

ADVANTECH

2023 Sustainability Report



About Advantech

2023 Sustainability Report

Report Editorial Principles

Advantech Co., Ltd. (hereinafter referred to as Advantech) has published its 2023 Corporate Sustainability Report, transparently presenting to stakeholders and the general public the company's strategies, management policies, achievements, and future aspirations in governance, environment, and social aspects. This report was issued in June 2024. The annual key tasks are based on the GRI (Global Reporting Initiative) Universal Standards 2021 Reference option, the Financial Supervisory Commission (Taiwan, ROC)'s requirement that certain industries disclose sustainability indicators (Industry category: Computer and peripheral equipment industry), the Sustainability Accounting Standards Board (SASB) industry standards (applicable category: Hardware), and the reporting principles of AA1000.

Report Boundaries and Scope

This report's boundary includes significant locations of operation and main factory areas: Advantech has Ruiguang, Yangguang, Donghu, and Linkou Taiwan (collectively referred to as ACL) and Advantech Kunshan Manufacturing Center (AKMC). Overseas bases include: Advantech Corporation (ANA), Advantech Europe B.V. (AEU), Advantech Japan Co., Ltd (AJP), Advantech KR Co., Ltd (AKR), and Advantech China Co., Ltd. (ACN). The manufacturing capacity of the aforementioned bases accounts for 100% of Advantech's total manufacturing capacity, the consolidated revenue accounts for 92.6% of the overall Group, and the number of employees accounts for 94.8% of the total number of employees.

Any data scope adjustment or data boundary difference within the scope of this report and those reported in the previous reports will be marked in the relevant text or chart in each chapter of the report. In compliance with International Accounting Standards (IFRS), Advantech's annual report covers Advantech and its affiliates. Except for the operating locations and major factories disclosed above, information on all other affiliates of Advantech is excluded from this report. Disclosures made by Advantech Cultural and Educational Foundation on a voluntary basis demonstrate the effectiveness of the entity's ESG commitments during the reporting period.

***Note:** Some of the texts and graphs in this report have used abbreviations of their company codes, such as the aforementioned ACL, AKMC, ANA, AEU, AJP, AKR, and ACN. Please refer to the descriptions in "Report boundaries and scope" for the full names of the abbreviated names. If the word RBU appears in the chart mentioned above, it refers to the Regional business unit, i.e. AKMC, ANA, AEU, AJP, AKR, ACN. Any mention of headquarters in the text or chart refers to Advantech's Ruiguang Taiwan, Yangguang, Donghu, and Linkou (collectively referred to as ACL). If the information has been re-edited, it will also be explained in the relevant chapter.

Reporting Period

This report mainly presents various performance data for 2023 (2023/1/1 - 2023/12/31). This report will also partially disclose previous information during this period, or on subsequent strategies, goals, and plans.

Reporting Standards

This report follows the reference option of the GRI Standards (Reference) and discloses Advantech's strategy, management approach, projects, and performance in terms of corporate sustainability. The figures of the financial statements in this report are expressed in NTD, and the performance related to environmental protection, safety and health is expressed in internationally accepted indicators. If there are any estimates or assumptions, they will be noted in the relevant chapters.

Sustainability Reporting Assurance and Third Party Verification

The Financial Supervisory Commission (Taiwan, ROC) and AA1000AS* Type 2 High Assurance Level, the Global Reporting Initiative (GRI) Universal Standards 2021 Reference option, were satisfied with this report through verification by SGS Taiwan Limited, an independent third party. For reporting purposes, sustainability indicators (sector: computer and peripheral equipment industry) and industry standards established by the Sustainability Accounting Standards Board (SASB) (applicable category: Hardware) shall be disclosed for particular industries. The Statement of Warranty is attached as the appendix to this Report.

***Note:** AA1000AS is the AA1000 Assurance Standard for Accountability Principles for Sustainable Development published by Accountability Organization in the UK. It is one of the international verification standards currently mainly for corporate sustainability reports.

In accordance with the Taiwan Standard on Assurance Engagements 3000 (TWSAE3000) "Assurance engagements that are not audits or reviews of historical financial information", PwC Taiwan conducted independent limited assurance on the implementation of the selected KPIs, and prepared the Limited Assurance Report and assurance indicators, please refer to the appendix.

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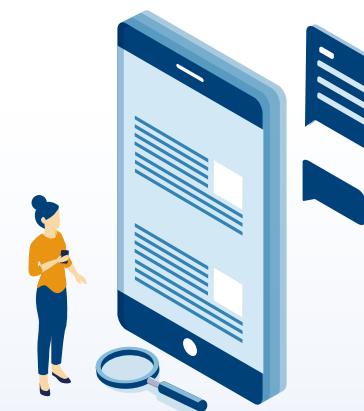
Publication of the Report - Planned to Publish Annually

Current issue: June 2024
 Last issue: June 2023
 Next issue: Scheduled in June 2025

Publication of the Report and Contact Information

In order to implement the paperless environmental protection policy, the electronic version of this report is simultaneously published on the Company's website. For any suggestions or inquiries about this report, please contact:

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Message from the Executive Management

2023 marked Advantech's 40th anniversary. Following the completion of Linkou Phase III, we held three world partner conferences in Taiwan. The VIP guests expressed their appreciation for Advantech's long-term focus on IIoT and implemented various solutions in our own factory building, both expressed high affirmation. The Company's subsidiaries around the world also participated in the "Cycling 40" global cycling event and invited local customers and partners to celebrate. In addition, nearly 9,000 employees around the world also enjoyed special 40th anniversary incentive activities, and were given high satisfaction feedback to mark the end of the 40th anniversary celebration.

In addition to operating activities, Advantech's ESG sustainability projects have also been actively expanded from the headquarters to overseas subsidiaries, and have received positive feedback from the outside world.

In 2023, Advantech made significant progress in sustainability performance. In terms of overall ESG performance, Advantech was included as a constituent of the Dow Jones Sustainability Indices (DJSI) for the first time and was rated as the Global 5% Sustainability Benchmark Company by All Industries, and Computers & Peripherals and Office Electronics ranked fourth. The Corporate Governance Evaluation continues to maintain a top 5% ranking among listed companies. In 2023, it significantly improved its position in the Taiwan's Excellence in Corporate Social Responsibility Award, moving from 27th to 12th place. Additionally, in the 2023 Global Views ESG Corporate Sustainability Award, Advantech received dual recognition for the first time, winning awards for both Comprehensive Performance Model Award and Education and Outreach.

However, in the face of the development of various emerging issues in the field of ESG, especially global climate change, corporate decarbonization, biodiversity and forestation protection, diversity, equity, inclusion-DEI and other issues, we still need to areas for improvement. Advantech will continue to integrate sustainable responsibility with its operation and risk management, benchmark against international frameworks such as TNFD, SBT, ISSB, and the EU Taxonomy, and work together with industry and supply chain partners to move towards a better future.

Looking forward to 2024, the ESG corporate sustainability development office has defined the following key issues. External experts, partners, and internal teams are engaged to continuously drive sustainable transformation:

Environmental:

- **2040 Accomplish RE100 achievement:** Committed to achieving the goal of using 100% renewable electricity in our global operations by 2040, and achieving the RE50 goal of energy-intensive manufacturing plants in Taiwan and Kunshan, China by 2030.
- **Introduce carbon pricing and move towards decarbonization:** Advantech plans and implements greenhouse gas inventory roadmaps with a schedule better than the requirements of the Financial Supervisory Commission (Taiwan, ROC). and year by year completes greenhouse gas inventory projects for the Taiwan parent company, Kunshan subsidiary and global RBUs (Regional Business Units, including AJP, AKR, AESC, and ANA). In 2023, we obtained the first product carbon footprint statement (ISO 14067) and launched the carbon pricing project. In 2024, we expect to incorporate carbon costs into business management and take more proactive actions to decarbonize the enterprise.
- **Develop sustainable intelligent solutions:** Focusing on our core business, we work with partners in the value chain to launch smart energy solutions, such as Intelligent Energy Management System (iEMS), smart healthcare, smart factories, and smart transportation and other sustainable intelligent solutions. The goal is to generate revenue from intelligent solutions. The proportion of products and revenue is increasing year by year. In 2023, with reference to the EU Taxonomy framework, we calculated that 39.9% of Advantech's revenue from sustainable intelligent solutions contributed to climate change mitigation and climate adaptation promotion in 2023. Advantech will strive for low-carbon innovation and continue to move forward.

Social:

- **Promote IoT Industry-Academia co-creation value chain:** Work together with industry, government, academia, and research to help youth find employment and start entrepreneurship. Collaborate with ecosystem partners to help with biodiversity monitoring and smart forest management.
- **Diversity, Equity, Inclusion (DEI) workplace:** Advantech, an enterprise operating in 27 countries across the globe, is confronted with the formidable task of effectively managing and fostering a workforce that is diverse in nature, encompassing various generations and backgrounds. Advantech introduced its Diversity, Equity, and Inclusion (DEI) strategy framework and objectives in 2023. By incorporating an

inclusion and diversity framework into the processes of talent selection and planning, this approach fosters a greater sense of workplace belonging among employees and manages the performance of global talent development through data-driven decision making. The objective of this endeavor is to foster a culture of agile management and provide employees with continuous career advancement. Let each Advantecher unleash their potential and demonstrate outstanding contributions.

Governance:

- Information security and risk management: High-risk items are defined through the Risk Management Committee and corresponding countermeasures are generated. In 2024, the Company will continue to improve the performance of global taxation, information security, and data governance brought about by generative AI.
- ESG sustainability governance: In 2023, Advantech launched the sustainability performance and positive incentive mechanism for senior executives to examine sustainability trends at home and abroad, set KPIs to integrate corporate operations and risk management. The initiative also establishes sustainability performance metrics to drive accountable ESG management and achieve tangible results. In the coming year, we will evolve our incentive mechanisms and share our sustainability achievements.

The above are the main directions of Advantech's ESG work in 2024. We will implement sustainable development through the above actions, and the team will combine the forces of various stakeholders to create a future of inclusiveness and sustainability.

Chairperson

K.C. Liu June 2024



President of General Management

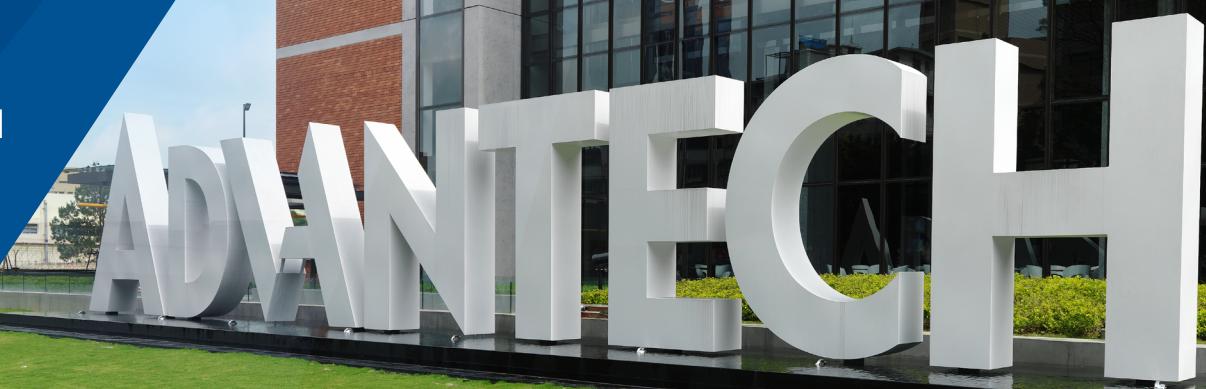
Eric Chen June 2024



1

Sustainability Vision and Goals

- 1.1 ESG Governance Structure
- 1.2 Stakeholder Engagement
- 1.3 Sustainability Goals and Material Topics



1.1

ESG Governance Structure

Advantech's corporate mission is to enrich the smart world with IoT technology, and our sustainability mission is to become a catalyst for a sustainable planet by leveraging our core strengths. As a multinational corporation based in Taiwan with a global perspective, Advantech adheres to policies of international responsible business conduct, which align with various declarations and guidelines including, but not limited to, the Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy of the International Labour Organization (ILO), the Universal Declaration of Human Rights, and, despite not being a UN member state, also considers the United Nations Global Compact, the United Nations Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and the Responsible Business Alliance Code of Conduct (RBA Code of Conduct) in its operational management and implementation of ESG policies. Related policies and documents, see: [Sustainability Report - ESG \(advantech.com\)](#)

Advantech's highest governance unit and ESG governance unit oversee due diligence, identify sustainability materiality themes annually, manage progress, and track goals, aiming to determine the positive and negative impacts of Advantech's operations on the economy, environment, and society. If there is no negative impact, the supervision will continue to be positive and preventive measures will be implemented. Adopt mitigation or remedial measures if there are negative impacts. Relevant information can be found in the management approach table descriptions in each material topic chapter.

Advantech's commitment:

- Improve corporate governance performance and strictly comply with the business ethics plan and related laws and policies.
- Enhance the all-round value of the Company, continue to bring positive influence and create positive value to various stakeholders.
- Combining core strengths, we actively invest in innovative research and development to provide smart products and solutions that contribute to environmental development and social impact; continue to increase the proportion of revenue from sustainable intelligent solution, reduce environmental impact at operating locations, and improve own green operation performance.
- Emphasizing the long-term development of employees, building a DEI workplace with Diversity, Equality, and Inclusion, and providing employees with a healthy and safe working environment, reasonable compensation, employee care and benefits, and promoting the value addition of talents.
- Encourage employees to participate in charitable causes with an altruistic spirit and establish a "volunteer leave system" to promote employees' contribution to the community and society.
- Progressively enhance the cooperation and education and training on the three ESG dimensions with external suppliers each year, and work together with suppliers to create sustainable value and low-carbon business opportunities.

Advantech has published the Sustainability Report since 2013. In terms of ESG governance mechanisms, we improve the governance mechanisms year by year by researching domestic and international sustainability trends and the practices of its benchmark companies.

Personnel or Units	Role
Chairperson	The top leader of sustainable development; leading Advantech's global corporate sustainable strategy and development.
Board of Directors	Regularly review corporate sustainability performance, review the report's sustainability materiality topics, review the pre-release and post-release versions of the sustainability report, and discuss major ESG proposals.
Corporate Sustainability Committee at the Board of Directors Level -SDC Sustainability Development Committee	<ul style="list-style-type: none"> Chairman K.C. Liu (convenor), Director Jeff Chen, and Director Ji-Ren Lee, a total of three members, discussed annual agenda items including climate change strategy, corporate carbon management and carbon pricing, diversity, equality and inclusive workplace development, biodiversity protection, performance evaluation and incentive mechanisms for ESG KPIs among senior management, EU sustainable disclosure topic, social impact assessments, globalization strategies, corporate organizational development and transformation, business inheritance, global talent cultivation and rotation, compensation optimization, RE100, EU carbon tariff response strategy, annual ESG performance evaluation and verification, and corporate occupational health and safety among other topics. Corporate Sustainability Committee at the Board of Directors Level-SDC Sustainability Development Committee meets once a quarter, for a total of four times a year. Climate-related issues are included on the agenda of the Board of Directors at least once a year, and the Sustainability Committee is the responsible unit for managing climate change.
ESG Corporate Sustainability Development Office	<ul style="list-style-type: none"> The main leader is the President of General Management, who gives instructions and suggestions to the ESG Corporate Sustainability Development Office. Responsible for identifying Advantech sustainable development issues, formulating annual development goals and plans, convening quarterly corporate sustainable development meetings, and inviting Board members, external experts, and benchmarking companies depending on the theme for feedback. ESG projects are carried out by the responsible team, and the ESG Corporate Sustainability Development Office regularly monitors the results and proposes improvement plans. The ESG Corporate Sustainability Development Office reports to the Chairman the planning and progress of relevant projects from time to time. The Chairperson gives direction and strategic advice and the President is invited to participate in important meetings and decision-making.



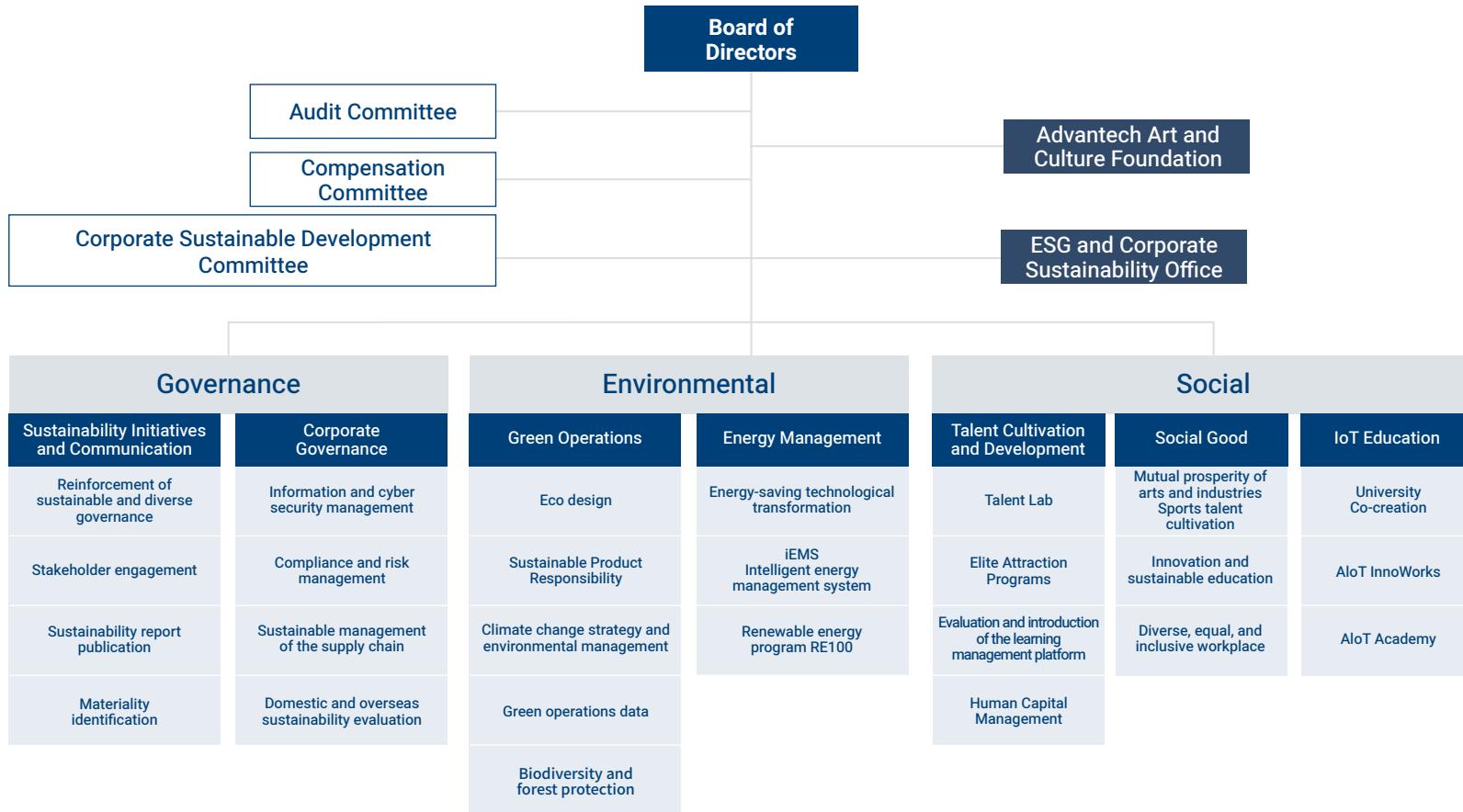


Figure 1.1.1: Advantech ESG organizational structure

Advantech's sustainability performance advanced significantly in 2023, as evidenced by its numerous outstanding accomplishments at domestic and international sustainability assessment fairs. Advantech shall persist in striving for the utmost levels of excellence, assume the position of an industry pioneer in low-carbon sustainability, and advance our endeavors ceaselessly.

Award	Category or Group	Accolade	Award	Category or Group	Accolade
	Selected for Yuanta FTSE4Good TIP Taiwan ESG ETF, the TW CG100 IDX, and the TIP Taiwan Environmental Sustainability Index		Taiwan's Excellence in Corporate Social Responsibility Award	Large enterprise group	12 th place
Taiwan Excellence Awards	Compact Industrial Computer System IPC-320		Global Views ESG Corporate Sustainability Award	Electronic technology industry comprehensive performance group Outstanding Project Education Promotion Group	Model Award
	Fanless Edge AI Inference System		Dow Jones Sustainability Index	Company by All Industries	
	USC-365 POS Computer Smart Retail Terminal		EcoVadis	-	Bronze Medal
Interbrand, an International Brand in Taiwan	-	5 th place	CDP Carbon Disclosure Program	Climate change questionnaire	B Level
TWSE Corporate Governance Evaluation	Listed company	Top 5%			

1.2

Stakeholders Engagement

The ESG Corporate Sustainability Development Office utilized the operational status of the Company as well as annual international sustainability trends, internal operational developments, the sustainable development progress of relevant peers, and discussions with the Company's top sustainability executives to lay the groundwork for reporting in previous years' sustainability reports and written reports. The primary stakeholder groups, as per the AA1000 SES (AA1000 Stakeholder Engagement Standard), will persist in their previous iterations. These groups comprise employees, customers, business partners, universities and research institutions, suppliers and contractors, the media, public associations and the government, shareholders and investment institutions, the communities, and non-profit organizations are the eight primary categories of stakeholders.

We interact with stakeholders through various channels, including telephone communications, online customer service (Live Chat), physical and online meetings/forums, event satisfaction surveys, customer satisfaction surveys, customer visits, supplier audits, participation in public association initiatives, etc. Additionally, contact information is publicly available on the ESG Corporate Sustainability Official website at [Contact Us - ESG \(advantech.com\)](#), where units respond to stakeholder concerns and provide feedback.

Expanding the Influence of Sustainability Issues

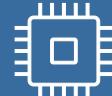
In 2023, Advantech's ESG Corporate Sustainability Development Office participated in multiple internal and external sustainability communication events to communicate with major stakeholders on key sustainability issues. The Advantech Group released four editions of its ESG quarterly newsletter in 2023. The purpose of these newsletters was to enhance internal stakeholders' (employees) comprehension of sustainability issues and to aid external stakeholders in evaluating Advantech's sustainability performance and offering constructive feedback. This endeavor additionally aids Advantech in its pursuit of environmentally friendly, low-carbon business prospects and in bolstering the sector's sustainable competitiveness.

Stakeholder	Form of communication	Sustainable communication topics
Employee	<ul style="list-style-type: none"> • Exchange meeting • Quarterly ESG report • Education and training 	
Customer	<ul style="list-style-type: none"> • Exchange meeting • Written reports and exchanges • Thematic sessions 	
Business partners, universities, research institutions	<ul style="list-style-type: none"> • Exchange meeting • Special sustainability seminar 	
Suppliers and contractors	<ul style="list-style-type: none"> • Exchange meeting • Education and training 	
Media, associations, government	<ul style="list-style-type: none"> • Thematic visits • Workshop • Exchange meeting • Sponsorship 	
Shareholders and investment institutions	<ul style="list-style-type: none"> • Exchange meeting • Written reports and exchanges 	Environmental aspect: Issues such as climate action, energy conservation and carbon reduction, RE100 and Net Zero target roadmap, internal carbon pricing (ICP), product carbon footprint, biodiversity, and Advantech's overall sustainable development strategy.
Community, social groups, non-profit organizations	<ul style="list-style-type: none"> • Thematic visits • Exchange meeting • Written reports and exchanges • Sponsorship 	Social aspect: Enhance employee satisfaction, improve employee turnover rate, and build a diversity, equity, inclusion (DEI) workplace.
Chairperson, Board member, middle and senior management	<ul style="list-style-type: none"> • Exchange meeting • Newsletter • Education and training 	Governance aspect: Sustainability evaluation results, Advantech's future development strategies, and the diversity of the Board of Directors governance team were discussed.

Table 1.2.1: 2023 Achievements of Advantech and various stakeholders in expanding sustainable influence

Table 1.2.2: Advantech's performance in communication and interaction with stakeholders in 2023

Stakeholders	Significance of stakeholders to Advantech	Methods of communication and negotiation with stakeholders	Frequency of communication	Content or topics of concern to stakeholders	Advantech's response	Communication or negotiation outcome, highlights
 Employee	<p>Employees are Advantech's most important asset. Among Advantech's four core values, "People-oriented Environment" emphasizes the following:</p> <ul style="list-style-type: none"> • Create a stage for open management and allow talents to exert themselves to the fullest • Trust and respect talents • Build a happy and open social environment 	<p>Employee Welfare Committee Physical and virtual employee conferences Employee intranet and social media website Newsletter Global electronic signage Employee complaint mailbox ESG education and training</p> <p>ABLE Line community</p>	<p>Permanent Half-yearly Permanent Weekly, quarterly Permanent Normal state New employee training Permanent</p>	<ul style="list-style-type: none"> • Evaluation, promotion, training and development • Employee relations and communication • Salary and benefits • Human rights • Occupational safety and health 	<ol style="list-style-type: none"> 1. The Employee Welfare Committee convenes at least once a quarter, and the chairperson summons all the representative members to attend the meeting. 2. The purpose of the biannual Kick-off Meeting is to disseminate the Company's vision and key development strategies so that all employees are cognizant of the Company's future prospects and can progress in tandem with Advantech. 3. Employee Zone: In order to facilitate synchronous comprehension among colleagues regarding critical company information, distinct categories such as Corporate News, Office Bulletin, and Regional News are created in accordance with the nature of the data. Additionally, the website provides colleagues with easy access at all times to comprehensive information regarding the Company's systems, regulations, and diverse management approaches. 4. ABLE Club website: Eight special sections covering the topics of employee care, welfare committee and foundation event information and registration, club information, authorized shops, event reports and tidbits, etc., are set up to provide employees with a comprehensive digital platform for a happy life. 5. ABLE Club FB: Announcement of event information, event photo albums, employee happiness feedback, and other text, audio and video tidbits. 6. Weekly electronic report: activities related to employee welfare and sent every week. 7. Quarterly electronic report: Compile employee benefit-related policy information and annual key event forecasts and send them out on a quarterly basis. 8. Advantech has set up an employee complaint mailbox for employees with disabilities or special needs. No complaints were filed in 2023. 9. Advantech has established a Suggestion Box. A total of 60 pieces of feedback were received in 2023; of these, 46 were processed and resolved by the corresponding units, for a 77% completion rate. Furthermore, in order to address urgent circumstances, a LINE community has been established, and an annual employee satisfaction survey is carried out to gather insights regarding feedback regarding the implementation trajectory of different policies. 10. Advantech's employee assistance program (EAPs) is available 24 hours a day. Assist colleagues to resolve emotional difficulties and psychological pressure. 	<p>1. The budget implementation rate for employee welfare activities in 2023 was 90.07%.</p> <p>2. In 2023, all employees participated in the ABLE Club website an average of four times, and recorded more than 15,000 registrations.</p> <p>3. 2023 was the first year that Advantech introduced the volunteer leave system. We provided employee training and ESG education through various channels as well as advocate the volunteer leave system. The number of volunteer hours throughout the year reached 1,062.</p>
 Customer	Operation revenue is generated by Advantech's clients. We are cognizant of industry developments and attentive to customer requirements. We are dedicated to delivering high-quality products and services to our valued customers, and we eagerly anticipate establishing productive partnerships with clients.	Comprehensive channels of communication are employed to facilitate understanding of customer needs and feedback. These channels include customer meetings, online seminars, customer satisfaction surveys, online and offline media platforms, customer audit communications, quarterly meetings with key accounts, dedicated customer service lines and customer email boxes.	Real-time communication and response	<ul style="list-style-type: none"> • Sustainable smart product and solution quality • Overall ESG performance • Carbon reduction path 	Identify the items that are not satisfactory to customers, make rectification and follow up on the improvement, or those who inquire about the company's sustainable performance results and development, request the corresponding units to complete the response within the deadline.	<p>By conducting numerous in-person meetings with clients to update them on our progress towards sustainable development and the carbon reduction of our products, we established ourselves as the foremost option for customers concerned with sustainability. For details, see 3.4 Customers and partners co-creation.</p>

Stakeholders	Significance of stakeholders to Advantech	Methods of communication and negotiation with stakeholders	Frequency of communication	Content or topics of concern to stakeholders	Advantech's response	Communication or negotiation outcome, highlights										
 Business partners, universities, research institutions	With their R&D capabilities in cutting-edge technologies and expertise in a variety of fields, our business partners, universities, and research institutions are able to aid businesses in their innovative R&D efforts to increase their market competitiveness.	Directly communicate with partners or research institutions through the project manned window.	<ul style="list-style-type: none"> Symposium (as needed) Cooperation in technology development (annually) Industry-academia collaboration project meeting (monthly) Campus promotion of IoT (annually) 	<ul style="list-style-type: none"> Information and cyber security management IoT application, promotion and education Eco design and sustainability liability of product Innovative mechanism 	<ol style="list-style-type: none"> For the key technologies required by Advantech to improve product strength, cooperate in industrial technology development through technology transfer or commissioned research. Cultivate the talents and technologies required by the enterprise with research institutions by providing research funding sponsorship or establishing joint R&D centers. Sponsor competitions and courses to jointly create and promote universal education on the IoT and cultivate industry talents. 	<ol style="list-style-type: none"> Cooperated with the Industry Academia Innovation School of National Yang Ming Chiao Tung University on 8 projects including: key technology innovation, campus IoT application development, industry-academia-master's-doctoral program, and internship. The Innoworks competition was promoted in 7 countries, with 224 student teams and 850 students participating. We collaborated with teachers from colleges and universities in Taiwan and China to offer 7 IoT-related internship courses. 										
 Suppliers and contractors	Suppliers play a key role for Advantech in realizing the sustainable supply chain ecosystem of the IoT. By establishing smooth communication channels, we ensure the stability and quality of the supply chain and strengthen operational resilience.	<table border="1"> <tr> <td>Supplier ESG evaluation</td> <td>Yearly</td> </tr> <tr> <td>Supplier ESG promotion</td> <td>Yearly</td> </tr> <tr> <td>Supplier conference</td> <td>From time to time</td> </tr> <tr> <td>Supplier evaluation</td> <td>Yearly</td> </tr> <tr> <td>Reporting mailbox</td> <td>Normal state</td> </tr> </table>	Supplier ESG evaluation	Yearly	Supplier ESG promotion	Yearly	Supplier conference	From time to time	Supplier evaluation	Yearly	Reporting mailbox	Normal state		<ul style="list-style-type: none"> Information and cyber security Customer and partner co-creation Eco design and product sustainability responsibility Sustainable management of the supply chain 		<ol style="list-style-type: none"> Expanded investigation and conducted ESG sustainability risk assessments, with a total of 1,127 suppliers identified. Encouraging 6 suppliers to take action on energy conservation, joint carry out energy conservation and carbon reduction projects. Added 146 new suppliers and approved 140 new suppliers. Planned to conduct audits on 61 existing suppliers, and completed audits on 61 companies in total. The training courses on supplier code of conduct were attended by 716 people.
Supplier ESG evaluation	Yearly															
Supplier ESG promotion	Yearly															
Supplier conference	From time to time															
Supplier evaluation	Yearly															
Reporting mailbox	Normal state															
 Media, associations, government	<ul style="list-style-type: none"> Assist in the real-time transmission of Advantech's important strategies and messages to the market Work together to promote and educate the market, and convey important industry perspectives and regulations Sharing of viewpoints on future industrial policy 	<ul style="list-style-type: none"> Press release, exhibition management, exclusive interviews Visit reception Participation in various public associations 	<ul style="list-style-type: none"> 30+ press releases throughout the year Quarterly earning call Annual shareholders' meeting Quarterly or monthly communication with the association Annual council attendance Communication and planning for the annual forum 	<ul style="list-style-type: none"> Advantech's financial directions Future trend perspectives Advantech's sustainability and heritage planning Important issues, norms, standards, etc. of the industry 	<ol style="list-style-type: none"> Regular media exclusive earning call once a quarter, and revenue news once a month. Arrangement of one-on-one media interviews (face-to-face, phone interview, video conference) 15-20 sessions. Actively participates in 15-20 key conferences of associations and drives different industry partners to introduce smart solutions, and even joins Advantech as a partner in promoting IoT solutions and co-creation. 	View News & Archives - Advantech (advantech.com)										

Stakeholders	Significance of stakeholders to Advantech	Methods of communication and negotiation with stakeholders	Frequency of communication	Content or topics of concern to stakeholders	Advantech's response	Communication or negotiation outcome, highlights
 Shareholders and investment institutions	Advantech's institutional investor structure consists of mainly international long-term investors who agree with Advantech's strategic direction and business philosophy and are willing to share external insights such as international sustainability trends and industry observations. Maintaining a positive two-way interaction helps optimize the Company's strategy and promote long-term development.	Annual shareholders' meeting	Yearly	<ul style="list-style-type: none"> ● Information and cyber security ● Eco design and product ● Risk foresight and crisis management ● Corporate heritage and succession 	<p>1. We responded to investors' concerns about sustainable material topics with written documents and ESG conferences.</p> <p>2. Consistent disclosure of the Company's sustainability strategy implementation status and results in press releases, official website, and sustainability reports.</p>	<p>1. Results of high-frequency and efficient meetings: In 2023, a total of 152 communications meetings were held; with more than 600 (Chinese/English) communicators, foreign shareholders attended the shareholder meetings in person to interact with the Chairperson and Independent Directors, implementing shareholder activism.</p> <p>2. Positive recognition from corporate entities: The service quality of Advantech's investor team and the high availability of senior management team have been highly recognized by foreign investors in the United States and Europe, and have been recognized repeatedly in international competitions.</p>
		Large earnings call	Quarterly			
		Seminar for domestic and overseas investment institutions	From time to time			
		Physical/video corporate exchange meeting	Every day			
		Sustainability report/sustainability website	Yearly			
		Corporate website/financial reports/shareholder service email	Normal state			
		Market observation post system	Normal state			
 Community, social groups, non-profit organizations	We all regard it as our responsibility to promote sustainability, encourage innovation, energy, education and sustainability, enhance the development of arts and cultural industries, and foster talent cultivation so that arts and businesses can co-prosper with cultural sustainability.	Exchange activities	Immediate and regular response	<ul style="list-style-type: none"> ● Promotion of SDGs ● PBL teaching model ● Demonstration of diverse learning processes ● Development of arts and cultural industries ● Cultivation of creative talents ● Improvement of humanistic quality 	<p>1. Advantech invests heavily in sustainable education and promotes the "ACT Dreamer Program" to directly lead to the implementation of SDGs with PBL, and is committed to cultivating global citizens with sustainability awareness.</p> <p>2. We supported innovative education in taking root, and sponsored multiple non-profit organizations to promote flipped education.</p> <p>3. Organized the annual "Art Salon" in support of the team's performance.</p> <p>4. Collaborate with professional schools in the top talent cultivation project to train potential creative and performing talents to enhance the soft power of Taiwan's art.</p> <p>5. The "Art and Literature Podcast" was independently funded and produced fortnightly. It was broadcasted simultaneously on the Cheng Sheng Radio Station.</p> <p>6. Set up art galleries in the lobby of the Company, promote reading, and hold cultural lectures.</p>	<p>1. The documentary film of the ACT sharing session was viewed by nearly 8,000 people.</p> <p>2. The "Sustainable Action! Generations Annual Conference" was jointly announced by 41 schools, and more than 800 people attended the annual conference.</p> <p>3. Published three promotional articles on "CommonWealth Education, Parenting Family Lifestyle" magazine which received over 75,000 page views.</p> <p>4. Recorded 90 episodes of "Art and Literature Podcast," which was listened by 30,233 people in total.</p> <p>5. Collaborated with the Institute of Performing Arts, National Taiwan Normal University on top-notch programs, facilitating cross-field collaboration with more than 100 students.</p> <p>6. Support the GuoGuang Opera's Youth Succession Plan and train young traditional opera performers.</p> <p>7. The Company sponsored the first FOCASA International Circus Festival, which attracted over 80,000 visitors.</p> <p>8. The Company sponsored over 130 performances throughout the year, attracting an audience of 5,500 seats.</p>
		Sponsorship	Yearly			
		Exhibition and Media	Bi-weekly and monthly			

Annual Stakeholder Survey

Through the annual stakeholder survey, we are able to understand the sustainability issues that our stakeholders are concerned about. In order to obtain more comprehensive and in-depth insights, in 2023, our survey scope, questionnaire distribution, and collection scope are consistent with the boundaries of this report, and we will conduct an impact survey on Advantech's global middle and senior executive.

To encourage more stakeholders to participate in the questionnaire response, a donation of NT\$100 will be made to forest protection for each valid questionnaire collected. A total of 1,105 copies of the 2023 annual stakeholder survey were collected, and a total of NT\$110,500 was donated in total; donated to forest conservation units as promised to fulfill our sustainability responsibilities. Details are as follows: In terms of forest protection work, we pledged to donate to Taiwan Forestry Restoration Association's restoration activities in shallow mountain areas in Taichung. Two reclamation lands were adopted, with one area being restored with 52 species of 500 native seedlings and the other with 125 species of 1,000 native seedlings. For details on how to identify materialities and the questionnaire analysis results, please refer to [1.3 Sustainability goals and material topics](#).

Scope of Investigation	Advantech Taiwan Ruiguang, Sunshine, Donghu, Linkou (collectively referred to as ACL) and Advantech Kunshan Manufacturing Center, AKMC). Overseas operating bases include: Advantech Corporation (ANA), Advantech Europe B.V. (AEU), Advantech Japan Co., Ltd (AJP), Advantech KR Co., Ltd (AKR), Beijing Advantech Electronic Technology Co., Ltd. (ACN).	
Stakeholders	Investigation aspects	Valid questionnaires collected
Employees	<ul style="list-style-type: none"> • Positive and negative impact • Probability of positive and negative impacts 	733
Customers		70
Business partners		84
Universities and Research Institutions		14
Suppliers and Contractors		110
Media, Public Associations, Government		33
Community, Non-profit Organizations		23
Shareholders and Investment Institutions	<ul style="list-style-type: none"> • Positive and negative impact • Probability of positive and negative impacts • Financial impact 	9
Chairperson, Board member, Directors and senior executives		29
Total number of valid questionnaires collected		1,105

Table 1.2.3: 2023 Annual stakeholder survey

1.3

Sustainability Goals and Material Topics

1.3.1 Identification of Material Topics

The Sustainability Report is one of Advantech's main channels for communicating ESG issues to stakeholders. To this end, in addition to routine stakeholder communication media, we engage stakeholders through the material topic analysis process. Advantech adheres to the reporting principles of the GRI 2021 Standards, which incorporate the European Union's concept of Double Materiality. This methodology distinguishes between the "impact on sustainable development concerning the economy, environment, and people (human rights)" and the "financial impact on organizational operations." This methodology identifies significant, impactful topics, with a focus on long-term challenges and opportunities that can be concretely realized through operational essence. This enables the observation of sustainability trends, the response to stakeholder expectations and suggestions, and the tracking of progress toward long-term sustainability goals.

Conduct an annual survey to identify Advantech-related sustainability issues, inventory the positive and negative impacts of sustainability issues, and disclose the relevant information in the sustainability report after ranking the issues to fully convey the essence of Advantech's management of various material sustainability topics and performance.

In order to confirm the objectivity of the analysis results, in addition to the perspectives of stakeholders and Advantech's ESG priorities in recent years, the materiality was verified through internal and external consultants and the Sustainable Development Committee, and the results were reported to the Board, as well as the basis for developing sustainability strategies and planning sustainability-related projects.



Figure 1.3.1: Advantech's sustainability goal setting and strategy development process

Collect/Identify Advantech-Related Sustainability Issues

Prior to conducting the stakeholder survey, we improved the process of gathering feedback from stakeholders. For example, we held numerous communication sessions with investment institutions and customers and actively participated in external sustainability-related meetings. During these interactions, we learned about the importance of various issues such as human capital and associated risks, product energy consumption standards, eco design, and Advantech's overall carbon reduction goals. As a result, we elaborated on these topics in the questionnaire. In addition, we proactively reached out to responsible units within our organization (including units of business, public relations, employee relations, investor relations, emerging business development, supply chain, etc.) to gather feedback. Based on the initial draft of issues identified through this process, we sought feedback from middle and senior managers in each unit on additional topics they wanted to include or discuss. This enabled us to better understand the perspectives of key stakeholders involved in the process on questionnaire design and Advantech's key sustainability themes.

On the other hand, in accordance with Advantech's ESG vision - "Enable an Intelligent and Sustainable Planet," we believe that Advantech's core IoT technologies and solutions, as well as its corporate culture of open innovation, co-creation with partners, and deep industry-academia IoT development. Collaboration allows us to effectively use our core competencies to address the United Nations Sustainable Development Goals (SDGs). For details, see the Material Management Approach. For the management policies of material topics, please refer to the relevant chapters of each material topic.

Step 1	Identification of stakeholders	Based on the operational nature and through the five principles of the Stakeholder Engagement Standard (AA1000 SES): Dependency, Responsibility, Tension, Influence, and Diverse Perspectives, identifying 8 key stakeholder groups: employees, customers, business partners, universities and research institutions, suppliers and contractors, media and public associations and government, shareholders and investment institutions, communities and non-profit organizations.	8 key stakeholder groups
Step 2	Sustainability topics collection	<ul style="list-style-type: none"> Based on the GRI Standards, the United Nations Sustainable Development Goals (SDGs), the Responsible Business Alliance (RBA), and the Sustainable Accounting Standards Board (SASB) and issues of concern to responsible investment institutions: Dow Jones Sustainability Indices (DJSI) and MSCI ESG Ratings, Carbon Disclosure Project (CDP), Task Force on Climate-related Financial Disclosures (TCFD) and other information disclosure frameworks as the basis for sustainability issue collection. Mid-level and senior executives who have close contact with stakeholders are asked about the draft issues in advance using the aforementioned processes through each unit in charge of stakeholders (sales, public relations, employee relations, investor relations, emerging business development units, supply chain, etc.). The goal is to determine whether they want to include any additional topics or investigate specific issues, as well as to understand their perspective on questionnaire design and the importance of these issues to Advantech. 	8 major sustainability topics sources
Step 3	Sustainability topics convergence	The members of the Sustainability Report Team of the Sustainability Development Committee and the opinions of external experts gather and converge various issues.	17 sustainability topics
Step 4	Evaluate internal and external impacts and possibilities	<ul style="list-style-type: none"> Collect opinions from stakeholders. In 2023, online questionnaires were used to collect opinions from 1,105 internal and external stakeholders. Most of these stakeholders have communication or collaboration with Advantech and have a certain degree of understanding of Advantech's business. In addition, we also send questionnaires to Advantech's middle and senior management to confirm the executives' opinions on sustainability topics based on the Executive management's importance and ranking of the topics. The questionnaire design took into account the principle of double materiality and collected stakeholders' assessment of "the impact of material topics on society, the environment, and people." Assessment of the "impact/extent of material topics on Advantech's operations (financial)" by the invested institutions and the Executive management. 	
Step 5	Analysis and ranking of material topics	Using the spirit of GRI 3 and double materiality analysis, by measuring the financial impact and impact possibility of substantial subjects, the results of expert consultation meetings and the focus of the Sustainability Development Committee will be used as the basis for materiality adjustments, which ultimately be decided by the members of the Board. In 2023, we identified 10 material topics and 7 minor topics.	10 material topics
Step 6	Determining the list of material topics and the content of Advantech's 2023 Sustainability Report	Following analysis, this report discloses information on 10 material topics. Related material topics will also be disclosed based on the recommendations of the GRI Topic Guidelines; the Sustainability Development Committee will continue to track the progress of the 7 minor topics. The information is disclosed in this report in detail to meet the stakeholders' expectations of the Company. To ensure the report's contents are transparent, reasonable, and well-balanced, we will continue to assess the relative significance of each sustainability issue in the future and make timely adjustments to the report's material topics in response to the insightful feedback of stakeholders.	

Table 1.3.1: Advantech's Material Topic Survey Context

Methodology of Material Topics in 2023's Sustainability Report

Based on the opinions of stakeholders, external reference indicators and international initiatives (Table 1.3.1 Advantech material topic survey context), and internal development strategies and goals (Figure 1.3.2 Advantech's ESG Vision: Enabling an intelligent planet), 17 sustainability issues were identified by ESG Corporate sustainability development office in 2023 (Table 1.3.3: Advantech's sustainability issues list in 2023), and the survey contents were formulated accordingly. The feedback of stakeholder survey and material topics were defined and ranked to be proposed for discussion by the Sustainable Development Committee in the second quarter. Reported to the Board for approval.

