached conditions will be complied.

Grants related to assets are presented as deferred income and are recognised as income in the income statement on a straight-line basis over the useful lives of the assets.

Grants related to income are recognised as other income in the income statement.

4.16 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax.

Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Group recognises deferred tax liabilities for all taxable temporary differences while it recognises deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Group records deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

4.17 Financial instruments

The Group initially measures financial assets at its fair value plus, in the case of financial assets that are not measured at fair value through profit or loss, transaction costs. However, trade receivables, that do not contain a significant financing component are measured at the transaction price as disclosed in the accounting policy relating to revenue recognition.

Classification and measurement of financial assets

Financial assets are classified, at initial recognition, as to be subsequently measured at amortised cost, fair value through other comprehensive income ("FVOCI"), or fair value through profit or loss ("FVTPL"). The classification of financial assets at initial recognition is driven by the Group's business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

Financial assets at amortised cost

The Group measures financial assets at amortised cost if the financial asset is held in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate ("EIR") method and are subject to impairment. Gains and losses are recognised in the income statement when the asset is derecognised, modified or impaired.

Financial assets at FVOCI (debt instruments)

The Group measures financial assets at FVOCI if the financial asset is held to collect contractual cash flows and to sell the financial asset and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the income statement and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in other comprehensive income. Upon derecognition, the cumulative fair value change recognised in other comprehensive income is recycled to the income statement.

Financial assets designated at FVOCI (equity instruments)

Upon initial recognition, the Group can elect to irrevocably classify its equity investments which are not held for trading as equity instruments designated at FVOCI. The classification is determined on an instrument-by-instrument basis.

Gains and losses recognised in other comprehensive income on these financial assets are never recycled to the income statement.

Dividends are recognised as other income in the income statement, except when the dividends clearly represent a recovery of part of the cost of the financial asset, in which case, the gains are recognised in other comprehensive income.

Equity instruments designated at FVOCI are not subject to impairment assessment.

Financial assets at FVTPL

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value recognised in the income statement.

These financial assets include derivatives, security investments held for trading, equity investments which the Group has not irrevocably elected to classify at FVOCI and financial assets with cash flows that are not solely payments of principal and interest.

Dividends on listed equity investments are recognised as other income in the income statement.

Classification and measurement of financial liabilities

Except for derivative liabilities, at initial recognition the Group's financial liabilities are recognised at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the income statement when the liabilities are derecognised as well as through the EIR amortisation process. In determining amortised cost, the Group takes into account any discounts or premiums on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in the income statement.

Regular way purchases and sales of financial assets

Regular way purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace are recognised on the trade date, i.e., the date on which the Group commits to purchase or sell the asset.

Derecognition of financial instruments

A financial asset is primarily derecognised when the rights to receive cash flows from the asset have expired or have been transferred and either the Group has transferred substantially all the risks and rewards of the asset, or the Group has transferred control of the asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the income statement.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

The Group considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due and considers a financial asset as credit impaired or default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to have a significant increase in credit risk and to be in default using other internal or external information, such as credit rating of issuers.

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

ECLs are calculated based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

4.18 Derivatives

The Group has no policy to speculate in or engage in the trading of any financial derivative instruments, other than for managing the foreign currency risk by entering into forward exchange contracts to mitigate such exposure.

Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and subsequently remeasured at fair value, which is determined by reliable financial institutions. Gains on losses arising from changes in the fair value of the contracts are recognised in the income statement.

4.19 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categories of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

5. Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgements and estimates are as follows:

5.1 Allowance for diminution in inventory value

The determination of allowance for diminution in inventory value requires management to make judgements and estimates of potential inventory losses. The allowance for declining in net realisable value is estimated based on the selling price expected in the ordinary course of business less the estimated costs to complete the sale; and allowance for obsolete, slow-moving and deteriorated inventories is estimated based on the approximate aging of each type of inventories and the prevailing market condition.

5.2 Property plant and equipment and investment properties and depreciation

In determining depreciation of plant and equipment and investment properties, the management is required to make estimates of the useful lives and residual values of the plant and equipment and investment properties and to review estimate useful lives and residual values when there are any changes.

In addition, the management is required to review property, plant and equipment and investment properties for impairment on a periodical basis and record impairment losses when it is determined that their recoverable amount is lower than the carrying amount. This requires judgements regarding forecast of future revenues and expenses relating to the assets subject to the review.

5.3 Allowance for impairment of investments

The Company treats investments as impaired when there has been a significant or prolonged decline in the fair value below their cost or where other objective evidence of impairment exists. The determination of what is “significant” or “prolonged” requires judgement of the management.

5.4 Intangible assets

The initial recognition and measurement of intangible assets, and subsequent impairment testing, require management to make estimates of cash flows to be generated by the asset or the cash-generating units and to choose a suitable discount rate in order to calculate the present value of those cash flows.

5.5 Post-employment benefits under defined benefit plans

The obligation under the defined benefit plan is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increase rate, mortality rate and staff turnover rate.

5.6 Fair value of financial instruments

In determining the fair value of financial instruments recognised in the statement of financial position that are not actively traded and for which quoted market prices are not readily available, the management exercises judgement, using a variety of valuation techniques and models. The input to these models is taken from observable markets, and includes consideration of credit risk, liquidity, correlation and longer-term volatility of financial instruments. Change in assumptions about these factors could affect the fair value recognised in the statement of financial position and disclosures of fair value hierarchy.

6. Cash and cash equivalents

Cash and cash equivalents as at 31 December 2024 and 2023 as reflected in the statements of financial position and cash flows consist of the following:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cash	1,592	1,533	339	257
Bank deposits	3,487,481	2,499,454	1,605,622	936,338
Fixed deposits with maturity not over 3 months	3,200,000	4,453,429	2,800,000	4,050,000
Total cash and cash equivalents	6,689,073	6,954,416	4,405,961	4,986,595

As at 31 December 2024, bank deposits in savings accounts and fixed deposits carried interests between 0.001 and 5.200 percent per annum (2023: 0.010 and 5.240 percent per annum).

7. Related party transactions

During the years, the Company had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business and were concluded on commercial terms and bases agreed upon between the Company and those related parties.

(Unit: Million Baht)

	Separate financial statements		Transfer pricing policy
	2024	2023	
Transactions with subsidiary companies			
(eliminated from the consolidated financial statements)			
Sales of goods	147	163	Prices agreed between the parties due to the uniqueness of products sold to each customer
Sales of assets	3	4	Cost plus mark up
Dividend income	-	240	Declared rate
Guarantee fee income	5	2	0.5 percent per annum
Purchase of materials	156	321	Cost plus mark up
Purchase of assets	1	2	Cost plus mark up
Marketing service fee expenses	10	9	Rates stipulated in the agreement
Service fee expenses	2	2	Cost plus mark up
Interest income	2	-	5.15 percent per annum

As at 31 December 2024 and 2023, the balances of the accounts between the Company and those related parties are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Trade and other receivables (Note 8)				
Trade receivables - related parties				
Subsidiaries	-	-	18,092	72,721
Total trade receivables - related parties	-	-	18,092	72,721
Other receivables - related parties				
Subsidiaries	-	-	9,674	5,908
Total other receivables - related parties	-	-	9,674	5,908
Total trade and other receivables	-	-	27,766	78,629

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Trade and other payables (Note 18)				
Trade payables - related parties				
Subsidiaries	-	-	20,429	47,003
Total trade payables - related parties	-	-	20,429	47,003
Other payables - related party				
Subsidiary	-	-	-	375
Total other payables - related party	-	-	-	375
Total trade and other payables	-	-	20,429	47,378

Short-term loan to related party

Movements in short-term loan to related party during the year ended 31 December 2024 are summarised below.

(Unit: Thousand Baht)

	Balance as at 31 December 2023	During the year		Balance as at 31 December 2024
		Increase	Decrease	
Short-term loan to related party				
Subsidiary				
Hana Semiconductor International Limited	-	507,444	-	507,444
Total short-term loan to related party	-	507,444	-	507,444

As at 31 December 2024, short-term loan to related party carried interest at the rate of 5.15 percent per annum and is due for repayment in December 2025.