Gather Sources on Material Topics

01

Material topics are gathered and identified through a variety of channels, with an emphasis on literature published by reputable organizations, concerns expressed by benchmark companies, and correspondence with critical stakeholders. The sources are listed below.

- Regulations and standards of authoritative institutions: 2023 Sustainability Yearbook of the Dow Jones Sustainability Index, CDP, SASB, GRI, SDGs.
- Material Topics Publicly Disclosed in Advantech's 2022 Sustainability Report.
- Engage with stakeholders (e.g. shareholders, investment institutions, and customers) to understand topics of concern and sustainability trends.
- Conducted issue consultation and questionnaire survey for Advantech's directors and senior executives, members of the Board, Sustainable Development Committee, and members of the ESG Office, which were also referred to as the Company's management strategies.
- Survey material topics covered by international benchmark companies.

Perform Double Materiality Analysis

02

Advantech adheres to the European Union's Double Materiality principle and the GRI Standards (2021) four-stage process of materiality identification in order to identify highly significant issues that also have a substantial impact "on Advantech" and "on the external economy, environment, and people." "Double Materiality" refers to issues that must be prioritized for management by considering the perspectives of stakeholders and the impact of issues on corporate profitability, reputation, and business risks. In addition, Advantech incorporates the analysis results into the organization's enterprise risk management (ERM) as consideration for corporate sustainable operation (see 2.4 Risk foresight and crisis management in Chapter 2), which helps Advantech integrate our sustainability strategy and corporate governance. The management policy is to make ESG performance bring long-term influence to the Company.

Discussion and Approval of Material Topics

03

- Conduct written discussions and hold meetings with middle and senior executives, members of the Board of Directors, the Sustainable Development Committee, and the ESG Corporate Sustainability Development Office to review and revise the findings of the material topic analysis.
- The annual material topics are launched after negotiation and adjustment.
- Submitted to the Chairman and the Board of Directors in the second quarter and received their approval.

Table 1.3.2: Advantech's material topic Identification process in 2023

Advantech's ESG Vision: Enabling an Intelligent and Sustainable Planet



Figure 1.3.2: Advantech ESG Vision: Enable an Intelligent and Sustainable Planet

Environmental	Social	Governance
<ul style="list-style-type: none"> • Climate Change Strategy and Management • Eco Design and Sustainability Liability of Product • Biodiversity and forestation protection • GHG Inventory and Energy Management 	<ul style="list-style-type: none"> • Industry Talent Cultivation and Development • Diversity, Equality and Inclusive Workplace • Application Advocacy and Education of IoT • Occupational Health and Safety • Human Rights • Neighborhood and Community Care 	<ul style="list-style-type: none"> • Information and cyber security management • Co-creation of Customers and Partners • Sustainable Management of the Supply Chain • Risk Foresight and Crisis Management • Innovative Mechanism • Policy and public campaign • Sustainable Intelligent Solutions

Table 1.3.3: Advantech's sustainability issues list in 2023

▲ Stakeholder Survey, Impact Survey, Materiality Analysis

Prior to the stakeholder reconciliation and materiality questionnaire survey, the ESG Office also adjusted the material issues (including consolidation, deletion, addition, and name change) for relevant senior executives. After the investigation and stakeholder discussions, ultimately no issues of deletion, consolidation, or name change. However, there are some new survey topics due to the sustainable development trend. The results of the adjustments are shown in Table 1.3.4. Changes in the sustainability issues list in 2023 (new additions, name changes, or consolidation).

Reasons for including new sustainability topics in the questionnaire	Biodiversity and forestation protection:
	<p>Biodiversity and forestation protection issues have gradually emerged as sustainability concerns in response to global ESG developments. Apart from relying on the natural environment's operational resources, Advantech leverages its technological advantages, collaborates with ecological partners, explores potential business opportunities, and develops IoT for Nature. This initiative aims to provide sustainable products and solutions, identify stakeholders in energy conservation and carbon reduction, and foster coexistence and prosperity with the Earth.</p>
	<p>Occupational Health and Safety: Advantech operates three major manufacturing centers and has a presence in over 27 countries with hundreds of operational locations worldwide. Advantech is committed to achieving zero workplace accidents and considers the occupational safety and health of its employees as a significant priority. Internally, we implement occupational safety and health concepts, provide education and training, set issue-specific goals, and get our occupational health and safety management system related certified.</p>
	<p>Policy and public campaign: Advantech engages in diverse external relationships, actively participating in domestic and international industry-related associations to empower industry development and expand connections within the industry ecosystem. Furthermore, Advantech participates in non-profit organization platforms related to climate change, biodiversity conservation, corporate sustainability development, RE100, and more. This involvement allows the Company to stay updated on the latest corporate sustainability trends and continuously improve its sustainable development efforts.</p>

Explanation of the 2023 Materiality Impact Assessment Process and Results

The method for prioritizing sustainability issues is explained as follows:

The ESG issues should be assessed and ranked in accordance with the EU's Double Materiality framework and "the level of impact that Advantech has on the economy, environment, and society in the process of providing products or services through its business relationships and activities." Furthermore, the evaluation of "Financial Materiality" pertains to the influence that environmental, economic, and social concerns have on the internal financial and accounting statements of the Company.

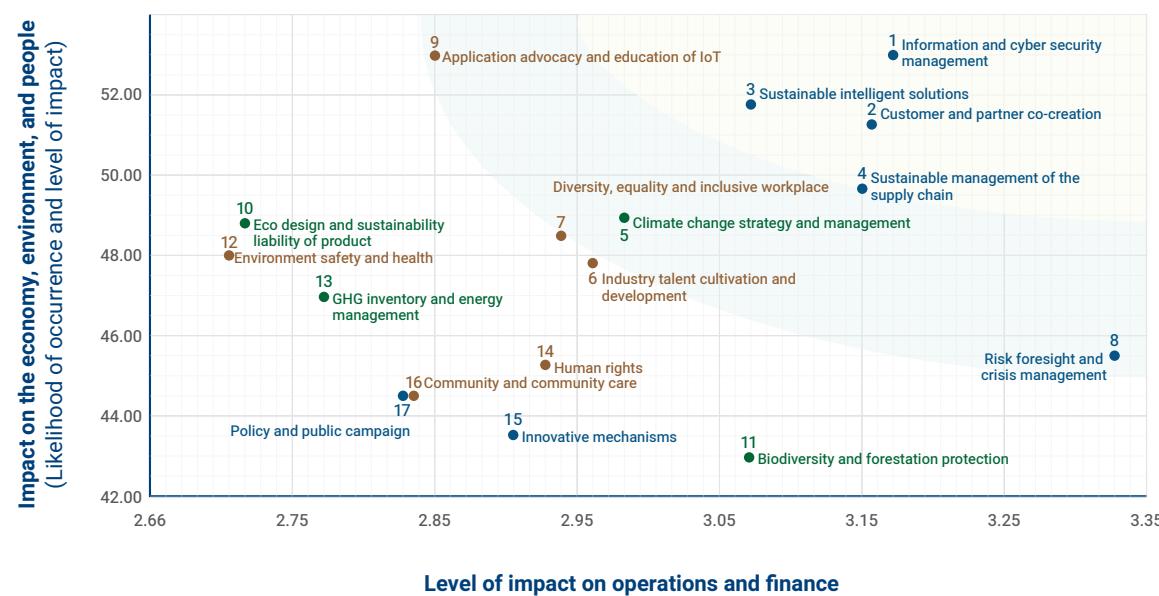
- Level of impact of the material topic = Positive impact + Negative impact
- Probability of occurrence of the material topic = Positive impact probability + Negative impact probability

Advantech's 2023 materiality analysis results were ranked through the following three steps:

1. Multiply the probability of impact on economy/environment/people by the level of impact on economy/environment/people for each sustainability topic, and rank the results according to the results.
2. Rank the results of each sustainability topic by "level of financial impact on the Company".
3. Cross-considered the ranking results of the above two points and judged them based on the level of double material impact of the materiality topic matrix.

In 2023, 1,105 valid internal and external questionnaires were gathered. To ensure that the assessment results are representative, important stakeholders' opinions are obtained through external communication meetings with key customers, suppliers, and experts, as well as internal sustainable development committee meetings.

Identify the impact and extent of each issue through statistical and quantitative analysis to generate the preliminary material topic matrix.



Level of impact on operations and finance

Figure 1.3.3: Material topic matrix

List of 2023 material topics and description of changes

As explained in 1.2 Engagement of Stakeholders, in 2023, Advantech conducted its impact survey on stakeholders and senior executive, a total of 1,105 valid questionnaires were collected. The contents covered were the 17 sustainability issues (as shown in the table above) and the details of each issue description. The degree of impact and probability of occurrence of material topics on the economy/environment/people (including human rights) are graded from 1 to 5. The Sustainable Development Committee's working group compiles the scores from each relevant unit.

Given the disparity in the number of valid questionnaires received among stakeholders, we first averaged the survey results of each stakeholder group and then assigned weights based on the stakeholder's level of relationship with Advantech. Senior executives communicate and negotiate with one another, evaluate the characteristics of the company and the industry, and refer to the content of the S&P Sustainability Yearbook 2023, and industry benchmarks for name changes and adjustments to major issues.

Ranking of material issues	Name of material issue	Aspect of material issue	Changes in the ranking of material issues	Meaning to the organization	Note
01	Information and cyber security management	G	–	Advantech recognizes that information and cyber security issues are critical to the Company's operational stability, product safety, and brand value as a global leader in the IoT. These factors are critical for stakeholders such as employees, customers, and investors.	
02	Co-creation of customers and partners	G	▲	Strong customer relationships enhance Advantech's corporate competitiveness, while high-quality partnerships contribute to the overall creativity of the IoT industry.	
03	Sustainable intelligent solutions	G	▲	Advantech's hardware and software products and integrated solutions can be applied to the growing markets of renewable energy, climate mitigation, climate adaptation, telemedicine, and education. Continuously developing products for sustainable applications not only enhances Advantech's corporate competitiveness, but also contributes to sustainability.	
04	Sustainable management of the supply chain	G	▲	Advantech's primary manufacturing process involves purchasing components from upstream component manufacturers, assembling them in-house, and delivering the finished products to customers. With a diverse and highly customized range of products, Advantech regularly conducts supplier assessments and ESG management evaluations. The concept of "corporate social responsibility and sustainable management of the supply chain" is integrated into assessment standards, aiming for a win-win scenario fostering sustainable value and service quality.	
05	Climate change strategy and management	E	▲	Advantech has included climate change as one of the major risks in corporate sustainability, and manages it according to two major aspects: "mitigation" and "adaptation." We actively identify risks, build adaptation capabilities, research and analyze opportunities for climate change, continue to invest in green energy, energy-saving products and solutions, and integrate energy management core business to promote energy conservation and sustainability.	
06	Industry talent cultivation and development	S	▲	The characteristics of our industry (High-mix Low-volume, innovation, and high demand for flexibility) make the need for various professionals and cross-disciplinary talents essential. Attracting, nurturing, and retaining talent are crucial for Advantech's operations.	
07	Diversity, equality and inclusive workplace	S	–	The diversity of Advantech's talents facilitates the incorporation of EDI (Equity / Diversity / Inclusion) elements into the workplace. Pay attention to employee communication and welfare, respect the diversity and differences of each employee, support employees in suitable positions to give full play to their strengths, and give employees a sense of accomplishment and belonging.	Rename

Ranking of material issues	Name of material issue	Aspect of material issue	Changes in the ranking of material issues	Meaning to the organization	Note
08	Risk foresight and crisis management	G	▼	Risk management aims to safeguard and enhance Advantech's value by structurally and systematically assessing existing and potential risks. It involves making timely decisions that align with the Company's operational objectives, ensuring goal achievement, and facilitating continuous improvement. As a global leader in its industry, Advantech consistently focuses on and drives significant strategic and operational risk management initiatives.	
09	Promotion and education of IoT applications	S	▼	With the vision of popularizing and deepening IoT education, we have implemented various industry-academia projects. Achieve universal IoT education, IoT project-based learning and innovation, IoT career exploration, and IoT research and long-term collaborations to bridge the industry-academia gap and cultivate the new generation of IoT talent and innovative energy.	
10	Eco design and sustainability liability of product	E	▼	Implement eco design standards and provide environment-friendly products. From raw materials, product design, manufacturing, to environmental management, we gradually set goals and introduce various standards. We are willing to do our best to improve the environment, reduce environmental impact, and produce environmentally friendly products.	
11	Biodiversity and forestation protection	E		Biodiversity and forestation protection issues have gradually emerged as sustainability concerns in response to global ESG developments. Apart from relying on the natural environment's operational resources, Advantech leverages its technological advantages, collaborates with ecological partners, explores potential business opportunities, and develops AIoT for Nature. This initiative aims to provide sustainable products and solutions, identify stakeholders in energy conservation and carbon reduction, and foster coexistence and prosperity with the Earth.	New Topic
12	Occupational health and safety	S		Advantech operates three major manufacturing centers and has a presence in over 27 countries with hundreds of operational locations worldwide. Advantech is committed to achieving zero workplace accidents and considers the occupational safety and health of its employees as a significant priority. Internally, we implement occupational safety and health concepts, provide education and training, set issue-specific goals, and get our occupational health and safety management system related certified.	New Topic
13	GHG inventory and energy management	E	—	We are committed to reducing greenhouse gas emissions and using energy and resources more efficiently in order to meet our publicly stated carbon reduction targets. To ensure the co-existence and co-prosperity of environmental protection and corporate sustainable development.	
14	Human rights	S	▼	Fulfill our responsibilities for upholding corporate human rights and protect the fundamental human rights and related rights and interests of all employees, customers, and stakeholders. Comply with domestic and international human rights laws, regulations, norms, or standards.	
15	Innovative mechanism	G	▼	Actively invests in product and technological innovations, fostering mechanisms for collaborative prosperity with R&D and business ecosystem partners.	
16	Neighborhood and community care	S	▼	Sustainability and altruism is one of Advantech's corporate spirits. Advantech has used IoT technology to create smart healthcare by focusing on its core competencies to help achieve SDG 3 - Good Health and Well-being, and respond to SDG 9 - Industrial Innovation and Infrastructure, and SDG 4 - Quality Education. This long-term support for IoT education and various innovative education aims to provide learning opportunities and benefits to Taiwanese children and youth.	
17	Policy and public campaign	G		Advantech engages in diverse external relationships, actively participating in domestic and international industry-related associations to empower industry development and expand connections within the industry ecosystem. Furthermore, Advantech participates in non-profit organization platforms related to climate change, biodiversity conservation, corporate sustainability development, RE100, and more. This involvement allows the Company to stay updated on the latest corporate sustainability trends and continuously improve its sustainable development efforts.	New Topic

In this year's material topic survey, based on the questionnaire results and communication with senior executives. This year's human rights topics and innovation mechanisms did not make the top 10 major topics in the ranking of impact and significance. It is estimated that Advantech does not have significant negative impacts on human rights issues, the Company regularly conducts human rights due diligence checks to improve its performance, and Advantech complies with the relevant international human rights policies or commitments of the countries or regions where it operates. Therefore, it is estimated that Advantech does not have a strong significance according to survey results. Secondly, "innovation" is in the DNA of all Advantech companies and is deeply embedded in our operation and maintenance management process. As one of the material topics of "Customer and partner co-creation," it also connotes a high degree of innovation and co-creation. Therefore, the "Innovative mechanisms" topic is slightly behind and does not make the top 10 list this time.

Ranking of material issues		Aspects	Changes	Ranking of material issues		Aspects	Changes
01	Information and cyber security management	G	-	06	Industry talent cultivation and development	S	▲4
02	Customer and partner co-creation	G	▲3	07	Diversity, equality and inclusive workplace	S	-
03	Sustainable intelligent solutions	G	▲1	08	Risk foresight and crisis management	G	▼2
04	Sustainable management of the supply chain	G	▲2	09	Application advocacy and education of IoT	S	▼5
05	Climate change strategy and management	E	▲8	10	Eco design and sustainability liability of product	E	▼8

Table 1.3.6: 10 Material Topics Addressed by This Report

Description of the 2023 material topic boundaries and corresponding GRI topics

For each material topic, based on the associated activities, products, services, and related impacts, we assess the extent of the impacts and whether impacts occur inside or outside the organization, and define the boundaries of the value chain. Table 1.3.7 Defines the relationship between each material topic and Advantech's value chain and the corresponding GRI topic

Icons	Description
	May fully disclosed in this report
	May partially disclosed in this report

Sustainability aspect	Material topics	Importance to Advantech	Where the impact occurs in the value chain						GRI
			Advantech	Subsidiaries	Suppliers	Investors	Customers	Society	
Governance	Information and cyber security management	Advantech recognizes that information security issues are critical to the Company's operational stability, product safety, and brand value as a global leader in the IoT. These factors are critical for stakeholders such as employees, customers, and investors.	●	●			●		3-3
	Customer and partner co-creation	Strong customer relationships enhance Advantech's corporate competitiveness, while high-quality partnerships contribute to the overall creativity of the IoT industry.	●	●			●		3-3
	Sustainable intelligent solutions	Advantech's hardware and software products and integrated solutions can be applied to the growing markets of renewable energy, climate mitigation, climate adaptation, telemedicine, and education. Continuously developing products for sustainable applications not only enhances Advantech's corporate competitiveness, but also contributes to sustainability.	●	●	●		●	●	3-3
	Sustainable management of the supply chain	Advantech's primary manufacturing process involves purchasing components from upstream component manufacturers, assembling them in-house, and delivering the finished products to customers. With a diverse and highly customized range of products, Advantech regularly conducts supplier assessments and ESG management evaluations. The concept of "corporate social responsibility and sustainable supply chain management" is integrated into assessment standards, aiming for a win-win scenario fostering sustainable value and service quality.	●	●	●	●	●	●	3-3 204-1 308-1
	Risk foresight and crisis management	Risk management aims to safeguard and enhance Advantech's value by structurally and systematically assessing existing and potential risks. It involves making timely decisions that align with the Company's operational objectives, ensuring goal achievement, and facilitating continuous improvement. As a global leader in its industry, Advantech consistently focuses on and drives significant strategic and operational risk management initiatives.	●	●		●	●	●	3-3

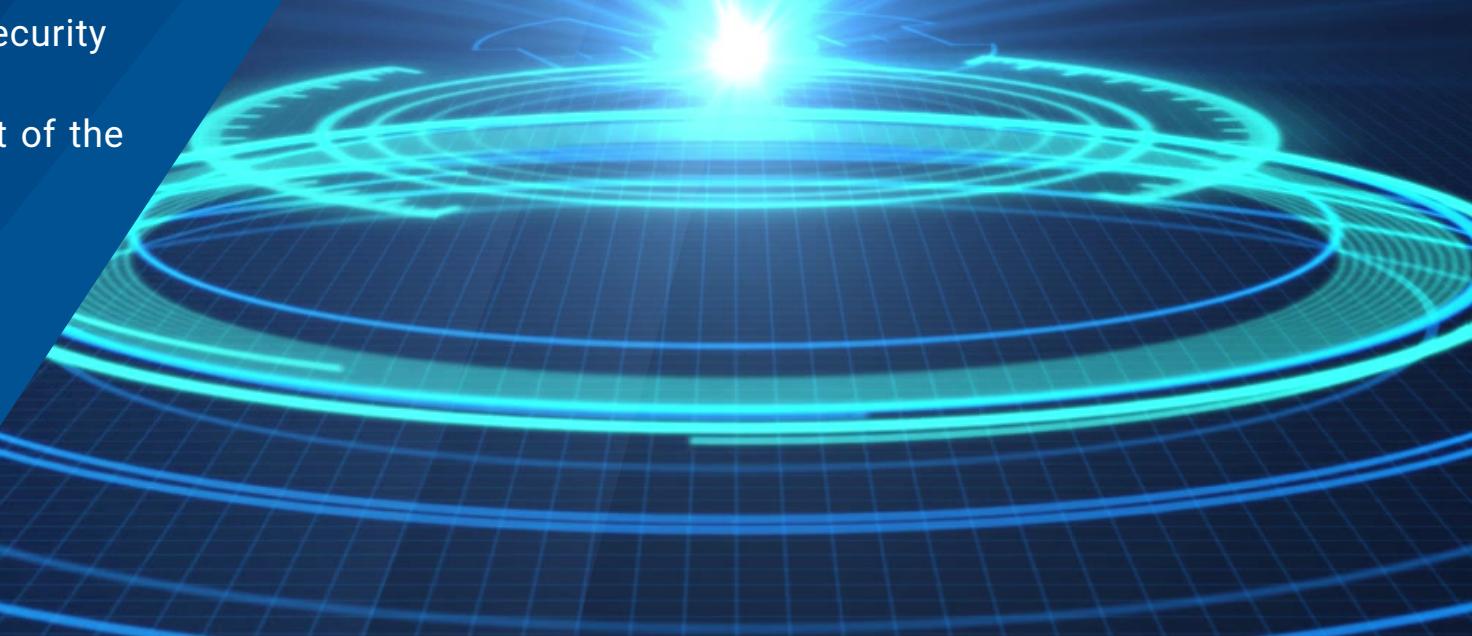
Table 1.3.6: Relationships between material topics and Advantech's value chain, and corresponding GRI topics

Sustainability aspect	Material topics	Importance to Advantech	Where the impact occurs in the value chain						GRI
			Advantech	Subsidiaries	Suppliers	Investors	Customers	Society	
Social	Industry talent cultivation and development	The characteristics of our industry (High-mix Low-volume, innovation, and high demand for flexibility) make the need for various professionals and cross-disciplinary talents essential. Attracting, nurturing, and retaining talent are crucial for Advantech's operations.	●	●				●	2-7 3-3 401-1 405-2
	Diversity, equality and inclusive workplace	The diversity of Advantech's talents facilitates the incorporation of EDI (Equity / Diversity / Inclusion) elements into the workplace. Pay attention to employee communication and welfare, respect the diversity and differences of each employee, support employees in suitable positions to give full play to their strengths, and give employees a sense of accomplishment and belonging.	●	●				●	2-7 3-3 404-3
	Application advocacy and education of IoT	With the vision of popularizing and deepening IoT education, we have implemented various industry-academia projects. Achieve universal IoT education, IoT project-based learning and innovation, IoT career exploration, and IoT research and long-term collaborations to bridge the industry-academia gap and cultivate the new generation of IoT talent and innovative energy.	●	●			●	●	3-3
Environmental	Climate change strategy and management	Advantech has included climate change as one of the major risks in corporate sustainability, and manages it according to two major aspects: "mitigation" and "adaptation." We actively identify risks, build adaptation capabilities, research and analyze opportunities for climate change, continue to invest in green energy, energy-saving products and solutions, and integrate energy management core business to promote energy conservation and sustainability.	●	●	●	●	●	●	3-3 201-2 302-4
	Eco design and sustainability liability of product	Implement eco design standards and provide environment-friendly products. From raw materials, product design, manufacturing, to environmental management, we gradually set goals and introduce various standards. We are willing to do our best to improve the environment, reduce environmental impact, and produce environmentally friendly products.	●	●	●	●	●	●	3-3

2

Corporate Management and Governance

- 2.1 Operational Performance and Corporate Governance Structure
- 2.2 Information and Cyber Security Management
- 2.3 Sustainable Management of the Supply Chain
- 2.4 Risk Foresight and Crisis Management



2.1

Operational Performance and Corporate Governance Structure

2.1.1 Company Profile

Since its establishment in 1983, Advantech has focused on the global IIoT field, providing corporate customers with a full range of services such as software and hardware system integration, customized design services, and global technical support. And the vision of the corporate brand of "Enabling an intelligent planet".

Advantech is a Taiwan listed company and has been listed on the Taiwan Stock Exchange since 1999 (TWSE: 2395); Headquartered in Neihu Science Park, Taipei, Taiwan, our business base spans 27 countries in Europe, America, Asia, and other regions. Our three major manufacturing centers are located in Linkou (Taiwan), Kunshan (China), and Fukuoka (Japan). Furthermore, we have built four logistics management centers and 21 local service centers to provide global customers with real-time and comprehensive integrated services via a complete service system.

Advantech and its affiliated companies focus on the manufacturing, assembly, sales, and after-sales service of industrial computer-related products (see Organization chart in 2.1.2 for details). The major 3 business groups include: Industrial IoT Business Group, Embedded IoT Platform Business Group, and Service IoT Business Group, providing customers with diversified application solutions such as smart manufacturing, smart healthcare, smart energy, transportation infrastructure, communication network security, and smart logistics. To embrace the global trends of the IoT, AI, and ESG sustainability, Advantech has introduced software and hardware solutions centered around WISE-IoT, the industrial IoT cloud platform, to help partners and customers in connecting the industrial chain. Moreover, we actively work with various industrial partners to "co-create" an industrial ecosystem to accelerate the realization of the goal of industrial intelligence. For more information on the Group, please refer to:  [Introduction Video to Advantech Co., Ltd.](#).

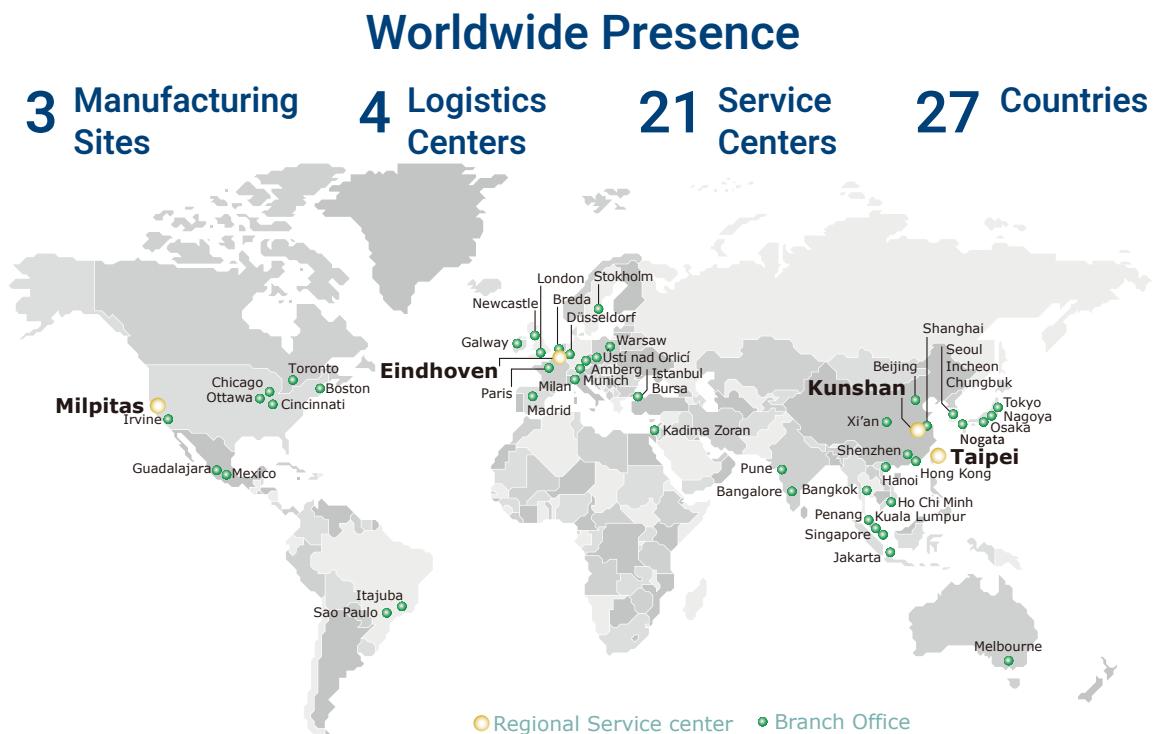


Figure 2.1.1: Distribution of Advantech's operating locations

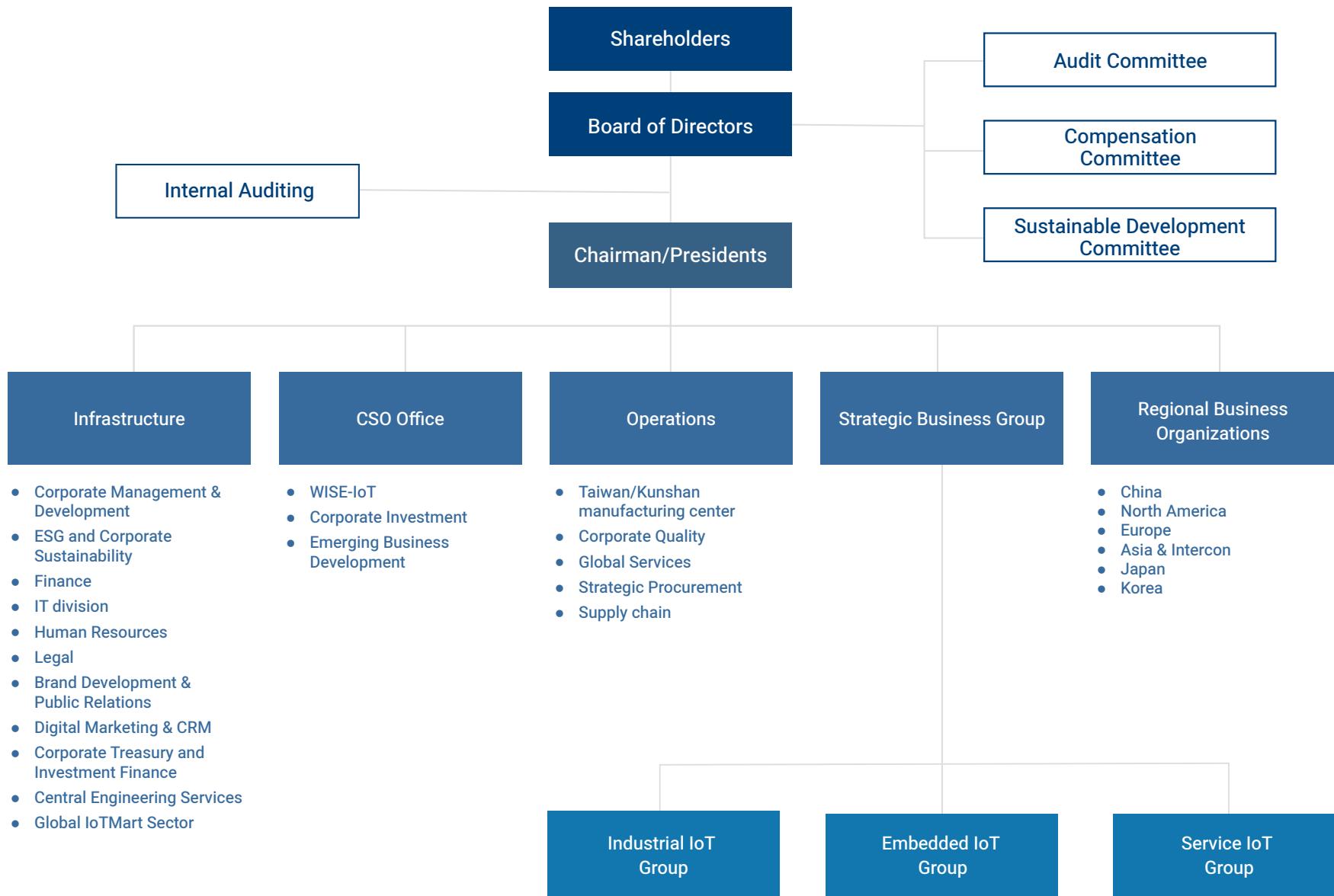


Figure 2.1.2: Organizational chart of Advantech

Management Performance and Brand Value

Due to the high global inflation and economic headwinds in 2023, Advantech's annual revenue decreased by 6%, but its profitability remained stable, with positive growth in gross profit margin, operating profit margin, and net profit margin. The EPS reached NTD 12.65 in 2023, continuing to hit new record highs.

"Advantech has long focused on its core business, maintaining a strong financial structure." It also maintains a high dividend-payment policy and shares business results with shareholders. In 2023, a total of NTD 9.5 of cash dividends was distributed per share in cash dividends, with a payout rate of over 75%, aiming to create a stronger business value for shareholders. Since its inception, Advantech has focused on the management of its own brands. In 2023, we were ranked the 5th among international brands * in Taiwan, with a brand value of US\$ 881 million and a growth rate of 13%, making it one of the top five international brands in Taiwan for six consecutive years.

Main products	2023			
	Sales amount (NTD thousand)	%	Product yield (set / piece)	Percentage of production at self-owned facilities (%)
Embedded board and system	34,679,628	54%	3,592,503	99%
Industrial computers and industrial controls	22,911,585	35%	2,457,342	99%
After-sales service and others	6,976,484	11%	643,340	100%
Total	64,567,697	100%	6,693,185	99%

*Note: The area of production plants is as follows: Manufacturing Center in Linkou, Taiwan (553,030 ft²); Manufacturing Center in Kunshan, China (1,107,821 ft²); Manufacturing Center in Fukuoka, Japan (129,403.7 ft²)

Table 2.1.1: Advantech's Products, Business Proportion, and Product Output in 2023

 According to the 2023 evaluation results of Interbrand, an internationally renowned brand evaluation agency commissioned by the Industrial Development Bureau, Ministry of Economic Affairs. Please refer to the [website](#) for details.
For more information, please refer to [Financial Results](#) on the Company website.

Advantech Value Chain and Business Development

Advantech specializes in industrial computers, which were first used in factory manufacturing processes, including the control, monitoring, and testing of instruments and machinery. In a narrow sense, industrial computers are limited to industrial automation board systems and mainly automation equipment. In recent years, due to the application and integration of communication, network, software, and optoelectronics, industrial computers have gradually been applied to all aspects of life and become more application-oriented. The IPC industry has flourished with applications such as MRT card readers, automatic ticket machines, ATMs, POS machines, digital electronic billboards, and smart building monitoring and management systems. Its growth has extended far beyond the industrial sector, leading to its recent renaming by the Ministry of Economic Affairs to "Intelligent Industry." Benefiting from the rise of intelligence and IoT systems, the future of IoT technology is very promising, and may further change human society; at the same time, the ecology and needs of different vertical markets are different, prompting the entire industry to develop in an ecological model.

In terms of industrial, upstream, midstream, and downstream relevance, the supply chain of industrial computers and embedded boards is as follows: In the upstream, there are components such as chipsets, CPUs, PCBs, DRAMs, logic ICs, connectors, passive components, and other components. The midstream sector includes I/O equipment, single board computers, barebone systems, industrial computers, and industrial computer peripherals. In the downstream, it includes system integrators, distributors, and end consumers. The upstream, mid-stream and downstream of the IoT are completed by the collaboration of different forms of vendors to provide customers with effective services and form a close relationship of cooperation. For more information, see Sustainable Supply Chain Management.

In 2023, Advantech shifted its core business model from being "Product-centric" to "Industry-centric", under the core spirit of "Sector Driven." They realigned internal resources to focus on eight key sectors: Embedded Design-in & DMS, AFE, Industrial Equipment & Transportation, Industrial Automation, Energy & Utilities, iCity Services, iHealthcare, Industrial Cloud & Video, and IoTMart (IoT Cross-border e-commerce). Advantech integrates the WISE IoT cloud platform with AI technology to connect the innovation resources of all business units to facilitate collaboration.

In addition, in 2023, Advantech accelerated its deployment in key technologies and regional markets, including: expanding production capacity and improving manufacturing resilience in Malaysia; expanding operating bases and establishing a local software R&D center in India; the acquisition of Bitflow, a North American high-end frame capture card company, and AI machine vision technology. The blueprint has become more complete. In 2024, Advantech will continue to make in-depth deployment in the AIoT industry to accelerate future development and growth.

2023 Revenue and Performance by region

US\$mn	2023	2022	YoY	Rev%
North America	657	700	-6%	32%
Europe	388	404	-4%	19%
China	425	522	-19%	20%
North Asia	217	215	+1%	10%
Taiwan	103	132	-22%	5%
Asia & InterCon	184	230	-20%	9%
Others	100	110	-9%	5%
Total	2,074	2,313	-10%	100%

Figure 2.1.3: 2023 Global Geo-Region Sales Distribution (USD)

2.1.2 Corporate Governance

Corporate governance is essential for long-term operations. Advantech values discussions and interactions with stakeholders. In terms of board structure and functional committees, all self-expectations exceed the standards required by laws and regulations, and are reviewed and optimized annually.

 For more information, please refer to the [Audit Policy](#), [Code of Ethics and Business Conduct](#), [Guideline for Insider Trading Prevention Management](#) and [Insider Trading](#) on the Company website.

Composition and Functioning of the Board of Directors

Advantech is committed to optimizing the functions of the Board of Directors and has established a comprehensive director [selection system](#). The selection of Board members adheres to the [diversity policy](#) and comprehensive assessments include industry background, professional field, age, and gender balance to promote diverse perspectives. In addition to considering the international market outlook, professional and academic accomplishment, and risk management, Advantech will also consider including the expertise in the field of sustainability in the evaluation indicators of the board members. The process of selecting director candidates is outlined in Article 192-1 of the Company Act. The shareholders' meeting appoints directors from the candidate list. The recruitment process for independent directors is regulated by the "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies." Each term of the board of directors consists of three years in office.

Advantech is currently in the 15th term of the Board of Directors, consisting of nine directors, and the term of the Board of Directors is from May 25, 2023 to May 24, 2026. The composition of the current Board of Directors and the evolutionary goals of the next Board of Directors (16th term) are shown in the figure below; Advantech Cultural and Educational Foundation will occupy one seat on the board, and the stakeholders of the public welfare aspect are also included in the composition of the Board of Directors. Overall, the composition of Advantech's Board of Directors complies with the principle of diversity. The diverse professional perspectives of the directors are constructive and beneficial to the Company's ability to cope with operational, industry, and sustainability impacts. The average tenure of the 15th Board of Directors as of the end of December 2023 was 6.7 years.

 For more information, please refer to the official website: [Board of Directors](#). The minimum number of seats for independent directors and female directors is specified in the [Corporate Governance Best Practice Principles](#).

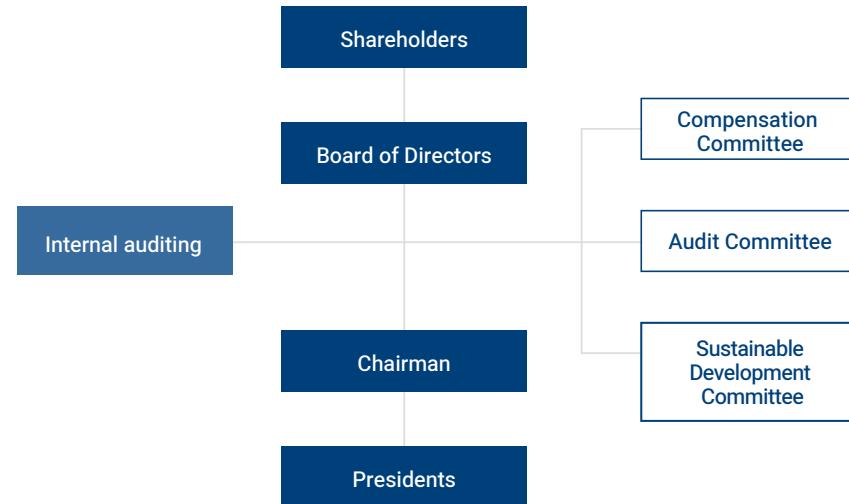
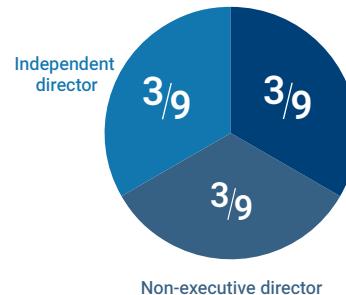
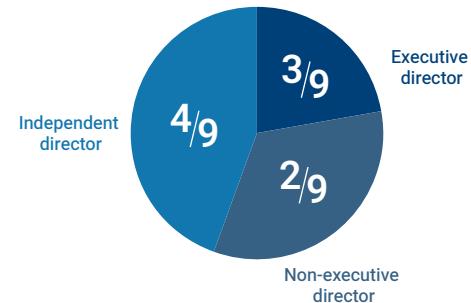


Figure 2.1.4: Advantech corporate governance structure

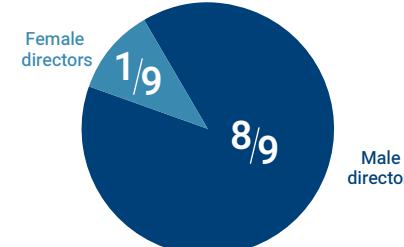
Diversity on Board of Directors
15th term



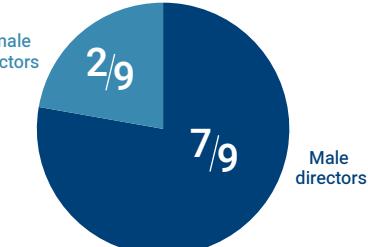
Diversity on Board of Directors
Targets for the 16th term



Director gender distribution
15th term



Director gender distribution
Targets for the 16th term



In terms of sustainability expertise, Director Chaney Ho used to be a member of the Sustainability Committee of Tatung Co. (TWSE: 2371); Independent Director Benson Liu was the former chairperson of Taiwan Corporate Governance Association and is currently the managing director of the association. Independent Director Chan-Jane Lin is the convener of the Board of Supervisors of the Taiwan Corporate Governance Association. The composition of the Board of Directors is sustainable. In the future, the Board of Directors will continue to strengthen its sustainability functions. The Founder and Chairman, K.C. Liu, is also a CEO of the Company. The Company follows the principle of avoidance of interests in the "[Rules and Procedures of Board of Directors Meetings](#)," while adopting a well-established mechanism of co-governance in operations to enhance the balance and separation of powers and mitigate conflicts of interest. On October 30, 2023, the Board of Directors requested the directors with a conflict of interest to be recused from the discussion and decision-making process of the "[Related party transaction](#)" motion, and the resolution was made by the independent directors and directors without conflicts of interest.

 The definition of Advantech's controlling shareholder is the same as that of the annual report. For details, see [the top ten shareholders](#) of Advantech on the official website.

Functional Committee of the Board of Directors

The setup of functional committee is superior to regulatory requirements. The composition and implementation status of the committees in 2023 are as follows:

Functional Committee	Members	Attendance rate	Resolutions (see official website for details)	External expert consultants (Attendance without voting rights)
Compensation Committee (statutory)	Independent Director, Ming-Hui Chang (Convener) Independent Director, Benson Liu Independent Director, Chan-Jane Lin	100%	2023	
Audit Committee (statutory)	Independent Director, Benson Liu (Convener) Independent Director, Ming-Hui Chang Independent Director, Chan-Jane Lin	100%	2023	
Sustainable Development Committee (voluntary)	Chairman, K.C. Liu (Convener) Director, Jeff Chen Director, Ji-Ren Lee	100%	2023	Merck KGaA / Chairman, John Lee (Inheritance Mechanism) The Hong Kong University of Science and Technology / Professor, Caroline WANG Chia-Ling (Senior Talent Training and Empowerment) China Europe International Business School / Professor Hwang, Yuhchang (Remuneration and Incentive Design) BCG Consulting Team (corporate inheritance mechanism design)

Mechanism of Progressive Sustainable Development Committee (SDC)

In July 2022, Advantech officially established the Sustainable Development Committee (SDC) at the board level to hold meetings quarterly to formulate the Company's long-term development strategy. Among them, the 1Q/3Q SDC meeting is positioned as an "Progressive SDC": Invite all directors, external experts, consultants, and senior executives on an expanded basis to discuss in-depth Advantech's business model innovation, business succession, medium and long-term vision, and other key development issues. In 2023, the Progressive SDC agenda includes discussions on Advantech's global strategy, the NEG framework, and implementation planning, organizational changes within Corp. Development, optimization of organizational change, inheritance and governance structures, talent development and rotation systems, as well as long-term strategic issues related to the layout and development of emerging business units. The Progressive SDC mechanism incorporates external consultants and experts, builds internal consensus, and promotes changes to demonstrate group intelligence and execution.

 For more information, see [Functional Committees](#) on the official website.

The Implementation of Corporate Governance

Implementation status

The Board of Directors held a total of seven meetings in 2023. The attendance of Board members was good, the agenda was carried out smoothly, and the proposals were fully interactively discussed and resolved. The overall operation is good.



For more information, please visit Official Website > [Board of Directors Operations](#)

Job Title	Name	Number of attendances	Number of absences	Attendance rate (%)
Chairman	K.C. Liu	7	0	100%
Director	Advantech Foundation Representative: Chaney Ho	6	1	86%
Director	K and M Investment Co., Ltd Representative: Wesley Liu	7	0	100%
Director	AIDC Investment Corp. Representative: Tony Liu	7	0	100%
Director	Jeff Chen	7	0	100%
Director	Ji-Ren Lee	7	0	100%
Independent director	Ming-Hui Chang	7	0	100%
Independent director	Benson Liu	7	0	100%
Independent director	Chan-Jane Lin	7	0	100%

Training Status and Evaluation mechanism

In 2023, the average training hours per director was 12.0 hours , which is higher than the 6 hours recommended by law. Advantech encourages directors to pursue continuing training and keep abreast of international trends in their professional fields. Besides regularly disclosing information on governance courses offered by professional organizations such as the Taiwan Corporate Governance Association, Securities and Futures Institute, and Taiwan Institute of Directors for reference, The Company organized director training seminars with topics determined with reference to the pan-operational risk map and material issues. The lecturer program invites consultants from outside industry and academia according to the topic. The lecture content combines theory with business practice in order to maximize the strategic effect on business operations. In August and December 2023, Advantech organized two 6 - hour training courses for directors: "Succession Strategies for 100-Year Enterprises" and "Industry Reform and Corporate Transformation Led by Generative AI." In the future, the background diversity and professional fields of the directors will be considered to provide individual directors with customized advice on the training topics that should be strengthened. In order to improve the professionalism of directors and keep pace with international standards, the strategic advice to Advantech also keeps pace with the times. Special invitation: John Lee, Chairperson of the Merck KGaA; Shiaw-Shian Yu, COO of the Industrial Technology Research Institute; and Wen, Yi-Ling, CEO of the Artificial Intelligence Foundation Taiwan. In the future, Advantech will evaluate the diversity of directors' backgrounds and their professional fields, providing customized learning recommendations for individual directors to enhance their professionalism and diversity. This approach aims to align with international trends and ensure that Advantech's strategic advice remains up-to-date.

- **Evaluation mechanism**

Advantech has established a rigorous evaluation mechanism for the Board of Directors and functional committees. Advantech conducts [self-evaluation](#) every year and [external evaluations](#) conducted by third-party professional institutions every three years. The Board of Directors reports the evaluation results in the first quarter of each year. To address these deficiencies, the management team coordinates resources and collaborates across departments to make improvements every year. Advantech has completed the 2023 internal self - evaluation on the performance of the Board of Directors, Board members, Audit Committee, compensation Committee, and Sustainable Development Committee. For the external evaluation, we commissioned the "Taiwan Institute of Ethical Business" to assess the operations of the Board of Directors and three functional committees, as well as the arrangements for training and various aspects of ESG development. Overall, they provided positive evaluation. The specific evaluation results and improvement plans have been reported to the Board of Directors in the first quarter of 2024.



For more information, please refer to [2023 Board Performance Evaluations](#), [2023 Board Performance Evaluation by Taiwan Institute of Ethical Business](#)

CEO and senior executives compensation mechanism

- Policy Purpose:** Regularly assess the salaries of the CEO and senior managers to motivate the CEO and senior managers to achieve company goals, generate profits, and improve business performance, and taking into account the reasonable correlation with future risks. Operations are carried out in accordance with Advantech's "Measures for the Management of Managers' Salary and Remuneration."
- Governing Unit:** Advantech has established a functional "Compensation Committee" at the board level. The 15th term is highly independent, with three independent directors serving as members. External consultants are also consulted to improve decision-making quality: Third-party consulting firms are regularly appointed to investigate remuneration levels and trends; external expert consultants are invited to provide insight and analysis depending on the topic from time to time to assist the Compensation Committee in making an overall assessment and proposing optimal remuneration policies.
- Review process:** The Compensation Committee considers the manager's salary and compensation policy, system, standards, and structure, taking into account factors such as industry pay levels, individual performance, company performance, and the viability of future risk associations. They conduct regular reviews of the company's performance evaluations, compensation systems, and standards for directors and managers, and report their findings to the board of directors for consideration.

Furthermore, Advantech values the participation and feedback of stakeholders, including shareholders. In addition to fully disclosing individual director remuneration information in the annual report, Advantech also reports on the "Allocation of Employee Remuneration and Director Remuneration" at the annual shareholders' meeting, informing shareholders and soliciting feedback. Advantech's 2023 Annual Shareholders' Meeting was held on May 25, with a shareholder attendance rate of 95.49%. The report proposal "Allocation of Employee Remuneration and Directors' Remuneration" has been submitted to shareholders for their attention, and no objections were raised during the meeting.



Please refer to the [Compensation Committee](#) of the Company, [2023 Shareholders' Meeting Minutes, 2023 Annual Report \(Pages 19 - 20\)](#) for directors' remuneration for details.

CEO and senior executives' remuneration structure and short to long term incentive plans

- CEO and Senior Executives' Fixed Salary:** Including basic salary, various allowances or additions, and a fixed one-month year-end bonus, which are determined according to their professional qualifications and with reference to the market salary level.
- CEO and Senior Executives' Variable Salary:**
 - Short-term incentive plan - cash bonus:** It rewards the performance achievements of the past year and is divided into individual performance bonuses and team profit sharing bonuses.
 - Long-term incentive plan - Employee Stock Option (including ESOP, PSOP^{*}):** to retain talent and incentivize long-term value creation, the rights will be distributed over a three-year period, with a five-year deferral period for disbursement, settling the achievement rate of stage goals annually and cumulatively rolling them over to encourage continuous value contribution. The total achievement rate is settled at the end of the term.
- * ESOP: Employee Stock Option Plans, PSOP: Performance Stock Option Program
- Measure indicators:** They are divided into financial indicators and strategic indicators. Qualitative or quantifiable indicators are adopted to facilitate the regular evaluation of the achievement rate. Strengthen the strategy to ensure continuous growth through a high linkage mechanism between remuneration and performance.

Financial Indicators	Revenue growth, profit growth, ROE, and relative metrics (TSR: Total Shareholder Return). The relative indicator (TSR) is linked to CEO performance. The benchmarking reference is the annual average of the top 50 Taiwanese listed electronics companies by market value. There is a linked relationship between relative performance and CEO compensation.
Strategic Indicators	Growth-driven KPIs and project-based corporate transformation KPIs are broken down from the Company's important strategies to specific items for continuous advancement. In principle, the financial indicators and strategic indicators of the CEO and senior managers account for 50% and 50% each.

- Risk Linkage:** The Company agrees on the clawback clause. If there are major risk events that are sufficient to affect the Company's goodwill, or gross negligence such as violation of labor contracts or work rules, or the occurrence of obviously low work performance, the bonuses to the CEO and managers will be affected, and the bonuses will be reduced or not paid. To achieve the effect of risk management and control, the Company may withdraw the bonuses and dummy shares already granted (including events that occurred during the deflated years) as appropriate.
- Severance pay and retirement benefits:** Advantech does not have a severance pay system in place. In terms of retirement benefit plan and contribution rate, directors receive no retirement benefit fund; senior managers are entitled to the same retirement benefits and contribution rate as general employees, and the relevant implementation rules shall comply with the Ministry of Labor and the Labor Pension Act.



Please refer to the official website of the Ministry of Labor - [Introduction to the New Labor Retirement System](#) and the "Directors' Remuneration" and "Managers' Remuneration" tables in the [2023 Annual Report \(P19, 20, 22\)](#).

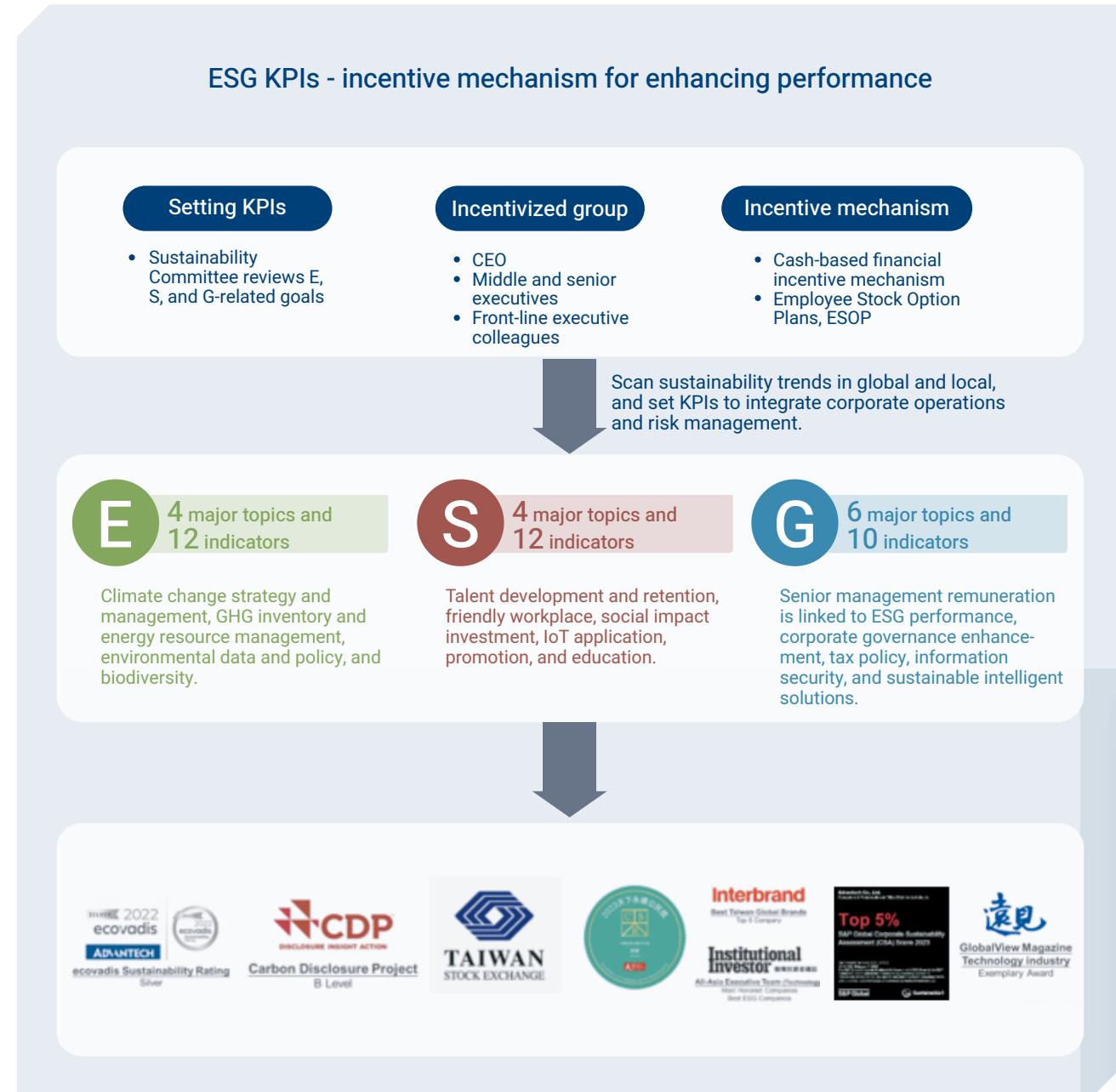


ESG Performance and Incentive Mechanism

Advantech has continued to advance its vision of being an intelligent enabler for a sustainable earth. In 2022, we established and implemented an ESG KPI mechanism for senior executives, including the Chairman, Co-Governance President, senior executives, responsible managers, members of the ESG Corporate Sustainability Development Office, and other accountable colleagues. This mechanism includes ESG sustainability indicators such as environmental, social, and governance aspects. Major performance evaluation items for 2023 and 2024 are planned. The incentives and rewards are mainly based on Employee Stock Option Plans (ESOPs), supplemented by performance bonuses. The payment schedule is in November of each year and in April of the following year issued. At the same time, goals and promotion plans are set and regularly evaluated by benchmarking domestic and international sustainability trends, Advantech's operations and risk management mechanisms. Payments are made based on sustainable goals, quantitative indicators, and actual performance. As a result of the implementation in 2023, over 54,230 shares have been issued to senior executives, junior and mid-level supervisors, and entry-level colleagues with outstanding ESG performance.



ESG KPIs - incentive mechanism for enhancing performance



▲ Shareholding Requirements for CEO and Senior Managers

Advantech believes that the long-term ownership of the Company's shares by the senior management team can strengthen the concept of connecting with the long-term interests of shareholders. According to the "Measures for the Management of Managers' Salary and Remuneration" published by Advantech's Compensation Committee on October 28, 2022, it is specified that the number of shares held in the Company by the CEO and president of the Company shall not be less than 10,000 shares, in order to fulfill the commitment to sound corporate governance. In 2023, the Company's Founder and Chairman/CEO, K.C. Liu, will hold 1,131.55 times the fixed salary, and the average shareholding of the three co-governing presidents will be 7.25 times the fixed salary.

▲ Annual Total Compensation Ratio

- In 2023, the ratio of the annual total compensation of the highest-paid individual to the median annual total compensation of other employees in the organization: 23.34 (6 regions)
- YOY Ratio: Year-over-year Ratio of the percentage increase in the annual total compensation of the highest paid individual to the percentage increase in the annual median total compensation of the rest of the organization: 0.97

***Description:**

Calculation methods such as salary type and definition, annual total compensation, and median of other employees are based on the GRI guidelines, and the annual total compensation for all employees is sorted and sampled.

1. Five major regions were adopted for the annual salary multiple in 2022, and six major regions were adopted for the annual salary multiple in 2023. (Unable to disclose the comprehensive salary statistics for the U.S. out of the 6 regions in 2022)

2. YoY Ratio: To maintain a consistent baseline for comparison, the YoY Ratio is calculated using the values for the five regions in 2023 and divided by the values for the five regions in 2022 to obtain 0.97.

3. Median annual salary: The following formula is used for calculation since complete raw data is unavailable for some overseas regions. It is expected that the numerical acquisition method will be optimized in 2024.

The denominator is the average total annual salary in the six regions and the median of the six major regions calculated according to the formula for approximate median of group mean.

$$\text{Approximate Median} = L + \frac{(n/2) - B}{G}$$

- L is the average number of groups that contain the median.
- n is the total number of data
- B is the cumulative number of groups that precede the median group
- G is the number of median groups



▲ Integrity Management: Compliance with Laws, Anti-corruption, and Anti-competitive

Integrity management is an important part of the internal control mechanism of corporate governance. Advantech identifies various laws and regulations in advance, and then communicates with relevant internal units to evaluate the formulation and implementation of the Company's relevant rules, in order to ensure smooth compliance with laws and regulations and practical practices. The concepts of compliance with laws, anti-corruption, anti-competitive, and social responsibility in integrity management are closely related to the Company's goodwill, which is one of Advantech's sustainable operations.

Key promotion projects in 2023

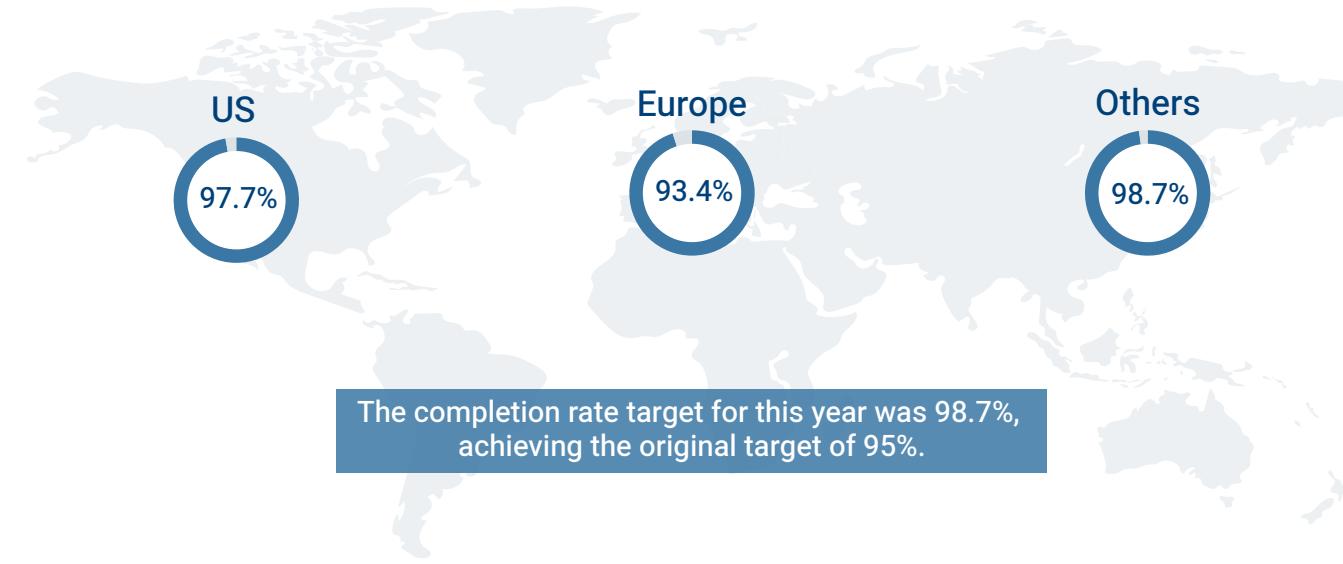
- Global policy on the addition of "Advantech global entertainment and gift policy"
- Set clear boundaries for hospitality and gifts
- Procedures for disposing high-value gifts

Promotion and implementation of integrity management

Sourcing Department	IT Department	Human Resources Department	Legal Department
Request suppliers to sign the Integrity Commitment Letter through the supplier management system. In 2023, the response rate was 95%.	Establish education and training related systems, including regular reminders to watch education and training and test systems.	Organize education and training, including Integrity Business Code and Advantech Code of Conduct, etc.	Legal compliance, and report to the board of directors once a year. Under the supervision of directors, ensure compliance with relevant regulations.
Audit Department			Set reporting handling guidelines and establish effective accounting and internal control systems to audit and prevent unethical behavior.

Integrity management education and training outcomes

2023 Completion rate of the online integrity management test



The following were Advantech's 2023 major regulatory violations:

*Definition of material breach of laws and regulations:

Any breach of laws and regulations as per the material information listed by the Financial Supervisory Commission (Taiwan, ROC).

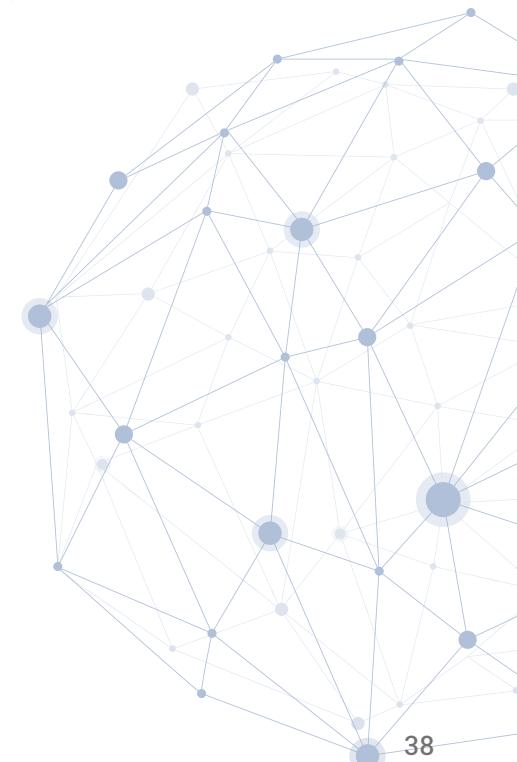
- Major regulatory violations (including incidents of fines and non-monetary sanctions) in 2023
 - Corruption and bribery incidents: 0
 - Incidents of discrimination and harassment: 0
 - Breach incidents of customer privacy data: 0
 - Conflicts of interest: 0
 - Incidents of fraud, money laundering, and insider trading: 0
 - Anti-competitive behavior, Antitrust and Monopolistic Practices, Operate market events: 0
 - Other incidents related to integrity management or any major violations of laws and regulations: 0
 - The overall number of incidents for "Incidents of anti-competitive behavior, antitrust and monopoly behavior, and market manipulation" in 2023 is 0. Therefore, no monetary loss due to litigation: \$0.
- Direct or indirect political contributions in 2023: NT\$0



For compliance with laws and anti-corruption information, please refer to Advantech's official website: [Major Internal Policies and Actions](#), [Advantech business Conduct](#), [Guideline for Insider Trading Prevention Management](#)



For internal audit system-related information, please visit Advantech's official website: [Internal Audit](#)



Tax Policy

Advantech adheres to the spirit of altruism, aspires to, and is committed to giving back to society while the Company is thriving. In terms of tax policy, it is our responsibility to pay reasonable taxes to the societies and economies where we conduct business, to refrain from engaging in aggressive tax arrangements, and to comply with all relevant tax laws and regulations. According to the Group's tax policy, Advantech headquarters and its domestic/overseas subsidiaries shall abide by the following principles:

1. Act at all times in compliance with the spirit and the letter of the relevant tax laws and regulations in the countries in which we operate.
2. Advantech complies with Organization for Economic Cooperation and Development (OECD) Transfer Pricing Guidelines to prepare three-tier transfer pricing documentation.
3. Transfer pricing is set based on the "arm's length principle." Profits from each operating entity are reasonably remunerated for the risk and complexity of each entity's activities.
4. Advantech's major decisions are made mainly based on business purposes, and then supplemented by tax analysis to search for optimal solutions.
5. Do not engage in any arrangement that transfers value created to low tax jurisdictions or tax havens simply for reducing tax burden. Do not use tax havens or tax structures whose sole purpose is for tax avoidance.
6. Assess tax risk periodically and reduce it by negotiating Advance Pricing Agreement (APA) with local tax authorities in the countries Advantech generates high income.
7. Build mutually respectful relations with tax authorities based on mutual trust and communication, information transparency, and tax payment with integrity.



Tax Governance

Advantech is subject to tax laws and regulations in the various jurisdictions in which it operates or conducts business. Changes in tax laws and regulations could increase tax liabilities and compliance burdens, which will have an adverse impact on business operations. In order to effectively manage tax risks, Advantech complies with the tax laws and regulations, understands its tax liability and compliance status, identifies potential tax risks, prioritizes the issues, and handles them on a case-by-case basis. Technology tools are also being used for effective tax management. The aforementioned tasks and results are regularly reviewed by the management.

The strategy development of global finance and tax is led by the management, which delegates day-to-day responsibility to the headquarters' finance manager. Local accounting teams execute the tax filings in compliance with tax laws and regulations. In addition, Advantech has engaged external tax consultants and CPA firms for tax reporting and compliance services. Advantech's Audit and Risks Committee, delegated by the Board, oversees the quality and integrity of the accounting, auditing, and financial control practices of Advantech through periodic reviews of certain major matters. These include accounting policies and procedures, internal control systems, legal compliance, and corporate risk management, among others. Advantech's Tax Policy is reviewed by the Audit and Risks Committee and approved by the Board.



A Tax Payment Status

Country	Revenue	Net profit before tax	Income tax paid	Income tax accrued (current year)	Number of employees
Taiwan	45,445,230	13,087,184	2,546,066	1,865,784	3,588
China	26,379,413	362,135	-15,036	55,180	3,357
Japan	4,149,165	350,652	165,656	116,066	232
Korea	2,428,278	107,064	23,940	23,721	129
Europe	12,789,290	387,638	70,432	80,063	525
United States	20,556,485	1,363,254	461,190	316,029	536
Other	3,116,425	1,820,991	63,011	20,523	462
Total	114,864,286	17,478,918	3,315,259	2,477,366	8,829

Table 2.1.2: 2023 Revenue, net profit before tax, tax information, and number of employees (Unit: NTD thousand)

A Effective Tax Rate

The Group's effective tax rate and cash tax rate for 2022 and 2023 are as follows:

Item	Effective tax rate		Cash tax rate	
	2022	2023	2022	2023
Net profit before tax	13,442,860	13,266,699	13,442,860	13,266,699
Income tax expense / income tax paid	2,700,301	2,477,366	1,255,369	3,315,259
Add: R&D tax incentives	512,000	367,696	512,000	367,696
Add: COVID-19 tax relief	–	–	1,099,948	-439,979
Income tax expense / income tax paid (with adjustments)	3,212,301	2,845,062	2,867,317	3,242,976
Effective tax rate	20.09%	18.67%	9.34%	24.99%
Effective tax rate (with adjustments)	23.90%	21.45%	21.33%	24.44%

Table 2.1.3: Effective tax rates (unit: NTD thousand; %)

*Note:

1. The revenue, net profit before tax, and tax information are aggregated amounts from local entities' statutory financial statements and related party transactions are not excluded.
2. The net profit before tax includes investment gain (loss) accounted using the equity method.
3. For the names of all resident entities and their primary business activities, please refer to the appendix of Advantech Co., Ltd.'s 2023 Sustainability Report.

Source: pages 12 to 13 of the FY2023 Advantech Co., Ltd. Consolidated Financial Statements; please refer to the "Consolidated Statements of Cash Flows" on page 15 for income tax paid.

*Note:

1. Effective tax rate = Income tax expense ÷ Net profit before tax
2. Cash tax rate = Income tax paid ÷ Net profit before tax
3. Differences in effective tax rate are explained below:
 - The effective tax rate was lower than the industry group average. This was primarily due to tax incentives for research and development expenditures according to regulations under the R.O.C. Statute for the Upgrading Industries and Statute for Industrial Innovation. Also, the pre-tax super deduction of R&D expenses and the preferential CIT rate for the high and new technology enterprise in China. After excluding these influences, the adjusted effective tax rate were similar to the industry group average.
 - Apart from what mentioned above, Cash tax rate was also affected by timing differences, such as advance payments and tax policies in different countries (e.g. COVID-19 payment deferral that up to 36-month installments in Taiwan.) After excluding these influences, the adjusted cash tax rate was similar to the industry group average.
 - FY2023 R&D tax incentives amount was estimated. The previous year's R&D tax incentives were revised to match the amount reported in the tax returns.

2.2

Information and Cyber Security Management

Item	Explanation
Materiality	As the threat of cyberattacks continues, information and cyber security has become one of the major risks to corporate operations around the world. Advantech recognizes that information and cyber security issues are critical to the company's operational stability, product safety, privacy, and brand value as a global leader in the Internet of Things (IoT). These factors are critical for stakeholders such as employees, customers, and investors.
Management strategy	<ul style="list-style-type: none"> • Improve information and cyber security visibility • Decrease in attack surface • Improvement of information and cyber security governance and risk awareness • Enhancement of information security resilience
Policy or commitment	To safeguard the Company's and customers' interests, we are dedicated to upholding information and cyber security, continuously evaluating the efficacy of information and cyber security management, and minimizing the frequency of information and cyber security incidents.
Impact description	The positive impact of information and cyber security can strengthen the confidence of stakeholders, etc. in corporate risk management and sustainable operations. Advantech established an information and cyber security management organization and adopted the ISO 27001 standard to continuously improve the information and cyber security management system. On the other hand, the negative impacts of information and cyber security breaches on business operations include leak of confidential information, interruption of system services, resulting in damage to reputation, loss of customers, and legal risks to the Company. In terms of security, our company employs a multi-layered defense framework, deploying mechanisms such as firewalls, antivirus software, endpoint protection, privileged account management, and two-factor authentication to continuously assess information and cyber security risks and strengthen security architecture, thereby reducing the likelihood and severity of information and cyber security incidents. Furthermore, our critical systems have completed 8/12/24 3-Tier Snapshot data backups and established off-site backup centers to establish response and handling mechanisms for information and cyber security incidents, thereby mitigating their impact.
2023 Achievement status	<p>The completion rate of the information and cyber security promotion courses was 89%. In addition, the following goals were all achieved the 2023.</p> <ul style="list-style-type: none"> • Microsoft security score of 62% • Endpoint security protection (EDR) deployment coverage reached 83% • The deployment coverage rate of system vulnerability patching tools exceeded 91% • The availability of key application systems reached 99.9%
2024 Goals	<ul style="list-style-type: none"> • Web security filtering and zero trust network access are implemented in the headquarters and Taiwan region • Information and cyber security risk rating up to 80% • The headquarters and Linkou factory achieve compliance with the new ISO 27001: 2022 standard update
2025 Goals	<ul style="list-style-type: none"> • Introduce web security filtering and zero trust network access in the Asia Pacific region, including the headquarters and offices in Taiwan, China, Japan, Korea, Malaysia, and Singapore. • Information and cyber security risk rating up to 85% • China, Europe, and North America achieve compliance with the new ISO 27001: 2022 standard update
2030 Goals	<ul style="list-style-type: none"> • Advantech introduces global web security filtering and zero trust network access • The information and cyber security risk rating score is higher than the industry standard, and the rating score remains no less than 85% • Global Factories achieve compliance with the new ISO 27001: 2022 standard update

Item	Explanation
Action plans	<ul style="list-style-type: none"> Introducing Security Access Service Edge (SASE), a cloud architecture that integrates network security and access control, to enhance the security and performance of Internet use. Strengthen the digital asset management mechanism, grasp Advantech's global information and cyber security risks for improvement, and understand the security status of outsourced third-party suppliers.
Effectiveness assessment	<ul style="list-style-type: none"> Introduce information and cyber security risk rating tools, continuously monitor information and cyber security risk status, and take corresponding improvement measures to gradually improve the information and cyber security risk score. Pass the external audit of a third-party certification company, and maintain operations within the scope of implementation in compliance with ISO 27001:2022 standards.
Stakeholders engagement	<ul style="list-style-type: none"> Employees: Provide mandatory online courses on information and cyber security and complete tests. Customers: Respond to customer questionnaires and audits, and provide relevant supporting records as needed. Suppliers and contractors: All suppliers are required to fill out the Information Security Management Declaration. Suppliers of major components and system services are required to complete the information security risk self-assessment form and conduct regular information security audits. Shareholders and investment institutions: The Company's major action plans and results for improving information and cyber security are disclosed through the Company's annual report and sustainability report. Business partners: Respond to partners' inquiries and provide supporting records as necessary. Government, public associations, and the media: Respond to inquiries from government units and relevant public associations, and provide supporting records as necessary.

Advantech has achieved ISO/IEC 27001:2013 certification for its Information Security Management System (ISMS), expanding its scope in 2022 to include the management of the headquarters' information center and backbone network. In the same year, Advantech's information operations in Europe and the United States also obtained ISO/IEC 27001:2013 certification. Advantech continues to enhance and broaden the scope of its Information Security Management System, establishing standardized systems and processes across strategic, managerial, technical, and awareness aspects. This ongoing effort aims to continuously improve the depth and breadth of cybersecurity governance.

▲ Information and Cyber Security Policy and Organization

The implementation of information and cyber security requires the awareness and full support of the management. To demonstrate the Company's commitment to information and cyber security, Advantech has appointed the President as Chief Information Security Officer (CISO). A cross-departmental Information Security Governance Team has been formed, led by the quality control and information security teams. This team is in charge of promoting information and cyber security in a variety of areas, including computer information systems, physical environments, product security, supply chain management, and regulations compliance. The Information Security Governance Team convenes a meeting every six months to review the management effectiveness, information security-related issues and directions. The Company also regularly reports the implementation status to the risk management committee to incorporate information security into the scope of corporate risk management.

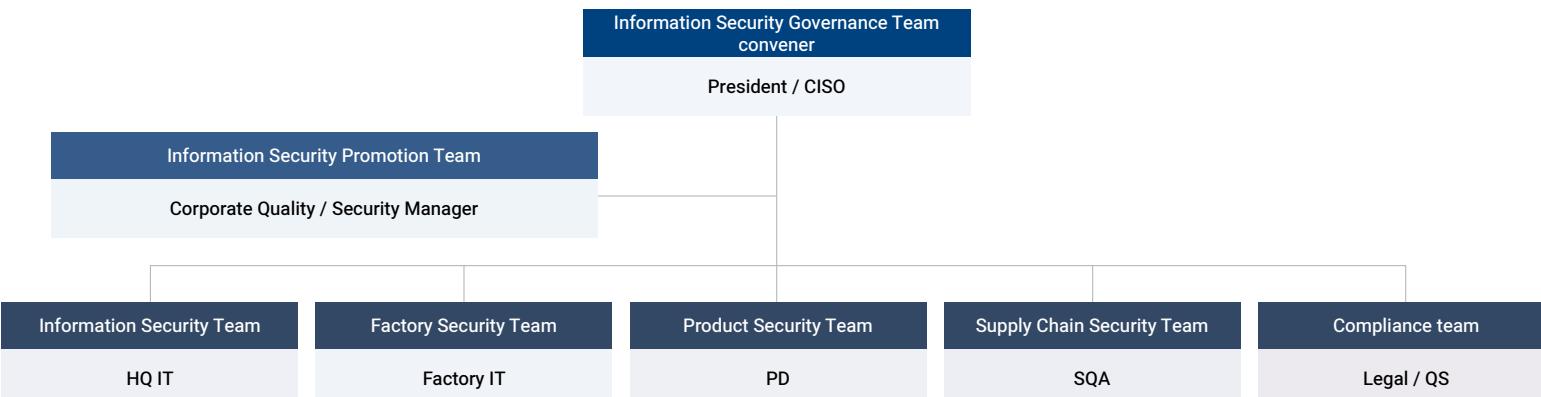


Figure 2.2.1: Organization structure of Information Security Governance Team

Information and Cyber Security Management Strategy

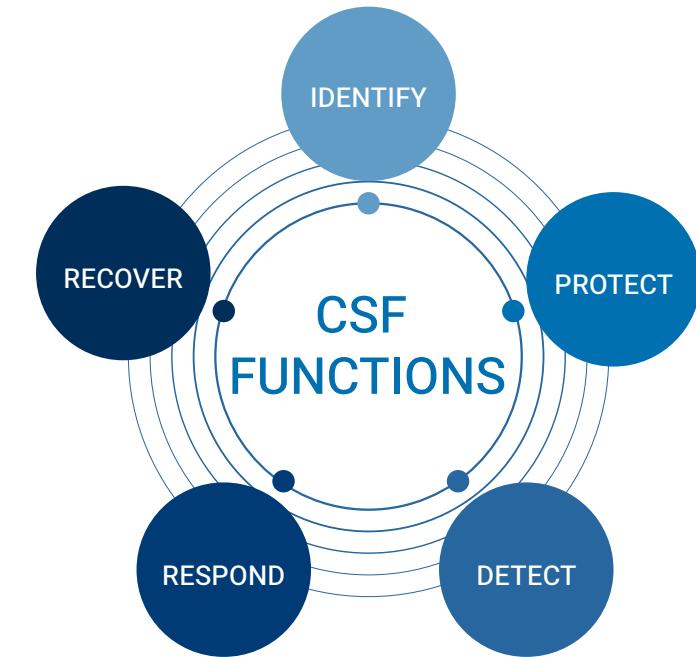
The National Institute of Standards and Technology's (NIST) Cybersecurity Framework (CSF) serves as the foundation for our information and cyber security development roadmap. The framework has five main functions:

Identification, protection, detection, response and recovery are mainly for the different stages of an enterprise's attack, that is, before the event (identification and protection), during the event (detection and response), and after the event (recovery), the measures needed to be taken control.

In response to the United States Securities and Exchange Commission (SEC)'s rules governing cybersecurity risk management, governance, and disclosure of related events for Listed Companies, we have policies and relevant procedures for cybersecurity risk assessments; also supervise the cyber security risks of third-party service providers, and has contingency procedures and cyberattack recovery plans in place for cybersecurity incidents.

Furthermore, we actively participate in the information security organization including Taiwan Chief Information Security Officer Alliance and Taiwan Computer Emergency Response Team / Coordination Center (TWCERT/CC) to acquire cyber threat intelligence, cybersecurity threats, and vulnerability information. By integrating external cybersecurity vendors and expert resources, we continuously monitor new cybersecurity information, technologies, and trends to strengthen our security framework and measures, effectively blocking emerging cybersecurity threats.

In addition, our company continues to assess internal and external cybersecurity risks and trends to develop corresponding cybersecurity management strategies. Our current strategy focuses on reducing the attack surface, improving visibility of cybersecurity risks, enhancing cybersecurity governance and risk awareness, and strengthening cybersecurity resilience. The cybersecurity action plans and key achievements for 2023 will be explained subsequently.



Decrease in Attack Surface

The software used by enterprises ranges from operating systems to business applications for daily tasks. Each software vendor will release patches and security updates to fix vulnerabilities from time to time to mitigate the risk of being vulnerable to attacks. Advantech introduced Endpoint Central, an endpoint management and security solution, in 2023 to strengthen the management of system weaknesses and vulnerabilities and assist with patch operations. It has been deployed on nearly 9,000 computer devices so far, and the coverage will continue to be expanded.

	Taiwan	China	North America
1. Agent deployment rate (Target: 90%)	95.1%	91.5%	91.6%
2. Device onboard rate (Target: 90%)	93.5%	91.7%	92.8%

Target not met Target achieved

Today's enterprises are facing increasingly diverse security threats, such as the security breaches caused by external personnel's equipment, the physical security restrictions that require visitors or employees working from home to circumvent them, and the inability of traditional network architectures to prevent and untrusted network security. The equipment is connected to the Internet, etc. This year, Advantech introduced a network equipment control and network segmentation tool to protect the network connection policy of various information equipment of enterprises and prevent them from malware and virus attacks.

Additionally, the Company has completed Breach and Attack Simulation (BAS) exercises. These exercises employ automated simulations to simulate external and internal threats, lateral movements, and data breaches. The effectiveness of security protection mechanisms is verified by continuously simulating attacks on various assets, ensuring that the Company's defenses are strong and capable of defending against potential security threats. This year, we also commissioned a cybersecurity vendor to conduct vulnerability scans and penetration testing on the Salesforce and IoTMart systems. The test results did not identify any security vulnerabilities beyond low-risk levels.

Improve Information Security Visibility

The traditional concept of information and cyber security protection examines the insufficiency of information security protection capabilities from the Company's internal perspective, but may overlook information such as application security risk, Cubit Score, hacker information exchange, and leakage of account confidential information, which could lead to evaluation blind spots. Therefore, Advantech has introduced information and cyber security risk scoring tools to externally examine the Company's overall security status and identify deficiencies in existing information and cyber security protection mechanisms through the proprietary and open data sources of the vendors, as well as advanced machine learning algorithms and analysis technologies and assist information and cyber security personnel to make improvements.

In addition, in recent years, hacker groups have begun to use these as a springboard to infiltrate suppliers or outsourced companies to intrude into other enterprises, raising the risk of supply chain information and cyber security ecosystems. Advantech also applies the information security risk scoring tool to supplier information and cyber security risk management to grasp the information security status of partners in order to identify and respond to their own risks in a timely manner.

Improvement of Information Security Governance and Risk Awareness

To enhance employees' awareness of information and cyber security, we have included information security as an annual compulsory course, providing e-Learning courses and online tests. In response to the increasing frequency of phishing email attacks, our company conducts social engineering drills to simulate phishing emails from hackers, testing employees' awareness of information security risks. Additionally, we release a security newsletter every quarter. This newsletter includes updates on the latest information security trends, significant domestic and international cybersecurity incidents, important announcements, and more. These efforts are aimed at enhancing awareness and vigilance among our staff regarding information security.



Information and Cyber Security Promotion Course

In 2023, general employees were given online or face-to-face courses. The courses were mainly about common information and cyber security risks and countermeasures, Advantech's information and cyber security policies and regulations, prevention of ransomware and phishing mails, software security control, and information and cyber security incident notification. A total of 8,442 employees and 4,221 hours of employee information and cyber security training courses were completed throughout the Company.



Social Engineering Drill

By simulating company announcements, system notifications, or enticing messages, our employees undergo two rounds of phishing email simulation tests: an initial test and a retest, and a total of 13,689 test emails were sent. The test results still showed that a certain percentage of employees opened the test letters, indicating that the security awareness of employees against phishing mails still needs to be enhanced.



Information and Cyber Security e-newsletter and Information Security Rewards Campaign

- Since the second quarter of 2023, the information and cyber security e-newsletter has been sent to employees around the world every quarter, with a total of 23,718 people sent.
- The Company organized information security rewards campaign to encourage the employees of the IT department to actively participate in the enhancement of information and cyber security and unleash creativity. A total of 10 teams signed up to participate in the competition, and 3 teams received awards.

▲ Enhancement of Information Security Resilience

Considering the possibility of IT services being affected due to internal or external disasters or human errors, Advantech planned a remote disaster recovery at the Linkou factory to achieve mutual remote disaster recovery and remote data backup between Neihu and Linkou through the Nutanix virtual machine. When the Neihu server room is unable to provide services, the remote disaster recovery mechanism in the Linkou server room will continue to provide services for the critical information system. After establishing the remote disaster recovery mechanism, Advantech's IT department completed two disaster recovery drills this year to verify the integrity of the overall architecture and system for disaster response and recovery procedures.

In addition, this year, Advantech introduced the information service incident management platform Statuspage to visualize the service health status of each system, enhance the tracking and reporting of IT service performance and usability, and optimize the process for reporting information service anomalies.

Status of Information Security Incidents in the Last Three Years

From 2021 to 2023, there were a total of 14 information security incidents, but they did not cause a material impact on the Company's business, and there were no instances where customers' personal data was affected or fines were imposed due to the leakage of confidential information. There were a total of 3 information security incidents this year, but they did not cause a material impact on the Company's business, and there were no instances where customers' personal data was affected or fines were imposed due to the leakage of confidential information. The causes of the incidents were cloud service interruption, computer virus attack, and equipment hardware failure. Suffering from cyberattacks (e.g.: hackers, viruses) incidents affecting 1 person, external service disruptions (e.g., utility power, internet connection, cloud service), 3500 people were affected, and equipment failure affected 3500 people.

After the root cause of the incident was investigated, an SOP has been established for handling cloud service interruptions, and equipment availability monitoring and regular maintenance have been enhanced to reduce the possibility of equipment failure affecting business operations. For incidents caused by computer viruses, the Company continues to refine the performance of endpoint protection and antivirus tools, and enhances personnel security awareness education.

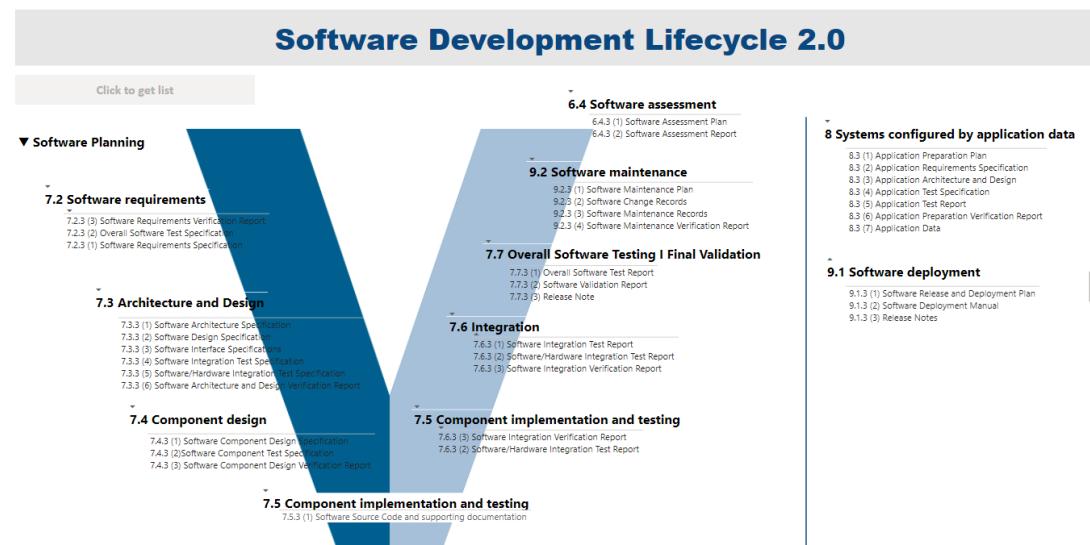
Advantech has set up notification windows for product data security risks or loopholes to receive relevant reports from customers or information and cyber security companies, and then refer them to the product department for resolution. The patch will be announced on the Company's official website and reply to the reporting unit.