Directors and management's benefits

During the years ended 31 December 2024 and 2023, the Group had employee benefit expenses payable to its directors and management as below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Short-term employee benefits	177.1	156.8	21.7	19.3
Post-employment benefits	4.2	4.7	2.6	2.2
Total	181.3	161.5	24.3	21.5

Guarantee obligations with related parties

The Company has outstanding guarantee obligations with its related party, as described in Note 34.5 to the financial statements.

8. Trade and other receivables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Age of receivable				
Trade receivables - subsidiaries				
Not yet due	-	-	16,015	34,627
Past due				
Up to 3 months	-	-	2,077	37,758
3 - 6 months	-	-	-	58
6 - 12 months	-	-	-	278
Total trade receivables - subsidiaries (Note 7)	-	-	18,092	72,721
Trade receivables - unrelated parties				
Not yet due	3,248,926	3,523,315	1,621,984	1,651,895
Past due				
Up to 3 months	916,366	1,322,803	479,160	718,582
3 - 6 months	83,927	45,888	63,952	35,107
6 - 12 months	67,395	20,445	67,016	13,560
Over 12 months	5,411	8,950	-	2,605
Total trade receivables - unrelated parties	4,322,025	4,921,401	2,232,112	2,421,749
Less: Allowance for expected credit losses	(4,002)	(15,964)	-	(2,492)
Total trade receivables - unrelated parties - net	4,318,023	4,905,437	2,232,112	2,419,257
Total trade receivables - net	4,318,023	4,905,437	2,250,204	2,491,978
Other receivables				
Receivables from the Revenue Department	47,506	62,012	1,800	7,237
Other receivables - subsidiaries (Note 7)	-	-	9,674	5,908
Other receivables - unrelated parties	115,193	210,692	21,288	35,556
Total other receivables	162,699	272,704	32,762	48,701
Trade and other receivables - net	4,480,722	5,178,141	2,282,966	2,540,679

The normal credit term is 30 to 60 days.

9. Inventories

(Unit: Thousand Baht)

	Consolidated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2024	2023	2024	2023	2024	2023
Finished goods	1,101,051	1,154,250	(97,874)	(67,434)	1,003,177	1,086,816
Work in process	1,189,673	1,233,426	(449,795)	(226,585)	739,878	1,006,841
Raw materials	5,554,718	7,116,070	(299,077)	(336,097)	5,255,641	6,779,973
Goods in transit	97,308	95,717	-	-	97,308	95,717
Total	7,942,750	9,599,463	(846,746)	(630,116)	7,096,004	8,969,347

(Unit: Thousand Baht)

	Separate financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2024	2023	2024	2023	2024	2023
Finished goods	661,431	647,011	(31,530)	(35,761)	629,901	611,250
Work in process	196,133	248,295	-	-	196,133	248,295
Raw materials	2,528,005	3,224,887	(190,253)	(202,359)	2,337,752	3,022,528
Goods in transit	37,030	14,429	-	-	37,030	14,429
Total	3,422,599	4,134,622	(221,783)	(238,120)	3,200,816	3,896,502

Detailed movements of the reduction of cost to net realisable value are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Balance at the beginning of the year	(630,116)	(226,096)	(238,120)	(121,366)
Add: Increase during the year	(783,317)	(664,533)	(258,047)	(323,064)
Less: Reversal during the year	503,622	259,390	274,384	206,310
Add: Translation adjustment	63,065	1,123	-	-
Balance at the end of the year	(846,746)	(630,116)	(221,783)	(238,120)

10. Other current financial assets

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Debt instruments at amortised cost				
Fixed deposits	2,853,598	703,078	1,100,000	-
Total debt instruments at amortised cost	2,853,598	703,078	1,100,000	-
Debt instruments at FVOCI				
Overseas marketable corporate bonds	1,201,909	1,235,019	-	-
Total debt instruments at FVOCI	1,201,909	1,235,019	-	-
Total other current financial assets	4,055,507	1,938,097	1,100,000	-

As at 31 December 2024, fixed deposits with financial institutions carried interests between 1.50 and 4.50 percent per annum (2023: 0.95 and 5.80 percent per annum).

In 2023, the Group reversed provision of Baht 21.5 million for expected credit losses on its debt instruments at FVOCI.

In July 2024, Credit Suisse Asset Management (Switzerland) AG, a fund management company, announced the final pay back amounts from the termination of Supply Chain Fund in 2021, The pay back amounts by the fund of USD 8.54 million or equivalent to Baht 289.94 million were received in August 2024. The Group realised loss on fair value measurement in 2021, therefore, such amounts were recognised as other income in the 2024 income statement.

11. Investments in subsidiaries

Details of investments in subsidiaries as presented in the separate financial statements are as follows:

(Unit: Thousand Baht)

Company's name	Paid-up capital		Shareholding percentage		Cost		Dividend received during the year	
	2024	2023	2024	2023	2024	2023	2024	2023
			Percent	Percent				
Hana Semiconductor (Ayutthaya) Company Limited	1,200,000	1,200,000	58	58	2,142,910	2,142,910	-	140,000
Hana Semiconductor (BKK) Company Limited	1,000,000	1,000,000	100	100	1,011,100	1,011,100	-	100,000
Omac Sales Limited	325	325	100	100	273,492	273,492	-	-
Hana Microelectronics (Cambodia) Company Limited	1,417,167	702,127	100	100	1,417,167	702,127	-	-
Hana Microelectronics International Company Limited	-	-	100	100	-	-	-	-
Hana Microelectronics Investment Company Limited	-	-	100	100	-	-	-	-
Total investments in subsidiaries					4,844,669	4,129,629	-	240,000
Less: Allowance for impairment loss on investments					(169,719)	-		
Investments in subsidiaries - net					4,674,950	4,129,629		

In March 2024, the Company additionally invested in 20,000 ordinary shares of Hana Microelectronics (Cambodia) Company Limited, in amount of USD 20 million or equivalent to Baht 715.04 million (2023: Baht 546 million). As at 31 December 2024, the Company invested in 40,000 ordinary shares of Hana Microelectronics (Cambodia) Company Limited, amounting to USD 40 million or equivalent to Baht 1,417.17 million (2023: 20,000 ordinary shares of Hana Microelectronics (Cambodia) Company Limited, amounting to USD 20 million or equivalent to Baht 702.13 million), representing 100% of the issued and paid-up share capital of the subsidiary.

In testing impairment of investments in subsidiaries when there are impairment indicators, the Company has determined recoverable amounts of its cash generating units (CGUs) based on value in use calculation using cash flow projections based on financial budgets approved by the management.

Key assumptions used in calculating value in use under conservative basis include WACC at 12 percent per annum.

During the year 2024, the Company recorded allowance for impairment loss on investment in Hana Microelectronics (Cambodia) Company Limited of Baht 169.72 million in the separate financial statements.

12. Investment in associate

(Unit: Thousand Baht)

Company's name	Nature of business	Country of incorporation	Shareholding percentage		Consolidated financial statements: Carrying amount based on equity method		Separate financial statements: Cost method	
			2024 (Percent)	2023 (Percent)	2024	2023	2024	2023
FT1 Corporation Limited	Manufacture and trading of electronic components	Thailand	49	-	369,581	-	372,890	-
Total					369,581	-	372,890	-

FT1 Corporation Limited

During the current year, the Company entered into an agreement with New Versal Company Limited for an investment in a newly incorporated company, FT1 Corporation Limited, to seek business opportunity in smart electronics industry. The Company has invested in 4,900 ordinary shares, in an amount of Baht 0.49 million, representing 49% of the issued and paid-up share capital of that company.

On 24 July 2024, the Company's Board of Directors' Meeting No. 4/2024 passed the resolution approving the Company to additionally invest in 7,448,000 ordinary shares of the share capital increase of FT1 Corporation Limited, in an amount of Baht 744.8 million, according to its shareholding percentage of 49% in that company. On 8 August 2024, the Company made a partial payment of Baht 372.4 million towards this investment, with the remaining balance of Baht 372.4 million.

As at 31 December 2024, FT1 Corporation Limited has not yet commence its operation.