In addition, according to the information security requirements of SASB indicators, Advantech's Switch products comply with the requirements of IEC 62443-4-2 certification. The feature introduction is as follows:

- Secure authentication, such as 802.1X, RADIUS, TACACS+ and other remote encryption and authentication functions.
- Communication encryption, such as TLS 1.3, HTTPS, SSH and other connection encryption functions.
- System integrity, such as Firmware endorsement (electronic signature).

The lifecycle of Advantech's Switch products follows the secure development process defined in IEC 62443-4-1, which discloses the Open Source and GPL application scope of the products.

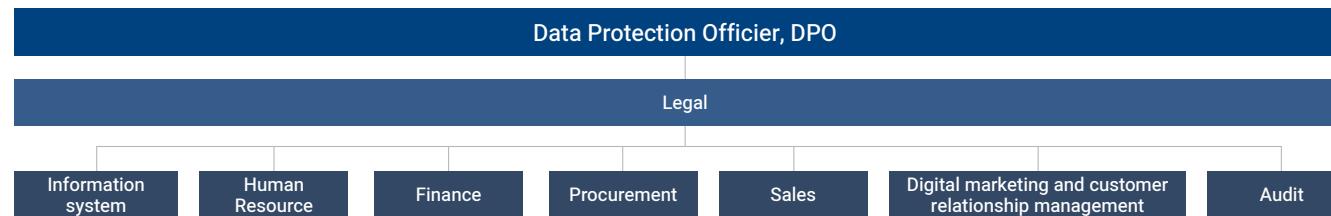
Type of information security incident	2021	2022	2023	Total number of incident by type
Suffering from cyberattacks (e.g.: hacking, virus)	3	0	1	4
Disruption of external services (e.g.: utility power, internet connection, cloud service)	1	0	1	2
Human error	1	3	0	4
Equipment failure	1	2	1	4
The total number of information security incidents for the year	6	5	3	14



Privacy Protection

The scope of Advantech's privacy policy includes the following: Advantech's privacy policy includes but is not limited to employees, customers, suppliers, and any third parties using other services of the Website. To ensure that everyone can use Advantech's various services with peace of mind, Advantech has formed a personal data protection team under the legal department and formulated the "Advantech Co., Ltd. Personal Data Protection Manual" and "Privacy Protection Policy" to comply with the Personal Data Protection Act and the General Data Protection Regulation (GDPR).

Organizational chart of the personal data protection team



Protection of privacy

- Internal data access is subject to privilege control, and users must apply for it through the internal process form.
- New employees are entitled to privacy-related education and training.
- The purchasing unit announces Advantech's privacy policy in the purchaser management system every year, and requires suppliers to sign it during login before performing related operations.
- Privacy-related clauses in the standard contract that both parties are required to abide by.
- Establish Advantech's privacy policy and explain Advantech's processing and protection of personal data in detail. Please refer to Advantech's privacy policy for details:

Chinese <https://www.advantech.com/zh-tw/legal/privacy>

English <https://www.advantech.com/en/legal/privacy>

Privacy-related consent signed



New employees
100% signed



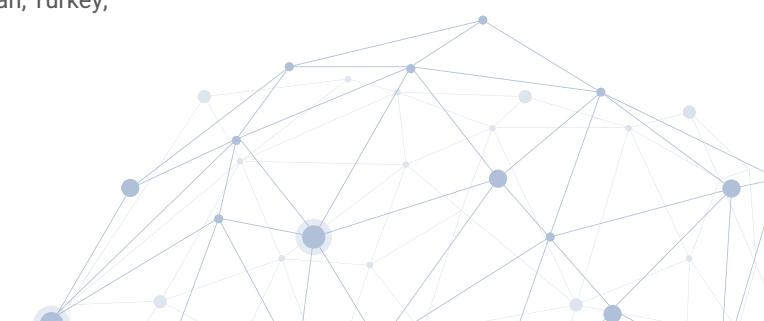
Suppliers
100% signed



Online customers
100% signed

Privacy protection for digital marketing and customer management

- Differentiating the data that can be accessed and edited according to the regulations of the region to which the user belongs to ensure that customer data is properly managed and used.
- The customer data source channel will request customers to read Advantech's privacy policy, and relevant consent will be recorded.
- Corresponding supporting principles have been developed in accordance with the privacy needs of countries, including Japan, Turkey, California, and Europe's GDPR.





2.3

Sustainable Management of the Supply Chain

Item	Explanation														
Policy or commitment	<ul style="list-style-type: none"> Suppliers are required to abide by Advantech Supplier Code of Conduct, and comply with and improve the performance of labor, safety and health, environmental management, ethics, and management systems. 														
Impact description	<p>The impact and explanation of sustainable management of the supply chain on the value chain</p> <table border="1"> <thead> <tr> <th colspan="2">Upstream</th> <th rowspan="2">Corporate operations</th> <th colspan="2">Downstream</th> </tr> <tr> <th>Raw material procurement</th> <th>Product design</th> <th>Customer usage</th> <th>Recycling and regeneration</th> </tr> </thead> <tbody> <tr> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table> <p>● Impact ○ No impact</p>	Upstream		Corporate operations	Downstream		Raw material procurement	Product design	Customer usage	Recycling and regeneration	●	●	●	●	●
Upstream		Corporate operations	Downstream												
Raw material procurement	Product design		Customer usage	Recycling and regeneration											
●	●	●	●	●											
2023 achievement status	<p>100% achievement of the 2023 targets:</p> <ul style="list-style-type: none"> 100% of Tier 1 suppliers comply with Advantech's Supplier Code of Conduct 100% of PVL suppliers do not use conflict minerals Completed 100% improvement for significant suppliers' deficiencies 														
2024 Goals	<ul style="list-style-type: none"> 100% of Tier 1 suppliers comply with Advantech's Supplier Code of Conduct 100% of PVL suppliers do not use conflict minerals Expand the scope of the annual ESG audit to 60% of all suppliers Completed 100% improvement for significant suppliers' deficiencies 														
2025 Goals	<ul style="list-style-type: none"> 100% of Tier 1 suppliers comply with Advantech's Supplier Code of Conduct 100% of PVL suppliers do not use conflict minerals Expand the scope of the annual ESG audit Completed 100% improvement for significant suppliers' deficiencies 														
Key actions or programs	<ul style="list-style-type: none"> Request suppliers to sign and follow the "Advantech's Supplier Code of Conduct" Conduct supplier Conflict Minerals Due Diligence annually and comply with the OECD third-party mechanism Regularly identify high-risk suppliers, and conduct audits and counseling 														
Effectiveness	<ul style="list-style-type: none"> Evaluate every year whether the achievement status (KPI) has improved compared to the previous year according to the set management policies and goals as a method of management improvement Propose improvement proposals annually with reference to the best practices in supply chain management of DJSI and other benchmarking peers 														
Stakeholder engagement	<ul style="list-style-type: none"> Advantech conducts annual evaluations of its suppliers, which include quality, procurement, and ESG sustainability management. Furthermore, the Company holds regular supplier conferences and exchanges to facilitate ongoing communication. Advantech is also actively involved in supplier development and training, providing resources to suppliers to support collaborative development across the supply chain. This collaboration promotes innovation in technology incubation and the use of novel materials. These efforts are detailed in the sustainability report, which provides a comprehensive overview of supply chain issues, allowing stakeholders to fully understand and evaluate the Company's supply chain practices. 														

2.3.1 Overview of Advantech's Industrial Value Chain

Advantech is committed to building a sustainable supply chain ecosystem for the IoT, creating a win-win situation as the core. The Company provides services for the IIoT industry. The components for the manufacturing process are purchased from upstream component manufacturers, assembled and manufactured in-house, and delivered to customers. Due to the characteristics of the industry, the products purchased are various and highly customized. Currently, there are more than tens of thousands of supply materials in the supplier database. To ensure supply chain stability and quality, and to understand its manufacturing process, Advantech regularly conducts supplier evaluations that cover quality performance and implementation, technical process capability, commercial cost management, local supply chain priority, and sustainability. We also communicate with suppliers at all times to incorporate the concepts of corporate social responsibility and sustainable management of the supply chain into the evaluation criteria. It is hoped that through Advantech's sustainable supply chain management, suppliers can improve their sustainability capabilities and become our long-term partners. Moreover, in order to achieve the goal of sustainable management of the supply chain, Advantech's COO routinely reviews the procurement practices and management performance of the supply chain at the Meeting of Quality Management (MQM), an essential operational meeting within the organization.

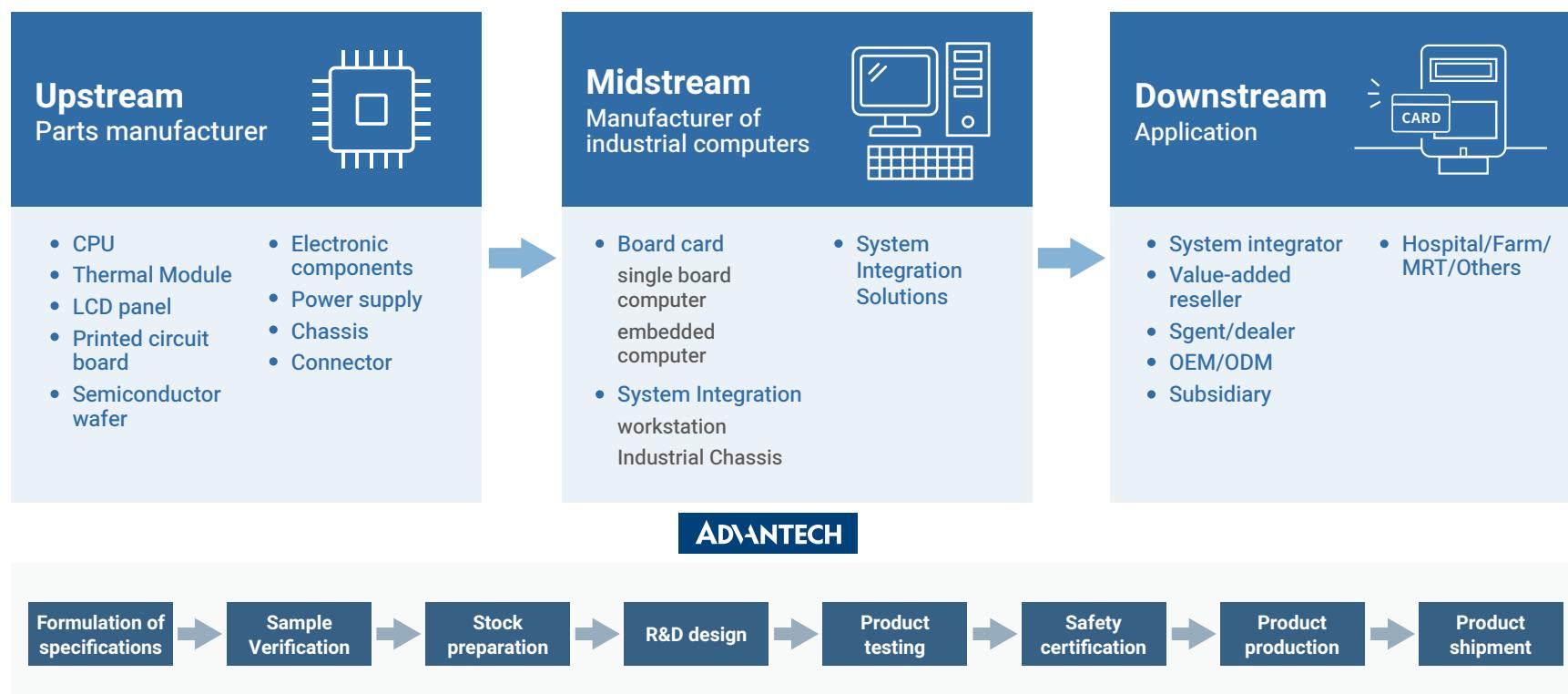


Figure 2.3.1: Advantech industrial value chain

Goal of Sustainable Supplier Relationship Management

Optimizing the core competitiveness of the supply chain	Strengthening the sustainability and resilience of the supply chain
Require suppliers to follow Advantech's Supplier Code of Conduct to improve labor, safety and health, environmental management, ethics and management system performance; actively provide counseling for suppliers to improve core competencies and reduce the risk of operational interruption.	Advantech actively reduces environmental impact of the supply chain. It constantly monitors and evaluates the performance of the supply chain, including the product lifecycle, to identify potential risks and opportunities, and sets electricity, water, waste, and carbon reduction goals together with suppliers to mitigate climate change laying the foundation for the sustainable development of the supply chain.

Table 2.3.1: Short- and medium-term goals of Supply Chain Sustainability Management

Item	Achievements in 2023	2024 Goals	2025 Goals
	100% achieve the target set in 2023		
Requirement to sign Advantech's Supplier Code of Conduct	100% of Tier 1 suppliers (including significant suppliers) comply with Advantech's supplier code of conduct	100% of Tier 1 suppliers (including significant suppliers) comply with Advantech's supplier code of conduct	100% of Tier 1 suppliers (including significant suppliers) comply with Advantech's supplier code of conduct
The execution of due diligence on conflict minerals complies with OECD's third-party mechanism	100% of PVL suppliers do not use conflict minerals	100% of PVL suppliers do not use conflict minerals	100% of PVL suppliers do not use conflict minerals
Audit and counseling for non-conforming improvement work	100% complete the improvement of deficiencies of significant suppliers	<ul style="list-style-type: none"> • Expand the scope of the annual ESG audit • 100% complete the improvement of deficiencies of significant suppliers 	<ul style="list-style-type: none"> • Expand the scope of the annual ESG audit • 100% complete the improvement of deficiencies of significant suppliers

***Note:** Significant suppliers are defined as the following two types of suppliers: PVL suppliers with high annual procurement costs and key raw materials that are irreplaceable, and supplier groups with high sustainability risks identified through ESG evaluation.

Performance Highlights

100%

100% of significant suppliers have completed the signing of the "Agreement for Advantech Supplier Code of Conduct".

100%

100% of new suppliers are evaluated for compliance with environmental standards.

100%

100% of significant suppliers have signed the "Declaration of Non-Use of Conflict Minerals".

100%

100% of significant suppliers completed the counseling and improved their deficiencies.

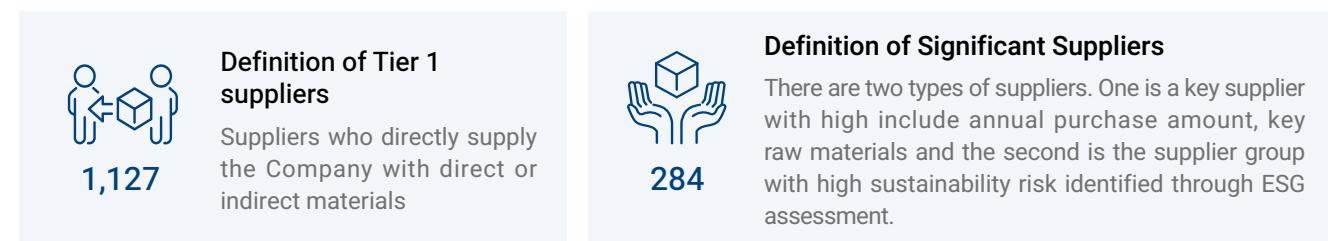
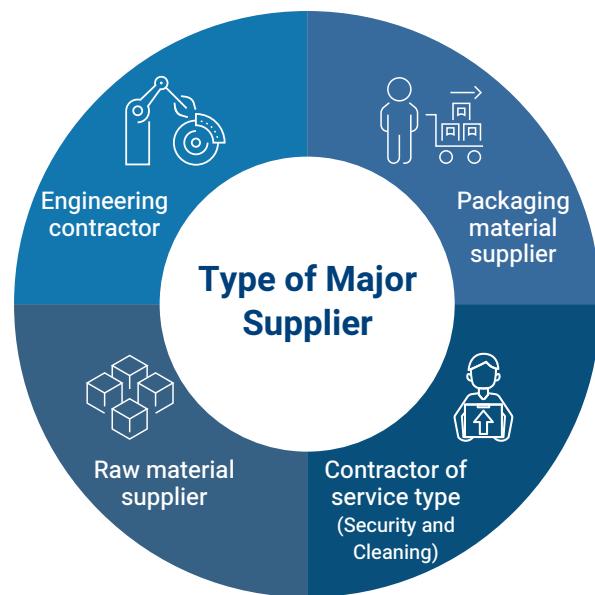
New

Developed 2,024 solutions for multiple sources of raw materials.

Supplier Composition and Procurement Layout

Advantech's product portfolio is diverse and highly flexible. Its products are widely used in the fields of embedded computing for the IoT, industrial computers and peripherals, cloud computing and industrial automation, and communication systems. Therefore, the supply chain is also active, diverse, and closely interrelated. The raw materials supply chain includes IC, printed circuit boards, electronic components, wires, plastic parts, metal parts, packaging materials, etc. Advantech's main suppliers are divided into raw material and packaging material suppliers, and security, cleaning, and engineering contractors. Among them, raw material suppliers have a significant impact on operations and production. Therefore, Advantech has divided raw material suppliers into 2 categories according to their attributes, including direct materials (materials directly related to production) and packaging material suppliers (materials or packaging materials not directly related to production).

In order to effectively manage raw material suppliers and resource allocation, Advantech selects suppliers with high annual procurement costs and suppliers of key raw materials and irreplaceable ones as PVL suppliers. It also uses ESG evaluation to identify supplier groups with high sustainability risks. These two types of suppliers are significant suppliers as defined by Advantech. Advantech has identified 284 significant suppliers, accounting for 65.3% of total procurement volume.



Distribution of supplier procurement in 2023

Category		Number of suppliers		Proportion of procurement amount	
Significant suppliers	Significant tier 1 suppliers	284	225	65.3%	36.9%
	Significant non-tier 1 suppliers		59		28.4%

Prioritize Locally procurement

In order to deepen strategic regional cooperation and reduce carbon dioxide emissions generated from the manufacturing and transportation processes on the environment, Advantech continues to implement a localized procurement strategy. Over the years, Advantech has prioritized procurement from local suppliers. Overall, Advantech only purchases from its factories in Taiwan and Kunshan. In 2023, the local procurement amount in Taiwan was NT\$11.53 billion, with a ratio of about 89%; Advantech Kunshan's local procurement ratio is about 40%* of the total due to some electronics and peripheral raw materials are uniformly purchased by Advantech Taiwan. The overall proportion of local procurement increased slightly to 71% in 2023. The proportion of the Company's local procurement amount in recent years is shown in Figure 2.3.2.

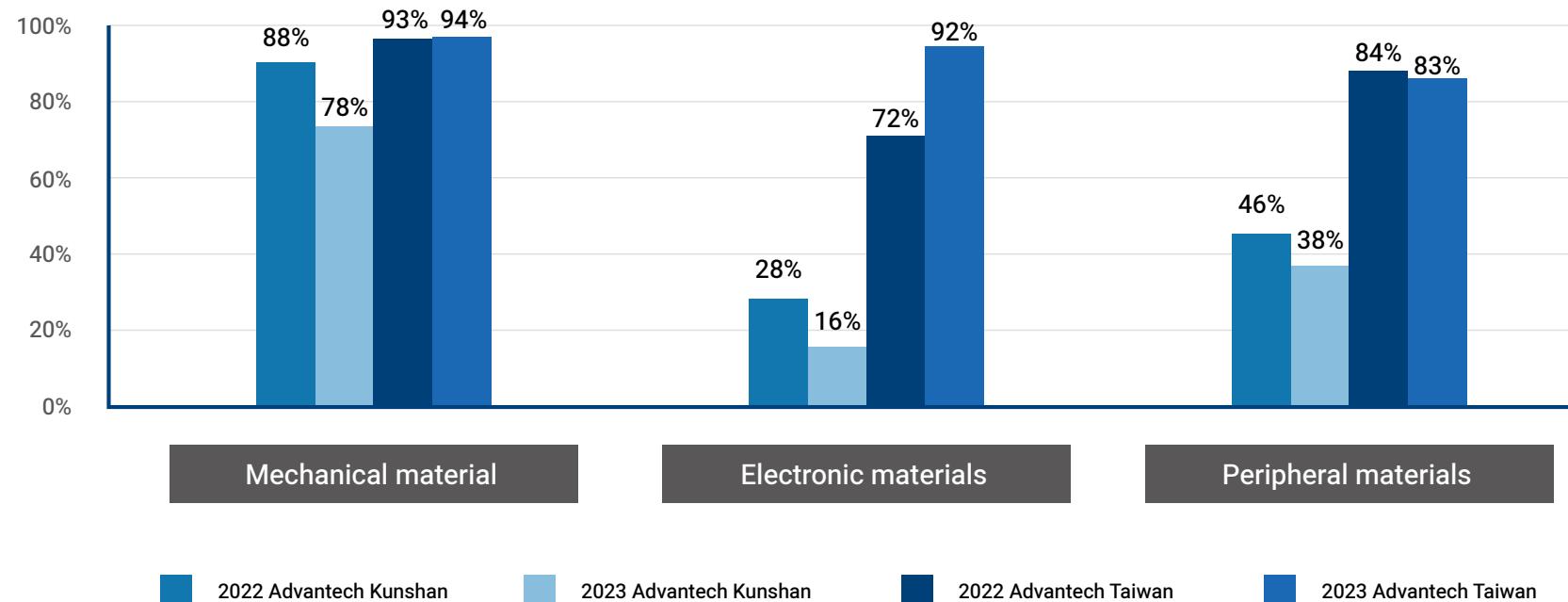


Figure 2.3.2: Local procurement ratio of Advantech Taiwan and Advantech Kunshan, 2022-2023

***Note:**

- 1 Definition of procurement locally: Advantech Taiwan – transaction counterparty is a manufacturer having a uniform invoice number for a for-profit enterprise in Taiwan; AKMC – transaction counterparty is a domestic manufacturer in mainland China.
- 2 Kunshan Electronics' decrease in the proportion of local procurement is mainly due to the switch to the self-purchasing strategy in 2020, but most of the self-purchasing suppliers are agents registered in Taiwan.

2.3.2 Supply Chain Management Strategy

Advantech believes that sustainable supply is an important commitment for corporate sustainability, and is aware of the impact of geopolitical challenges on the supply chain. It aims to deepen our relationships with global customers and partners through consistent global brand power, create sustainable corporate value and jointly establish an industrial chain for mutual benefit and common prosperity. Advantech has a global procurement unit and a supplier quality management unit to implement supplier management and symbiosis to control the supplier selection criteria and process, conduct the risk assessment, performance assessment, audit counseling, education, training, and organize supplier conferences. Implement the continuity requirements in the daily management of the supply chain. Advantech's procurement strategy aims to diversify procurement risks and reduce costs. Therefore, more than two suppliers are used to ensure substitutability and competitiveness with each other; for electronic parts with high commonality, Advantech has established a second source of parts management mechanism; safety stocks are established for major materials to prevent risks caused by material shortages or quality problems. Advantech assigns dedicated procurement staff to analyze market information based on the expected level of availability. Through regular review of market dynamics, a centralized procurement strategy is adopted, and a list of PVL suppliers is established. Paying attention to suppliers' capabilities in cost, quality, delivery, sustainable supply, and improving cooperation efficiency to obtain high-quality materials and stable delivery times.

In addition to evaluating the labor, environment, and business ethical management of our operations in accordance with the RBA Code of Conduct, Advantech also actively requests the sustainable management of the supply chain by requiring suppliers to sign the "Consent form for supplier code of conduct." In addition to local laws and regulations, we also regulate business behavior in various aspects such as labor rights and interests, health and safety, environment, business ethics, and management system. At the same time, suppliers must also communicate this requirement to their next-tier suppliers and monitor their compliance. Take practical actions to build a more resilient and influential supply chain.



Figure 2.3.3: Advantech supplier management strategy

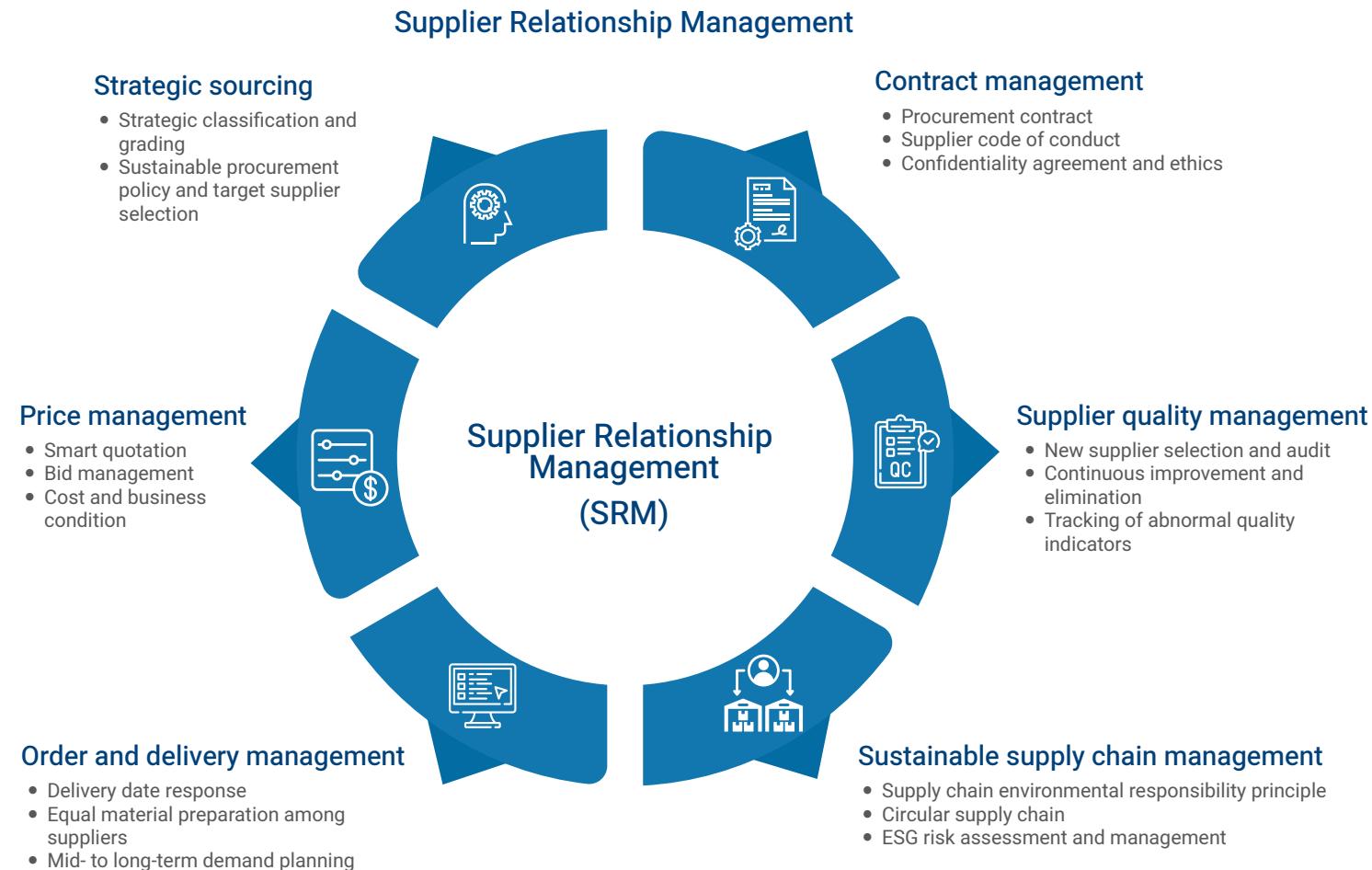
In addition, for the selection of new suppliers, Advantech requires suppliers to sign the purchase contract and the "Consent form for supplier code of conduct" since the recognition stage, unless the products of Advantech are widely used in the market and have passed the international standards, which can be listed as qualified suppliers through the certification of the evaluation team with supporting documents, and others must undergo on-site audits, focusing on quality, procurement, ESG sustainability management, and other fields.

Table 2.3.2: Overview of Supplier and Contractor Management

Type	Management principles	Implementation ratio	Future management priorities
All significant suppliers A total of 284 suppliers, of which all of them have completed the implementation and signing.	Conduct supplier profile review by signing the Supplier Code of Conduct Acceptance Form	100%	Include the supplier code of conduct in the contract
	Key suppliers that adopt ESG sustainability risk assessment (including labor, environment, safety and health, ethics, etc.)	100%	Maintain the evaluation ratio
2023 New Suppliers Out of a total of 146 suppliers, 140 have passed the review and became official suppliers.	Conduct supplier profile review by signing the Supplier Code of Conduct Acceptance Form	100%	Include the supplier code of conduct in the contract
	Adopt ESG sustainable risk assessment to evaluate new suppliers (including labor, environment, safety and health, ethics, etc.)	100%	Maintain the evaluation ratio
	Through the Supplier Audit Form evaluation (assessment requirements for quality system, design control, procurement services, etc.)	100%	Maintain the evaluation ratio
2023 Audit of Existing Suppliers The total number of implementations of ESG plans is 11, and all done. A total of 61 quality audits were planned, and 61 are audited.	Perform supplier profile review by signing the "Consent Form for Supplier Code of Conduct"	100%	Include the supplier code of conduct in the contract
	Through the Supplier Audit Form evaluation (assessment requirements for quality system, design control, procurement services, etc.)	100%	Maintain the evaluation ratio
	Passed the "Audit Form for Third-Party Suppliers" (evaluation on quality system, design control, procurement services, etc.)	100%	Increase the percentage of on-site evaluations

▲ Supplier Relationship Management (SRM)

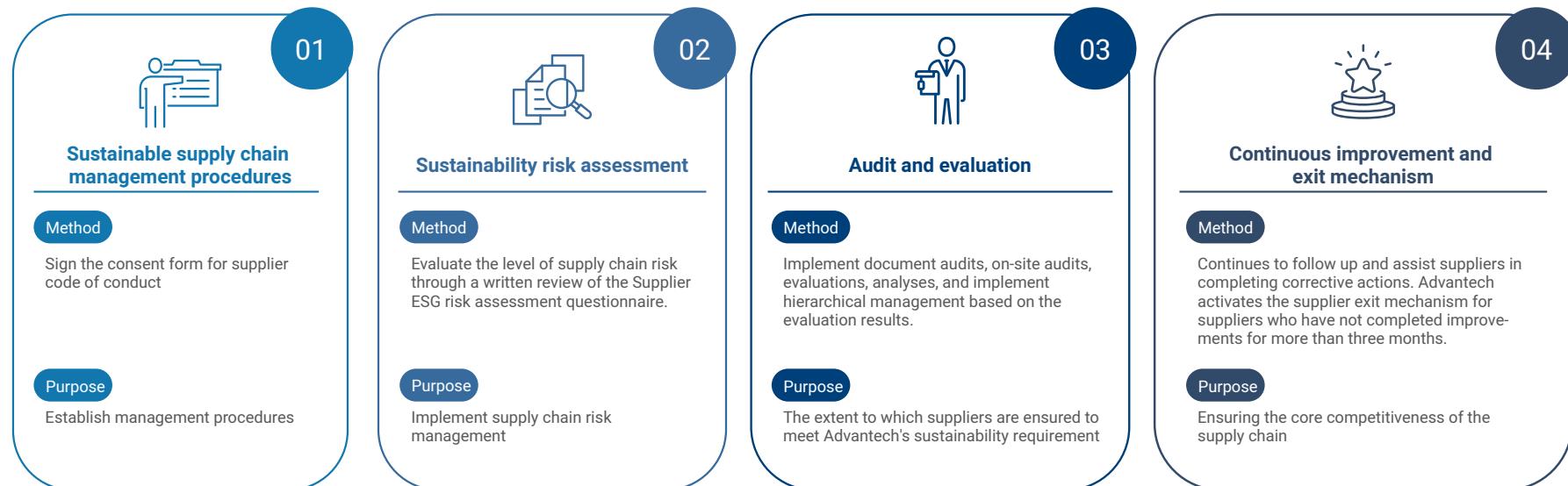
Advantech implements supplier life cycle management and integrates supplier communication channels through the supplier relationship management (SRM) platform. This platform includes functions such as contract establishment, price/quality management, new supplier audits, existing supplier audits, and information release, etc., By controlling online data, we promote offline improvement results to concretely practice a sustainable supply chain.



2.3.3 Sustainable Supply Chain Management

Sustainable Supply Chain Management Implementation

To implement Advantech's procurement and supply chain policy, Advantech has established a four-stage supply chain sustainability management process. Through the annual rolling improvement, circular, and exit mechanism, we ensure that suppliers meet Advantech's standards and improve their sustainability performance.



Supplier Sustainability Evaluation

Advantech has established ESG thresholds for its suppliers (including new suppliers and existing suppliers). To become an Advantech supplier, in addition to signing the supplier code of conduct, PCB suppliers are also required to pass ISO 9001 and ISO 14001 certifications. In addition, in order to understand and identify potential risks in the supply chain, Advantech refers to the Supplier Selection Criteria when conducting supplier screening. During the screening process, factors such as sustainability or business operations are also considered to conduct a supplier survey and evaluation. The ESG screening for but not limited to governance, environmental, social, country, industry, and product collaboration, product and business operation relevancy accounted for 26.7% of the overall procurement evaluation, and was listed as priority conditions of Advantech suppliers. The overall supplier screening items include the following:

Category	Aspect	Selection criteria	Proportion
ESG sustainability	Governance	<ul style="list-style-type: none"> Business ethics, integrity management, information disclosure and intellectual property protection, identity protection Public disclosure or corporate governance evaluation records (such as annual reports or sustainability reports) Financial statement review and analysis 	26.7%
	Environmental	<ul style="list-style-type: none"> Compliance with environmental regulations, environmental management system (waste, air pollution, etc.), carbon management, and hazardous substance management Local suppliers are preferred to reduce transportation energy consumption and emissions 	
	Social	<ul style="list-style-type: none"> Labor regulation compliance, occupational health and safety management, human rights, labor practices Review public litigation records or media information reports to see if there is any risk of negative impact related to social topics, including but not limited to human and labor rights 	
	Country	<ul style="list-style-type: none"> Prohibition of use of conflict minerals and materials on the U.S. Prohibited Materials List Pay attention to existing international sanctions regulations to avoid accidentally violating them Note that the import and export of specific countries or specific items from economic sanctions country 	
	Industrial	<ul style="list-style-type: none"> RBA code of conduct, management of energy and resources consumption during the production process The manufacturing process involves the risk of resource intensity and energy consumption risk (such as the stability and recordation measures of the supply of power generation energy required for production) The trend of regional regulations with potential polluting industries (such as environmental regulations for the painting spraying industry or electroplating industry, or whether there is a trend of banning migration) 	
Quality process	Product	<ul style="list-style-type: none"> The resource intensity of the area where the product is manufactured, such as land use scalability, labor structure, integrity of upstream and downstream supply chains, and delivery time Suppliers who meet specific product certification requirements, such as choosing UL-certified factories to produce specific products 	60.0%
Business cooperation	Operations Related	<ul style="list-style-type: none"> Industry and business analysis: Research on customer base and brand, or industry reputation for its technology and quality Regarding to the business operation, any emergency response procedures for production or not 	13.3%

Supplier Risk Identification and Audit Counseling

Since 2021, in order to improve the core spirit of sustainable supply chain management, Advantech has issued the Advantech ESG risk assessment audit form to significant suppliers every two years. In addition to completing the questionnaire concerning their performance in four key sustainability domains (labor, health and safety, environmental management, and ethics), suppliers are obligated to furnish pertinent corroborating materials, including certificates of management system verification or operational documents pertinent to the subject matter. The outcomes of suppliers' self-evaluations form the foundation for subsequent sustainable risk management. In order to ensure that risks can be effectively controlled and reduced, the goal of this audit is to identify suppliers with potentially high risks in terms of economic, environmental, and social aspects, to track the risk items of high sustainability risk suppliers annually, and to provide counseling and audits to high sustainability risk suppliers to ensure their compliance. After summarization, a total of 271 significant suppliers were surveyed in writing in the ESG sustainability risk assessment survey in 2022, and the overall response rate was 100%. In 2023, we also conducted written follow-up on a total of 11 high sustainability risk suppliers, with a follow-up rate of 100%.

Advantech has set suppliers that if the audit result score is lower than 80 points or the suppliers have a high sustainability risk critical item, the supplier will be requested to propose corrective measures for the deficiencies, and will correct the deficiencies and reply within three months. If the supplier still cannot solve the problem, the supplier's tier will be canceled.

According to the results of the current audit and investigation, 4.0% of the suppliers have high sustainability risk, and 11 suppliers with a score lower than 80 points (out of 100 points) have critical projects. Therefore, Advantech designated these suppliers as high sustainability risk suppliers in 2023 and completed the priority on-site counseling and audits. The Company also provides the formulation of improvement measures and ongoing follow-up actions, to ensure that deficiencies are rectified and their risk levels are reduced.

Lastly, in 2023, no supplier was listed as a disqualified supplier due to a violation of major sustainability project specifications in the ESG sustainability risk assessment audit.

Audit items and percentage	Actual/target (number of suppliers)	Actual/target (proportion)
Suppliers performing ESG audits	271/271	100.0%/100%
Significant suppliers performing ESG audits	271/271	100.0%/100%
The proportion of significant suppliers with a total score below 80 points (contingent with critical items)	11 / <15	4.0% / <10%
Implementation of improvement plans for high-risk significant suppliers	11 / <15	100.0% / 100%
Termination of cooperation with suppliers for serious violations	0 / 0	0.0% / 0.0%
Assist high-risk significant suppliers with ESG counseling and improvement	11 / all	100.0% / 100%

Analyzing the performance of each sustainability aspect of risk management, it is found that the business ethics aspect has a relatively high average defect rate of 62%, and the issues covered are mainly procedures or requirements for which ethics-related issues have not been established; the health and safety aspects have a lower average defect rate of 5%; however, there are still some high sustainability risk issues located in the labor aspect, with 19% of suppliers losing score in this aspect, mainly due to the lack of requirements for prohibiting compulsory labor. We will follow up, audit, provide counseling, and require a corrective plan. The total number of audit deficiencies was 21, and the average completion rate for deficiencies was 100%.

Percentage of been provided corrective actions for priority non-conformities and other non-conformities.

100%

Table 2.3.3: Significant suppliers ESG audit deficiencies and improvement actions in 2023

Element	Primary Deficiency Uncovered	Root cause	Improvement Action	Resource provided
Labor	There are no requirements of prohibiting the use of forced, guaranteed (including debt-paid), or compulsory labor, the prohibition of the use of involuntary or exploitative prison labor, slavery, or human trafficking.	Suppliers do not yet have relevant management awareness.	Suppliers are required to formulate relevant policies or measures, and the implementation thereof is requested to be enhanced.	Provide suppliers with suggestions on labor policies or measures for reference and implementation.
Health and safety	Implementation of firefighting, notification, and evacuation training, as described in Article 15-5 of the "Enforcement Rules of Fire Services Act," has not been carried out. The drill shall be held at least once every six months and shall last for no less than four hours, and the local fire department shall be notified in advance.	Suppliers do not yet have relevant management awareness.	Suppliers are requested to enhance the promotion of ESH management regulations and relevant regulatory requirements, and strengthen their implementation.	Provide suppliers with recommendations for fire safety promotion and management for their reference and implementation.
Environmental	Hazardous substance management standards and management measures have not been established (need to comply with environmental regulations such as RoHS and REACH).	Suppliers do not yet have relevant management awareness.	Suppliers are required to establish hazardous substance management standards and conduct regular inspections to ensure the classification and storage of hazardous substances.	Provide suppliers with recommendations on hazardous substance management standards for their reference and implementation.
Business ethics	No commitment, offering, authorization, giving or acceptance of bribes, illegal or inappropriate advantages, or other forms of interest-related procedures or requirements.	Suppliers do not yet have relevant management awareness.	Suppliers are required to formulate relevant policies or measures, and the implementation thereof is requested to be enhanced.	Provide suppliers with suggestions on policies or measures for reference and implementation.
	Whether the information required by laws and regulations is properly managed and disclosed to ensure that there are no false or erroneous contents, and that there are no relevant procedures or requirements.	Suppliers do not yet have relevant management awareness.	Suppliers are required to formulate relevant policies or measures, and the implementation thereof is requested to be enhanced.	
	There are no procedures or requirements to prevent intellectual property rights infringement or illegal duplication, and this includes information dealing with customers.	The supplier has not converted the actual management mechanism into documented information.	Suppliers are required to formulate relevant policies or measures, and the implementation thereof is requested to be enhanced.	
	They did not establish procedures or requirements to ensure that the company's information complies with regulatory requirements and that its public statements are not false or misleading.	The supplier has not converted the actual management mechanism into documented information.	Suppliers are required to formulate relevant policies or measures, and the implementation thereof is requested to be enhanced.	

▲ Supplier Evaluation and Elimination Mechanism

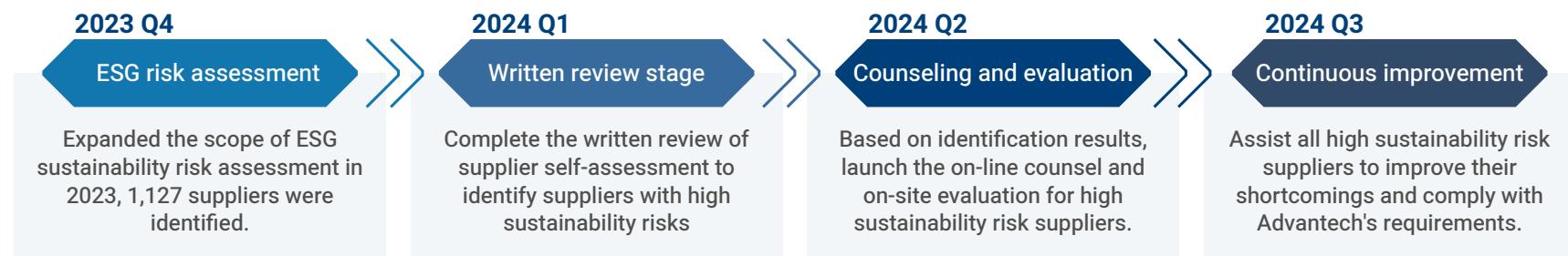
Advantech has established a supplier performance evaluation system to implement supplier sustainability and performance management. The scores are divided from A to D in four levels (A is more than 95 points and D is less than 70 points). The system as a performance evaluation mechanism for managing suppliers, the evaluation mechanism is as follows. A review of the supplier performance evaluation results in 2023 showed that 0 suppliers were rated D, and no suppliers were eliminated that year. Relevant units score suppliers based on the quarterly Management Circle of Suppliers (MCS) and quarterly supplier evaluation results. A grading system is adopted in accordance with the corresponding management procedures, and a reward, penalty, and elimination mechanism is implemented.

Implementation measures and mechanisms	
 Rewards	The Company has been awarded the excellent supplier award for A-grade suppliers for 4 consecutive quarters. The Company is praised and rewarded at the annual supplier conference. In terms of business cooperation, more orders are allocated and opportunities to participate in new projects are given.
 Penalty	C-level suppliers will be included in the observation list, and suppliers are required to conduct relevant reviews and propose improvement measures.
 Elimination	Those exhibiting a rating of C for two consecutive quarters or those exhibiting any other serious violations of Advantech's policies will be suspended from application for new projects, the number of orders will be reduced, and the policy will be changed to "delivered with the second supplier". Immediate execution of the contract will not be possible due to shipment-related issues. The elimination mechanism may be implemented after the introduction of the alternative solutions. For suppliers still unable to cooperate with the Company for improvement within two years, the amount of purchases will be reduced or the amount of purchases will be suspended, and their supplier qualifications will be cancelled.

2.3.4 Enhance Supplier Sustainability

▲ Supply Chain Sustainability Improvement Plan

Starting from 2023, Advantech expanded the scope of ESG sustainability risk assessment from PVL suppliers to tier 1 suppliers. A total of 1,127 suppliers were identified to capture the sustainability risk of suppliers. In order to implement supplier sustainability risk management, we audit the concerned suppliers. The sustainability audit includes written audit and on-site audit. In 2024, we expect to complete supplier online counseling in a two-phase method and conduct on-site audits if necessary to optimize the core competitiveness of the supply chain.



▲ Supply Chain Improvement and Empowerment Plan

In terms of the supplier improvement plan, Advantech has planned supplier counseling, training, and supplier innovation cooperation. After 2023, we continue cultivating and training suppliers, providing supplier resources, developing collaboratively with the supply chain, and driving innovative technology through cooperation. Incubation and application of new materials; in addition, we also cooperate with 6 suppliers to assist suppliers in introducing third-party suppliers/validate inventory consultation counseling to establish new system management, and purchase new high-performance equipment after diagnosis and verification by energy-saving experts to achieve the purpose of energy saving and improvement. To jointly achieve the goals of energy conservation and emission reduction, and reduce energy consumption and environmental impact.



Supplier Improvement and Training Program

Category	Course / Conference Name	Course /Conference Content	Participants	Number of Participants/ Number of Companies	Training Materials		
Supplier improvement Program	Supplier code of conduct	The courses covered the four major topics of labor and personnel, environmental management, health and safety, and business ethics to help suppliers understand Advantech's supplier sustainability regulations.	Tier 1 suppliers	856 suppliers		This course aims to help suppliers understand Advantech's supplier sustainability regulations, which we use as an indicator for supplier ESG risk assessment.	
	Vendor Summit	Advantech invites PVL suppliers to the vendor summit, hoping to achieve friendship, mutual benefit, and mutual growth and sustainable management.	PVL suppliers	80 people/ 33 suppliers		At the Vendor Summit held in 2023, Advantech's President of General Management explained Advantech's sustainability-related management policies to suppliers and jointly swore an oath of Advantech's strategic goals and determination to achieve net zero carbon emissions by 2050.	
	Carbon Management - RE100	The role of RE100 in achieving net zero carbon emissions, and the analysis of the global and Taiwan green power market.	PVL suppliers	384 people/ 285 suppliers		This course helps suppliers understand the positive benefits of renewable energy use on mitigating carbon emissions from suppliers' operations, and explains the importance and supplier-related questions about the use of renewable energy.	
Supplier Training Program	One of the purposes of the supplier training program is to incubate low-carbon co-creation, and work together to create low-energy power supplies to drive innovative technology incubation and new material application. Successful cases include the development of power supplies with high energy efficiency and low energy consumption to enhance product competitiveness. The actual performance is also reflected in the carbon reduction performance of the products.	High Carbon Emission Suppliers	6 suppliers	 Third-party counseling/ verification	 New system introduction	 Purchase new high-performance equipment	 Energy-saving improvement of key energy-consuming equipment and systems

2.3.5 Conflict Mineral Procurement Management

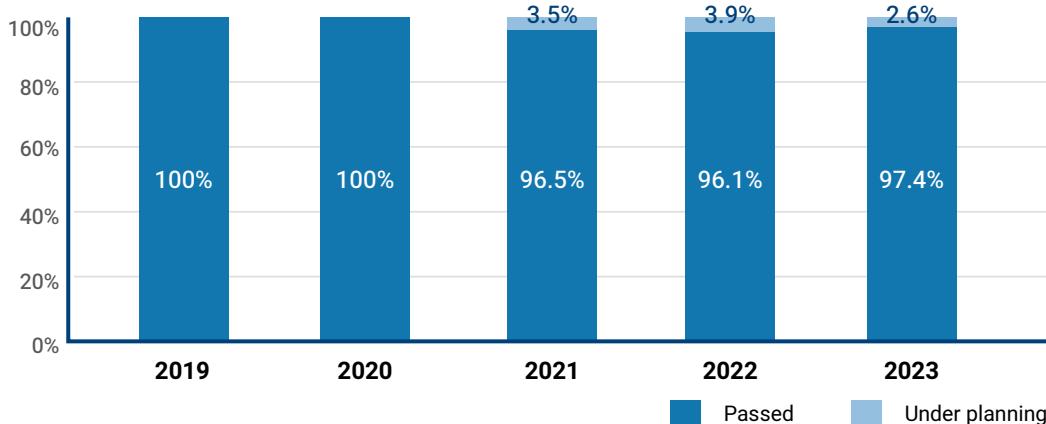
Tantalum, tin, tungsten, and gold are all 3TG minerals required for the operation of electronic devices. A significant portion of our global product portfolio (such as industrial computers and peripherals, cloud computing and industrial automation, communication systems, IoT intelligent systems, and embedded platforms) relies heavily on these materials, particularly electronic components. For example, tin is used in solder, tantalum is used in capacitors, tungsten is used in electronic contacts, and gold is used in electrical connection coatings. These are all crucial components in many of our products. To avoid using minerals from conflict-affected and high-risk areas (CAHRAs), Advantech follows the "Responsible Business Alliance (RBA) Code of Conduct" to implement a policy of not using conflict minerals. The Company not only declares and pledges not to use metals from CAHRAs, but also requires suppliers to comply with and make commitments to it to ensure that Advantech's supply chain respects human rights and does not involve participation in conflict activities. By 2023, 100% of Advantech's key suppliers have signed the "Declaration of non-use of conflict minerals." Furthermore, none of Advantech's own products uses conflict minerals. As a brand-name company, Advantech does not directly purchase raw ores or unrefined 3TG minerals. We have multiple supply chains with mines. Once raw ores are smelted, refined, and converted into ingots, bars, or other mineral-containing derivatives, it is impossible to determine the source of 3TG minerals. SORs are the focal point of ore and are at the best point of the supply chain to understand the source of ore. Suppliers who have a direct relationship with Advantech and influence procurement decisions are considered tier-one (PVL) suppliers, therefore rely on them to help Advantech identify and assess risks in our supply chain and provide information on the SOR for supplying 3TG contained in our product.

Advantech continues to follow the OECD Due Diligence Guidance as the basis for the "Conflict minerals management plan". The Conflict Minerals Reporting Template (CMRT) is used to investigate the source of minerals used by suppliers and identify whether the 3TG smelter has passed the independent third party audit verification, such as RMI/LBMA/RCJ. If there are any non-compliant smelters in the supply chain, and their use is not essential, suppliers are required to cease procurement and use of conflict minerals and to select new mineral sources, providing valid evidence that the new minerals are conflict-free and meet RBA requirements. If the use of these smelters is essential, suppliers must submit a removal plan or ensure that the smelters pass an independent third-party audit verification. Advantech conducts due diligence based on the OECD Five-Step Framework:



According to the conflict minerals due diligence results for 2023, we identified 232 smelters in our supply chain. 226 smelters have been certified as meeting the Responsible Minerals Assurance Process (RMAP) standards (or equivalent cross-recognized assessments). There are currently 6 smelters in the certification process, with qualified smelters achieving a compliance rate of 97.4%.

***Note:** 3TG refers to minerals extracted from the Democratic Republic of the Congo and surrounding countries, such as: tantalum, tin, tungsten, and gold.



2.4

Risk Foresight and Crisis Management

Item	Explanation
Policy or commitment	Advantech has risk management policies and business continuity plans in place, aiming to perform risk impact assessments in advance, promotion of countermeasures, and define handling processes during risk occurrences in order to reduce their possible impacts and influences when risks occur and to facilitate subsequent correction and management. Advantech strives to provide transparent and sufficient information and communication to potentially affected stakeholders regarding major risk events and countermeasures.
Impact description	The risks identified in Advantech's risk management process involve economic, environmental, and social issues. If each risk item is not effectively managed and responded to, the possible negative impacts on the Company include affecting the Company's strategy execution and operational performance achievement, impair the Company's goodwill, or increase the Company's operating costs and expenses. Please refer to the individual risk item descriptions for relevant preventive or mitigation actions. On the other hand, through early identification of risk events and effective response, risks can also be transformed into future business opportunities and competitiveness.
2023 Goals achievement status	<ul style="list-style-type: none"> Expand risk management Training course to all overseas employees, with the target completion rate of more than 80% of global employees (excluding direct employees): Actual completion rate: 86% Facilitate project discussions and actions formation on at least two high-level risk issues: <ol style="list-style-type: none"> Strengthening risk management mechanism of large-scale DMS projects Strengthening of Polish service center in Europe
2024 Goals	<ul style="list-style-type: none"> Expand risk management training course to all overseas employees, with the target completion rate of more than 80% of global employees (excluding direct employees) Facilitate project discussions on at least two major domestic or overseas risk issues Pan strategy risk to be included in risk assessment and risk map
2025 Goals	<ul style="list-style-type: none"> The completion rate of risk management training course exceeded 85% of the global employees (excluding direct employees). Facilitate project discussions on at least three major domestic or overseas risk issues Reasonable evolution of risk management mechanism or organization benchmarking to leading peers
2030 Goals	<ul style="list-style-type: none"> Provide advanced risk management training course for domestic and overseas management, completion rate > 70% Facilitate project discussions on at least five major domestic and overseas risk issues Reasonable evolution of risk management mechanism or organization in comparison with benchmarking peers
Key action plans or programs	<ul style="list-style-type: none"> For key action plans for major operational risks, please refer to 2.4 Risk foresight and crisis management
Effectiveness assessment	<ul style="list-style-type: none"> The management unit builds data dashboards and KPIs for major risks to report and track abnormalities in real time. The Internal Audit team lists risk topics as audit topics for deep dive and follow-up Material risk topics are included in the matters to be tracked at the quarterly risk management meeting and reported to the Board of Directors or the Audit Committee. The risk management team proposes evolution proposals every year with reference to the best practices of benchmarking peers risk management
Stakeholder engagement	<p>Advantech conducts an annual risk survey, targeting mid-to-senior managers, directors, certified public accountants (CPA), and external consultants. The purpose of the survey is not only to identify major risk items, but also to gather opinions on risk management improvement. A risk mailbox was created to encourage and solicit all employees feedback for improving risk management.</p> <p>Major risks and relevant mitigation actions are fully disclosed through various channels such as the official website, sustainability reports, earnings call, and press releases, so that investors, institutional shareholder and other stakeholders can fully understand.</p>

Advantech defines various risks based on the Company's overall operational direction, and implements an enterprise risk management mechanism (ERM) to establish, identify, precisely assess, effectively supervise, and strictly control risk management mechanism. Prevent possible losses within the risk appetite and continuously adjust the best risk management practices according to the changes in the internal and external environment. Major risks identified through Advantech's risk management process include economic, environmental, and social issues. Economic issues include business succession, management of overseas business subsidiaries, sustainable supply chains, information and cyber security, and cross-border tax issues. Environmental issues include low-carbon and eco products, climate transition risks, etc.; social issues include talent cultivation and retention, labor relations, personal data protection, etc.; the results of the annual survey on significant sustainability issues are also used to identify and assess major risk issues each year. Taking 2023 as an example, material sustainability issues were also considered as the main strategic or operational risk issues in enterprise risk management, for the proportion of up to 70%.

Advantech uses the risk management mechanisms to reduce or mitigate the potential impact of risks on the Company's revenue, costs, and reputation; at the same time, we proactively explore opportunities that may arise from risks, such as investing in solar energy, wind power, and electric vehicle-related applications, and developing energy management platforms that can be applied to different industries.

Risk Management Governance Framework and Organization

As the highest governance unit for risk management, the Board of Directors oversees the overall risk management mechanism and approves the revision of policy and procedure. The Board of Directors, Sustainable Development Committee, and Compensation Committee are responsible for the supervision and tracking of pan strategy risk items and risks with a diverse or global impact, while pan operational risks are mainly supervised and by the Audit Committee.

The risk management team is the highest management unit for operational risk management. It is responsible for implementing the risk management process and reviewing progress of risk mitigation actions implementation status quarterly. The responsible managers of each function are responsible for formulating risk mitigation actions and actual implementation. The internal audit team closely supervises or even assists in the execution of all risk management processes and provides opinions. It also conducts audits of various risk topics as needed. Basically, major risks that will be prioritized and included in the annual project audit. The proposal for the evolution of the risk management mechanism is also proposed by the risk management group and the internal audit after joint discussion.

The risk survey and identification process is initiated by the risk management team in the fourth quarter of each year, and the measurement and response plans for major risks are completed at the beginning of the following year. Due to the rapid changes in the business environment, the risk management team and the management flexibly observe and propose changes in various risks that require attention. Add or adjust the identification and measurement of risk items and mitigation plans, and include them in the discussion and tracking of quarterly risk management meetings or senior management meetings.



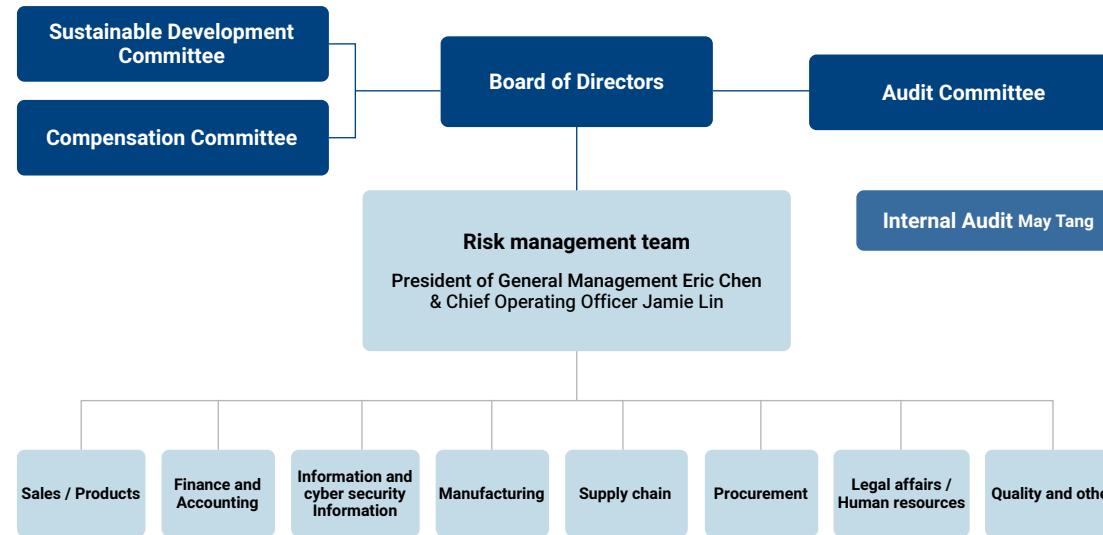


Figure 2.4.1: Risk management organization

Three Lines of Defense Model for Risk Management and Others

Three lines of defense model	Corresponding unit	Role
First line: those responsible for operational risk	Operational/functional unit manager in charge and front-line employee	<ul style="list-style-type: none"> The manager in charge is responsible for planning and implementing risk management mechanism at the first line. Manager in charge and front-line employee are accountable for proper completion of the response actions.
Second line: risk management and compliance oversight	Risk management team: <ul style="list-style-type: none"> Led by Corporate President of General Management and Chief Operation Officer (COO) Depending on the nature of risk topic, the Chairman, President of business units and other senior executives will be invited to join the discussion 	<ul style="list-style-type: none"> Supervise the implementation and effectiveness of risk management response measures. Supervise quality compliance with the quality unit, and supervise legal compliance with the legal unit.
Third line: independent Internal Audit	Internal audit team	<ul style="list-style-type: none"> In-depth participation and supervision of risk management meetings and execution of risk management mechanism. Provide independent and objective assurance services to ensure the effectiveness of risk management and compliance processes.

For the following information, please refer to the risk management page of the Company's website ([Chinese](#)/[English](#))

- Risk governance framework and major risk items
- Risk management policy and procedures
- Risk management mechanism and processes
- Emerging risks and countermeasures
- Major risks sensitivity analysis

Advantech Operational Risk Map

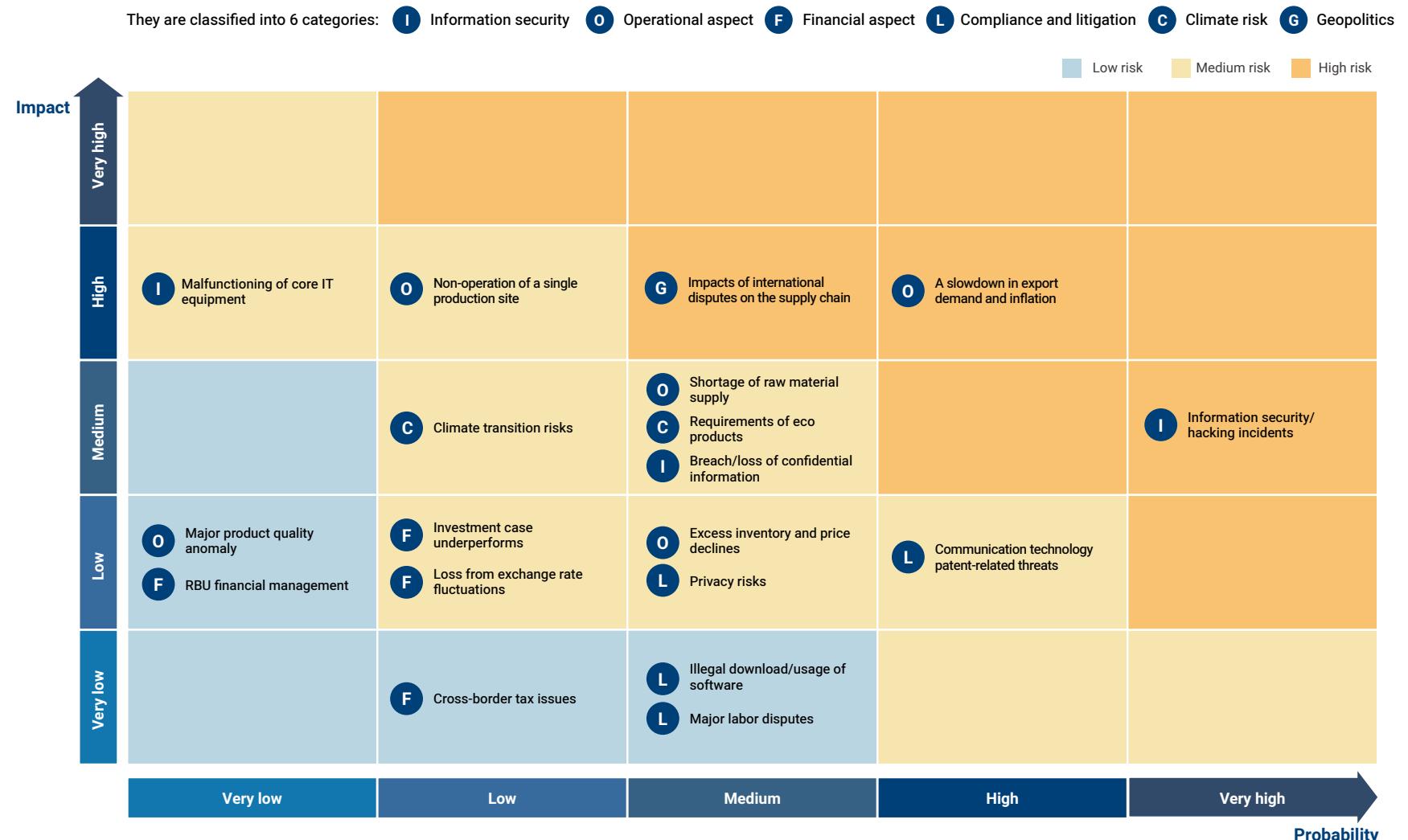


Figure 2.4.2: Pan-operational risk map for 2023

The high and medium risk areas highlighted in orange on the risk map has exceeded the Company's tolerable risk appetite, and it is necessary to adopt risk adjustment strategies and countermeasures as a priority to reduce the likelihood of occurrence or the level of potential impact, and the improvement results are closely monitored.

Mitigation actions to Major Risks and Risk Appetite

Major risk items	Major mitigation actions	Risk appetite and mitigation description
1 Impact of international disputes on the supply chain	<ul style="list-style-type: none"> ● Expanded the selection and use of materials from China ● Expanded Fukuoka Japan office as a cross-strait backup manufacturing site ● Forged an outsourcing partnership in Malaysia to conduct partial product trial productions ● Expanded CTOS assembly capabilities and capacity in major overseas regions 	Considered a high risk, the negative impact of risks on revenue and profitability must be lowered
2 A slowdown in export demand and inflation	<ul style="list-style-type: none"> ● Strengthened software and integration services to enhance customer loyalty ● Strengthened sales-end management of order demands ● Close tracking of unshipped orders, including customized and standard products ● Strict control over the number of employees in each region and operating expenses 	Considered a high risk, the negative impact of risks on revenue and profitability must be lowered
3 Information and cyber security or hacking incidents	<ul style="list-style-type: none"> ● Information and cyber security testing and strengthening of security awareness among employees ● Implementation of the sensitive data protection mechanism ● Information division's information security rewards campaign; information security newsletters are sent quarterly ● Implementation of the information service incident management platform ● Tracked the implementation level of server vulnerability patching 	Considered a high risk, it is necessary to reduce the likelihood of risk occurrence and reduce the losses that may be caused by potential incidents
4 Non-operation of a single production site	<ul style="list-style-type: none"> ● Production transfer between Linkou and Kunshan plants ● External partners supported productions ● Continue to introduce automation in the plants to reduce labor intensity ● Established a comprehensive security management system 	Considered a medium risk, it is necessary to reduce the likelihood of risk occurrence and reduce the losses that may be caused by potential incidents
5 Raw material supply shortage	<ul style="list-style-type: none"> ● Formed a direct strategic supply relationship with key manufacturers ● Vigorously promoted alternative materials and suppliers with low sustainability risks ● Conducted a market trend and industry analysis on key raw materials ● Promoted the critical material convergence project to eliminate the use of risky materials 	Considered a medium risk, it is necessary to reduce the likelihood of risk occurrence and reduce the losses that may be caused by potential incidents

*Note: Due to space considerations, the above description includes the high-risk part and the medium-risk part with a higher degree of impact.

Figure 2.4.3: Major risk items and counteractions



Project highlight 1

Number of employees trained on internal control and risk management courses: About 1,600 people were trained in 2021; more than 4,000 people were trained in 2022; more than 5,000 people were trained in 2023, accounting for 86% of the total number of employees (excluding direct employees).



Project highlight 2

Expansion of recipients of the 2023 risk management opinion survey

A total of 1,055 surveys were sent to board members, external consultants, CPAs, and senior managers at home and abroad. The response rate was about 33%. The number of surveys increased by 6% compared to the previous year.

3

Innovation and Services

- 3.1 Sustainable Intelligent Solutions
- 3.2 Innovative Mechanism
- 3.3 IoT Application Promotion and Education
- 3.4 Customers and Partners Co-Creation



3.1

Sustainable Intelligent Solutions



Item	Explanation
Policy or commitment	<p>Advantech has assembled product R&D capabilities and local technical teams to embrace new opportunities in key application domains such as factory automation, renewable energy infrastructure, EV batteries and charging pile equipment, smart healthcare, and smart retailing.</p> <p>Incorporate the concept of sustainability into the strategic blueprint for new product development and market expansion across business units. Establish quantifiable plans for sustainable products and services, and expand the scope and performance targets of related product departments (such as Environmental and Energy, Smart Healthcare). This will in turn amplify the positive impact on the environment and society through Advantech's products and services.</p>
Impact description	<p>Sustainable intelligent solutions are being used to improve convenience and efficiency in a variety of industries, including smart factories, intelligent transportation, healthcare, energy management, and smart warehouses. These solutions have a positive economic impact because they streamline processes and boost productivity. The shift toward automation is becoming increasingly important, particularly in the context of a global labor shortage, and it serves as a critical strategy for closing the human resource gap.</p> <p>Advantech's iEMS series solutions help enterprises save energy, reduce carbon emissions, and make energy transition to make a positive impact on the environment in the global net zero development trend. However, intelligence and AI will indeed replace part of the labor force and bring corresponding social impacts.</p> <p>In the face of the possible impact on society and employment, Advantech has also long invested in the cultivation of industry talents, such as IoT industry-academic cooperation, IoT industry-academic internship project, and IoT education online certification course. Committed to shortening the gap between learning and application, and bringing more innovative talents in IoT to the world. For the industry-academia education content related to IoT, see 3.3 IoT application promotion and education.</p>
2023 Goals achievement status	<p>Achieved.</p> <p>In 2023, the target for revenue of sustainable intelligent solution ratio is 19%, and the actual result is 39.9%.</p> <p>(Note: In 2023, we calculated contributions to the EU Taxonomy indicators, focusing on mitigating climate change and enhancing climate adaptation. Advantech's sustainable smart solutions were assessed for their contributions to these areas. Therefore, the calculation methods for the two years are different.)</p>
2024 Goals	41% of revenue comes from the sale of sustainable products or solutions.
2025 Goals	42% of revenue comes from the sale of sustainable products or solutions.
2030 Goals	47% of revenue comes from the sale of sustainable products or solutions.
Key actions or programs	<ul style="list-style-type: none"> Establish a clear blueprint for sustainable product R&D and design and improve product integration. With reference to sustainability-related indicators, those with high applicability are included in Advantech's existing eco products and related operating activities specification to gradually enhance sustainability. Establish ecosystem partners. By leveraging the value and technological advantages of partners, we can provide users with better value, thereby creating mutual prosperity and sustainability for Advantech, ecosystem partners, customers (enterprises or individuals), and the earth. Continue to pay attention to the development of sustainability-related regulations, and incorporate the development of sustainable indicators, certifications, or technologies related to products or solutions in the development direction.
Effectiveness assessment	<ul style="list-style-type: none"> Regularly review revenues from smart energy management solutions, smart factory solutions, smart telemedicine, smart agriculture solutions, smart education solutions, smart transportation, and smart logistics. Each business group has monthly, quarterly, and annual review mechanisms to review strategies, plans, inventory, revenue, gross profit, net profit margin, and other revenue conditions on a regular basis. Enter into external awards or competitions. For example, Advantech participated in and exhibited at E-Mobility Taiwan organized by Taiwan External Trade Development Council (TWSE) and was selected as the ESG Achievement logo; USC-365 POS machine won the 2023 Taiwan Excellence Awards (Click here); Performance evaluation via external honors
Stakeholder engagement	In recent years, Advantech has noticed that customers have become increasingly concerned with issues such as energy conservation, carbon reduction, and product carbon footprint. There is also considerable interest in Advantech's social contributions and corporate governance. In response to the above issues, Advantech has various discussions and experiences with customers, and then forwards customers' expectations to the relevant units, including the improvement of product sustainability and the acceleration of product carbon footprint disclosure.

With the vision of "Enabling an intelligent planet" we are committed to achieving sustainable development in the world. By utilizing IoT technology and comprehensive product solutions, we enhance customers' resource utilization and production efficiency, reduce energy waste and carbon emissions, thereby promoting sustainable development. This is achieved through the development of IoT software and hardware products and services in areas such as energy management, transportation and logistics management, smart agriculture, smart factories, telemedicine, education, and maintenance services. Advantech is also committed to gradually expanding the proportion of revenue from sustainable intelligent solutions.

According to the revenue share of sustainable intelligent solutions classified under climate change mitigation indicators and climate change adaptation indicators as determined by the EU Taxonomy Sustainable Reporting Framework in 2023, the proportion amounted to 39.9%, or NTD 25,766,635K. The calculation methodology for this reporting scope is as follows:

Step 1: Refer to the classification, meaning, and peer identification of the Sustainable Development Taxonomy, and then further explain the connotation of economic activities based on Advantech's products and operating activities.

Step 2: Advantech units including product, manufacturing, R&D, procurement, and investment evaluate the relevance of the activities in 2023 based on the economic activity descriptions.

Step 3: A total of 17 economic activities were identified, corresponding to the domains of climate mitigation and climate adaptation. Advantech's 2023 EU Taxonomy Eligible revenue, capital expenditures, and operating expenditure were inventoried accordingly. Collect and disclose financial data of economic activities and issue a summary report.

In the future, Advantech will refer to international sustainability indicators, improve its methodology year by year, incorporate sustainability indicators into its green operations management, enhance the planning of eco products and services, enhance ESG performance, and continue to monitor the latest sustainability developments with regularly updated results.

	Revenue		Capital expenditure		Operational expenditure	
Total amount (Currency: NTD)	Total amount (Currency: NTD) 64,567,697K	100%	Total Amount (Currency: NTD) 1,197,587K	100%	Total Amount (Currency: NTD) 14,033,564K	100%
Total of which is Taxonomy- Eligible Amount (Currency: NTD)	Total amount (Currency: NTD) 25,766,635K	39.9%	Total Amount (Currency: NTD) 477,914K	39.9%	Total Amount (Currency: NTD) 5,600,288K	39.9%
Total of which is not Taxonomy Eligible Amount (Currency: NTD)	Total amount (Currency: NTD) 38,801,062K	60.1%	Total Amount (Currency: NTD) 719,673K	60.1%	Total Amount (Currency: NTD) 8,433,276K	60.1%

*Note: The ratios of capital expenditure and operational expenditure are estimated based on the ratio of revenue.

Table 3.1.1: 2023 Advantech sustainable intelligent solutions financial disclosures with reference to the EU taxonomy



Case highlights 1

Advantech facilitates low-carbon transition of smart electric buses in Vietnam

Advantech has formed a strategic partnership with VinGroup, Vietnam's largest conglomerate, specifically with its subsidiaries VinBus and VinFast, which specialize in smart electric buses. Advantech offers an integrated solution for smart buses that incorporates AI and vehicular networking technologies. Advantech's TREK smart bus management system includes advanced driving assistance systems (ADAS), driver behavior management, passenger Wi-Fi, and an advertising broadcasting system. This collaboration focuses on the integration of cutting-edge technologies to improve the efficiency and user experience of public transportation in Vietnam.

Advantech's TREK smart bus solution includes VinBus electric buses, which provide passengers with an environmentally friendly, safe, efficient, and comfortable public transportation experience. Furthermore, these buses use AI image identification to manage driver behavior in real time, which improves intelligent driving safety features. This includes blind spot detection, speeding, emergency braking, distracted driving, and sending out instant alerts for activities like using a phone while driving. These capabilities ensure the highest level of passenger safety. VinBus smart electric buses are Vietnam's first public transportation equipped with IoT technology, which is committed to improving passenger safety, convenience, and comfort.

Environmental impact: VinBus and Advantech are deploying 2,000 to 3,000 electric buses in major cities in Vietnam. The TREK system improves the safety, comfort, and convenience of buses. The accurate route planning, arrival time estimation, and the free Wi-Fi service enhance passenger satisfaction and willingness to ride, and effectively reduce urban carbon emissions. After investigation with customers, a total of 25.46 million kilometers in two years of operation and maintenance is equivalent to 23,000 tons of carbon reduction. Related information: [VinBus - Home](#)

Social impact: Advantech assisted the bus operator VinBus in collecting mileage, vehicle condition, and battery information to the cloud platform by leveraging IoT technology and experience in the global bus industry. It optimizes energy-saving driving mode, estimate battery health status in real-time as future preventive maintenance data, and provide operational solutions from energy consumption data. The advanced driving assistance system (ADAS) effectively reminds drivers of distracted driving behaviors, reduces visual blind spots and the incidence of accidents, and enhances traffic safety.

Location: Vietnam

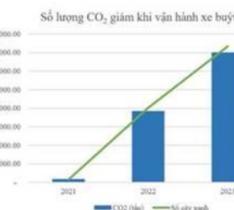
Partners: VinBus, Vinfast, Vingroup, TAITRA



Image source: [Vietnamese consumers are willing to pay for electric buses, cosmeceuticals, and new gadgets. - Business Today \(businesstoday.com.tw\)](https://www.businesstoday.com.tw/vietnamese-consumers-are-willing-to-pay-for-electric-buses-cosmeceuticals-and-new-gadgets/)



- After 2 years of putting the zero-emission e-bus into operation, VinBus has contributed to reducing nearly 23 thousand tons of CO₂ released into the environment.
- The expansion of service deployment helps to reduce CO₂ emissions and serve the mobility needs of customers.



Related Reports:

- [Vietnamese consumers are willing to pay for electric buses, cosmeceuticals, and new gadgets. - BusinessToday \(businesstoday.com.tw\)](https://www.businesstoday.com.tw/vietnamese-consumers-are-willing-to-pay-for-electric-buses-cosmeceuticals-and-new-gadgets.-BusinessToday(businesstoday.com.tw))
- [\[VinBus Opening Ceremony\] Vietnam's first electronic bus route](#)



Case highlights 2

iEMS empowers the semiconductor industry's digital and low-carbon transformation.

Advantech's intelligent energy management system (iEMS) helps customers meet ESG, net zero, and carbon neutral requirements. Solve the shortcomings of customers' production efficiency and energy utilization in the face of the impact of the IIoT on the entire industry. Advantech integrated multiple independent systems, including energy and power systems, into a single intelligent control system to assist in energy consumption management and find the most cost-reducing decisions.

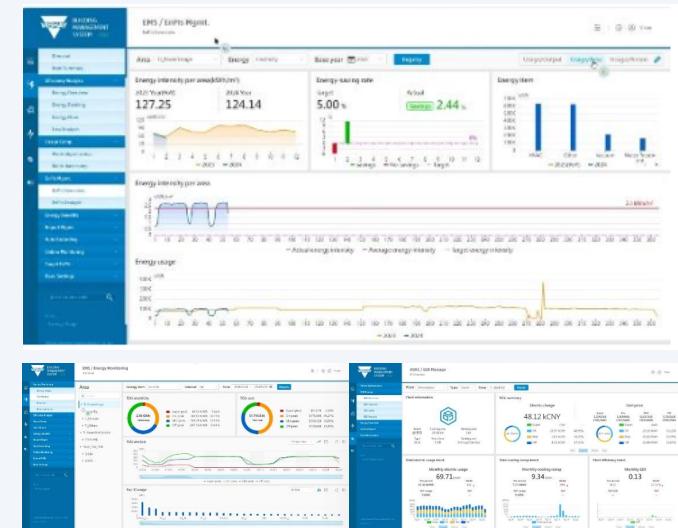
The customer uses the energy management solution (EcoWatch) in the overall IEMS solution to realize the monitoring, statistics, management, and declaration of energy consumption mainly for water, electricity, gas steam, and renewable energy. Identify energy hotspots, guide energy consumption behavior changes, and plan energy-saving and carbon reduction actions. The equipment lifecycle management and maintenance solution (Machine Unite+PHM+Patrol) realizes the connection between process equipment and public facility equipment to perform equipment lifecycle management, improve availability, and reduce downtime and risks.

Environmental impact:

- According to customer feedback, after implementing the solution, monthly electricity consumption is reduced by about 15-30%, and annual electricity bills are reduced by nearly one million yuan, which equates to a reduction of 1,562,277 kWh of electricity consumption. Equivalent to reducing 1,557,590 kg of CO₂ emissions and planting 129,799 trees.
- Analyze the power consumption of the production unit, identify unreasonable power consumption, and optimize the energy efficiency of the manufacturing process.

Economic impact: We proactively reduce energy costs and carbon emissions, accelerate compliance with laws and regulations in various countries, and meet ESG/net zero/carbon neutral requirements set by customers and financial investors to enhance our competitive advantages.

Location: China
Partner: Vishay





Case highlights 3

Electronic paper introduced into smart factory warehousing

Advantech assisted a semiconductor manufacturer to replace the expensive clean paper with electronic paper in the clean room marking wafer cassette to help the semiconductor factory to record the marking of the production process. Wafer cassettes can be marked directly in the clean room and items are clearly marked during transportation after leaving the factory to improve the accuracy and efficiency of the process.

Environmental impact: 4,000 pieces of electronic paper are replaced twice a day, with an estimated 2,920,000 image changes per year and carbon emission reduces by 52,560,000g, which is equivalent to the adsorption capacity of 3.5 hectares of forest.

Economic impact: The project was successfully introduced into the semiconductor industry, which subsequently stimulated the industry's willingness to introduce the industry chain, enhanced its financial operation for the entire industry, and stimulated the overall industry to move towards sustainability.



This electronic paper is placed in the wafer cassette to describe the production work order and production process. When implementing production process record marking in the semiconductor factory, in the semiconductor clean room with high requirements for the working environment, the use of clean paper will increase the cost, and the use of ordinary paper will bring in dust. Therefore, the use of electronic paper in the clean room to label the wafer cassettes can be regarded as an innovation. The overall production process is streamlined and the items are clearly labeled during transportation after leaving the factory. There is no need to re-check traditional paper labeling, which effectively improves economic efficiency.

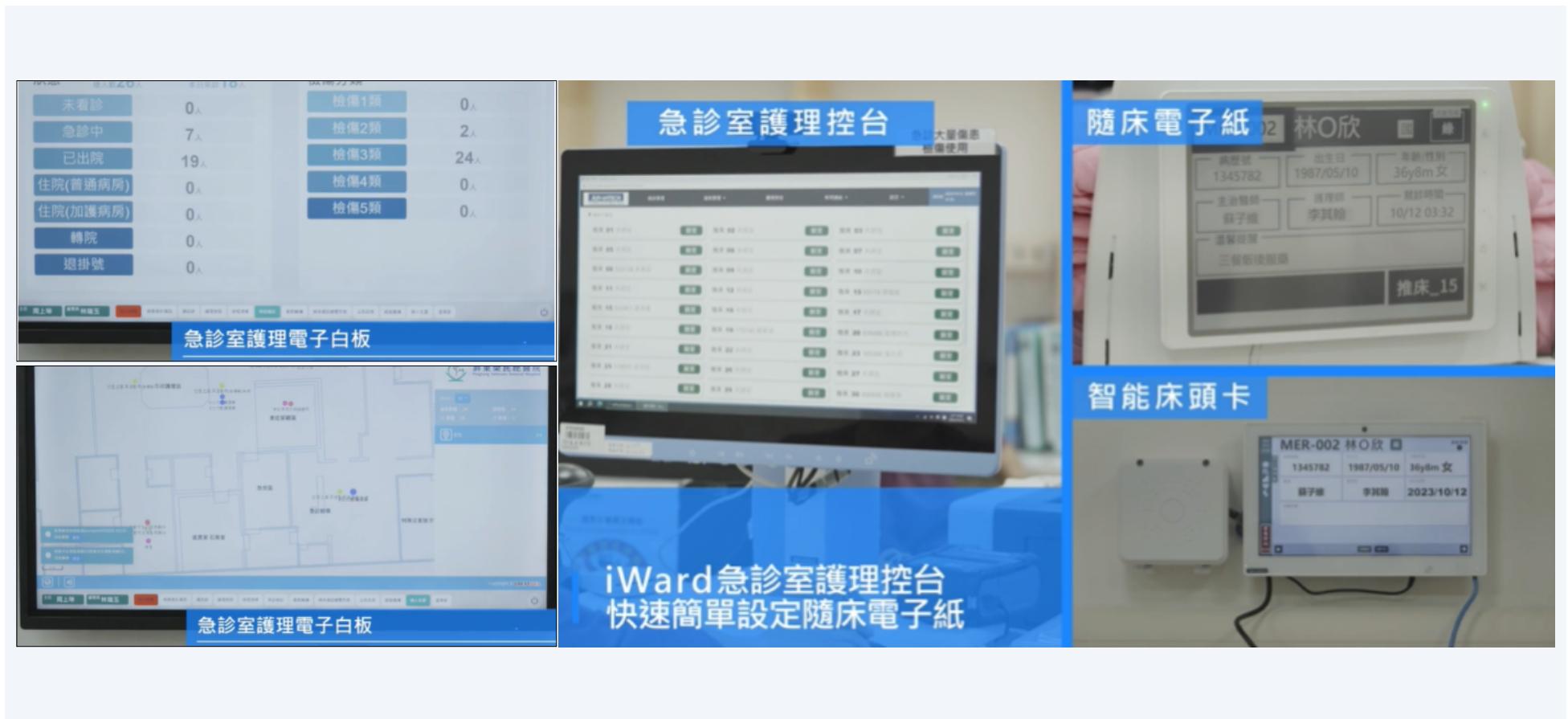


Case highlights 4:

Advantech iWard smart emergency solution - Pingtung Veterans General Hospital



With the help of Advantech, the new Pingtung General Hospital has built a smart medical system to manage and present all medical information of patients electronically from admission to discharge to enhance the precision and efficiency of care and nursing. Compared to the past, medical personnel were in a hurry at the scene, resulting in the failure to update patient information in a timely manner, resulting in the difference in the time, quality and accuracy of obtaining patient information between medical and medical teams. Advantech provides a series of smart emergency solutions for emergency room, such as electronic nursing whiteboard, nursing console, bed electronic paper, smart bedside card, etc., to make nursing and care work more efficient and accurate, and to improve the quality of medical care.



3.2

Innovation Mechanism

Advantech's innovation mechanisms include product, technology, business, and academia collaborations. Under the leadership of the chairman and senior supervisors, Advantech's innovation mechanisms include three major categories and six types of implementation:

Business Innovation and emerging business opportunities

IMAX-C: Includes business units' innovative strategies and practical plans such as product, sales, and organizational reform breakthroughs.

EBO: Advantech colleagues worldwide conducted rigorous analysis and planning for emerging opportunities observed to formulate business plans for Advantech's new growth trajectory.

Innovative products and technologies

A+X: The Chairperson and senior supervisor of the products department empowered product innovation directly and channeled resources to expedite new product development.

MCT/TSU: The Technical Committee was established by the R&D supervisor to engage in centralized and horizontal management of the core technologies of each business unit, as well as to implement the modularization of forward-looking technology sharing (TSU-Technical Sharing Unit).

Industry-academia research and co-creation

University co-creation: Conducted in-depth R&D and practical field verification with domestic and foreign universities to create new technologies and application breakthroughs.

Innoworks: Provided software, computing resources, and online teaching for colleges and universities around the world to encourage the new generation of students to unleash their creativity and engage in practical development.

Advantech's innovation and development blueprint includes the IMAX-C mechanism, which brings new ideas and opportunities to its existing business units. This approach entails establishing new organizations, collaborating with external partners, and creating new products and services. It also emphasizes the consolidation and integration of internal resources. On the other hand, EBO investigates new business opportunities, new markets, and new technologies from the perspective of new businesses with low market maturity or outside the scope of the original business, and nurtures these new opportunities for Advantech's future development. Among these two endpoints, A+X is the extension of the existing business groups' new product strategy from the perspective of market development, while expanding the business territory, and achieving A+X through high-level empowerment and cross-unit integration. With the innovation of new products and businesses of these business units, MCT/TSU plays the role of core technology integration management. Advantech's blueprint emphasizes industry-academia co-creation, as well as Innoworks initiatives, to generate new ideas through academic and research collaborations. These efforts aim to generate innovative concepts about the future of the Internet of Things (IoT) as well as new generation product designs. This strategy is intended to position Advantech favorably in the AIoT (Artificial Intelligence of Things) integration, applications, and services sector, allowing for early ideation and exploration. This innovative mechanism fosters the development of novel business units and annually introduces fresh products to the market. Furthermore, apart from garnering accolades, it facilitates exceptional business performance, thereby empowering Advantech's core business to attain expedited expansion by capitalizing on prevalent trends and state-of-the-art research and development technologies. Examine the effectiveness and trends of innovation through internal innovation projects, stimulate the development of innovative products, and adjust product strategies at any time.

Innovation Management

Different effectiveness indicators are given depending on the nature of the issues that each mechanism focuses on to ensure that innovation measures and mechanisms can maximize their benefits. Each innovation mechanism has its own defined goals (KPIs), conditions for achieving them, and follow-up actions. For example, the number of industry-academia research projects has been set, and a certain percentage of the outcomes has been set for technology transfer or continuation of cooperation with business units. For another example, in product innovation and industrial design, additional rewards are provided, and the revenue generated by new products after commercialization are tracked; for the EBO mechanism of business innovation, senior supervisors form an executive committee, give substantial support to the planning or results of innovative businesses and business models, and track the business development results of business units.

3.2.1 Business Innovation and Emerging Business Opportunities

IMAX-C

Goals

Advantech structures its organization using a Business Unit approach, which includes Strategic Business Units (SBUs) focused on strategy and product development, as well as Regional Business Units (RBUs) dedicated to sales and regional development. Both units work together to oversee the company's operational management. The SBU benefits from the IMAX-C mechanism, which fosters innovation and business development. "I" stands for incubation, which involves nurturing new organizations; "M" and "A" represent Mergers & Acquisitions and Alliances, respectively, which facilitate connections with external partners; "X" stands for X-Product, which focuses on the development of new products and services; and "C" stands for Convergence & Consolidation, which involves the integration of internal resources to avoid redundancy in products or units.

Practices

Each SBU (Strategic Business Unit) product unit submits IMAX-C proposals from the bottom up, based on business level and market focus. These proposals start from individual product lines, are assembled across multiple product lines into product divisions, and further converge into business groups composed of several product divisions. This layered integration forms the overall strategic direction for innovation and management within the SBU.