13. Investment properties

The net book value of investment properties as at 31 December 2024 and 2023 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements			Separate financial statements	
	Land	Building	Total	Land	Total
Cost					
As at 1 January 2023	72,304	-	72,304	72,304	72,304
As at 31 December 2023	72,304	-	72,304	72,304	72,304
Additions	62,000	24,000	86,000	-	-
As at 31 December 2024	134,304	24,000	158,304	72,304	72,304
Accumulated Amortization					
As at 1 January 2023	-	-	-	-	-
As at 31 December 2023	-	-	-	-	-
Amortisation for the year	-	92	92	-	-
As at 31 December 2024	-	92	92	-	-
Net book value					
As at 31 December 2023	72,304	-	72,304	72,304	72,304
As at 31 December 2024	134,304	23,908	158,212	72,304	72,304

As at 31 December 2024, the fair value of the investment properties based on market price amounted to approximately Baht 231 million (2023: Baht 96 million) and for the Company amounted to approximately Baht 145 million (2023: Baht 96 million).

14. Property, plant and equipment

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Net book value				
Property, plant and equipment	9,169,373	11,533,940	2,029,304	2,134,006
Right-of-use assets (Note 19)	158,213	167,535	-	-
Total	9,327,586	11,701,475	2,029,304	2,134,006

Movements of property, plant and equipment for the years ended 31 December 2024 and 2023 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements								
	Land	Buildings	Leasehold improvement	Fixtures	Machinery and equipment	Office furniture and equipment	Vehicles	Construction in progress and machinery under installation	Total
Cost									
As at 1 January 2023	506,909	4,709,799	159,714	1,214,863	20,006,189	901,348	58,197	742,627	28,299,646
Additions	53,142	51,608	8,911	31,808	642,819	36,302	1,782	1,862,299	2,688,671
Disposals	-	(4,459)	-	(232,814)	(462,473)	(29,698)	-	-	(729,444)
Transfer in (out)	-	73,280	9,545	14,099	627,880	26,298	-	(751,102)	-
Translation adjustment	(1,478)	(43,527)	(4,258)	(179)	(202,323)	(4,703)	(298)	(18,061)	(274,827)
As at 31 December 2023	558,573	4,786,701	173,912	1,027,777	20,612,092	929,547	59,681	1,835,763	29,984,046
Additions	4,763	13,185	7,838	27,561	193,976	19,237	9,672	1,390,989	1,667,221
Disposals	-	(3,981)	(36,451)	(2,350)	(365,102)	(19,421)	(10,953)	-	(438,258)
Transfer in (out)	-	36,074	-	49,437	1,240,688	40,325	7,478	(1,379,039)	(5,037)
Translation adjustment	(366)	(89,820)	(6,660)	(675)	(494,235)	(9,723)	(329)	(202,811)	(804,619)
As at 31 December 2024	562,970	4,742,159	138,639	1,101,750	21,187,419	959,965	65,549	1,644,902	30,403,353
Accumulated depreciation									
As at 1 January 2023	27,318	2,472,746	130,947	876,223	13,105,215	732,521	42,937	-	17,387,907
Depreciation for the year	3,033	206,880	12,564	61,386	1,277,040	70,488	5,015	-	1,636,406
Accumulated depreciation for disposed assets	-	(4,144)	-	(232,750)	(428,930)	(23,254)	-	-	(689,078)
Translation adjustment	(317)	(21,309)	(3,551)	(14)	(82,661)	(2,801)	(277)	-	(110,930)
As at 31 December 2023	30,034	2,654,173	139,960	704,845	13,870,664	776,954	47,675	-	18,224,305
Depreciation for the year	-	220,830	21,346	65,831	1,306,393	68,171	5,448	-	1,688,019
Accumulated depreciation for disposed assets	-	(3,981)	(36,451)	(2,350)	(344,205)	(18,473)	(10,324)	-	(415,784)
Translation adjustment	-	(41,780)	(5,346)	(91)	(186,294)	(7,757)	792	-	(240,476)
As at 31 December 2024	30,034	2,829,242	119,509	768,235	14,646,558	818,895	43,591	-	19,256,064
Allowance for impairment loss									
As at 1 January 2023	-	-	-	150	58,120	16	-	-	58,286
Translation adjustment	-	-	-	-	(20)	-	-	-	(20)
As at 31 December 2023	-	-	-	150	58,100	16	-	-	58,266
Increase during the year	-	130,560	730	1,759	1,050,503	17,713	-	560,186	1,761,451
Translation adjustment	-	-	-	-	(14)	-	-	-	(14)
As at 31 December 2024	-	130,560	730	1,909	1,108,589	17,729	-	560,186	1,819,703
Net book value									
As at 31 December 2023	528,539	2,132,528	33,952	322,782	6,683,328	152,577	12,006	1,835,763	11,701,475
As at 31 December 2024	532,936	1,782,357	18,400	331,606	5,432,272	123,341	21,958	1,084,716	9,327,586
Depreciation for the year									
2023 (Baht 1,486 million included in manufacturing cost, and the balance in administrative expenses)									1,636,406
2024 (Baht 1,542 million included in manufacturing cost, and the balance in administrative expenses)									1,688,019

Unit: Thousand Baht)

	Separate financial statements							
	Land	Buildings	Fixtures	Machinery and equipment	Office furniture and equipment	Vehicles	Construction in progress and machinery under installation	Total
Cost								
As at 1 January 2023	249,865	2,059,153	428,829	3,653,877	321,236	17,606	107,137	6,837,703
Additions	-	-	9,790	5,750	24,276	-	275,601	315,417
Disposals	-	(2,248)	(23,989)	(218,703)	(19,387)	-	-	(264,327)
Transfer in (out)	-	-	14,098	231,026	12,865	-	(257,989)	-
As at 31 December 2023	249,865	2,056,905	428,728	3,671,950	338,990	17,606	124,749	6,888,793
Additions	4,763	-	7,746	1,401	13,405	5,847	226,707	259,869
Disposals	-	-	(2,350)	(111,948)	(1,374)	-	-	(115,672)
Transfer in (out)	-	-	40,740	190,000	24,314	-	(256,767)	(1,713)
As at 31 December 2024	254,628	2,056,905	474,864	3,751,403	375,335	23,453	94,689	7,031,277
Accumulated depreciation								
As at 1 January 2023	-	1,150,432	305,177	2,907,591	243,461	11,133	-	4,617,794
Depreciation for the year	-	85,515	28,089	215,654	29,191	1,896	-	360,345
Accumulated depreciation for disposed assets	-	(2,248)	(23,926)	(212,218)	(19,260)	-	-	(257,652)
As at 31 December 2023	-	1,233,699	309,340	2,911,027	253,392	13,029	-	4,720,487
Depreciation for the year	-	85,486	31,889	212,396	30,489	1,645	-	361,905
Accumulated depreciation for disposed assets	-	-	(2,350)	(111,499)	(870)	-	-	(114,719)
As at 31 December 2024	-	1,319,185	338,879	3,011,924	283,011	14,674	-	4,967,673
Allowance for impairment loss								
As at 31 December 2023	-	-	-	34,300	-	-	-	34,300
As at 31 December 2024	-	-	-	34,300	-	-	-	34,300
Net book value								
As at 31 December 2023	249,865	823,206	119,388	726,623	85,598	4,577	124,749	2,134,006
As at 31 December 2024	254,628	737,720	135,985	705,179	92,324	8,779	94,689	2,029,304
Depreciation for the year								
2023 (Baht 334 million included in manufacturing cost, and the balance in administrative expenses)								360,345
2024 (Baht 337 million included in manufacturing cost, and the balance in administrative expenses)								361,905

As at 31 December 2024, certain plant and equipment were fully depreciated but are still in use. The gross carrying amount, before deducting accumulated depreciation and allowance for impairment loss, of those assets amounted to approximately Baht 12,731 million (2023: Baht 12,347 million) and for the Company amounted to approximately Baht 2,733 million (2023: Baht 2,786 million).

The overseas subsidiary has mortgaged the land use right and buildings with net book value of approximately CNY 34 million or equivalent to Baht 158 million as collateral against long-term loans from financial institutions as described in Note 21 to the financial statements.

During the year 2024, Power Master Semiconductor Company Limited, an overseas subsidiary, has continuously incurred operating losses, and its performance compared to its business plan led to the indication of the impairment loss. As a result, the subsidiary performed an impairment testing and recognised an impairment loss to reduce the carrying amounts of the assets to their recoverable amounts amounting to totalling KRW 79.8 billion or equivalent to Baht 1,844 million, including impairment loss on plant and equipment of Baht 1,761 million and impairment loss on intangible assets of Baht 83 million, presented as “Loss on impairment of non-financial assets” in the consolidated income statement for the year 2024. The subsidiary has determined the recoverable amount of its cash-generating unit based on value in use using cash flow projections based on financial estimates approved by management.