After the product unit proposed IMAX-C innovation initiatives, the Company teamed up with multiple units within Advantech to conduct research, analysis, and discussions on product and service innovation, business model innovation, and organizational innovation. After the decision is finalized, the ABP (Annual Business Plan) of the SBU will be launched successively, which has become the cornerstone of the continuous growth and development of the SBU.

Results

In 2023, a total of 70 business unit IMAX-C strategic policy plans were produced. Among them are the market opportunities brought by the sustainable wave. In 2023, Advantech established AFE (Application Focused Embedded) to focus on emerging applications such as electric vehicles, robots, drones, and autonomous vehicles. They aim to define industry-specific platforms in collaboration with partners through the establishment of regional ecosystems.



▲ EBD (Emerging Business Development)

Goals

Advantech follows the "Niche Business Unit Cluster" growth model, promotes core business goals with a vision, focuses on industries, and centralizes business strategies. In 2023, further expand the existing EBO (Emerging Business Opportunity) proposal management mechanism and integrate internal innovation incubation, external investment, and industry-academia/startup co-creation mechanisms to form the EBD (Emerging Business Development) mechanism. The goal is to explore innovative business opportunities beyond Advantech's core businesses, verify the feasibility of emerging business models and technologies, in order to expand the business territory and pursue sustainable corporate growth.

Practices

In 2023, we combined IMAX-C's global emerging business opportunities, interaction with external consultants, and the annual "Vote for 2030" event at the WPC (World Partner Conference) to collect VOC (Voice of Customers) and invite key global customers/partners to conduct business tickets for emerging businesses and give feedback on the business opportunities they observe. Six major topics have been selected from nearly a hundred IoT industry opportunities to participate in the EBFT (Emerging Business Focus Topic) process, including GenAI industrial application solutions, industrial robots, green energy and energy storage solutions, digital healthcare, machine vision, and industrial wireless. This entails extensive market research and evaluation in order to create business plans. These plans are then scheduled to be presented at the EPCM (Executive Partner Committee Meeting), where senior supervisors make decisions on internal resource allocation, external investments, and business opportunity maturity assessments. Depending on the results of this assessment, opportunities may lead to the establishment of an incubation center to further develop the business idea, or they may result in the formation of a new BU (business unit) to strategize market deployment.

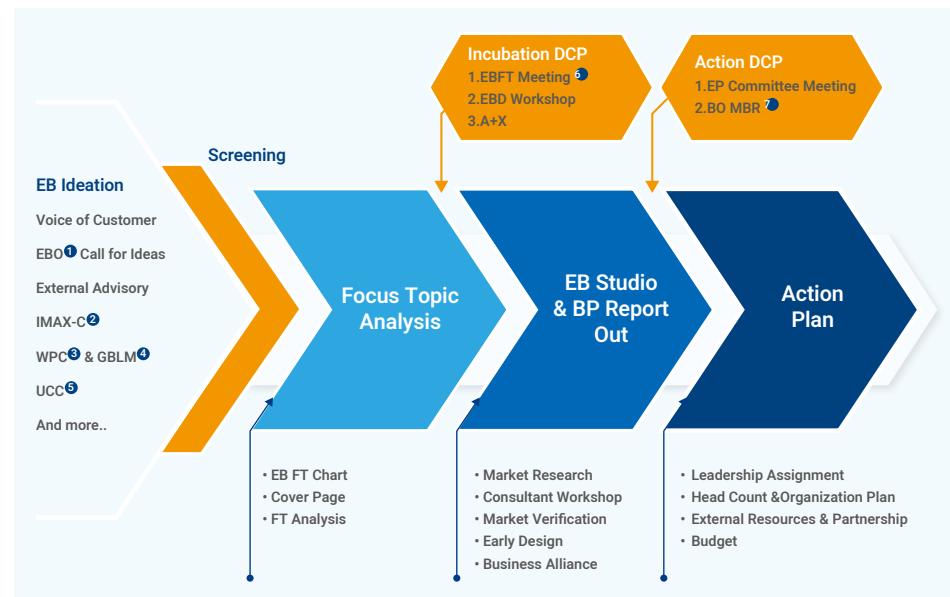


Figure 3.2.1: EBFT (EB Focus Topic) Promotion Process



Figure 3.2.2: "Vote for 2030" on-site voting situation

Generative AI will be the key word in technology and market development in 2023. Advantech will develop solutions suitable for industrial application scenarios by taking advantage of edge computing. Through discussion with external consultants and partners, as well as internal evaluations of product and technology requirements, we have established an AI Mission that will be launched on the market in 2025, which is divided into four major areas and 16 potential applications.



Figure 3.2.2: Advantech AI Mission Toward 2025-Product & Solution

Results

In 2023, nearly a hundred external IoT business opportunities were identified, and six were advanced into the EBFT management process. Focused on issues such as the product and market consolidation and new business opportunities for industrial displays, this initiative led to the formation of three new Business Units (BUS): IDS (Industrial Display Systems), Industrial AI Master BU, and Edge AI Platform BU.



EBD success stories

Established a new business group for industrial displays

Since the establishment of Advantech Emerging Business Development, we have been searching for new business incubation opportunities both internally and externally. Market research shows that Advantech will have a wide range of niches in terms of technology and application for industrial display panels in the future. However, in the past, our corresponding product departments were scattered in various business units.

Therefore, starting from May 2023, EBD initiated a new business plan for industrial displays. After multiple consultations with senior supervisors and an analysis of the business overview, it was decided to consolidate the display product units distributed across various business units into a new business group. This reorganization will help align efforts across multiple market domains. Lastly, in terms of production and manufacturing, Advantech has established an independent production line in order to grasp the technical content and stabilize the production cost.

EBD plays multiple roles in the incubation strategy for this display business group. We also successfully completed the organizational planning in September 2023, and officially established a new business group in December 2023.

3.2.2 Innovative Products and Technologies

MCT/TSU

Goals

A new Advanced Technology Committee, MCT – Meeting of Corporate Technology and Engineering, has been established by senior R&D supervisors. This committee is responsible for horizontally managing the core technologies across different business units and proactively deploying Advantech's forward-looking technology through a modular sharing approach (TSU-Technical Sharing Unit). It focuses on three key areas: digital transformation in R&D, cross-SBG (Strategic Business Group) sharing of IP (intellectual property), and a collaborative platform for core technology management.

Practices

Establish the Share TSU sharing and interoperability mechanism for the R&D teams of each business group to synergize their respective core technologies through horizontal connection and interoperability. The subjects were partitioned as follows: "Engineering," which centered on the growth and advancement of TSU R&D, encompassing the IP Sharing; and "Innovation," which prioritized the development of forward-thinking topics and advanced technology research to enable diverse business groups to collaboratively produce a comprehensive design while reducing the duration of R&D, thereby facilitating product innovation.

Results

In 2023, Advantech improved and innovated and launched 353 new industrial computers, computing modules, edge computing equipment, network equipment, sensing devices, and industrial hardware and software integration solutions. Currently, the MCT R&D Technical Committee is held bi-monthly and chaired by senior R&D supervisors. The committee focuses on three major technical strategic issues for long-term implementation, as shown in the table below: MCT/TSU technical strategic issues

R&D exchange mechanism	Intelligent material selection and parts development roadmap	Product development platform
<ul style="list-style-type: none"> ● Complete digital and comprehensive IP digital platform to provide total service solutions required by various industries. ● Intelligent automatic generation of design blueprints, and intelligent IP to complete circuit development ● Assemble Advantech's bug solutions for quick search and accurate recommendations to shorten product development time and costs. 	<ul style="list-style-type: none"> ● Accurate mainstream material recommendation for refined and accurate mass production and winning customer trust. ● Shorten the use of centralized materials to achieve economies of scale, and quickly reduce the cost of material purchase. 	<ul style="list-style-type: none"> ● Full R&D data and all elements, real-time data transparency, and seamless communication between PM/R&D/manufacturing, saving time and efficiency with building block module digital design, linking processes to accelerate product development.

Table 3.2.2: MCT/TSU technical strategic issues



3.3

IoT Application Promotion and Education

▲ Industry-Academia Co-Creation

Advantech's industry-academia collaboration mechanism has invested industrial resources in the development of "three main pillars" aimed at cultivating IoT talent and bridging the gap between academia and industry. Advantech uses "Industry-Academia co-creation" in the value chain to connect academia, internal employees, and industrial ecosystem partners to develop applications and solutions collaboratively. This initiative directs the integration of Advantech's core competencies and resources to benefit society while fostering strong growth in the IoT industry. It also allows the academic community to direct research toward industrial development, resulting in more job opportunities.

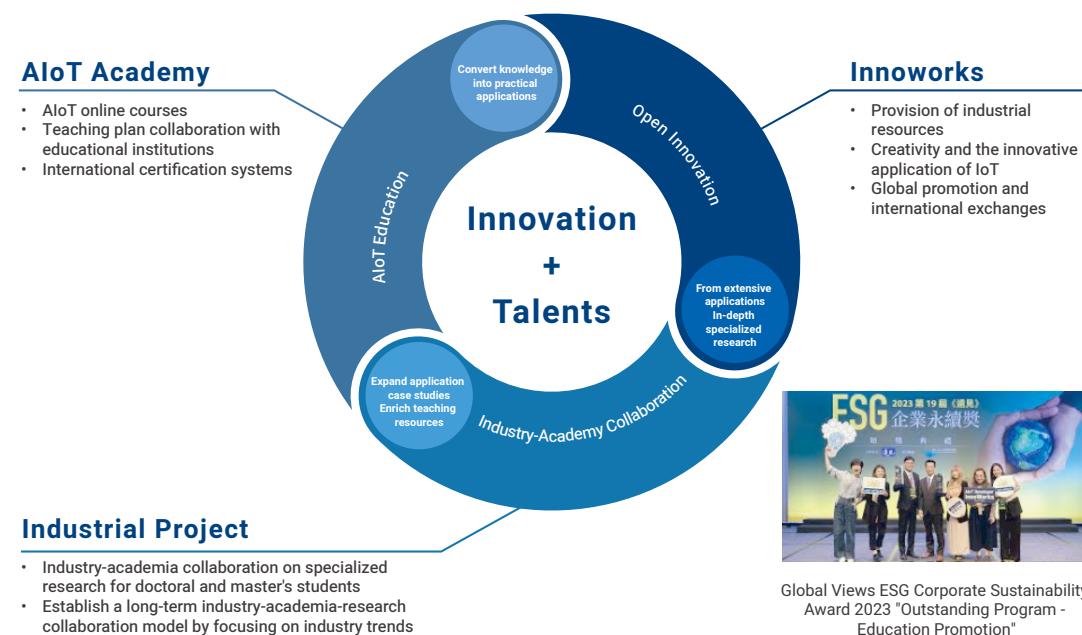
▲ IoT Education leveraging Advantech's Core Business Strengths

Provide the WISE-IoTSuite platform with flexible deployment to respond to the needs of different fields and industries based on leading technologies such as device intelligence, digital twin, industrial big data analysis, and artificial intelligence. Work with partners to create new value for the IoT industry, and jointly build an open and inclusive ecosystem.

▲ Responding to Advantech's Co-Creation Strategy

Advantech is committed to promoting the three-stage growth momentum of AIoT with the concept of co-creation. At present, hardware innovation from the first stage and active promotion of IoT platform operation from the second stage, integrated with IT, OT, Cloud, AI and other technologies to create the IoT cloud platform "WISE-IoTSuite", and gradually develop into the third stage of "AIoT solution development and ecosystem expansion" to meet the needs of more domains and provide integrated AIoT networking solutions. To this end, Advantech also invited the internal teams: "WISE-IoTSuite platform development and technology support team and product department" to join industry-academia co-creation to create high-quality application services and build Advantech's ecosystem in the Industrial IoT.

Promotion approach: Connect three main pillars and projects to promote industry-academia co-creation to incubate IoT innovation and talent.



Global Views ESG Corporate Sustainability Award 2023 "Outstanding Program - Education Promotion"

Industry-Academy Collaboration: Aligning education and application, the promotion of a co-creation ecosystem connects schools' research and development capabilities with industry's technological development requirements. This is accomplished through "industry-academic project collaboration," which is then "integrated with corporate internships for graduate and doctoral students," resulting in "industry transfer," further incubates innovation and talents.

- **Joint Research Projects**

Advantech's industry-academic collaboration program includes annual thematic collaborations with major universities focused on key IoT development trends. These collaborations seek to bridge the gap between industry practical needs and academic research capabilities in order to promote innovation implementation. Two models, Inside-out and Outside-in, create a positive cycle of industry-academic cooperation.

- Inside-out: Corresponds the school's AIoT R&D plan with the internal technology development roadmap. In-depth linkage between market demand and university R&D capabilities with the corporate test-driven model, as well as Advantech's internal and external (customer) field scenarios, to conduct proof of concept (POC) for innovative IoT applications, promoting industry-academia products and the market.
- Outside-in: Review university laboratory R&D programs and capabilities with potential for productization, and link external innovation issues with internal capabilities for productization. Development and planning roadmap for internal new products and new technologies with external innovations, which may further become an important source of innovation for new business units developed by the enterprise.

In 2023, nine industry-academic projects were launched, covering key IoT industry technologies such as information and cyber security and cooling. Other projects included factory quality inspection, predictive diagnostics, and AI industrial applications to reduce energy consumption in industrial parks. During the course of these projects, four interns from the industry-academic program worked at Advantech, combining their academic projects with corporate projects to accelerate the commercialization of innovative products. One of these students used the results of the industry-academic project to publish a thesis and become an Advantech-sponsored master's student.

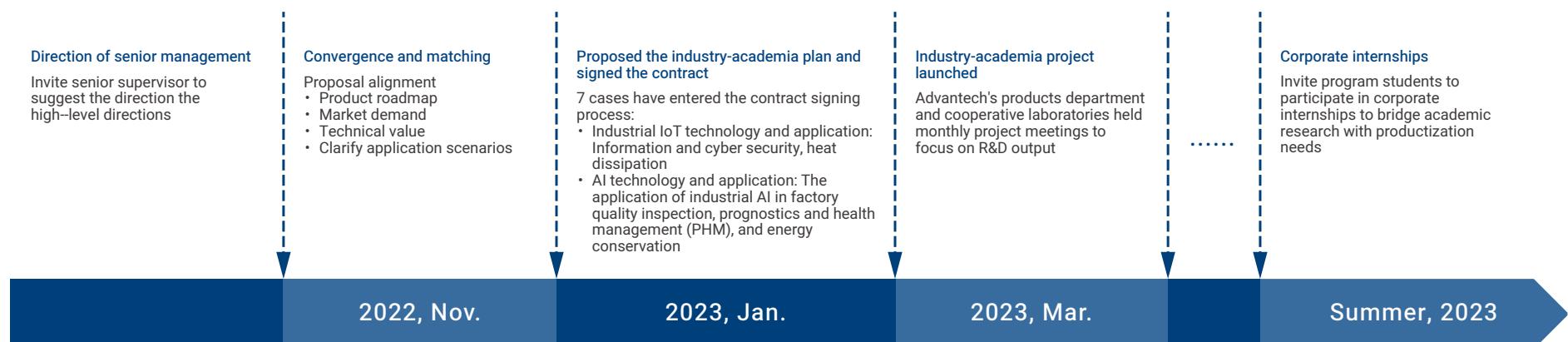
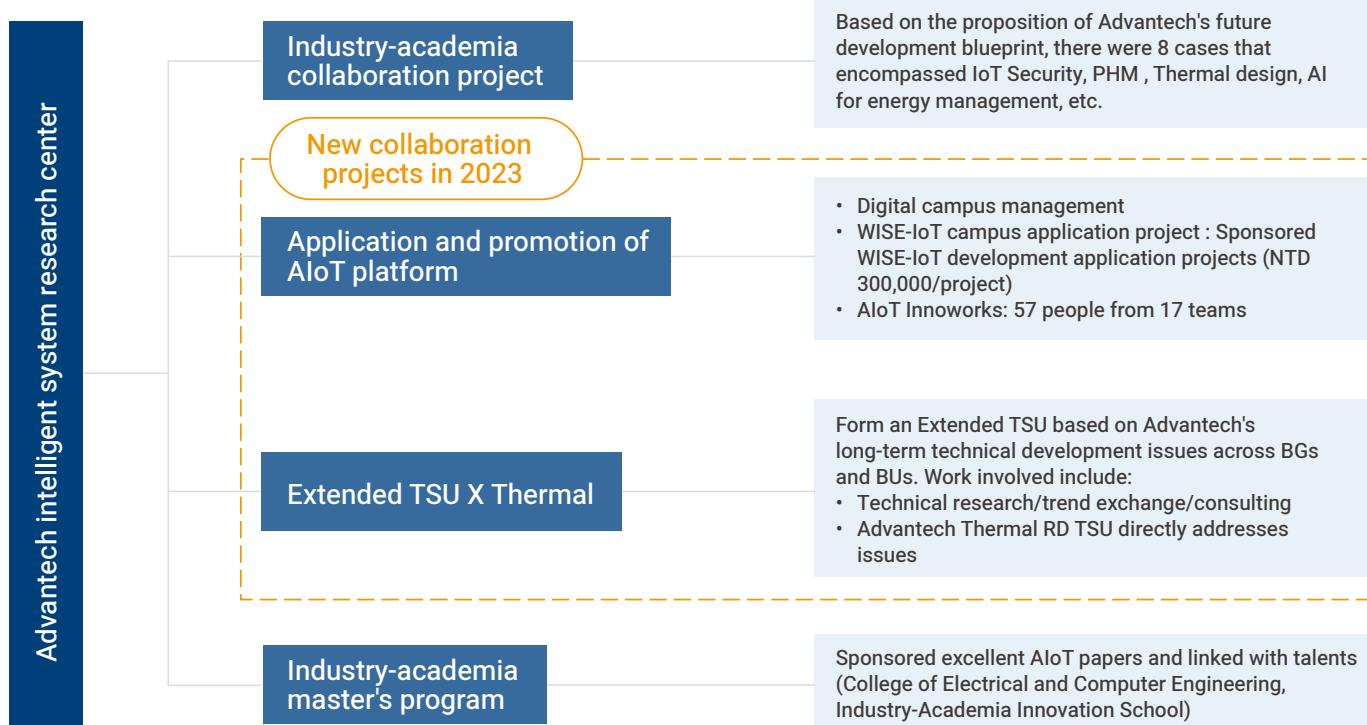


Figure 3.3.2: 2023 Advantech industry-university program implementation process

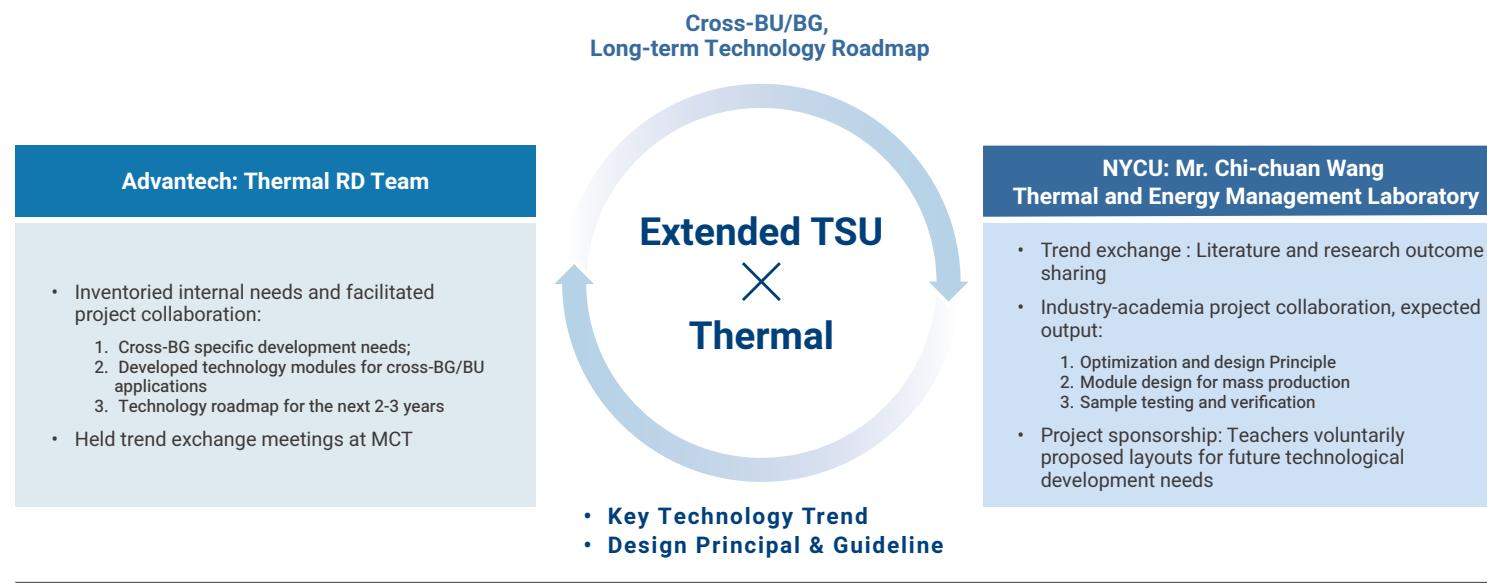
• Advantech Intelligent System Research Center

Since Advantech established the Intelligent Systems Research Center at Yang Ming Chiao Tung University in 2015, it has accumulated more than 52 projects. In 2024, for the purpose of innovation incubation and talent cultivation, in addition to the industry-academia collaboration project and industry-master's doctoral program, Advantech added Extended TSU X Thermal (Technology Sharing Unit) and application promotion of AIoT platform.



▲ Driving Long-Term Technology Innovation: Extended TSU

TSU is Advantech's internal cross-unit R&D organization to address the common technical challenges across product lines and to develop key technical advantages. In the past, it was mainly based on internal technical exchanges. In 2023, Advantech joined the thermal management as a pilot topic and formed the Extended TSU partnership with Professor Chi-Chuan Wang's Thermal and Energy Management Laboratory (National Yang Ming Chiao Tung University). Based on Advantech's long-term cooling module application needs and the Technology roadmap, Advantech collaborated on three cooling technology module development projects, including fanless system heat dissipation in high-power and high-temperature environments, and water-cooling technology research for industrial servers.



*Members: Eric Liu, William Yeh (SIoT), YC Su (ICVG&IIoT), Steven Yang (EIoT)

Figure 3.3.3: Extended TSU X Thermal Industry-Academia cooperation framework

▲ Application and Promotion of AIoT Platform

Advantech introduced the WISE-IoTSuite IoT data platform to National Yang Ming Chiao Tung University in 2023 to improve the efficiency of digital campus management, develop more campus IoT innovations, and cultivate IoT talent. For more information, please refer to the Case Highlights: WISE-IoTSuite @NYCU: digital campus management





Case highlights

WISE-IoTSuite@NYCU: digital campus management

In 2024, Advantech introduced the WISE-IoTSuite IoT data platform at National Yang Ming Chiao Tung University for the following purposes:

- Collaborate with leading universities to cultivate digital campus issues, incubate IoT innovation, and cultivate talents continuously.
- Establish a benchmark case for the application of IoT to digital campuses, form a replicable solution model, and explore the potential of the education market.

Currently, the platform introduced at Yang Ming Chiao Tung University is managed by the big data center and is mainly used for the following:

- Digital campus data management: The long-term goal is to establish a digital campus digital twin. In 2023, the first phase of integration of campus static data, sustainable development indicators, and campus energy data was completed.
- Innovative IoT program development: Encourage professors/laboratories to use the WISE-IoTSuite platform for the development of innovative IoT application projects. In 2023, a total of 7 innovative projects will be promoted, including applications such as drone management, industrial energy saving, and campus map guide.
- Innoworks X NYCU IoT talent cultivation: In 2023, a total of 57 students from 17 teams participated to cultivate IoT innovation talents through themed development competitions and guidance from business experts. [Link to the press release announcing the results of the National Yang Ming Chiao Tung University digital campus](#)



Figure 3.3.4: Presentation on the results of Advantech's participation in Yang Ming Chiao Tung University's digital campus project

Preliminary application outcome for stage 1



	I. Disclosure of basic school affairs-related information	II. Sustainable development indicators	III. Campus electricity consumption
Data source	College and university school affairs information disclosure platform	THE Impact Ranking indicators, SDG-related courses	Premises electricity consumption, electricity bill, electricity consumption for energy system circuits
Data type	Database	Databases and files	Report files
Dashboard design	5 basic information panels: Student, faculty, finance, research, and school affairs.	<ul style="list-style-type: none"> Sustainable development indicators SDG-related courses offered 	<ul style="list-style-type: none"> Circuit electricity consumption Computing-related electricity consumption on the premises Campus electricity bill
Functional applications	Data schedule update	Embed into web pages	Alarm function

Figure 3.3.5: Achievements in the application of Advantech's WISE-IoTSuite platform on Yang Ming Chiao Tung University's digital campus in 2024

- **Open teaching materials and courses AloT Academy**

Domain know-how and cross-industry applications are the keys to nurturing IoT talent. Therefore, Advantech has actively established the AloT Academy, an online learning platform, and will combine regional certification centers in the future to cultivate key IoT talent and expand into the educational application market. (Refer to Chapter 6 IoT education and industry-academia co-creation for more information on AloT Academy.)

- **AIoT Innoworks Projects**

Advantech provides online education and certification resources, an easy-to-use IoT platform, and industry mentor resources to recruit students interested in IoT to form teams to develop innovative IoT applications with Advantech platforms. In addition to cultivating IoT talents, it is easy to explore the potential innovative applications of IoT. (Refer to Chapter 6 IoT education and industry-academia co-creation for more information on AloT Innoworks.)

3.4

Customers and Partners Co-Creation



Material topics	Customers and partners co-creation
Policy or commitment	<ul style="list-style-type: none"> Considering customers as partners, and operating the market together with customers through a co-creation mechanism. Improve channel distribution management, optimize the global customer relationship management system, and technical service platform, while offering more online training courses. Ensure that customer privacy is fully protected and ensure that customers' rights and interests are not lost during the pandemic. Committed to focus on the development of the IoT industry and continue to invest in IoT platforms and solutions.
Impact description	<p>In terms of positive impact, with ecological connection and the spirit of co-creation, Advantech continues to be a smart solution for a sustainable planet with our industry strengths. In terms of society, IoT is used in telemedicine and healthcare to reduce medical costs and improve medical precision. In terms of economy, the improvement of the efficiency and performance of production activities and the application of AI technology can greatly enhance the level of industrial production. In terms of the environment, equipment monitoring and the deployment of a large number of sensing components will effectively reduce energy consumption and environmental pollution. In recent years, due to the development of alternative energy, Advantech has also ventured into the business of charging piles and alternative energy. Collaborate with customers and ecosystem partners to achieve sustainability in various fields.</p> <p>The potential negative impact of this issue is non-tangible damage to Advantech's brand image and goodwill. Faced with this negative impact, Advantech has taken remedial measures to re-examine Advantech's core capabilities, reduce information asymmetry, and ensure that important partners acquiring accurate information at the right time.</p>
2023 Goals achievement status	<p style="text-align: center;">Distribution authorization management</p> <ul style="list-style-type: none"> Overall performance of global distribution channels increased by 3%. The number of premium distribution partners accounts for more than 20% of the total. The sales performance of the distribution channel decreased by 16%, mainly due to the slowdown of market growth and dealer inventory adjustment amid global policy uncertainties. <ul style="list-style-type: none"> Achieved: The number of dealers with premium distribution partners accounted for 21% of the total. <p style="text-align: center;">Online training certification project</p> <ul style="list-style-type: none"> Expand the online training certification project. In addition to emerging countries, we also promote the introduction of courses to Japan and South Korea, providing local language courses and invite more partners to join. The Company held 4 World Partner Conferences (WPC), inviting nearly 4,000 customers and partners to provide more detailed product contents, solutions, and application cases, with the vision of jointly building a model in the IoT industry. <ul style="list-style-type: none"> Achieved: In 2023, a total of 13 distribution partners in emerging countries will complete the courses and pass the assessment. The localization courses in Korea have been launched online, the basic courses in Japan have been completed, and the advanced courses have been introduced in stages. Achieved: More than 4 Advantech global partner conferences were held, attracting more than 6,500 Advantech customers and partners from 60 countries.

2023 Goals achievement status			Customer connection experience				
			<ul style="list-style-type: none"> Customer satisfaction goals: Revenue from sampled customers accounted at least 60% of total revenue, and customer satisfaction score was average more than 90 points. Achieved: 68,748 pieces of customer feedback were collected on the official website and customer portals, with an average satisfaction rate of 4.03 points and a satisfaction rate of more than 3 points, about 99%. Achieved: Revenue from sampled customers accounted for 76.73% of total revenue, and customer satisfaction score was 93.16 points. 		<ul style="list-style-type: none"> Achieved: 68,748 pieces of customer feedback were collected on the official website and customer portals, with an average satisfaction rate of 4.03 points and a satisfaction rate of more than 3 points, about 99%. 		
			Digital service upgrade				
			<ul style="list-style-type: none"> Introduced the cloud customer relationship management system to the Japan branch and the Korea branch. The marketing automation system has shifted from the system platform developed locally to the application in the cloud. Achieved: Japan, Korea, and Brazil offices had implemented Salesforce Sale Cloud by 2023. 		<ul style="list-style-type: none"> Achieved: The project registration module 2.0 was introduced into the European market in 2023 to synchronize complete CRM data in real time to further break down data silos. Improve the Salesforce platform information and cyber security risk score by nearly 20% to effectively prevent phishing, credential stuffing, and account infringement attacks. 		
2024 Goals			<p>Distribution authorization management goals:</p> <ul style="list-style-type: none"> The overall revenue of global distribution channels will continue to expand, and the goal is to achieve a total performance growth of 14%. Develop "preferred distribution partners" and "industry exclusive distribution partners", which together account for more than 40% of the overall total. Organize more than 5 to 10 sessions of the Sector Focused Partner Conference at home and abroad, with over 100 customers and partners expected to be invited to each session. <p>Customer connection experience goals:</p> <ul style="list-style-type: none"> 2024 The satisfaction target collected from the official website and customer portals is 4.05 points or above. Over 3,000 views of the A-Connect replay in 2024. <p>Customer satisfaction goals:</p> <p>Revenue from sampled customers accounted at least 78% of total revenue, and customer satisfaction score is average more than 93 points.</p> <p>Digital service upgrade goals:</p> <ul style="list-style-type: none"> Integrate the customer relationship management systems of the headquarters and North America to improve business efficiency and achieve consistent management. Launched the Salesforce PRM operation plan with designated European partners to provide a brand-new customer experience and advanced partner management mechanisms, including customer e-contract signing with DocuSign, product and marketing information search, project registration and rebate mechanisms. It is expected to cultivate potential business opportunities and improve communication efficiency with key partners to replace email operations. And the rebate mechanism is expected to enrich the data of downstream CRM customers. Implemented Salesforce Sales Cloud for the Mexico branch to enhance customer data security and privacy protection. 				
2025 Goals			<p>Distribution authorization management</p> <ul style="list-style-type: none"> Develop "preferred distribution partners" and "industry exclusive distribution partners", which together account for more than 50% of the overall number, and have achieved a compound annual growth rate of more than 10% for two years. Expand the online training and certification project. There are more than 100 distribution partners worldwide, with more than 500 employees completing the exclusive training and certification courses. <p>Customer Satisfaction Target:</p> <ul style="list-style-type: none"> The sampled customers' revenue accounts for more than 80% of total receivables, and the average customer satisfaction score is above 93 points. 				

	<p>Eco partner management</p> <ul style="list-style-type: none"> WISE-Marketplace is an industrial interconnection ecosystem platform powered by empowerment. It offers business platforms and industry solutions, and over 100 industrial apps for activation by Advantech and partners. Registered with more than 100 industry application solution partners on the digital course platform and completed exclusive training and certification courses. Supported the success of more than 300 Domain Focus S/I companies, and facilitated 10 listed or to be listed Domain Focus SI companies' significant growth in market value. Domain Focus SI The company's market value has grown significantly <p>Digital service upgrade</p> <ul style="list-style-type: none"> With the Salesforce platform as the core hub, we promote cloud-based customer relationship management systems that cover more than 85% of overseas branches and drive the connection of Advantech's five other cloud platforms (quotation cloud, partnership management cloud, marketing automation cloud, e-commerce cloud and data cloud). Implemented Salesforce PRM in Europe and provided 70% of our partners with a brand-new customer experience, including customer electronic contract DocuSign signing, product and marketing information search, project registration and rebate mechanism.
2025 Goals	<p>Distribution authorization management:</p> <ul style="list-style-type: none"> The overall revenue of global distribution channels will continue to expand. The goal is to exceed US\$700 million, with a CAGR of more than 10%. We will focus on developing distribution partners and premium distribution partners of industries and targeting areas, both of which contribute more than 50% of the revenue and the volume. <p>Customer satisfaction:</p> <ul style="list-style-type: none"> Revenue from sampled customers accounted at least 85% of total revenue, and customer satisfaction score is average more than 93 points. <p>Digital service upgrade:</p> <ul style="list-style-type: none"> The remote work mode supported by the Salesforce cloud platform not only enhances work flexibility and employee satisfaction, but also greatly reduces the carbon footprint of employee commuting and office energy consumption, it is expected to reduce carbon emissions by 30%. Implementing Salesforce's digital supply chain solution is expected to achieve at least 20% efficiency improvement in aspects such as order processing time, inventory management efficiency, and supply chain transparency, which can not only reduce operating costs but also improve customer satisfaction by 10%.
2030 Goals	<p>Distribution authorization management:</p> <ul style="list-style-type: none"> Advantech's distribution channel management involves setting up product licensing, technical training, and marketing activities based on the differentiated development of distributor types, as well as sales performance evaluation, market development, talent development, technical training, strategies, and management systems. <ol style="list-style-type: none"> Ensure that dealers provide high-quality services. Sales performance indicators (annual performance targets, target market KPIs) Marketing and market development (marketing activity plan, development of industry-specific channels) Organizational talent development (talent development incentive mechanism, brand service team establishment) Technical certification training (product and application courses, quality awareness, and standard operating procedures) Direction of strategic development (annual business plan, hierarchical price management, inventory stocking mechanism) Management system compliance (project reporting, conflict and non-compliance management) <p>Digital service upgrade:</p> <ul style="list-style-type: none"> The HQ and North America Salesforce merger project encompasses technological assessments, data migration, system configuration, and user training, and is anticipated to be concluded in May, 2024. It's to improve the efficiency of cross-regional business collaboration and achieve data sharing and business process integration and standardization. Provide European partners with a one-stop product and marketing information search platform, as well as the development of project registration and rebate mechanisms, committed to providing partners with a more convenient and more efficient collaborative experience, thereby enhancing customer satisfaction and sales effectiveness.
Key actions or programs	

Key actions or programs	<p>Customer satisfaction:</p> <ul style="list-style-type: none"> In 2023, the scope of delivery was expanded from previously the top 80% of customers to all customers in China, North America, Europe, and Taiwan. At the same time, we also requested sales to provide a list of cooperative customers. In 2024, we will maintain the customers satisfaction survey in China, North America, Europe, and Taiwan, and increase the satisfaction survey in Japan at the same time.
Effectiveness assessment	<p>Distribution authorization management:</p> <ul style="list-style-type: none"> Implement the Channel BLM, formulate the annual distribution business plan (Channel ABP) together with distribution partners, and provide quantitative and qualitative evaluation indicators (performance, marketing, technical training, internal control, etc. total 18 indicators) every quarter to review implementation effectiveness, provide comprehensive resources and training, promote channel performance growth and partner development, and achieve stable and long-term development of distribution channels. <p>Digital service upgrade:</p> <ul style="list-style-type: none"> The cases and success stories of B2B customers in collaboration with Salesforce are disclosed on the Salesforce global website. To specifically demonstrate how Advantech uses the Salesforce platform to bring business value and cloud-based experience, and showcase the Company's experience in digital transformation to the world. Making customers, partners, and distribution channels understand Advantech's efficient cloud platform system deployment. <p>Customer satisfaction:</p> <ul style="list-style-type: none"> Based on the questionnaires filled out by customers in each region, customers' dissatisfaction or suggestions are reported back to the responsible sales person in each region. Then Advantech would make corresponding responses.
Stakeholder engagement	<p>Advantech will continue to collect, monitor, and respond to the suggestions of key stakeholders, customers, and partners through existing communication channels. This topic has not yet caused any major negative impact on stakeholders or the environment, economy, or society. Therefore, no remedial measures were taken</p>

3.4.1 Co-creation with Customers and Partners

Advantech's 2023 customer management and partner co-creation activities are based on the principles of "altruistic cooperation and mutual benefit" and "digital service upgrade." The Company is committed to deepening customer connection experience, expanding ecosystem partner operations, and institutionalizing distribution authorization management. At the same time, we will optimize digital platforms such as customer relationship management systems and online technical services to improve operational and service efficiency.

Customer management and co-creation with partners	Customer Connection Experience		Ecosystem partner management		Management of dealership authorization
	Advantech Connect Online forum	World Partner Conference	WISE-IoT	WISE-Marketplace cloud marketplace	WISE-IoT Suit
Incoming Order Management System for Dealer Customers MyAdvantech					
Advantech's Quotation System eQuotation/Salesforce CPQ					
Global customer relationship management system Salesforce CRM					
Global Online Technical Services Platform Zendesk & Chatbot					

Figure 3.4.1: Advantech's 2023 Customer management and partner co-creation highlights

Customer connection experience

▲ Advantech's 40th Anniversary World Partner Conference (WPC)

Since 2010, Advantech's corporate brand vision of "Enabling an intelligent planet" was initiated, and had also begun to build Taiwan's first IoT experience park in 2014, dedicated to the formation and development of IIoT, cloud platforms, and various ecosystems. Advantech's AIoT Co-creation Park completed its first phase in 2014 and served as the headquarters for the embedded IoT platform business group. After the second phase was completed in 2016, it became the manufacturing center of Advantech headquarters, and the production volume of Taiwan can be integrated here. The final phase of construction was completed in 2023. Advantech positioned the building as the headquarters for the IoT Business Groups, offices for co-creation partners, and a recreational area for employees.

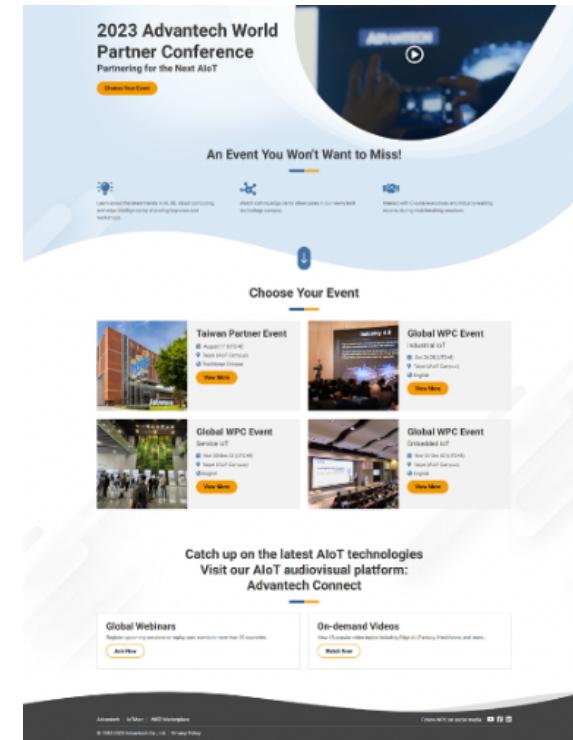
As 2023 coincides with Advantech's 40th anniversary, Advantech hoped that this co-creation park is not only become Advantech's global IIoT center but also create Taiwan's IIoT ecosystem clustering benefits and become a model example. In 2023, Advantech held three Industry Partner Summits with eight major themes: smart factories, smart devices, embedded edge computing and emerging industrial applications, smart healthcare, smart transportation and logistics, smart retail, iEMS intelligent energy management and conservation, and IoTMart, a global IoT cross-border e-commerce platform. Global customer partners were invited to attend the unveiling of the Advantech AIoT Smart Co-Creation Park and understand its strategic significance. These events provided an opportunity to share insights and discuss future collaborations in the AIoT space.

Customer and partner topic discussion

Global IIoT partner conference

Edge Evolution - Shaping the Future of Embedded and Emerging / Partnering from Edge to Cloud Solutions Feature Forum

Business



Ecosystem Co-Creation

The Internet of Things is a market where multiple industries are integrated. Advantech upholds the concept of co-creation and co-prosperity with partners to create industry ecological partners with the IoT platform and core products, enabling small and medium-sized system integrators, traditional automation system integrators, and cloud platform system service providers and enter the IoT industry through this platform, where ecological partners and Advantech work together to expand the market.

- Co-creation with partners

Through investment in external funds, we support start-up companies in Taiwan, China, Europe, and the United States, with the aim of forming a complete IoT ecosystem in these key regions. The annual support plan is detailed in the table below:

Advantech worked with experienced fund partners in the IoT industry to accelerate the development of international ecosystems. We invested in startups via AIoT Ecosystem fund and connected fund partners with our industry expertise, technical platforms, and market networks to accelerate the development of IoT ecosystems in key regions.

Ecosystem fund investment (overseas ecosystem deployment)			
Fund partners	Fund investment scale	Investment fields	Investment efficiency
Momenta (Europe, America)	USD 30 million	AIoT, smart manufacturing, intelligent energy management, edge computing, AI, information and cyber security	In view of the fragmentation of the Industrial IoT, it is necessary to establish an industrial ecological chain in the above investment fields. Therefore, Advantech and Momenta Ventures jointly launched the AIoT Ecosystem Fund focusing on Europe and America. Through venture capital investment in digital industry startups in the fields of AI and IIoT. Advantech had also responded to the sustainable development goals (SDGs) in its field, which has a far-reaching and positive influence on Advantech.
Ying Capital Capital (China)	RMB 200 million	Industrial control security, IoT security, smart 5G mines, energy service integrators, energy storage system providers	
Esquare Capital (Global)	USD 25 million	IoT, New Energy	

In addition to capital collaboration, Advantech worked with incubators and accelerators to provide enterprise technology platforms, industry connections, and co-creation funding sponsorship to early-stage startups that have not yet scaled their products or market performance. This is intended to accelerate the development of startups in the growth stage.

Table 3.4.1: The list of Advantech's support plan for AIoT startups in 2023

Sponsorships for incubators, accelerators, and IoT innovation events			
Sponsored organization	Areas of support	Investment amount	Sponsorship benefits
Asia America Multi-Technology Association (AAMA)	Smart manufacturing, smart healthcare, smart environmental protection, smart logistics	NTD 2 million	Cooperated with Chunghwa Telecom and SYSTEK Corporation, recruited a total of 13 startups through industry propositions and counseling, and formed 8 co-creation and cooperation projects.
Garage+	IIoT and Industrial AI Applications	NTD 700,000	Gathered product supervisors from Advantech and over 10 domestic and foreign start-ups to exchange industry experience and explore co-creation opportunities.
Pan WenYuan IoT Innovation Application Award	IIoT	NTD 1.2 million	A total of 12 start-up teams/school teams with IoT applications were recruited, and innovative teams for agricultural applications of IoT were actually selected to provide bonuses and industrial experts to achieve practical guidance on the industrial application of the technology.
IMV ESG Technology Innovation Proposal Competition	Energy conservation, agriculture, forestry, fish, animal husbandry	NTD 2 million	Formed an alliance with seven industry partners to support sustainable startups and teams in Taiwan. A total of 92 teams were recruited, and the 18 teams were eventually awarded the prize. <ul style="list-style-type: none"> • Organized 26 corporate counseling meetings • Practically assisted 1 start-up company in developing new businesses and successfully raised funds.

The application of IoT in the market is divergent and fragmented, and as a result, it is full of opportunities for innovative application, and start-ups are at the forefront of exploring and implementing emerging business opportunities. By collaborating with startups to develop emerging solutions, Advantech hopes to jointly expand into emerging applications and markets.

Support for startups (co-creation of innovative IoT solutions and markets)			
Co-creation partners	Investment amount (USD)	Co-creation solutions	Benefits
Encoremed (Malaysia)	1.7M	AIoT Solutions for outpatient appointment, scheduling, and telemedicine.	Expand the intelligent healthcare market.
Expetech (Taiwan)	1.2M	Smart warehousing and smart manufacturing solutions	Accelerate the industrialization of corporate technology and promote the formation of new IoT businesses.

WISE-IoT

WISE-IoT is Advantech's newly established IoT cloud platform business unit, which represents an important step for Advantech in digital transformation. By leveraging the core services of WISE-IoTSuite, an upgraded version of WISE-PaaS, Advantech's cloud-native IoT platform can be deployed on standalone servers, private clouds, and public clouds (AWS, Azure, and Alibaba) to develop situational solutions in various domains, which focuses on five major domains: smart internet-connected equipment, smart factory, smart energy saving, smart retailing, and smart healthcare.

In 2023, we began to expand to Southeast Asia, and the diversity of partners has gradually improved, not only including CP (channel partners), VAD (value-added sales partners), and DFSI (field-based SI partners), but also reinforced cooperative relationships, such as serving customers together, joint product development, industry entry into specific fields, and strategic investments initiative. There are also consulting partners based on the development of the industry to enter the global energy-saving field market, etc. In 2023, about 160 partners continued to have in-depth cooperation with WISE-IoT to build a stronger business ecosystem for WISE-IoT.

WISE-IoTSuite

Advantech's WISE-IoTSuite platform provides data-driven tools for developing diverse applications, including equipment connection management, Digital Twin asset performance management, big data integration and analysis, 2D/3D visualization, business intelligence, and generative AI assistant services. Users can easily develop and manage industrial applications with zero/low-code to accelerate digital transformation. WISE-IoTSuite provides secure and trusted services, efficient data processing with an open architecture, and enhanced delivery efficiency; based on WISE-IoTSuite, Advantech offers diversified solutions, including smart manufacturing, energy and carbon management, equipment operation and maintenance and smart park management. WISE-IoT Suite provides system integrators with a device-to-cloud integrated delivery engine and end-users with a secure and reliable digital platform to enhance their competitiveness and sustainability.



WISE-Marketplace

WISE-Marketplace is an end-to-cloud solution platform for IIoT that provides rich solution introduction, simple purchase and transaction processes, hybrid cloud remote deployment compatible with connection scenarios, open and flexible capacity expansion, focusing on including more than 100 selected industrial apps, as well as related education and training courses, certifications, and engineering support for the smart factory, smart energy management, smart device, smart healthcare, and Smart retail vertical industry. At the same time, to help customers accelerate digital transformation, the WISE-Marketplace assist system integrators and channel partners of different fields in co-marketing and establish the on-shelf mechanism for software developers to jointly create a prosperous industrial ecosystem.



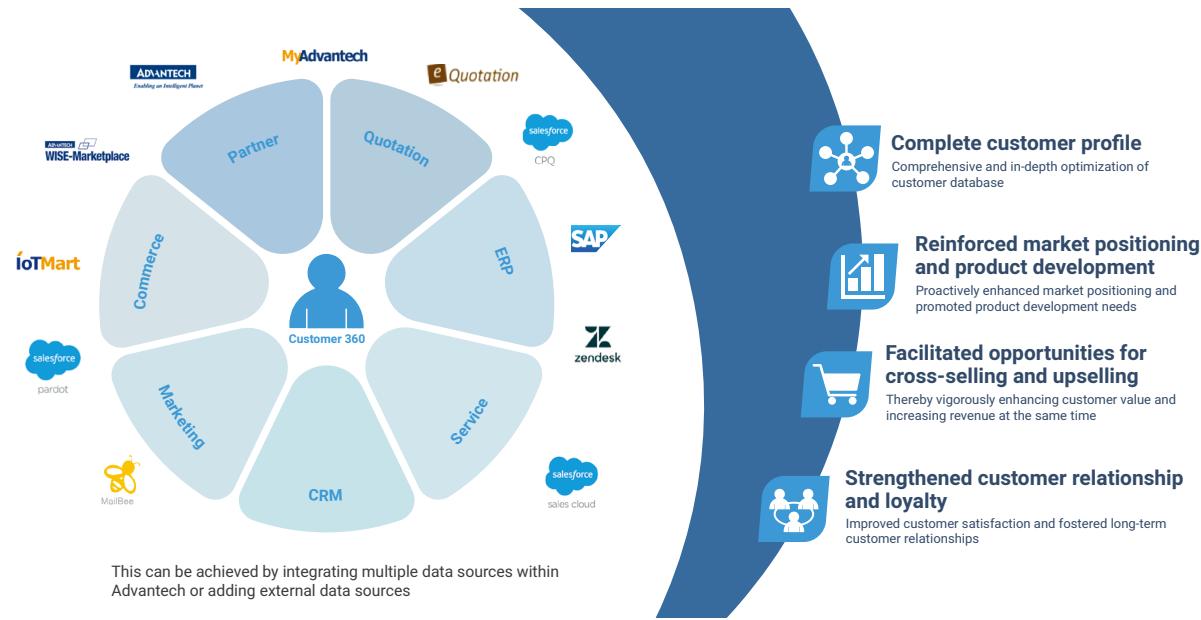
3.4.2 Customer Relationships, Distributors, and Channel Management

▲ Global Customer Relationship Management System

Advantech's Salesforce Sales Cloud digital transformation has successfully expanded to the United States, Europe, Taiwan, Middle East, Africa, Latin America, Japan, Korea, and Brazil. It is expected that we will further integrate the Salesforce system to realize the vision of ONE Advantech in 2024.

CRM is the cornerstone of our business and customer service. To grasp customer needs in a timely manner and provide comprehensive services, we build Advantech Customer 360 with the flexible Salesforce framework to improve the customer profile and promote cross-selling and up-selling opportunities.

Data security is also Advantech's top priority. We have comprehensively upgraded the Salesforce security level, increasing the security baseline by nearly 20% to effectively prevent phishing, credential stuffing, and account infringement attacks, thereby ensuring the information security of Advantech and its customers total protection.



▲ Dealer Management Platform - MyAdvantech

MyAdvantech provides important global partners with comprehensive customer relationship management and one-stop order purchasing process. In 2023, we introduced the project registration module 2.0 to the European market to provide complete business opportunity information and real-time data synchronization to break down data silos and accelerate operational convenience. It brought a 28% increase in the amount of business opportunities, then the product was introduced into China, the United States and other markets in order. In addition, the team had been working on the Salesforce PRM cloud migration preparation plan since 2023 to effectively enhance the stability of the platform, such as the real-time data connection and information security assurance. Simultaneously provide a brand-new customer experience, including the internal signing mechanism for client's electronic contracts and DocuSign signing, product and marketing information search, and the project registration and rebate mechanism. Advantech will continue to build strong brand trust and reputation with flexible and agile digital solutions.

Online customers

	2020	2021	2022	2023
% of total customers using your online services solutions/sales platform	18.0	22.0	23.66	27.9

*Note: The target for 2023 is 25.5%.

Online revenues

	2020	2021	2022	2023
% of revenues generated online (e.g. through direct sales, advertising, etc.)	21.3	37.0	18.4	14.8

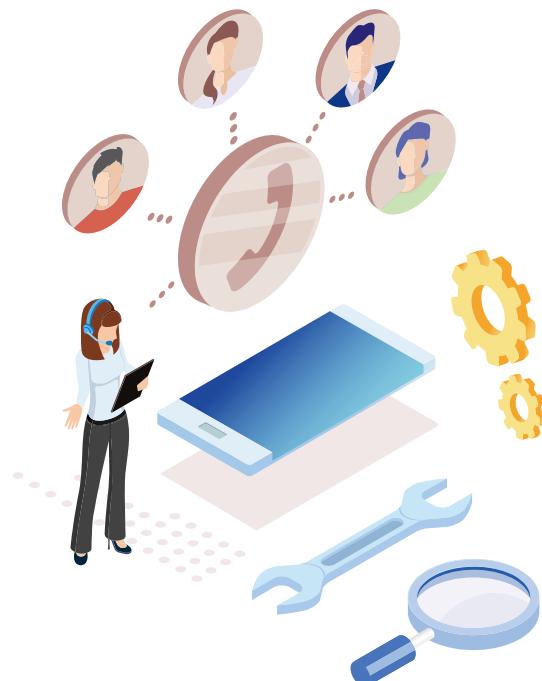
*Note: The target for 2023 is 16.6%.

3.4.3 Customer Satisfaction Survey and Customer Audit

Customer Satisfaction Survey

In 2023, Advantech conducted a customer satisfaction survey on customers with sales orders in each region from the five dimensions of TQRDC. (TQRDC: Technology, Quality, Responsiveness, Delivery, Cost) The number of each region was 2,906 in China, 4,901 in North America, 2,891 in Europe, and 3,894 in Taiwan, total 14,592 customers.

The PDCA tool was used to analyze the items with the lowest average value this year: AE technical service quality. Customers expect to have prototypes to be turned around in case of defects and rapid technical support. According to the needs of customers in each region, continuous improvement had been carried out through internal discussions to meet customer expectations.



Year	2019	2020	2021	2022	2023
Satisfaction (score)	94.59	95.16	94.83	92.66	93.16
Revenue from sampled customers as a percentage of total revenue (%)	16.80	16.98	17.45	60.76	76.73

*Note: Statistics on the percentage of revenue are based on the revenue from January to November of each year.

Customer satisfaction survey score and coverage 2019-2023

Item	Sales service and pricing	Delivery efficiency	Product quality	Technical service	After-sales service
Average score (out of 5 points)	4.70	4.68	4.72	4.52	4.60
Satisfaction (%)	93.92	93.60	94.47	90.35	92.05

Future goals: Increase the coverage of customer satisfaction surveys year by year and maintain an average satisfaction score of more than 90 points.

2023 Customer satisfaction survey scores

▲ Official Website and Customer Portal Satisfaction

Advantech's customer digital portal satisfaction survey is a satisfaction survey designed by the official website at the customer journey node, and is investigated and collected on a five-point satisfaction scale. For satisfaction scores below 3 points, customers were asked to leave improvement suggestions or assistance, we proposed an improvement plan and have the business unit track the improvement, with a view to completing the improvement within the specified time.

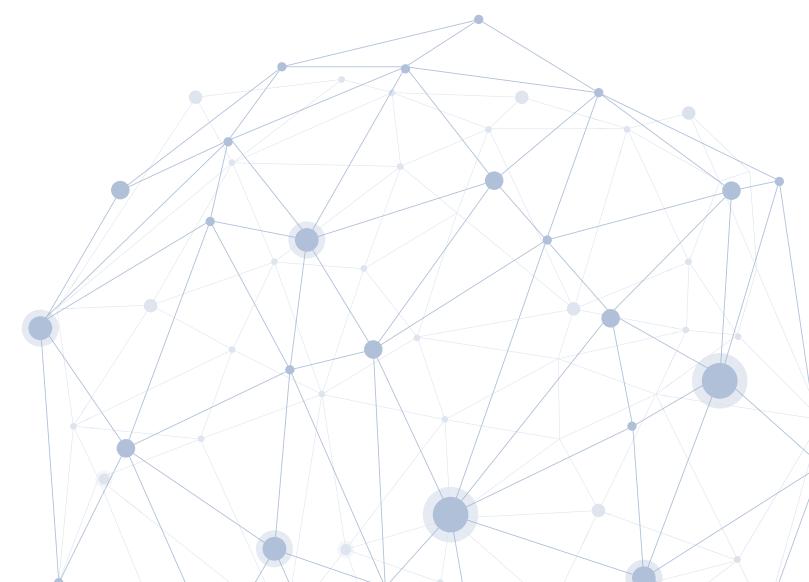
In 2023, customer digital portal satisfaction survey, a total of 68,748 pieces of customer feedback were collected on the official website. The average satisfaction rate was 4.03 points, and about 99% reached more than 3 points. We will continue to optimize the digital portal experience to provide customers with a better online experience.

3.4.4 Customer Service

▲ Global Online Technical Service Platform

In 2023, Advantech's technical service teams in Japan, Korea, and Taiwan completed the implementation of the cloud technology service management platform, Zendesk, enabling faster responses to customers for cross-border collaboration in Asia Pacific. The customer portal was launched in October of the same year for customers to check the progress of the service and cases at any time, significantly increasing the convenience for customers. The system also provided considerable help in assisting in the analysis of work order request information. It was observed that 43% of the requests for online support could be resolved by chatbots (Figure 3.4.4.2). A total of 114,757 technical service requests were closed in 2023, a 30% increase over last year, and the closure rate was 98%. In 2024, Advantech will focus on optimizing the RMA product maintenance department process in Europe, America, Japan and Korea. While introducing this platform, we will also enhance the customer experience and eliminate worries about after-sales service.

Advantech has continued to develop its chatbot service. In addition to introducing the service to Europe and Southeast Asia and guiding customers to self-help for support around the clock. We are also actively developing the application of Gen AI to provide Advantech product information and suggestions for solutions in the unmanned chatbot, which are expected to be implemented in the first half of 2024.



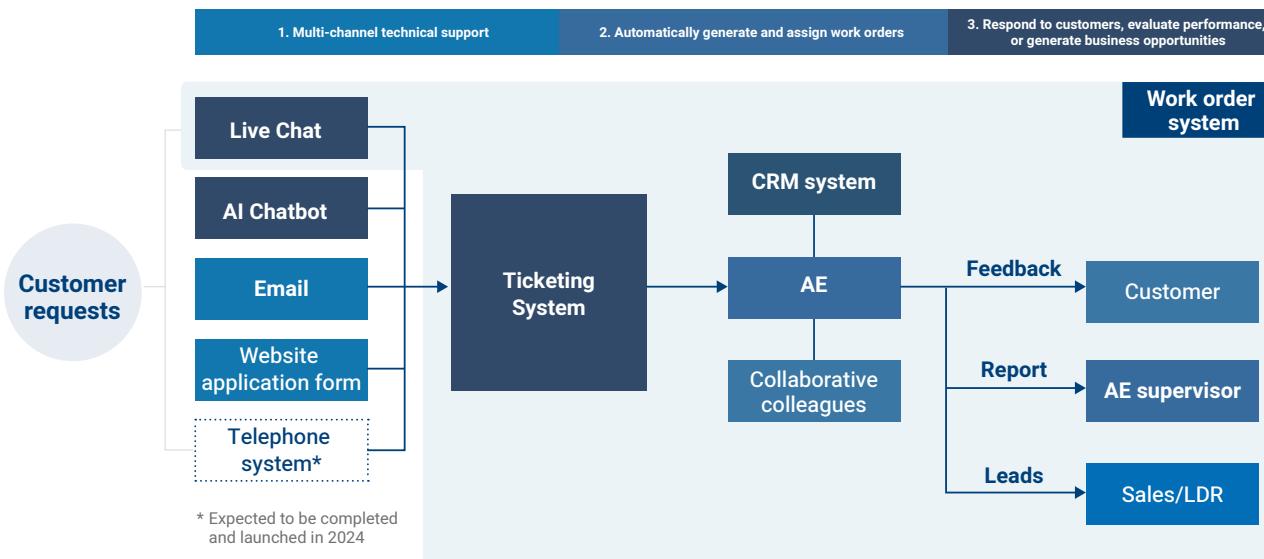
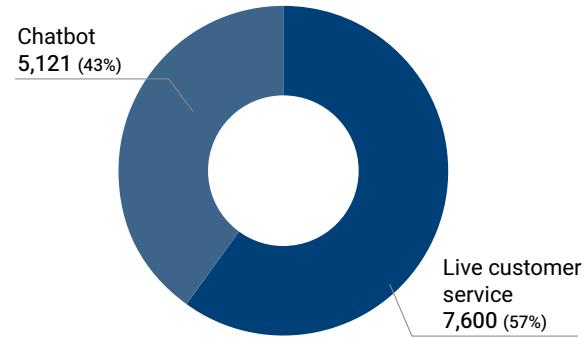


Figure 3.4.4.1: Advantech online technical service process

43% Customer requests can be handled by chatbots



* Areas where robots have already been introduced: North America, Europe, Southeast Asia, and emerging markets Analysis of online conversations in 2023.

Figure 3.4.4.2: Analysis of online conversations



4

Green Operations

- 4.1 Green Eco Design and sustainability Liability of Product
- 4.2 Climate Change Strategy and Management
- 4.3 GHG Inventory and Energy Management Actions
- 4.4 Environmental Management





4.1

Green Eco Design and Sustainability Liability of Product

Item	Explanation
Policy or commitment	<ul style="list-style-type: none"> Advantech has responded to the SDG 9 (Industry, Innovation, and Infrastructure) and SDG 12 (Responsible Consumption and Production) of the global sustainable development goals, gradually setting goals and introducing various standards from raw materials, product design, manufacturing, to environmental management. We are willing to do our best to improve the environment, reduce environmental impact, and produce environmentally friendly products.
Impact description	<ul style="list-style-type: none"> Advantech regards green eco design and sustainability liability of product as important risks and opportunities. The possible impacts include the increasing concern of stakeholders such as customers, and the response to carbon reduction and resource cycle laws and regulations in various countries (e.g. product energy consumption design, use of recycled materials and packaging materials), enterprises will be more regulated, so more R&D resources and expenses will need to be invested in the short term, and there will be barriers in R&D and design that need to be broken through. However, the investment in green eco design product and fulfillment of corporate responsibility for environmental sustainability have a positive impact on the overall environment and economy in the medium to long term. Besides driving sustainable transformation for our internal R&D team and supplier s, it also enhances Advantech's overall sustainability competitiveness. Potential negative impacts include: If the low-carbon product requirements of stakeholders such as customers cannot be met, the competitiveness of the product in the market may be reduced, and the carbon reduction plan with the supply chain will be delayed as a result, resulting in the inability between the Company and the supply chain to achieve sustainable development.
2023 goal achievement status	<ul style="list-style-type: none"> Ensure that 100% of raw materials comply with international environmental protection regulations and Advantech regulated substance standards. 37% of the new green eco design products achieved the silver medal (a slight difference from the set target). Mass-produced products achieved the silver medal for green eco design products/Advantech energy saving seal; accounting for 10% of annual revenue. All standard products new models are 100% compliant with the ErP energy-saving design code.
2024 Goals	<ul style="list-style-type: none"> Continuously ensure that 100% of raw materials comply with international environmental protection regulations and Advantech regulated substance standards. Reaching more than 60% of the silver medals for new green eco design products. Mass-produced products achieving the silver medal for green eco design products/Advantech energy saving seal; accounting for 12% of annual revenue. All standard products new models are 100% comply with Advantech's internal energy-saving design guidelines.
2025 Goals	<ul style="list-style-type: none"> Continuously ensure that 100% of raw materials comply with international environmental protection regulations and Advantech regulated substance standards. Reaching more than 80% of the silver medals for new green eco design products. Mass-produced products achieving the silver medal for green eco design products/Advantech energy saving seal; accounting for 15% of annual revenue. New products of a specific product line (suitable fields) meeting Energy Star requirements/obtaining the internal energy saving gold medal label for up to 20%.
Key actions or programs	<ul style="list-style-type: none"> Advantech's silver medal for green eco design guidelines was introduced to form internal regulations: Advantech has established internal regulations for energy-saving design and green materials (halogen-free requirements) to effectively increase the coverage rate of Advantech's green eco design products. Energy Star goal setting: In response to Advantech's industry characteristics and the Energy Star voluntary energy-saving design adjustment goal, we set up suitable products for design. Development of energy saving SW Utility: Assist hardware energy-saving through investment in energy-saving software development. Re-optimization of green eco design products: Continue to standardize the silver medal for green eco design products into a mandatory requirement for new Advantech models, and actively design and develop Advantech gold medal models compliant with green eco design products.
Effectiveness assessment	<ul style="list-style-type: none"> Establish a cross-departmental green eco design committee, and the project process management department convenes relevant departments to jointly formulate standards, implement, manage, review, and revise Advantech's green and ecological design guidelines according to international trends. Regular internal meetings to review the goal achievement status and action effectiveness: Based on the management guidelines set above, the ESG-environment team will review the goal progress every two weeks and adjust the implementation direction in real time to ensure compliance with the strategy. External resource assistance and experience learning: External consultants and lecturers are invited in a timely manner to provide guidance for the establishment of internal processes or the promotion of new policies and regulations, and to verify whether the status and direction of internal promotion are consistent with the goals.
Stakeholder engagement	<ul style="list-style-type: none"> Advantech discloses information through multiple communication channels, collects and analyzes stakeholders' opinions; at the same time, assesses the impact and risk level of various sustainability issues on the Company's operations, identifies material issues, and gives priority to responding and coping, in order to meet the expectations of stakeholders. In addition, we issue the sustainability report every year and accept verification from external certification agencies. Through continuous internal and external communication, we strengthen the efforts and achievements in green eco design products and sustainable responsibility.

Vision and Commitment

Advantech has responded to the SDG 9 (Industry, Innovation, and Infrastructure) and SDG 12 (Responsible Consumption and Production) of the global sustainable development goals, gradually setting goals and introducing various standards from raw materials, product design, manufacturing, to environmental management. We are willing to do our best to improve the environment, reduce environmental impact, and produce environmentally friendly products.

Annual Green Eco Design Actions, Performances, and Future Goals

Actions in 2024

Advantech's silver medal for green eco design guidelines was introduced to form internal regulations

Advantech has established internal regulations for energy-saving design and eco materials (halogen-free requirements) to effectively increase the coverage rate of Advantech's green eco design products.

Energy Star goal setting

In response to Advantech's industry characteristics and the Energy Star voluntary energy-saving design adjustment goal, we set up suitable products for design.

Development of energy saving SW Utility

Assist energy-saving design not only from hardware but also through investment in energy-saving software development.

Re-optimization of green eco design products

Continue to standardize the silver medal for green eco design products into a mandatory requirement for new Advantech models, and actively design and develop Advantech gold medal models compliant with green eco design products.

2023 performance



37% of new products

Percentage of green eco design system products won the silver medal with the internal self-declaration mark.



100%

Completion of SPC-815, the first product carbon footprint verification, and 2 product carbon footprint inventories.



87 %

Percentage of halogen-free plastic parts sold by product organizations in the year.



9.74%

Percentage of annual revenue of mass-produced products achieved the silver medal of green eco design products/Advantech energy saving seal.



11.5 %

Proportion of global waste recycling.



79 %

Achievement rate of the EPE replaced with paper/plastic for products under 5kg.

Green Eco Product Achievements by Phase and Future Goals

Item	Achievements in 2023	2024 Goals	2025 Goals
Compliance with international environmental regulations (Management of hazardous substances)	All raw materials comply with international environmental protection regulations and Advantech regulated substance standards, reaching 100%.	All raw materials comply with international environmental protection regulations and Advantech regulated substance standards, reaching 100%.	All raw materials comply with international environmental protection regulations and Advantech regulated substance standards, reaching 100%.
Compliance with internal green eco design guidelines	Reaching more than 37% of the silver medals for new green eco design products. ¹ (target more than 50%)	Reaching more than 60% of the silver medals for new green eco design products.	Reaching more than 80% of the silver medals for new green eco design products.
	The silver medal for mass-produced green eco design products/Advantech energy saving seal reached 9.74% of the revenue (target 10%).	The silver medal for mass-produced green eco design products/Advantech energy saving seal reached 12% of the revenue.	The silver medal for mass-produced green eco design products/Advantech energy saving seal reached 15% of the revenue.
Energy-saving design Compliance	All standard products new models energy-saving design compliant models/ratio reached 100%.	All standard products new models are 100% comply with Advantech's internal energy-saving design guidelines. ²	New products of a specific product line (suitable fields) meeting Energy Star requirements/obtaining the internal energy saving gold medal label for up to 20%.

4.1.1 Eco-design

▲ Green Eco Design Products Follow the Life Cycle Assessment (LCA)

Advantech always upholds the philosophy of products follow the life cycle and uses LCA and product carbon footprint to quantify the environmental impact of Advantech products. The assessment items cover the carbon emissions from the upstream raw material selection, manufacturing, transportation, and use stages until the final disposal. The Company will further set carbon reduction goals and take actions to implement the reduction, which is included in the Company's operational management goals.



Figure 4.1.1: Eco product LCA

In the second quarter of 2023, Advantech obtained the SPC-815 carbon footprint ISO 14067 certification for its first product, which allows us to assess the depth of product material selection through LCA and identify the top five key materials with carbon footprints, and complete Advantech's product carbon footprint inventory. The inventory methodology has been established to lay the foundation for the internal development of LCA. Advantech will launch the establishment of Advantech's internal carbon footprint query system in 2024. We will complete the product carbon footprint inventory of representative products of each business group to serve as the material selection mechanism for the initiation of low-carbon products.

In addition, Advantech develops its own eco product design mechanism and integrates the product life cycle process to develop Advantech's green eco product design guidelines to guide the product design department in eco product design.

Eco Product Design Management Mechanism

Advantech establishes standards from four major aspects of products: (1) green materials, (2) green packaging materials, (3) Product Recycling, (4) product energy saving, to evaluate the environmental impact at all stages from raw material selection, manufacturing, transportation, and use stages until the final disposal, and design innovative green eco design products to comply with international regulations and customer needs.



Figure 4.1.2: Four major aspects of eco product design

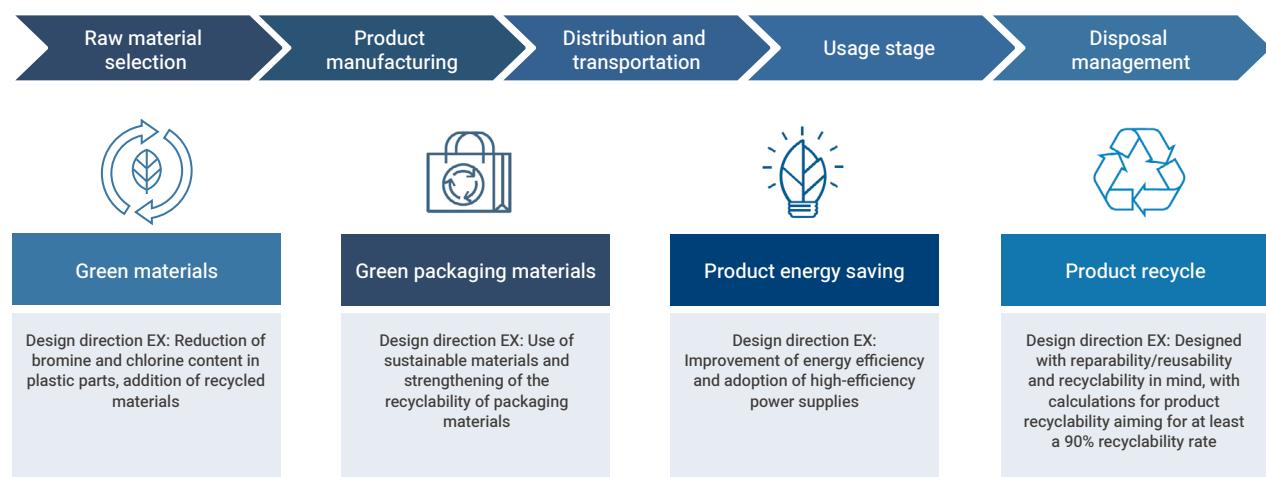


Figure 4.1.3: Product life cycle and Advantech's eco product design aspects

Standard Setting

Based on international environmental regulations or international assessment tools (such as the U.S. Electronic Product Environmental Assessment Tool, EPEAT³ and our experience in serving brand customers, Advantech's eco-design guidelines and guidelines is formulated to improve energy efficiency, eco-design, and reduce environmental toxicity and hazards; as well as provide inspection standards and tools, and gold/silver medal will be awarded to applicants who pass the review. Please refer to [Appendix 7 for information](#) on the models that passed the silver medal verification.

Environmental design focus	Design content
Enhance energy efficiency Ecological design Reduce environmental toxicity and hazards	Conformance with provisions of European Union RoHS Directive, China RoHS, Taiwan BSMI RoHS, IEC62474
	Conformance with substance restriction requirements of the European Union Battery Directive
	Reduction of Bromine and Chlorine content of plastic parts >25 grams
	Conformance with supply chain communication provisions of European Union REACH Regulation
	Elimination of added heavy metals in packaging
	Restriction on the use of elemental chlorine as a bleaching agent in paper-based packaging material
	Enhancing recyclability of packaging materials
	Recycled fiber in corrugated packaging
	Design for repair, reuse and recycling
	Design for plastics recycling
	Product recyclability calculation and minimum 90% recyclability rate
	Information and reporting in preparation for reuse and recycling
	Replacement components availability
	Energy efficiency

Table 4.1.1: Examples of eco product design content planning

³ EPEAT (Electronic Product Environmental Assessment Tool): It is a tool for assessing the environmental performance of electronic products jointly launched by the U.S. Environmental Protection Agency (EPA) and the Institute of Electrical and Electronics Engineers (IEEE). It complies with the ISO14024 framework and is a global ecological mark representative of the IT industry.

New Product Development Stage Inspection

For all system standard products, in 2023, we introduced the four major aspects of green eco design criteria into all stages of design and development, and set up relevant departments to conduct inspection during product mass production to ensure that the products meet the green eco design goals. In 2024, Advantech will more actively introduce the silver medal standard as an internal regulations to effectively increase the coverage rate of green eco design products and provide customers with green eco design products of greater value.

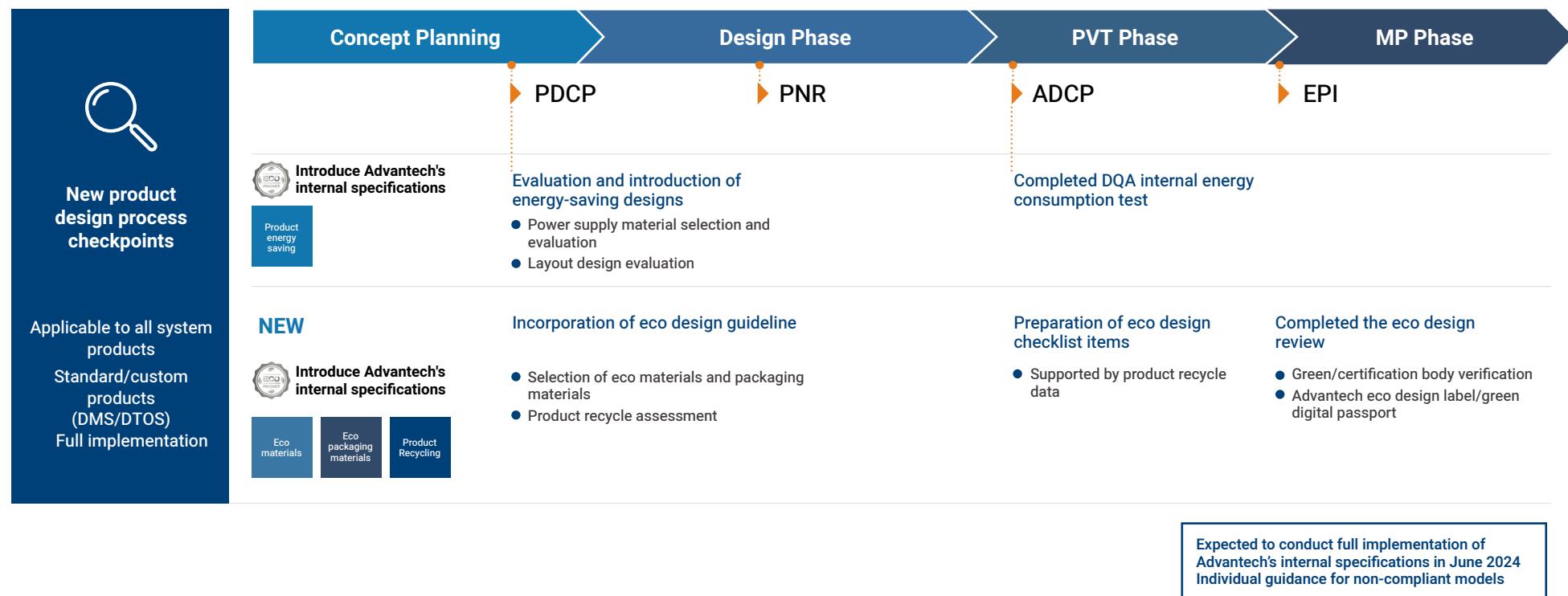


Figure 4.1.4: 2024 Product management mechanism: Review of the green eco design and development process of new products

Green Eco Design Product Performance Description and Future Action Plans

In 2023, we continued to re-optimize green eco design products: Introduce the silver medal standard criteria for green eco design products into products whose energy consumption must comply with the ErP international norms, and gradually promote the internal requirements of green eco design from voluntary to the introduction of the standards, some performance results have been achieved. In 2024, in addition to introducing the silver medal standard as an internal regulations in the development process, we will actively design and develop gold medal models that meet the green eco design product criteria, and evaluate the introduction of other recycled materials, such as using recycled plastic and recycled metals for the mechanism casings, and transitioning from EPE foam plastic to paper-based materials for packaging. The reduction in packaging material and the selection of environmentally friendly materials for the first and second generation models are currently undergoing evaluation and implementation. The following is a description of performance and action plans for eco materials, product energy saving, eco recycling, and eco packaging materials.

Green Materials



Eco design products

1. Introduced Advantech's low-halogen requirements for specific external component models
2. From 2021 to 2023, 87% of plastic parts complied with the "Advantech Low-halogen Control"

1. Expected to develop external parts for new models by the end of 2024
Compulsory introduction of Advantech's low-halogen requirements
2. Evaluated the introduction of eco-friendly materials (recycled materials)
The United Nations Environment Program (UNEP) emphasizes the need for countries around the world to promote sustainable design for products and materials. To enhance the reusability and recyclability of resources, the Company gradually plans to apply diverse eco-friendly materials in its products. Due to Advantech's long product lifecycle, their reliability and quality are important considerations. In 2023, the R&D Department began to evaluate the use of post-consumer recycled plastics (PCR).
In the future, Advantech will utilize eco-friendly materials in its products to support the circular economy by taking concrete actions and realizing the concept of sustainability.

Product energy saving

In addition to establishing Advantech's energy-saving internal regulations and introducing standardization, each business group also nominates products to meet the Energy Star design goal, and expects to develop energy-saving management software to improve carbon reduction performance: Carbon reduction performance is enhanced by developing the Energy Star technology, which is more carbon reduction efficient, and supporting software and hardware that can be quickly deployed in Advantech products.

2024 green eco design products Strategic objectives	New products	Software energy-saving modules
	<p>Eco design silver medal specification standardization</p> <ul style="list-style-type: none"> • Internal regulations were introduced for low-halogen plastic parts • Internal regulations were introduced for energy-saving designs 	<p>Strive to achieve Energy Star Ready</p> <ul style="list-style-type: none"> • Panel PC/Box PC product nomination <p>Development of the Power Suite energy-saving utility</p> <p>Energy-saving module and utility is planned to include in Power Suite development roadmap and it is planned to Introduced to x86 computer products firstly.</p>

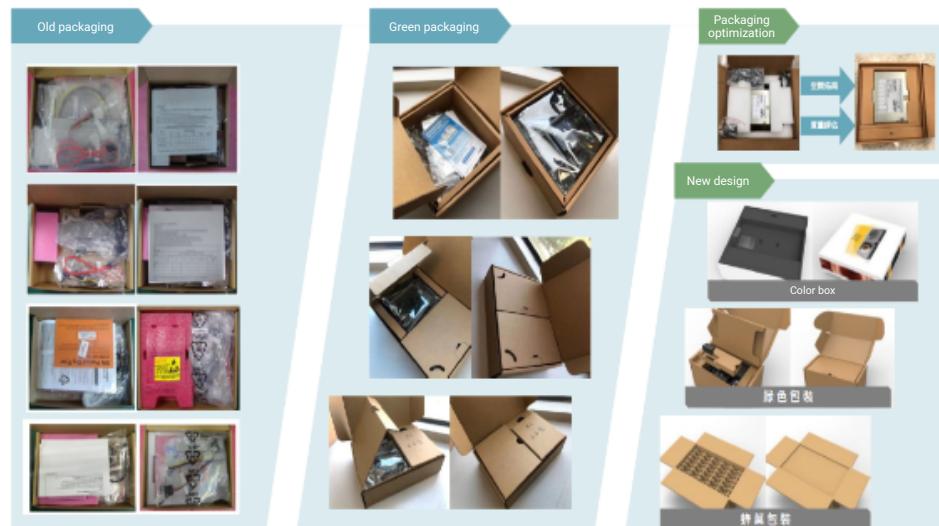
Green packaging materials

Action Performance

2023

The packaging material design team has invested resources in optimizing the eco packaging design in 2023, replacing the buffer material EPE with honeycomb design partitions.

1. Priority is given to replacing EPE with paper plastic for products weighing less than 5 kg, achieving 100% replacement for mass-produced PCB products. For all other products, the replacement rate was 79%.
2. Achieved using recycled materials, with packaging materials sourced from pulp consisting of over 90% recycled fibers and reaching 100% target.
3. Since raw materials are easy to obtain, Kunshan has taken the initiative to use 30% EPE Foam. Currently, Advantech is in the process of obtaining certification from suppliers.



Future Plans

2024

Expand eco packaging material design capabilities while meeting product safety requirements. Some of the improvement details made to the packaging design include:

Weight reduction design

- Designs involving modifying the stacking of packaging materials to increase shipment quantity

Change of material

- Substitute paper for plastic and introduce EPE buffer material into the plan.
- Use recycled materials

ESG Sustainable Development green packaging - technology refinement plan



Product Recycling

Action performance

- 2020-2021: In the early stages of green product design, considerations such as "recyclable, easy to disassemble, low pollution, and energy-saving" were integrated into the design. The recycling rate reached 90%.
- 2022-2023: From 2022 to 2023, the actual inventory and calculation of the recyclable proportion of products based on product categories were conducted, reaching approximately 94%, which is higher than the WEEE directive requirements.

* 備註：使用 WEEE 計算工具進行推估可回收率。

4.1.2. Product Liability

In order to reduce our impact on the environment and ecology, to fulfill our corporate responsibility for environmental sustainability, to meet the expectations of stakeholders, and to continuously comply with international regulatory requirements, Advantech annually complies with international regulations, the electronics industry standard IEC 62474, customer requirements, and environmental trends. After reviewing the management status of hazardous substances, we have established Advantech's green policy (hazardous substances reduction plan), surpassing the international mandatory regulations. By 2023, there were more than 500 controlled chemical substances. Furthermore, we regularly update Advantech's hazardous substance management regulations for green eco design products and manage them with the green supplier relationship management system (GPMS). Advantech's main plants have introduced the IECQ QC 080000.

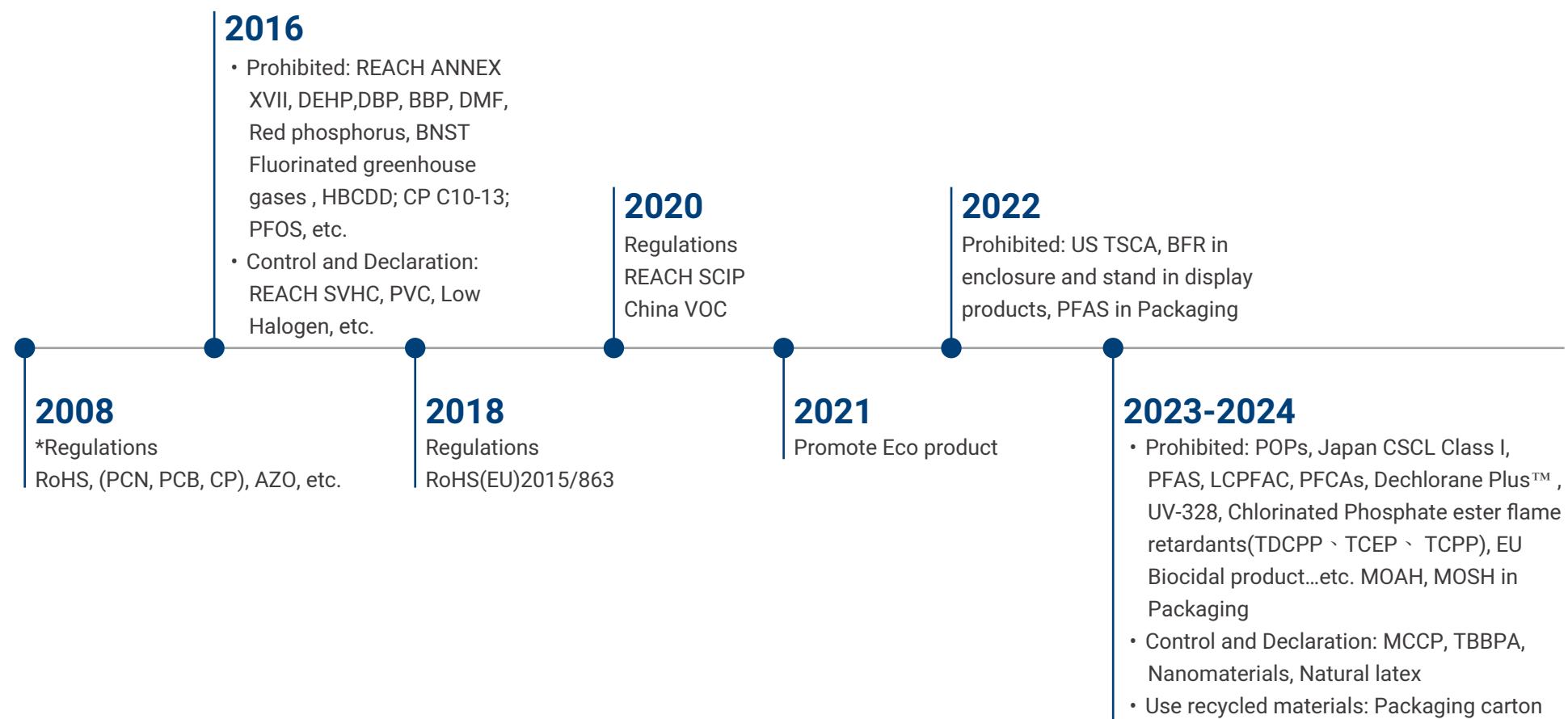


Figure 4.1.5: Advantech green policy - hazardous substances reduction plan

*Note: For all relevant hazardous substance management details, please refer to [Advantech's green policy - hazardous substances reduction plan](#).