Key assumptions used in value in use calculation include WACC at 15 percent per annum.

15. Intangible assets

(Unit: Thousand Baht)

	Consolidated financial statements			Separate financial statements	
	Computer software	Development costs	Total	Computer software	Total
Cost					
As at 1 January 2023	264,881	354,000	618,881	104,932	104,932
Additions	23,166	-	23,166	3,345	3,345
Write-off	(33)	(20,523)	(20,556)	(33)	(33)
Translation adjustment	(3,276)	(11,628)	(14,904)	-	-
As at 31 December 2023	284,738	321,849	606,587	108,244	108,244
Additions	29,995	-	29,995	179	179
Transfer in	1,713	-	1,713	1,713	1,713
Translation adjustment	(10,650)	(41,294)	(51,944)	-	-
As at 31 December 2024	305,796	280,555	586,351	110,136	110,136
Accumulated amortisation					
As at 1 January 2023	144,061	71,691	215,752	58,316	58,316
Amortisation for the year	35,457	30,433	65,890	8,676	8,676
Accumulated amortisation for write-off assets	(12)	-	(12)	(12)	(12)
Translation adjustment	(1,590)	(2,436)	(4,026)	-	-
As at 31 December 2023	177,916	99,688	277,604	66,980	66,980
Amortisation for the year	36,203	52,361	88,564	8,435	8,435
Translation adjustment	(5,828)	(18,148)	(23,976)	-	-
As at 31 December 2024	208,291	133,901	342,192	75,415	75,415
Allowance for impairment loss					
As at 1 January 2023	-	-	-	-	-
As at 31 December 2023	-	-	-	-	-
Increase during the year	20,028	62,941	82,969	-	-
As at 31 December 2024	20,028	62,941	82,969	-	-
Net book value					
As at 31 December 2023	106,822	222,161	328,983	41,264	41,264
As at 31 December 2024	77,477	83,713	161,190	34,721	34,721

16. Other non-current financial assets

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Debt instruments at amortised cost				
Fixed deposits	46	53	-	-
Total debt instruments at amortised cost	46	53	-	-
Equity instruments designated at FVOCI				
Local marketable equity securities	97	97	97	97
Total equity instruments designated at FVOCI	97	97	97	97
Total other non-current financial assets	143	150	97	97

17. Short-term loans from financial institutions

Movements in short-term loans from financial institutions during the year ended 31 December 2024 and 2023 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements	
	2024	2023
Balance beginning of year	1,076,408	-
Add: Increase during the year	26,017	1,945,417
Less: Repayment during the year	(588,447)	(803,882)
Translation adjustment	(4,623)	(65,127)
Balance end of year	509,355	1,076,408

As at 31 December 2024, the overseas subsidiaries had short-term loans from commercial banks of USD 15.0 million or equivalent to Baht 509.4 million (2023: USD 31.5 million or equivalent to Baht 1,076.4 million), which carry interest between 5.51 and 5.52 percent per annum (2023: 6.37 and 7.48 percent per annum) and are due for repayment during January to February 2025.

18. Trade and other payables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Trade payables - subsidiaries (Note 7)	-	-	20,429	47,003
Trade payables - unrelated parties	1,666,704	2,154,622	654,959	878,633
Other payables - subsidiaries (Note 7)	-	-	-	375
Advance received from customers	847,788	722,366	185,585	134,085
Other payables for purchase of machinery	180,840	156,188	33,705	73,866
Accrued expenses	331,078	357,370	32,460	34,707
Total trade and other payables	3,026,410	3,390,546	927,138	1,168,669

19. Leases

The Group has lease contracts for various items of property, plant, and equipment used in its operations. Leases generally have lease terms between 2 and 50 years.

a) Right-of-use assets (Note 14)

Movements of right-of-use assets for the years ended 31 December 2024 and 2023 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements			
	Land	Buildings	Machinery and equipment	Total
1 January 2023	123,343	314,003	5,220	442,566
Additions	-	4,567	2,763	7,330
Write-off during the year - net book value at write-off date	-	(315)	-	(315)
Transfer out	-	(265,153)	-	(265,153)
Depreciation for the year	(3,033)	(4,705)	(4,949)	(12,687)
Translation adjustment	(1,160)	(3,075)	29	(4,206)
31 December 2023	119,150	45,322	3,063	167,535
Additions	-	2,026	-	2,026
Depreciation for the year	(3,070)	(4,729)	(2,628)	(10,427)
Translation adjustment	(713)	(278)	70	(921)
31 December 2024	115,367	42,341	505	158,213

The overseas subsidiary has mortgaged the land use right and buildings with the net book value as at 31 December 2024 of approximately CNY 32.5 million or equivalent to approximately Baht 151.3 million (2023: CNY 32.5 million or equivalent to approximately Baht 156.4 million) as collateral for long-term loans from financial institution as described in Note 21.

b) Lease liabilities

(Unit: Thousand Baht)

	Consolidated financial statements	
	2024	2023
Lease payments	2,456	5,796
Less: Deferred interest expenses	(198)	(73)
Total	2,258	5,723
Less: Portion due within one year	(684)	(4,990)
Lease liabilities - net of current portion	1,574	733

Movements of the lease liabilities during the years ended 31 December 2024 and 2023 are summarised below:

(Unit: Thousand Baht)

	Consolidated financial statements	
	2024	2023
Balance at beginning of year	5,723	274,324
Additions	2,055	8,710
Accretion of interest	161	172
Payments during the year	(5,708)	(9,721)
Transfer	-	(269,496)
Translation	27	1,734
Balance at end of year	2,258	5,723

A maturity analysis of lease payments is disclosed in Note 36.1 under the liquidity risk.

c) Expenses relating to leases that are recognised in income statements

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Depreciation expense of right-of-use assets	10,427	12,687	-	-
Interest expense on lease liabilities	161	172	-	-
Expense relating to short-term leases	11,076	10,738	194	188
Expense relating to leases of low-value assets	237	541	128	433

d) Others

The Group had total cash outflows for leases for the year ended 31 December 2024 of Baht 11.3 million (2023: Baht 21 million) and for the Company amounting to Baht 0.3 million (2023: Baht 0.6 million), including the cash outflows related to short-term leases and leases of low-value assets.

20. Short-term provisions

(Unit: Thousand Baht)

	Consolidated financial statements
	Provision for product warranty
As at 1 January 2023	345,624
Translation adjustment	(3,391)
As at 31 December 2023	342,233
Translation adjustment	(2,354)
As at 31 December 2024	339,879

21. Long-term loans from financial institution

Movements in long-term loans from financial institution during the year ended 31 December 2024 and 2023 are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements	
	2024	2023
Balance beginning of year	227,376	-
Add: Increase during the year	212,243	238,735
Less: Repayment during the year	(35,713)	(2,404)
Translation adjustment	(23,021)	(8,955)
Balance end of year	380,885	227,376
Less: Portion due within one year	(46,563)	(24,306)
Long-term loans from financial institution - net of current portion	334,322	203,340

As at 31 December 2024, the overseas subsidiary had long-term loans from financial institution of CNY 81.8 million or equivalent to Baht 380.9 million (2023: CNY 47.3 million or equivalent to Baht 227.4 million), which carry a floating interest rate benchmarked to one-year lending rate of People's Bank of China (PBOC) throughout the period of the agreement and are repayable within 2026 - 2027.

The long-term credit facilities of the overseas subsidiary which have not yet been drawn amounted to CNY 40.3 million or equivalent to Baht 187.8 million (2023: CNY 82.3 million or equivalent to Baht 395.6 million).

The above loans are secured by the land use right and buildings of the subsidiary.

22. Provision for long-term employee benefits

Provision for long-term employee benefits, which represents compensation payable to employees after they retire, was as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Provision for long-term employee benefits at beginning of year	765,952	709,393	368,266	348,391
Included in the income statement:				
Current service cost	47,574	45,902	24,691	22,830
Interest cost	18,713	18,500	9,946	9,981
Included in other comprehensive income:				
Actuarial (gain) loss arising from				
Demographic assumptions changes	(34,137)	(35,673)	(36,418)	(46,943)
Financial assumptions changes	36,284	37,239	22,055	8,455
Experience adjustments	34,744	12,537	30,134	33,961
Benefits paid during the year	(70,351)	(21,946)	(8,781)	(8,409)
Provision for long-term employee benefits at end of year	798,779	765,952	409,893	368,266

The Group expects to pay Baht 23 million of long-term employee benefits during the next year (the Company only: Baht 21 million) (2023: Baht 23 million, the Company only: Baht 21 million).

As at 31 December 2024, the weighted average duration of the liabilities for long-term employee benefit is 12 years (the Company only: 14 years) (2023: 12 years (the Company only: 14 years).

Significant actuarial assumptions are summarised below.

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
	(% per annum)	(% per annum)	(% per annum)	(% per annum)
Discount rate	2.3 - 2.5	2.7 - 2.9	2.5	2.9
Future salary increase rate	4.0 - 5.0	4.0 - 5.0	4.0 - 5.0	4.0 - 5.0
Staff turnover rate (depending on age)	6.4 - 26.1	6.4 - 29.5	6.4 - 16.1	6.4 - 16.1

The results of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligations as at 31 December 2024 and 2023 are summarised below.

(Unit: Million Baht)

	31 December 2024			
	Consolidated financial statements		Separate financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(86)	103	(49)	59
Salary increase rate	101	(86)	58	(49)
	Increase 5%	Decrease 5%	Increase 5%	Decrease 5%
Staff turnover rate	(147)	210	(101)	150

(Unit: Million Baht)

	31 December 2023			
	Consolidated financial statements		Separate financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(81)	97	(45)	54
Salary increase rate	96	(82)	53	(45)
	Increase 5%	Decrease 5%	Increase 5%	Decrease 5%
Staff turnover rate	(134)	183	(87)	123

23. Share capital

23.1 On 28 April 2023, the Annual General Meeting of the Company's shareholders passed the following resolutions relating to the Company's share capital.

a) Approving to decrease the Company's registered share capital from Baht 974,403,900 (974,403,900 ordinary shares of Baht 1.00 each) to Baht 804,878,860 (804,878,860 ordinary shares of Baht 1.00 each) by cancelling 169,525,040 unissued shares, at the par value of Baht 1.00 per share. The Company registered the capital decrease with the Ministry of Commerce on 2 June 2023.

b) Approving to increase the Company's registered share capital from Baht 804,878,860 (804,878,860 ordinary shares of Baht 1.00 each) to Baht 885,366,746 (885,366,746 ordinary shares of Baht 1.00 each) by issuing 80,487,886 new ordinary shares, at the par value of Baht 1.00 per share. The Company registered the capital increase with the Ministry of Commerce on 6 June 2023.

23.2 On 16 October 2023, the Meeting of the Company's Board of Directors passed a resolution approving the Company to issue and allocate the newly-issued ordinary shares by means of a general mandate in the amount of 80,478,800 shares, at the par value of Baht 1.00 per share for the purposes of offering for sale in the private placement at the offering price of Baht 57.00 each or a total of Baht 4,587.80 million. The Company received payment for such shares and registered the increase of its paid-up capital with the Ministry of Commerce on 19 October 2023.

24. Equity-settled share-based payments

On 15 December 2022, an overseas subsidiary issued stock grants of its shares to directors, executives and employees of the Group, with significant details as follows:

Number of stock grants issued:	41,113,486 units (16% of ordinary shares of the subsidiary)
Vesting conditions:	Employees must remain in service for a granting period. The 20% of stock grants shall become vested and exercisable on the date of the subsidiary's Initial Public Offering (IPO date) and 20% of stock grants on the first, second, third and fourth anniversary of the IPO date.

There were no modifications to the share-based payment arrangement during the year.

During the year 2024, the Group recognised equity-settled share-based payment transactions amounting to Baht 28.7 million (2023: Baht 40.4 million) as expenses in profit or loss, together with a corresponding increase in "Capital reserve for share-based payment transactions" in shareholders' equity.

25. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside to a statutory reserve at least 5 percent of its net income after deducting accumulated deficit brought forward (if any), until the reserve reaches 10 percent of the registered capital. The statutory reserve is not available for dividend distribution.

At present, the statutory reserve has fully been set aside.

26. Finance income

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Interest income on bank deposits	135,074	39,420	71,090	19,150
Interest income on loan to related party	-	-	1,524	-
Interest income on debt instruments measured at FVOCI	58,684	57,545	-	-
Total	193,758	96,965	72,614	19,150

27. Expenses by nature

Significant expenses classified by nature are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Raw materials and consumables used	16,636,012	17,287,871	8,376,060	8,519,236
Changes in inventories of finished goods and work in process	350,602	2,224	33,511	133,365
Salaries and wages and other employee benefits	3,909,560	4,034,743	1,261,804	1,233,614
Management benefit expenses	181,258	161,487	24,296	21,539
Depreciation and amortisation expenses	1,776,584	1,702,296	370,340	369,021
Loss on impairment of investment	-	-	169,719	-
Loss on impairment of non-financial assets	1,844,420	-	-	-

28. Income tax

Income tax expenses for the years ended 31 December 2024 and 2023 are made up as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Current income tax:				
Current income tax charge	100,013	107,733	41,495	27,457
Adjustment in respect of income tax of previous year	(10,382)	(1,376)	1,612	(59)
Deferred tax:				
Relating to origination and reversal of temporary differences	(3,460)	(20,889)	(32,806)	(7,803)
Income tax expenses reported in the income statements	86,171	85,468	10,301	19,595

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2024 and 2023 are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Deferred tax relating to actuarial gain (loss)	(265)	85	(265)	85
Deferred tax relating to exchange differences from translating foreign currency financial statements	(295)	(816)	-	-
	(560)	(731)	(265)	85

The reconciliation between accounting profit and income tax expenses is shown below.

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Accounting profit (loss) before tax	(547,501)	1,846,035	1,791,741	2,143,024
Applicable tax rate	0 - 25%	0 - 25%	20%	20%
Accounting profit (loss) before tax multiplied by income tax rate	(449,260)	329,214	358,348	428,605
Adjustment in respect of income tax of previous year	(10,382)	(1,376)	1,612	(59)
Effects of:				
Promotional privileges (Note 30)	(388,861)	(447,004)	(349,123)	(350,541)
Dividend income not subject to tax	(23)	(17)	(23)	(48,017)
Income not subject to tax	64,432	(1,242)	-	-
Unrecognised temporary differences and unused tax losses as deferred tax assets	851,501	227,279	-	-
Share of income from investments in associate	(2,583)	-	-	-
Non-deductible expenses	32,108	3,923	38	131
Additional expense deductions allowed	(10,797)	(12,064)	(995)	(3,532)
Others	36	(13,245)	444	(6,992)
Total	545,813	(242,370)	(349,659)	(408,951)
Income tax expenses reported in the income statements	86,171	85,468	10,301	19,595

The components of deferred tax assets and deferred tax liabilities are as follows:

(Unit: Thousand Baht)

	Statements of financial position as at 31 December			
	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Deferred tax assets				
Allowance for expected credit losses	228	1,328	-	47
Allowance for diminution in value of inventories	9,450	5,787	3,725	4,462
Allowance for diminution in value of investment	-	-	33,944	-
Allowance for asset impairment	576	643	576	643
Provision for long-term employee benefits	6,884	6,901	6,884	6,901
Provision for vacation	881	1,461	333	338
Accrued expenses	25,234	22,298	-	-
Others	67,937	52,860	-	-
Total	111,190	91,278	45,462	12,391
Deferred tax liabilities				
Accumulated depreciation - plant and equipment	(119,088)	(103,195)	-	-
Total	(119,088)	(103,195)	-	-
Deferred tax assets (liabilities) - net	(7,898)	(11,917)	45,462	12,391
Statements of financial position				
Deferred tax assets	26,260	18,653	45,462	12,391
Deferred tax liabilities	(34,158)	(30,570)	-	-
Deferred tax assets (liabilities) - net	(7,898)	(11,917)	45,462	12,391

As at 31 December 2024, the subsidiaries had deductible temporary differences and unused tax losses totaling Baht 6,347 million (2023: Baht 2,747 million), on which deferred tax assets have not been recognised as the subsidiaries believe future taxable profits may not be sufficient to allow utilisation of the temporary differences and unused tax losses. The unused tax losses will expire by the year 2039.

29. Earnings (loss) per share

Basic earnings (loss) per share is calculated by dividing profit (loss) for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares in issue during the year.

29.1 Weighted average number of ordinary shares

(Unit: Thousand shares)

	2024	2023
Balance brought forward	821,197	804,879
Add: The weighted average number of ordinary shares issued during the year	64,170	16,318
Weighted average number of ordinary shares	885,367	821,197

29.2 Basic earnings per share

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Profit (loss) for the year (Thousand Baht)	(633,672)	1,760,567	1,781,441	2,123,429
Weighted average number of ordinary shares (Thousand shares)	885,367	821,197	885,367	821,197
Basic earnings (loss) per share (Baht)	(0.72)	2.14	2.01	2.59

30. Promotional privileges

The Group has received promotional privileges under the Investment Promotion Act B.E. 2520 as approved by the Board of Investment. Subject to certain imposed conditions, significant promotional privileges received with respect to tax are as follows:

Particulars	The Company											
1. Certificate No.	1234(1)/2555	2620(1)/2555	2199(2)/2557	59-0178-0-00-1-0	60-1432-1-00-1-0	63-1072-1-00-1-0	64-0816-1-00-1-0	64-0104-1-00-1-0	65-0289-1-00-1-0	66-0309-1-04-1-0	66-0115-1-00-1-0	67-1310-2-00-1-0
2. Promotional privileges for	Production of Integrated Circuit (IC) and Die Testing	Production of Electronic Control Unit	Production of PCBA	Production of PCBA	Production of Telecommunication and Wafer Die Test	Production of Semiconductor i.e. Integrated Circuit	Production of Electro-Magnetic	Production of Semiconductor i.e. Wafer Testing and Wafer Sawing	Production of parts for electronic control and measurement instruments for automotive industry	Production of PCBA	Integrated circuit (IC) and Continuous products	Production of Printed Circuit Board Assembly (PCBA)
3. The significant privileges are												
3.1 Exemption from corporate income tax on net income derived from the promoted operation and exemption from income tax on dividends paid from the promoted operations which are tax exempted throughout the period in which the corporate income tax is exempted.	8 years (expired) (tax exempted according to investment)	8 years (expired) (tax exempted according to investment)	8 years (expired) (tax exempted according to investment)	8 years (tax exempted according to investment)	6 years (tax exempted according to investment)	6 years (tax exempted according to investment)	4 years (tax exempted according to investment)	6 years (tax exempted according to investment)	8 years (tax exempted according to investment)	-	6 years (tax exempted according to investment)	6 years
3.2 50 % reduction of the normal corporate income tax rate for net income derived after the expiry date in 3.1	5 years	5 years	5 years	5 years	-	-	-	-	-	3 years (50 percent of investment in improvement of machines exclude land or working capital)	-	-
3.3 Exemption from import duty on machinery as approved by the Board.	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted	Granted
3.4 2 times deduction of transportation, electricity and water expenses from the first earning operating income	10 years	10 years	10 years	10 years	-	-	-	-	-	-	-	10 years
4. Date of first earning operating income	26 February 2016	3 January 2014	3 April 2015	4 February 2020	1 January 2018	Has not yet started utilising the privileges	8 October 2021	4 July 2024	6 July 2023	10 March 2023	Has not yet started utilising the privileges	15 July 2024

	Subsidiary			
Particulars	Hana Semiconductor (Ayutthaya) Company Limited			
1. Certificate No.	2687(1)/2556	60-0686-1-00-1-0	61-1275-1-00-1-0	64-0682-1-00-1-0
2. Promotional privileges for	Production of Semiconductor	Production of Integrated Circuit (IC), Wafer sawing, Wafer Grinding and Wafer Testing	Production of Integrated Circuit (IC)	Production of Integrated Circuit (IC) and Integrated Circuit Tested (IC Tested)
3. The significant tax privileges are				
3.1 Exemption from corporate income tax on net profit from promoted operations and exemption from income tax on dividends paid from the promoted operations which are tax exempted throughout the period in which the corporate income tax is exempted	8 years (Until 2 January 2026)	6 years (Until 31 December 2026)	6 years (Until 2 January 2029)	6 years
3.2 50 % reduction of the normal corporate income tax rate for net income derived after the expiry date in 3.1	5 years	-	-	-
3.3 Exemption from import duty on machinery as approved by the Board.	Granted	Granted	Granted	Granted
3.4 2 times deduction of transportation, electricity and water expenses from the first earning operating income	10 years	-	-	-
4. Date of first earning operating income	3 January 2018	1 January 2021	3 January 2023	Has not yet started utilising the privileges

The Group's operating revenues for the years ended 31 December 2024 and 2023, divided between promoted and non-promoted operations, are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements					
	Promoted operations		Non-promoted operations		Total	
	2024	2023	2024	2023	2024	2023
Sales						
Domestic sales	304,181	202,127	1,691	68	305,872	202,195
Export sales	17,709,444	19,334,385	6,786,024	6,615,536	24,495,468	25,949,921
Total sales	18,013,625	19,536,512	6,787,715	6,615,604	24,801,340	26,152,116

(Unit: Thousand Baht)

	Separate financial statements					
	Promoted operations		Non-promoted operations		Total	
	2024	2023	2024	2023	2024	2023
Sales						
Domestic sales	230,060	155,676	1,691	68	231,751	155,744
Export sales	11,910,771	12,225,071	116,221	93,859	12,026,992	12,318,930
Total sales	12,140,831	12,380,747	117,912	93,927	12,258,743	12,474,674

31. Segments information

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance.

For management purposes, the Group is organised into business units based on their products and have two reportable segments as follows:

1. The Printed Circuit Board Assembly (PCBA) Segment, which produces and sells Printed Circuit Board Assembly (PCBA).
2. The Integrated Circuit (IC) Segment, which produces and sells Integrated Circuit (IC).

No operating segments have been aggregated to form the above reportable operating segments.

The chief operating decision maker monitors the operating results of the business units separately for the purpose of making decisions about resource allocation and assessing performance. Segment performance is measured based on operating profit or loss and total assets and on a basis consistent with that used to measure operating profit or loss and total assets in the financial statements.

The basis of accounting for any transactions between reportable segments is consistent with that for third party transactions.

The following tables present revenue, profit and total assets information regarding the Group's operating segments for the years ended 31 December 2024 and 2023.

(Unit: Million Baht)

	Printed Circuit Board Assembly (PCBA)	Integrated Circuit (IC)	Others	Total reportable segments	Eliminations	Total
For the year ended 31 December 2024						
Revenue from external customers	15,866	6,709	2,226	24,801	-	24,801
Inter-segment revenue	3,580	528	618	4,726	(4,726)	-
Total revenue	19,446	7,237	2,844	29,527	(4,726)	24,801
Segment profit	2,861	162	(868)	2,155	39	2,194
Share of profit from investments in associates						13
Gain on exchange						9
Other income						642
Selling and distribution expenses						(216)
Administrative expenses						(1,476)
Loss on impairment of non-financial assets						(1,844)
Finance income						194
Finance cost						(64)
Income tax expenses						(86)
Loss for the year						(634)
Segment total assets						
Additions to property, plant and equipment	297	256	1,114	1,667	-	1,667

(Unit: Million Baht)

	Printed Circuit Board Assembly (PCBA)	Integrated Circuit (IC)	Others	Total reportable segments	Eliminations	Total
For the year ended 31 December 2023						
Revenue from external customers	15,956	8,235	1,961	26,152	-	26,152
Inter-segment revenue	3,513	752	1,093	5,358	(5,358)	-
Total revenue	19,469	8,987	3,054	31,510	(5,358)	26,152
Segment profit	2,859	473	(368)	2,964	16	2,980
Gain on exchange rate						41
Other income						439
Selling and distribution expenses						(210)
Administrative expenses						(1,421)
Loss on derivatives						(49)
Reversal of impairment loss on financial assets						21
Finance income						97
Finance cost						(52)
Income tax expenses						(85)
Profit for the year						1,761
Segment total assets						
Additions to property, plant and equipment	552	332	1,805	2,689	-	2,689

Geographic information

Revenue from external customers is based on locations of the customers as below.

(Unit: Million Baht)

	2024	2023
Revenue from external customers		
United States of America	6,348	6,260
Singapore	5,093	6,432
Malaysia	3,166	3,063
China	2,801	3,175
Bulgaria	878	1,128
Others	6,515	6,094
Total	24,801	26,152

Non-current assets other than financial instruments, deferred tax assets, net defined benefit assets and rights arising under insurance contracts are disaggregated based on locations of the assets as follows:

(Unit: Million Baht)

	2024	2023
Non-current assets		
Thailand	4,363	4,471
Korea	2,695	4,567
China	1,900	2,012
United States of America	713	638
Cambodia	346	376
Hong Kong	50	53
Others	3	8
Total	10,070	12,125

Major customers

For the year 2024, the Group has revenue from 5 major customers in amount of Baht 10,882 million, arising from sales by the Printed Circuit Board Assembly (PCBA) segment and the Integrated Circuit (IC) segment (2023: 12,059 million).

32. Provident fund

The Group and its employees have jointly established a provident fund in accordance with the Provident Fund Act B.E. 2530. Both employees and the Group contribute to the fund monthly at the rates of 3.0 - 7.5 percent of basic salary. The fund, which is managed by SCB Asset Management Company Limited, will be paid to employees upon terminating in accordance with the fund rules. The contributions for the year 2024 amounting to approximately Baht 89 million (2023: Baht 91 million) and for the Company amounting to approximately Baht 47 million (2023: Baht 46 million) were recognised as expenses.

33. Dividend paid

During the years 2024 and 2023, the Group had dividend payments as follows:

	Approved by	Total dividends	Dividend per share
		(Million Baht)	(Baht)
The Company			
For the year 2024			
Dividends on 2023 income and unappropriated retained earnings	Annual General Meeting of the shareholders on 30 April 2024	443	0.50
Interim dividends in respect of the income for the period from 1 January 2024 to 30 September 2024	Board of Directors' Meeting on 13 November 2024	221	0.25
Total for the year 2024		664	0.75
For the year 2023			
Dividends on 2022 income and unappropriated retained earnings	Annual General Meeting of the shareholders on 28 April 2023	402	0.50
Interim dividends in respect of the income for the period from 1 January 2023 to 30 September 2023	Board of Directors' Meeting on 13 November 2023	443	0.50
Total for the year 2023		845	1.00
Subsidiaries			
Hana Semiconductor (Ayutthaya) Company Limited			
For the year 2023			
Interim dividends in respect of 2022 income and unappropriated retained earnings	Board of Directors' Meeting on 5 April 2023	240	2.00
Total for the year 2023		240	2.00
Hana Semiconductor (BKK) Company Limited			
For the year 2023			
Interim dividends in respect of income for the period from 1 January 2023 to 30 April 2023	Board of Directors' Meeting on 18 May 2023	100	1.00
Total for the year 2023		100	1.00

34. Commitments and contingent liabilities

34.1 Capital commitments

As at 31 December 2024, the Group had capital commitments relating to the acquisitions of machinery totaling Baht 163 million (2023: Baht 37 million) and the Company only of approximately Baht 91 million (2023: Baht 17 million).

34.2 Commitments under service agreements

The Group has future payments required under the service contracts as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Payable:				
In up to 1 year	47.0	103.5	18.7	23.2
In over 1 year and up to 5 years	15.9	22.1	11.2	1.1

34.3 Marketing supportive service agreement

Since the year 2001, the Company and three subsidiaries entered into marketing supportive service agreement with an overseas subsidiary. Under that agreement, the Company and the three subsidiaries have to pay service fees to that subsidiary at the rates stipulated in the agreement.

34.4 Sale representative agreements

Since the year 2015, an overseas subsidiary entered into sale representative agreement with an unrelated company with the annual service fees of approximately USD 0.6 million.

34.5 Guarantees

a) As at 31 December 2024, the Company and a subsidiary have jointly and severally guaranteed bank credit facilities extended to a subsidiary, totaling USD 30 million or equivalent to Baht 1,020 million (2023: USD 30 million or equivalent to Baht 1,027 million,). Additionally, the Company has provided a supplementary guarantee for trade confirmation (i.e. foreign currency transaction and cross-currency swap transaction), amounting to USD 5 million or equivalent to Baht 170 million (2023: USD 5 million or equivalent to Baht 171 million). The Company only: amount to USD 35 million or equivalent to Baht 1,190 million (31 December 2023: USD 35 million or equivalent to Baht 1,198 million).

b) As at 31 December 2024, there were outstanding bank guarantees of approximately Baht 29 million (2023: Baht 29 million) issued by the banks on behalf of the Group in respect of certain performance bonds as required in the normal course of business of the Group to guarantee electricity uses, among others, and the Company of approximately Baht 28 million (2023: Baht 26 million).

35. Fair value hierarchy

As at 31 December 2024 and 2023, the Group had the assets that were measured at fair value or for which fair value was disclosed using different levels of inputs as follows:

(Unit: Thousand Baht)

	31 December 2024		
	Consolidated financial statements		
	Level 1	Level 2	Total
Assets measured at fair value			
Financial assets measured at FVOCI			
Marketable corporate bonds	1,148,657	53,252	1,201,909
Local marketable equity securities	97	-	97
Assets for which fair value was disclosed			
Investment property	-	230,608	230,608

(Unit: Thousand Baht)

	31 December 2023		
	Consolidated financial statements		
	Level 1	Level 2	Total
Assets measured at fair value			
Financial assets measured at FVTPL			
Marketable corporate bonds	1,180,575	54,444	1,235,019
Local marketable equity securities	97	-	97
Assets for which fair value was disclosed			
Investment property	-	96,405	96,405

(Unit: Thousand Baht)

	31 December 2024		
	Separate financial statements		
	Level 1	Level 2	Total
Assets measured at fair value			
Financial assets measured at FVOCI			
Local marketable equity securities	97	-	97
Assets for which fair value was disclosed			
Investment property	-	144,608	144,608

(Unit: Thousand Baht)

	31 December 2023		
	Separate financial statements		
	Level 1	Level 2	Total
Assets measured at fair value			
Financial assets measured at FVOCI			
Local marketable equity securities	97	-	97
Assets for which fair value was disclosed			
Investment property	-	96,405	96,405

36. Financial instruments

36.1 Financial risk management objectives and policies

The Group's financial instruments principally comprise cash and cash equivalents, trade and other receivables, investments and trade and other payables. The financial risks associated with these financial instruments and how they are managed are described below.

Credit risk

The Group is exposed to credit risk primarily with respect to trade and other receivables deposits with banks and financial institutions and other financial instruments. The maximum exposure to credit risk is limited to the carrying amounts of receivables as stated in the statement of financial position.

Trade receivables

The Group manages the risk by adopting appropriate credit control policies and procedures and therefore does not expect to incur material financial losses. Outstanding trade receivables are regularly monitored.

An impairment analysis is performed at each reporting date to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar credit risks. The Group classifies customer segments by customer type and rating. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions. Generally, trade receivables are written-off if past due for more than one year and not subject to enforcement activity.

Financial instruments and cash deposits

The Group manages the credit risk from balances with banks and financial institutions by making investments only with approved counterparties and within credit limits assigned to each counterparty. The limits are set to minimise the concentration of risks and therefore mitigate financial loss through a counterparty's potential failure to make payments.

The credit risk on debt instruments and derivatives is limited because the counterparties are banks with high credit-ratings assigned by international credit-rating agencies.

Interest rate risk

The Group's exposure to interest rate risk relates primarily to its cash at financial institutions and investments. Most of its financial assets and liabilities bear floating interest rates, or fixed interest rates which are close to the market rate.

As at 31 December 2024 and 2023, significant financial assets and liabilities classified by type of interest rates are summarised in the table below, with those financial assets and liabilities that carry fixed interest rates further classified based on the maturity dates, or the re-pricing date if this occurs before the maturity date.

	Consolidated financial statements as at 31 December 2024				
	Fixed interest rate within 1 year	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(Million Baht)				(% p.a.)
Financial assets					
Cash and cash equivalents	3,200	3,286	203	6,689	0.001 - 5.200
Trade and other receivables	-	-	4,481	4,481	-
Other current financial assets	3,831	225	-	4,056	1.500 - 7.400
	7,031	3,511	4,684	15,226	
Financial liabilities					
Short-term loans from financial institutions	-	509	-	509	5.510 - 5.520
Trade and other payables	-	-	3,026	3,026	-
Long-term loans from financial institution	-	381	-	381	3.650 - 3.700
	-	890	3,026	3,916	

	Consolidated financial statements as at 31 December 2023				
	Fixed interest rate within 1 year	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(Million Baht)				(% p.a.)
Financial assets					
Cash and cash equivalents	4,453	2,478	23	6,954	0.010 - 5.240
Trade and other receivables	-	-	5,178	5,178	-
Other current financial assets	1,688	250	-	1,938	0.950 - 7.400
	6,141	2,728	5,201	14,070	
Financial liabilities					
Short-term loans from financial institutions	1,025	51	-	1,076	6.370 - 7.480
Trade and other payables	-	-	3,391	3,391	-
Long-term loans from financial institution	-	227	-	227	3.750 - 3.850
	1,025	278	3,391	4,694	

	Separate financial statements as at 31 December 2024				
	Fixed interest rate within 1 year	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(Million Baht)				(% p.a.)
Financial assets					
Cash and cash equivalents	2,800	1,589	17	4,406	0.01 - 1.50
Trade and other receivables	-	-	2,283	2,283	-
Short-term loans to related party	507	-	-	507	5.15
Other current financial assets	1,100	-	-	1,100	1.50 - 1.60
	4,407	1,589	2,300	8,296	
Financial liabilities					
Trade and other payables	-	-	927	927	-
	-	-	927	927	

	Separate financial statements as at 31 December 2023				
	Fixed interest rate within 1 year	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(Million Baht)				(% p.a.)
Financial assets					
Cash and cash equivalents	4,050	929	8	4,987	0.10 - 2.00
Trade and other receivables	-	-	2,541	2,541	-
	4,050	929	2,549	7,528	
Financial liabilities					
Trade and other payables	-	-	1,169	1,169	-
	-	-	1,169	1,169	

Foreign currency risk

The Group's exposure to foreign currency risk related primarily to its trading transactions that are denominated in foreign currencies. The Group seeks to reduce this risk by entering into forward exchange contracts when it considers appropriate. Generally, the forward contracts will mature within one year.

The balances of financial assets and liabilities denominated in foreign currencies as at 31 December 2024 and 2023 are summarised below.

Foreign currency	Financial assets as at 31 December		Financial liabilities as at 31 December		Average exchange rate as at 31 December	
	2024	2023	2024	2023	2024	2023
	(Million)	(Million)	(Million)	(Million)	(Baht per foreign currency unit)	
US Dollar	324	258	34	54	33.9879	34.2233
Cambodia Riel	147	294	2	1	0.0084	0.0083
Japan Yen	29	63	8	11	0.2155	0.2423

Foreign currency sensitivity

The following tables demonstrate the sensitivity of the Group's profit before tax to a reasonably possible change in US dollar exchange rates, with all other variables held constant. The impact on the Group's profit before tax is due to changes in the fair value of monetary assets and liabilities including non-designated foreign currency derivatives as at 31 December 2024 and 2023. The Group's exposure to foreign currency changes for all other currencies is not material.

Currency	2024		2023	
	Increase/ decrease	Effect on profit before tax Increase (decrease)	Increase/ decrease	Effect on profit before tax Increase (decrease)
	(%)	(Million Baht)	(%)	(Million Baht)
US dollar	+1	34	+1	69
	- 1	(34)	- 1	(69)

Liquidity risk

The Group manages liquidity risk to meet its obligations and maintain cash balances to cover the liquidity needs. The Group has assessed that it has sufficient working capital to settle financial liabilities and concluded the risk to be low.

The table below summarises the maturity profile of the Group's non-derivative financial liabilities and derivative financial instruments as at 31 December 2024 and 2023 based on contractual undiscounted cash flows:

(Unit: Thousand Baht)

	As at 31 December 2024		
	Consolidated financial statements		
	Less than 1 year	1 to 5 years	Total
Non-derivatives			
Short-term loans from financial institutions	509,355	-	509,355
Trade and other payables	3,026,410	-	3,026,410
Lease liabilities	684	1,574	2,258
Long-term loans from financial institution	60,126	345,148	405,274
Total non-derivatives	3,596,575	346,722	3,943,297

(Unit: Thousand Baht)

	As at 31 December 2023		
	Consolidated financial statements		
	Less than 1 year	1 to 5 years	Total
Non-derivatives			
Short-term loans from financial institutions	1,076,408	-	1,076,408
Trade and other payables	3,390,546	-	3,390,546
Lease liabilities	5,063	733	5,796
Long-term loans from financial institution	32,156	214,617	246,773
Total non-derivatives	4,504,173	215,350	4,719,523

(Unit: Thousand Baht)

	As at 31 December 2024		
	Separate financial statements		
	Less than 1 year	1 to 5 years	Total
Non-derivatives			
Trade and other payables	927,138	-	927,138
Total non-derivatives	927,138	-	927,138

(Unit: Thousand Baht)

	As at 31 December 2023		
	Separate financial statements		
	Less than 1 year	1 to 5 years	Total
Non-derivatives			
Trade and other payables	1,168,669	-	1,168,669
Total non-derivatives	1,168,669	-	1,168,669

36.2 Fair value of financial instruments

Since the majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to the market interest rates, their fair value is not expected to be materially different from the amounts presented in the statement of financial position.

37. Capital management

The primary objective of the Group's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise shareholder value. As at 31 December 2024, the Group's debt-to-equity ratio was 0.20:1 (2023: 0.21:1) and the Company's was 0.08:1 (2023: 0.10:1).

38. Events after the reporting period

38.1 On 11 December 2024, the meeting of the Board of Directors of the Company No. 7/2024 passed the resolution approving an increase in the registered capital of Hana Microelectronics International Co., Ltd. ("the Subsidiary") by amounting to USD 100 million or equivalent to Baht 3,426 million, from the original registered capital of USD 2 to USD 100 million. This involves the cancellation of the original 2 shares with a par value of USD 1 each and the issuance of 10,000,000 new ordinary shares with a par value of USD 10 each.

The subsidiary registered the capital increase with the BVI Registry of Corporate Affairs on 2 January 2025. After the registered capital increase, the Company will continue to maintain 100 percent of the shares in Hana Microelectronics International Co., Ltd. In January 2025, the Company paid the additional shares in the amount of USD 100 million or equivalent to Baht 3,426 million, as called by the subsidiary.

38.2 On 27 February 2025, the meeting of the Board of Directors of the Company No. 1/2025 passed the resolution approving the final dividend payment for the year 2024 to the Company's shareholders at Baht 0.50 per share. Thus, including the interim dividend of Baht 0.25 per share, the total dividend payment for the year 2024 will be Baht 0.75 per share. The dividend payment will be proposed for approval at the Company’s upcoming Annual General Meeting (AGM) of shareholders.

39. Approval of financial statements

These financial statements were authorised for issue by the Company’s Board of Directors on 27 February 2025.

Back up attachment

Back up attachment

Attachment 1 : Details of directors, executives, controlling persons, the person assigned to take the highest responsibility in Accounting and Finance, the person assigned to take direct responsibility for accounting supervision, the Company's secretary, and the representative for contact and coordination in case of a foreign company

Link to attachment: https://eonemedia.setlink.set.or.th/report/0324/2024/1744340994765.pdf

Attachment 2 : Details of the directors of subsidiaries

Link to attachment: https://eonemedia.setlink.set.or.th/report/0324/2024/1744340994769.pdf

Attachment 3 : Details of the Heads of the Internal Audit and Compliance Units

Link to attachment: https://eonemedia.setlink.set.or.th/report/0324/2024/1744340994773.pdf

Attachment 4 : Assets for business undertaking and details of asset appraisal

Link to attachment: https://eonemedia.setlink.set.or.th/report/0324/2024/1744340994777.pdf

Attachment 5 : Unabridged policy and guidelines on corporate governance and unabridged code of business conduct prepared by the Company

Link to attachment: https://eonemedia.setlink.set.or.th/report/0324/2024/1744340994781.pdf

Attachment 6 : Report of the Audit Committee

Link to attachment: https://eonemedia.setlink.set.or.th/report/0324/2024/1744340994785.pdf