Performance Presentation



Continuously achieving 100% compliance of raw materials with international environmental regulations



100% compliance with IEC 62474



100% compliance with Advantech GPM Regulatory Substance Standards

(Relevant substance use disclosure and reporting for all raw materials in accordance with IEC 62474, accounting for 100% of product revenue)



Figure 4.1.6: Green Supply Chain Management Platform (GPMS)

Green Management

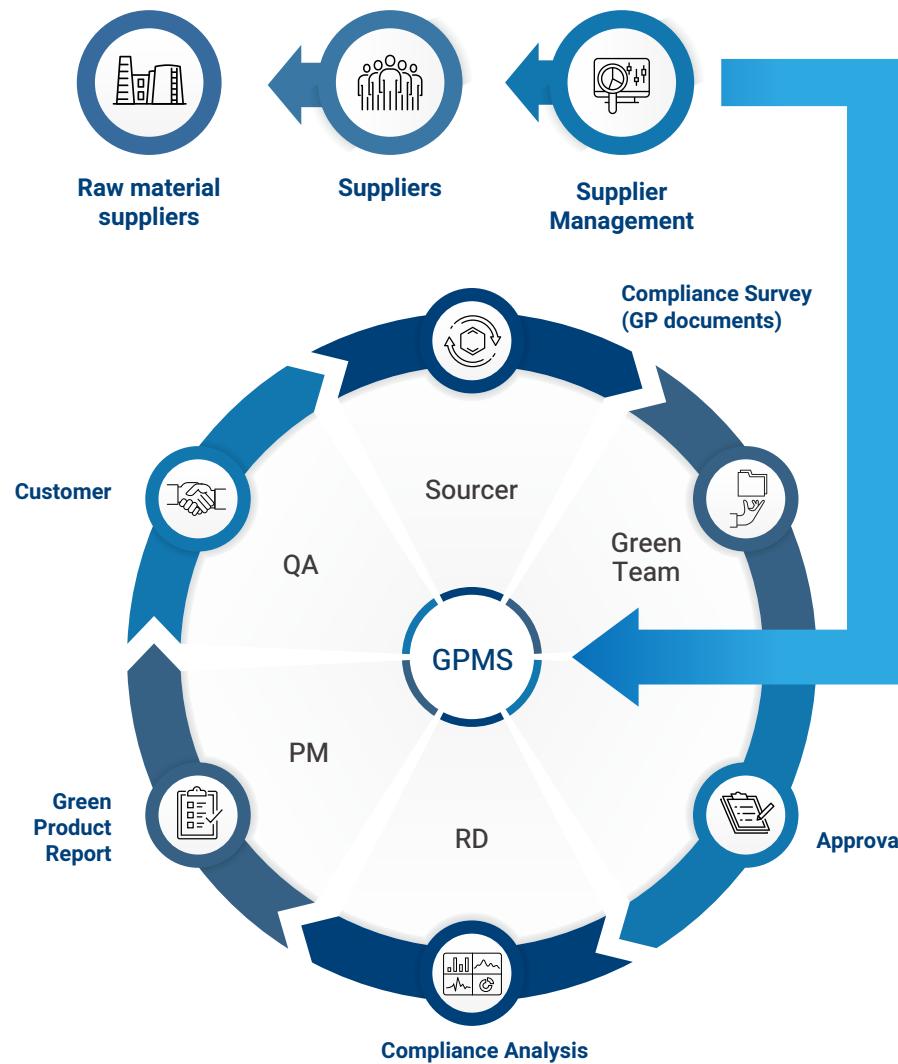
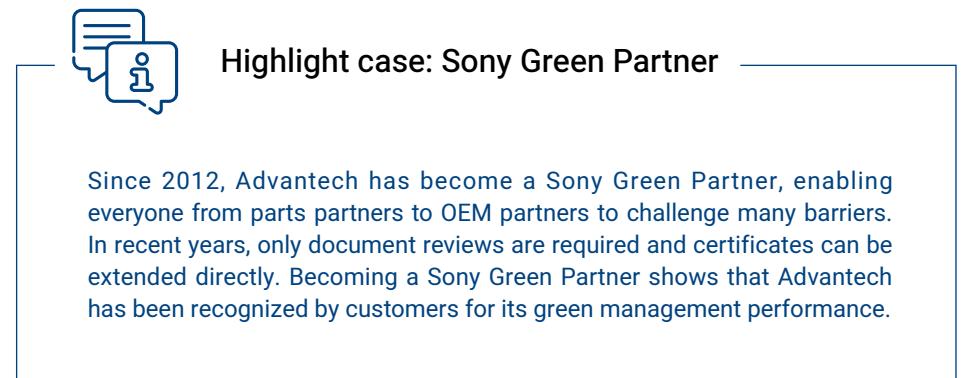


Figure 4.1.7: Green supply chain management process

Since 2010, Advantech has implemented a Green supplier relationship management system. Within this platform, suppliers must commit to and ensure that their products do not contain the Company's regulated harmful substances, as well as provide supporting documentation for reference. The platform is optimized annually to rejuvenate the database, resulting in an efficient green supply chain. Advantech has introduced the hazardous substance management system since 2010. We uphold the spirit of rigorous quality management and continue to control every aspect of product liability. Advantech's products comply with relevant regulatory requirements.

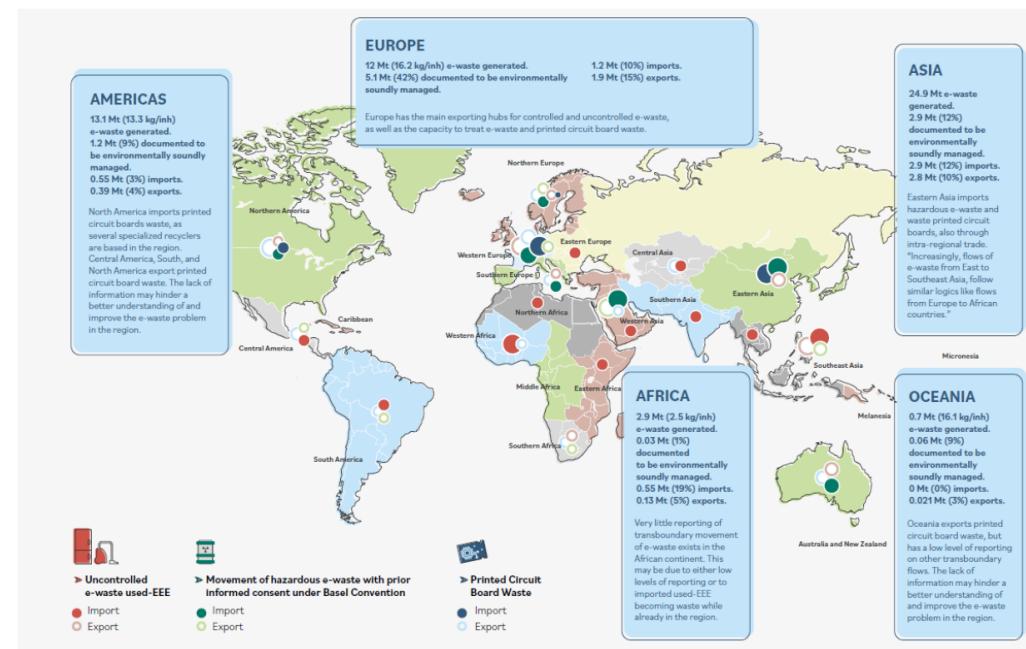


*Note: Sony Green Partner certification is eco product management system that ensures systematic control of all aspects of products from procurement to production and delivery, thus minimize the risk of introducing various environmentally friendly substances into products, and enhance customer products to continuously meet the requirements of environmentally friendly substance standards. It is the best partner for upholding Advantech's environmental requirements and commitments to products and meeting more environmental concerns.

End-of-life Liabilities: Product Recycling

The recyclable design of "recyclability, easy disassembly, low pollution, and energy saving" is injected into the early stage of product design. Advantech's green eco design products have a recycling rate of up to 90%; additionally, through recycling schemes required by regulations, the company promotes the reuse and recycling of electronic products. Commit to e-waste recycling and management in the spirit of producer responsibility.

Comply with local waste recycling laws and regulations in various countries, including Europe, the United States, Japan, Korea, Taiwan, and Kunshan. According to the "Global Transboundary E-waste Flows Monitor 2020 and 2022", the global e-waste reaches 53.6 million tons, and the recycling rate is only 17.4%. Including the recycling rate of 12% in Asia, 9% in the United States, and 42% in Europe. Use this reported recycling rate to convert Advantech's actual global product recycling percentage, and backtracked to calculate the data from 2020 to 2023.



Source: Global Transboundary E-waste Flows Monitor 2022

In particular, in Europe, in response to the EU WEEE Directive and sustainable product design and development, we re-examined product recyclers we cooperated with. At the end of 2020, we changed product recyclers in Europe and expanded the inventory in 2022 (recycling countries expanded from 8 to 20 countries) product shipments and recycling. In addition to the annual expenses for the disposal of electronic product waste in Finland, we also received about EUR 1223 in rewards in 2023.

	Global recyclable weight of products (tons)	Total weight of actual product recycled (tons)	Percentage of global actual product recycled (%)
2020	8,705	1,238	12.8%
2021	10,795	1,529	12.7%
2022	10,041	1,460	13.1%
2023	8,009	1,026	11.5%

Table 4.1.2: Advantech's global actual product recycling ratio

4.1.3 Green Eco Design Internal Label Exemplification

Advantech continues to invest in the research and development of green eco design products. By setting internal product standards for energy saving and green materials, improving green packaging product, and adhering to policies such as minimizing environmental hazards, making assembly and disassembly easier, and making material resources easy to recycle. We strive to achieve more energy efficient and eco benefits on product design. Advantech achieved a new green eco design product silver medal ratio of 37%⁴ in 2023, and reaching a silver medal for green eco design product/Advantech energy saving seal accounted for 9.74%⁵ of the total revenue. This accomplishment demonstrates the implementation of green eco design principles throughout the product lifecycle, effectively showcasing the company's performance in the circular economy. Additionally, we adhere to the Sustainable Accounting Standards Board (SASB) guidelines, calculating the proportion of our sales from products compliant with Type 1 eco label (such as Energy Star and CE ErP) as a percentage of total corporate revenue⁶. This metric serves as one of the indicators for investors to assess our sustainability performance and demonstrates the green competitiveness of our products.

Type 1 Eco-labels

Proportion of revenue from industry certification standard products

Certification standards	2022	2023
Product have obtained CE, ErP, or Energy Star certifications	0.75%	2.79%
Products comply with EPEAT equivalent standards ⁷	3.1%	9.74%

⁴ For calculation of the new product's green eco design Products ratio, please refer to the appendix: Calculation standards for various environmental indicators (Appendix 7)

⁵ Please refer to the appendix for the calculation of the percentage of revenue with silver medal for green eco design product/Advantech energy saving seal: Calculation standards for various environmental indicators (Appendix 7)

⁶ Please refer to the appendix for the calculation of the ratio of the sales of products meeting the Type 1 important eco label to the Company's revenue: Calculation standards for various environmental indicators (Appendix 7)

⁷ Advantech's green eco design guidelines and guidelines are formulated based on EPEAT. For more information, please refer to Chapter 4.1.1 Formulation of green eco design guidelines.



Type 2 Self-declared Environmental Claims: The Implementation of Advantech's Internal Declaration Green Eco Design Label and Energy Saving Design Label Classification is as Follows

Internal declaration label for the four major aspects of green eco design

Description	Internally declared green eco design product labels
The gold medal is awarded to the necessary and optional items in the four major aspects that comply with Advantech's ecological design guidelines and pass the inspection.	
The silver medal is awarded to the necessary items in the four major aspects that comply with Advantech's ecological design guidelines and pass the inspection.	



Number of new products comply with green eco design silver medal

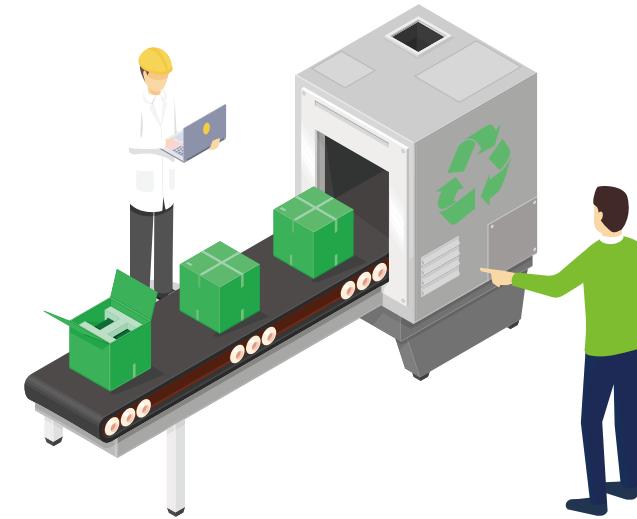
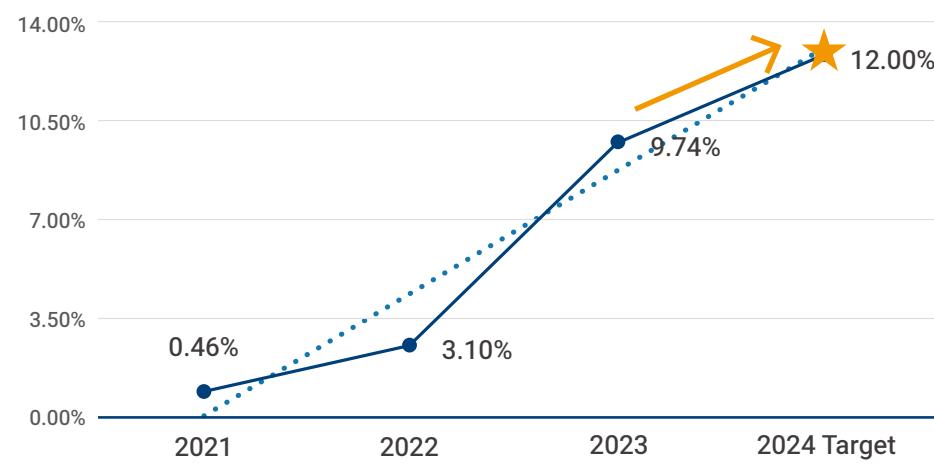
Year	2022	2023	2024
Rate	20%	37%	Target 60%

Advantech energy saving design classification declaration label

Description	Internal energy consumption label
The energy efficiency of products meets the Energy Star test standard.	
The energy efficiency of products meets the ErP and CEC test standards.	

Percentage of revenue from products achieving the silver medal for green eco design products/Advantech energy saving label in 2023: 9.74%

Eco product revenue percentage (%)





4.2

Climate Change Strategy and Management

Item	Explanation
Policy or commitment	<ul style="list-style-type: none"> Adopted the Science-Based Targets (SBT) and committed to achieving SBT by 2030. Joined the RE100 initiative and committing to achieve the goal of using 100% renewable energy by 2040. Achieving net-zero carbon emission by 2050.
Impact description	<p>Advantech regards climate change as an important risk and opportunity, and manages it according to two major aspects: "mitigation" and "adaptation." The potential impacts on the company include stakeholders such as customers' low-carbon design requirements for products (including the organization's use of renewable energy). Therefore, we have introduced and committed to the use of renewable energy through green eco design products, continue to invest in green energy, energy-saving products and energy-saving solutions, combined with the core business of energy management, promote energy conservation and sustainability, and turn risks into future business opportunities and competitiveness.</p>
2023 achievement status	<p>No target was set for 2023, but the following achievements were made:</p> <ul style="list-style-type: none"> Commitment to climate change strategy and net zero vision. Links to Advantech's internal climate information disclosure according to the TCFD framework. The Board of Directors approved the linkage of senior supervisor compensation to ESG and climate change issues and achievements. Officially became a RE100 member, publicly committed to reach the RE100 goal until 2040, and actively promoted the use of renewable energy in all RBUs around the world. Initiate the GHG inventory and verification programs at significant overseas operation locations. Obtained ISO 50001 certification of Taiwan and Kunshan operating bases. Obtained the first product carbon footprint ISO 14067 certification.
2024 Goals	<ul style="list-style-type: none"> Continue to identify climate risks and manage them through mitigation and adaptation. Apply the latest IPCC assessment report, readjust climate scenarios, and links to Advantech's internal climate information disclosure according to the TCFD framework. Optimize the ESG KPI incentive mechanism, incorporate the KPI mechanism into the consideration of operations management development and risk management, and strengthen the linkage of senior managements compensation to ESG and climate change issues and achievements. Activate the power conversion of Fishery and electricity symbiosis power plant in Taiwan and increase the use of renewable energy in the global RBU to 10%. Completed the global iEMS to monitor and analyze the electricity consumption of main operating locations around the world. Implement the internal carbon pricing (ICP) program and define Advantech's carbon pricing. Calculate the representative product's carbon footprint of each business group and complete the application of Advantech's methodology.
2025 Goals	<ul style="list-style-type: none"> Mitigate climate risks and expand business opportunities in the low-carbon market. Continue to align with international climate change and sustainability commitments. Continue to link senior managements compensation to ESG and climate change issues and achievements. Continue to increase renewable energy usage in global RBUs, and Advantech Taiwan uses renewable energy to reach 25% of the total electricity consumption. Increase the quantification of the GHG inventory and verification ratio at significant overseas operation locations. Advantech's GHG emission intensity per unit of revenue decreased by 36% compared to 2019.

Key actions or programs	<ul style="list-style-type: none"> Announce policy and goals on climate change discussed at the annual kick-off meeting. Establish KPIs of the linkage of senior managements compensation to ESG and climate change issues. Launch Advantech's global renewable energy promotion plan, deployed global RE100 teams, and set targets for individual RBUs. Conduct annual GHG inventory and verification (Scopes 1, 2, and 3). Promote energy management and product life cycle assessment methodologies through external ISO certification (ISO 50001, ISO 14067).
Effectiveness	<ul style="list-style-type: none"> Regularly report the management plans and results to the Board of Directors on material climate risk issues through the Sustainable Development Committee (SDC). Report to the Board of Directors for KPI execution by senior managements; report the year's sustainability performance and the achievement of goals in the fourth quarter of each year, and distribute incentives in the first quarter of the following year. (Refer to the description of "ESG performance and incentive mechanism" in 2.1.2 corporate governance for details). Obtained external certifications such as ISO 14064 GHG inventory, ISO 50001 Energy management, ISO 14067 Product carbon footprint, etc. Refer to the climate risk management practices of DJSI, CDP, and benchmark peers, and invite external consultants to provide the latest sustainability trends at the quarterly Corporate Sustainability Development Committee (SDC), proposing improvement plans based on Advantech's actual conditions and risk management
Stakeholder engagement	<ul style="list-style-type: none"> Advantech discloses its sustainability report annually to fully explain the climate change strategy and management issues, so that stakeholders can fully understand. Advantech's ESG Corporate Sustainability Development Office participates in ESG-themed meetings at investors' request. In these meetings, the office explains how Advantech identifies and addresses climate risks, complies with sustainable regulations in Europe and America, and manages carbon issues. Additionally, they relay investors' future expectations and feedback to the corporate sustainability development committee and relevant personnel to drive operational improvements. The ESG Corporate Sustainability Development Office attends ESG conferences at the client's request and discusses Advantech's renewable energy policy, GHG inventory progress, carbon reduction progress, and Advantech's product carbon footprint; the demands are turned into internal driving forces to accelerate internal carbon reduction.

As the world's largest provider of industrial computers and business networking technologies and services, Advantech understands its responsibility to the global environment. The Company's policy statement on climate change is consistent with the goal of the Paris Agreement to keep the global temperature rise below 1.5°C. After passing the science-based targets (SBT) in 2021 and committing to the science-based targets (SBT), we further joined the RE100 initiative in 2023 and committed to achieving the goal by 2040, considering renewable energy as an important strategy for moving towards net zero, and setting the goal of achieving net zero by 2050.

Advantech has included climate change as one of the major risks in corporate sustainable operation, and manages it according to two major aspects: "mitigation" and "adaptation." At the same time, we also actively identify risks, build adaptation capabilities, further research and analyze climate change opportunities, accumulate and deepen R&D momentum, continue to invest in green energy, energy-saving products and solutions, and we are integrating them with the core business of energy management to promote energy saving and sustainability.

▲ Overview of Advantech's Participation in Climate Change Initiative and Advocacy

For the management of climate change-related initiative and public associations, the ESG Corporate Sustainability Development Office will screen and identify public associations or non-profit organizations that align with the meaning of sustainability and the goals and spirit of the Paris Agreement. We also report and plan the investment of resources through the Sustainability Committee at the Board of Directors Level, and attend climate change-related seminars, workshops, and lectures as planned. If the association's and the Company's positions on climate change are found to be inconsistent with the goals and spirit of the Paris Agreement, Advantech will either (1) cease any form of support and participation; or (2) make a public statement and communicate with it in a clear timeframe that it is consistent with the goals and spirit of the Paris Agreement. The scope of this mechanism covers Advantech worldwide. Please refer to Appendix 5 List of public associations participated and description of investing in resources for Advantech's participation in climate change-related associations. By participating in educational training, forums, workshops, and other activities organized by climate change organizations, we can gain new knowledge and communicate with benchmarking companies to empower Advantech's commitment to support the Paris Agreement. For more information, please refer to: [Statement on Advantech's participation in climate change-related public associations management mechanism](#).

At present, Advantech actively participates in the following climate change-related initiative organizations:

Name of organization	Organization profile	Advantech's participation process
SBTi	The SBTi is a scientific approach that enables companies to formulate reasonable carbon reduction goals under the global carbon budget scenario of 1.5°C to control global warming trends and that can be certified by a third party.	<ul style="list-style-type: none"> In 2021, Advantech has committed to meet SBTi's scientific reduction goals and follow a reduction path of 2 °C, committed to reducing the carbon intensity of Scope 1 and Scope 2 emissions by 60% by 2030 using 2019 as the baseline year, and accomplished the goal of a 49% reduction in the carbon intensity of the Scope 3 products used. Furthermore, Advantech is also the third technology industry company in Taiwan to pass the audit, and we continue to move forward in pursuit of these goals. Advantech expects to prepare to align with the SBTi's scientific reduction path of 1.5 °C in 2024 and update the application target in 2025.
RE100	RE100 is a global renewable energy initiative led by the Climate Group and the Carbon Disclosure Project (CDP). From the perspective of the demand side, working together to improve the environment-friendly use of green electricity.	<ul style="list-style-type: none"> In 2023, we joined the RE100 initiative and made a commitment to achieve the goal of using 100% renewable energy by 2040. Advantech has committed to achieve 50% renewable energy use in Taiwan and Kunshan, China by 2030, and achieve the goal globally by 2040. Advantech sponsors the publication of RE100, the content of which focuses on Taiwan's renewable energy market and renewable energy policies, which will help to promote corporate-friendly renewable energy policies and progress. Advantech attended the RE100 member conference and renewable energy policy discussion workshop. The contents included: Taiwan renewable energy market policy initiative, stakeholder of green power policy and policy agenda inventory discussion, and discussion of challenges and dilemmas of Taiwan's renewable energy market.
Taiwan Climate Partnership	The Taiwan Climate Partnership was founded as a joint initiative of eight major technology companies. The purpose of this partnership is to leverage the power of partners to assist the industry's net-zero transformation.	<ul style="list-style-type: none"> Advantech became a member of the Taiwan Climate Partnership in 2022, pledging to decrease carbon emission through energy efficiency improving and low-carbon manufacturing in collaboration with the supply chain. (Refer to 2.3.4 Enhancing supplier sustainability for details.) Fulfill member obligations by regularly participating in member conferences and climate roundtable action meetings, with topics including but not limited to carbon pricing, analysis of the EU's latest sustainability regulations, carbon data, climate law, natural carbon sinks, and other issues.

▲ Advantech's Net Zero Vision



2050

Achievement of net zero carbon emissions

2030

Taiwan and Kunshan use
50% renewable energy

2040

The global use of renewable energy
reaches **100%**, reaching the
RE100 goal

2030

Reduce Scope 1 and Scope 2 carbon intensity by **60%**
Reduce the carbon intensity of Scope 3 product use **49%**



▲ Advantech's Climate Change Development History

2019

- Initiate the ISO 14064 GHG inventory and verification plan for Taiwan and Kunshan
- Base year for Advantech's Science-Based Target (SBT)
- CDP climate change rating of "B"

2020

- Establishment of the ESG Corporate Sustainable Development Committee and ESG Corporate Sustainability Development Office
- Introduce the green product plan to produce low-carbon products
- CDP climate change rating of "B"

2023

- Pass RE100 target commitment and actively promote the use of renewable energy in all RBUs around the world
- Link between the ESG KPI and the performance also approved by the Board
- Initiate the GHG inventory and verification plan of subsidiaries
- Activate iEMS in Taiwan and Kunshan to collect electricity consumption from main business bases
- ACL obtained green factory certification
- Taiwan and Kunshan operating locations obtained ISO 50001 certification
- Obtained the first product carbon footprint ISO 14067 certification

2022

- Establishment of the Sustainability Committee at the Board Level (SDC)
- Completion of Task Force on Climate-Related Financial Disclosures (TCFD) risks and opportunities assessment
- Initiation of the inventory and verification plan for all categories of ISO 14064 Greenhouse Gas Scope 3 (Scope 3)
- AKMC obtained green factory certification
- CDP climate change rating of "B"

2021

- The Science-Based Target (SBT) adopted to comply with the international below 2°C
- Commit to Task Force on Climate-related Financial Disclosures (TCFD)
- A 10 MW solar power plant with low-carbon investment for ACL
- CDP climate change rating of "B"

2026

- Complete the global ISO 14064 GHG inventory and verification

2030

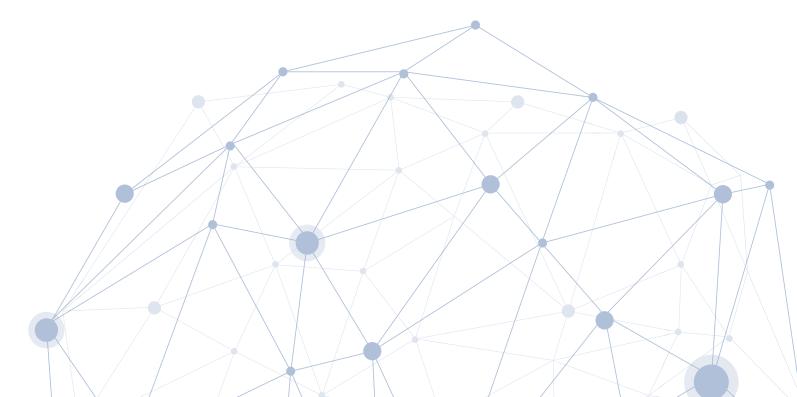
- Achieved Scope 1 and 2 carbon intensity decreased by 60%; Scope 3 product use carbon intensity decreased by 49% of SBT target
- Achieve 50% renewable energy usage in Taiwan and Kunshan

2050

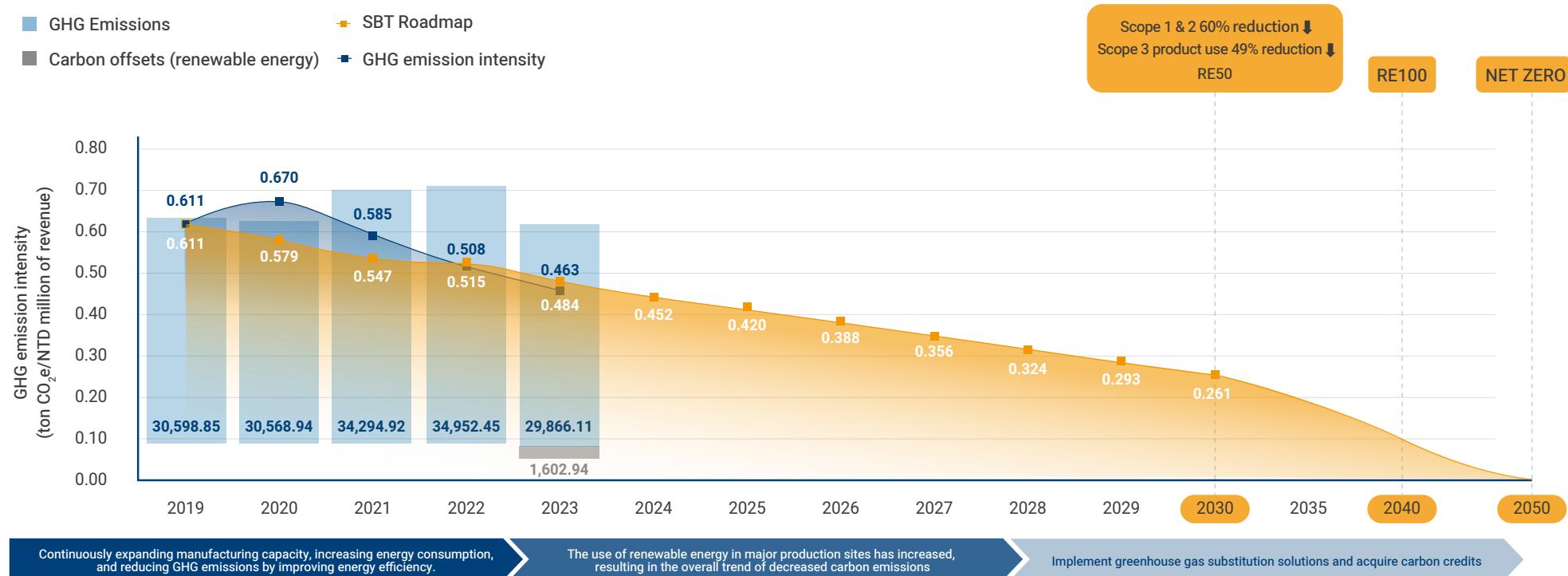
- Achievement of net zero carbon emissions

2040

- Achieve the RE100 goal of 100% global renewable energy use



▲ Advantech's Net-Zero Roadmap



▲ Advantech's Internal Carbon Pricing Strategy

Advantech launched the internal carbon pricing (ICP) project in 2023, hoping to introduce an internal price through the calculation and assessment of carbon emissions costs and incorporate it into the organizational cost-benefit assessment mechanism to guide low-carbon investments and promote the implementation of low-carbon production in all departments, thereby elevating Advantech carbon management performance and achieve the SBT carbon reduction goals. The project will give priority to calculation and evaluation through the shadow price method, and set prices by referring to the relevant laws and regulations of carbon trading in various countries and market prices. The internal carbon price is expected to be completed in 2024 to strengthen the carbon reduction investment decisions of business units.

4.2.1 TCFD Governance Structure and Climate Management Strategy

Extreme weather events caused by climate change, the pressure for low-carbon transition brought about by the aggressive carbon reduction goals of various countries, and the carbon reduction requirements imposed upon the upstream and downstream of the value chain have already caused enterprises to face potential operational impacts. In response to the global demand for a stronger linkage between the identification of climate risks and financial impacts, Advantech has integrated cross-departmental resources from the ESG Corporate Sustainability Development Office and introduced the Task Force on Climate-related Financial Disclosures (TCFD) under the promotion of the Corporate Sustainable Development Committee (SDC). It has followed the TCFD guidelines and recommendations to systematically measure the Company's climate risks and opportunities, deeply assess the existing risk management procedures which focused on climate change in the Pan-Operational Risk Map. The assessment results and response plan has also been reported to the Senior management of the SDC for confirmation, and the SDC will report the progress of climate management to the Board of Directors on a regular basis to enhance the Company's resilience in responding to climate risks.

Advantech's Climate Governance Framework			
Governance	Board of Directors	<ul style="list-style-type: none"> The highest supervisory unit for risk management (including climate risk) Review major climate-related goals and implementation budgets 	<ul style="list-style-type: none"> Oversee climate risk management and strategy implementation results
	Chairman	<ul style="list-style-type: none"> Chairing the Corporate Sustainable Development Committee (SDC) and leading the climate issue management mechanism 	<ul style="list-style-type: none"> Confirm climate-related KPIs and action plans
	SDC Corporate Sustainability Development Committee	<ul style="list-style-type: none"> Responsibilities and decision-making units for climate risk management Regular reporting to the Board on climate management progress Review climate-related risk and opportunity assessment results and response strategies 	<ul style="list-style-type: none"> Approve TCFD report Monitor the implementation of climate issues and review KPIs
	ESG Corporate Sustainability Development Office	<ul style="list-style-type: none"> Coordinate the implementation of climate-related risk and opportunity analyses and integrate the disclosure reports Promote climate-related action plans and report the progress to the Corporate Sustainable Development Committee (SDC) on a quarterly basis 	<ul style="list-style-type: none"> Research and analyze policies on climate issues and scientific research development trends, and monitor climate risk events on a regular basis
	Board Oversight	<ul style="list-style-type: none"> The Corporate Sustainable Development Committee (SDC) regularly reports climate-related management plans and results to the Board of Directors, while the Board of Directors reviews related major goals and budgets In 2021, the Board of Directors approved Advantech Taiwan's renewable energy goals, renewable energy PPA procurement budget, and the project of setting up solar power plants in collaboration with renewable energy providers 	<ul style="list-style-type: none"> In 2022, consulting companies and external experts were assigned to attend Board of Directors' training on topics such as how the ICT industry can help fight climate change, international sustainability trends, new trends in risk management, and response In 2023, the Board of Directors reviewed the annual comprehensive ESG performance, which included climate change-related aspects such as RE100 global workforce group and local target progress, product carbon footprint progress, annual GHG inventory, and EU carbon tariff response topics, etc.
	Advanced management mechanisms	<ul style="list-style-type: none"> Led by the Chairman, the SDC Committee holds meetings each quarter. The ESG Corporate Sustainability Development Office reports on climate-related issue trends, strategic planning, and implementation progress. The SDC supervises the achievement of goals and reviews relevant risks and opportunities assessment results and countermeasures. 	

	Disclosure aspect	Advantech's Implementation Status
 Strategy	Short-, medium- and long-term risks and opportunities	<ul style="list-style-type: none"> Identifying six major risks and five opportunities for Advantech based on the level of impact by referring to the climate-related risks and opportunities and their financial impacts in the TCFD guidelines, integrating operations and industry analysis. Define the short-, medium- and long-term as within 3 years, 3 to 5 years, and more than 5 years, and assess when each issue is likely to occur.
	Potential impacts and financial planning	<ul style="list-style-type: none"> Qualitatively assess the possible financial impacts of various major risks and opportunities, develop preventive and improvement measures, and set KPI accordingly.
	Scenario Analysis	<ul style="list-style-type: none"> The carbon reductions and the financial impact on the Company are analyzed using the International Energy Agency (IEA) Beyond 2°C scenario (B2DS) and 1.5°C scenario (1.5DS); the IPCC SSP2-4.5 Intermediate GHG emissions scenario and SSP5-8.5 Very high GHG emissions scenario, and the physical impact on operations to include in the assessment of adjustment strategy resilience is also analyzed.
 Risk management	Disclosure aspect	Advantech's Implementation Status
	Evaluation and Management Process	<ul style="list-style-type: none"> ESG Corporate Sustainability Development Office each year convenes cross-departmental members to collect and review relevant climate risk and opportunity factors of the Company, assess major climate issues through the level of impact and likelihood, monitor changes in risk levels, review and develop response strategies, and report to the SDC for resolution, as well as review related disclosures, and the SDC regularly reports to the Board of Directors to supervise the progress of climate risk management and review major relevant decisions.
 Metrics and Targets	Overall Risk System Integration	<ul style="list-style-type: none"> At the beginning of each year, the Risk Management Task Force assesses the Company's overall operational risks according to the risk management procedures, draws a Pan-Operational Risk Map, and reports the risk management process and plan to the Board of Directors. Since 2021, climate change risks have been included in the assessment process, and the risk level is identified through the main investigation of the Audit Office and in cooperation with the ESG Corporate Sustainability Development Office. In 2022, we introduced the complete TCFD assessment process. The assessment methods and results will be applied to the climate change risk analysis shown in the risk map and included in the overall risk management process. In 2023, the TCFD evaluation process will continue to be included in the overall risk management process. In 2024, we expect to adjust climate scenarios based on the latest IPCC assessment report, climate risks and responses will be reassessed.
	Disclosure aspect	Advantech's Implementation Status
 Metrics and Targets	Scope 1, 2 and 3 GHG emissions and targets	<ul style="list-style-type: none"> Passed the review of SBT science-based carbon reduction targets. Advantech Taiwan and Kunshan both complete the ISO 14064-1 GHG inventory, verification, and target tracking every year. Initiate the GHG inventory and verification for overseas significant locations of operation in 2023.
	Other climate-related management indicators and targets	<ul style="list-style-type: none"> Commit to joining the RE100 initiative and set the net-zero goal by 2050. We have set goals for power saving, renewable energy use, water saving, waste reduction, percentage of green products in revenue, and energy efficiency improvement for product power supplies. Introduce the ISO 50001 Energy Management System, assess the LCA carbon footprint of major products, and continue to set management indicators and goals for related strategies.

***Note:** The scope names of greenhouse gas under the ISO14064-1:2006 in responding to ISO14064-1 are divided into: Scope 1, corresponding to Category 1; Scope 2, corresponding to Category 2; and Scope 3, corresponding to Categories 3 to 6.

4.2.2 Climate-Related Risks and Opportunities and Identification of Financial Impacts

Advantech ESG Corporate Sustainability Development Office convenes cross-departmental members to define risks and opportunities according to the TCFD guidelines. Through the collection of multi-faceted issues, cross-departmental discussions, and external consultations to specifically identify Advantech's major risk and opportunity issues and their corresponding potential issues and impact levels, and analyze the possible financial impact. The three major aspects with industry characteristics and international contexts as the focus: operations (reduction, natural disasters), products/supply chain, and markets, in order to inventory the company's overall climate risks and opportunities, and accurately propose relevant countermeasures. Therefore, the Company's climate risk management covers the entire value chain (upstream, downstream, and own operations).

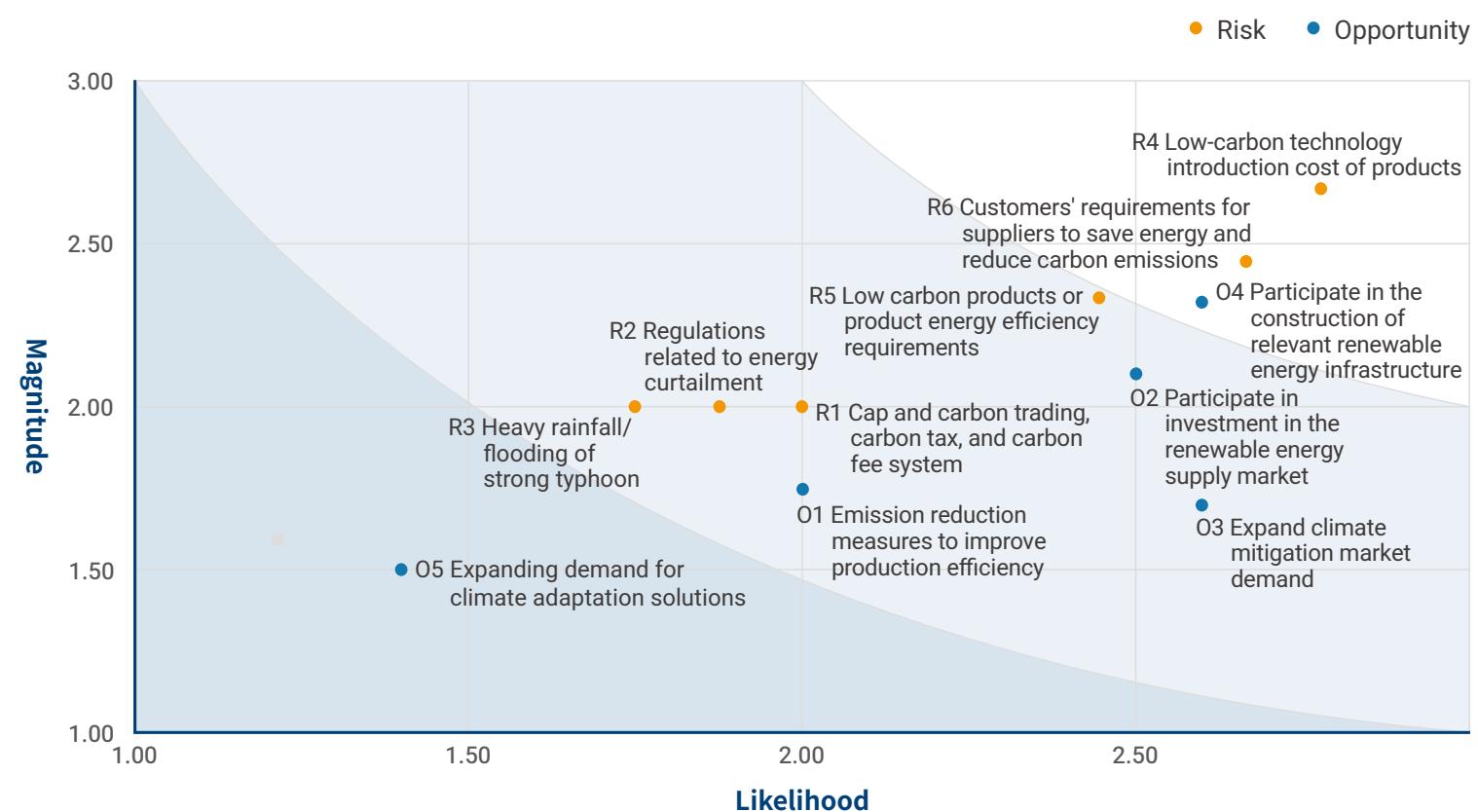


Figure 4.2.2: Materiality Matrix for Advantech's Climate Risks and Opportunities

Results of a scenario analysis of Climate Change risks

(For TCFD financial quantification status report, please refer to [Appendix](#))

Results of a scenario analysis of transformation risks

Scenario	Impact assessment	Financial impact
WB2DS (SBT voluntary reduction scenario)	Evaluate the financial impact of voluntary carbon reduction across all operations in 2030 through the purchase of all renewable energy sources, regardless of the cost of carbon credits purchased.	NT\$57,706,595 for an increase in the purchase cost of Power Purchase Agreements(PPA) and I-REC
1.5DS (Net zero scenario)	Evaluate the financial impact of voluntary carbon reduction across all operations in 2030 through the purchase of all renewable energy sources, regardless of the cost of carbon credits purchased.	NT\$58,764,963 for an increase in the purchase cost of Power Purchase Agreements(PPA) and I-REC
Control implementation scenario (Refer to historical scenarios)	Assess the interruption of water and power supply caused by China's energy transition/power curtailment policy, as well as the loss of revenue caused by the interruption of operation and production, as well as equipment damage and UPS maintenance costs.	NT\$315,557,546 in costs increased due to the interruption of operational production
STEPS (Implementation of Stated Policies Scenario)	Assess the time period for 2025-2030 that Advantech Taiwan may be subject to the government's regulations, including the tightening of regulations for large power consumers requiring a certain proportion of renewable energy, and amendments to the Climate Change Interaction Act. The Company's operating costs will increase due to payment of monetary substitution or carbon fees if it fails to meet the regulations.	NT\$8,868,638 of operating cost increased due to renewable energy deposit payment and carbon fee

Results of a scenario analysis of physical risks

Scenario	Impact assessment	Financial impact
SSP5-8.5 (Very high GHG emissions scenario)	Assess the financial impact on operations and production caused by extreme weather events (heavy rainfall or flooding) that occur in Taiwan as a whole until the middle of the century (2050) / every 5 to 10 years, excluding other physical risks (such as temperature rise, drought).	NT\$379,400 in operating costs due to damaged equipment and absent or delayed attendance of personnel in the factory.
SSP2-4.5 (Intermediate GHG emissions scenario)	Assess the financial impact on operations and production caused by extreme weather events (heavy rainfall or flooding) that occur in Taiwan as a whole until the middle of the century (2050) / every 5 to 10 years, excluding other physical risks (such as temperature rise, drought).	NT\$189,700 in operating costs due to damaged equipment and absent or delayed attendance of personnel in the factory.

*Note: SSP5-8.5 (Taking the highway scenario) corresponds to RCP8.5 (High global emission scenario) and SSP2-4.5 (Middle of the road scenario) corresponds to RCP4.5 (BAU scenario)

Climate-related risk and opportunity assessment results and response strategies

 Climate risk  Climate opportunity

Category	Risk or opportunity issues	Advantech encounters risk or opportunity.	Level of Impact	Affected schedule	Financial impact	Advantech's response strategy
Operation Transition Risk	Cap and carbon trading, carbon tax, and carbon fee system	When regulations related to greenhouse gases are implemented, emission credits may be purchased or carbon-related fees may be imposed.	Medium	Mid-term	<ul style="list-style-type: none"> Increase operating cost 	<ul style="list-style-type: none"> High energy-consuming equipment was replaced and building energy management system (iEMS) was established Investment in green energy equipment in factories and offices The maintenance and testing of the uninterruptible power system are strengthened, and contingency measures for power cuts are established. Carbon reduction KPI were set up for each department Plan to introduce the ISO 50001 energy management system
	Regulations related to energy curtailment	Splitting of power usage and policy on power limits caused interruption of water supply and power supply, resulting in increases in equipment damage and uninterruptible power system maintenance cost.	Medium	Short-term	<ul style="list-style-type: none"> Increase operating cost Increase capital expenditures Operational disruptions are caused to decrease operating revenue 	
Opportunity	Emission reduction measures to improve production efficiency	Emission reduction measures such as the replacement of old machines and the adjustment of the operating mode of reflow ovens are used to improve the efficiency of energy and resource use and the resilience of operations	Medium	Short-term	<ul style="list-style-type: none"> Operational costs reduction 	
Physical risk	Heavy rainfall / flooding of strong typhoon	The situation of interruption in operation includes heavy rainfall exceeding the maximum capacity of the drainage system and flooding causing power failure in the computer room.	Medium	Short-term	<ul style="list-style-type: none"> Increase capital expenditures decrease in asset value Operational disruptions are caused to decrease operating revenue 	<ul style="list-style-type: none"> Business Continuity Plan (BCP) and exception handling procedures are established and regularly exercised. The maintenance and testing of drainage facilities and anti-flooding operations are strengthened to evaluate the configuration of power generation facilities and the addition of energy storage equipment. The risk assessment of the operating sites is planned to formulate warning levels and response measures based on external data and scenarios for climate flooding potential.
Product/ Supply Chain Transition Risk	Low-carbon technology introduction cost of products	Additional costs include increased demand for low-carbon products, design and development introduced by derivative low-carbon technologies, replacement of environmentally friendly materials, safety certification fees, etc.	High	Short-term	<ul style="list-style-type: none"> Increase operating cost 	<ul style="list-style-type: none"> The Green Design Management Committee was established to target four product standpoints: green materials, green packaging materials, product recycling, product energy saving, and refer to the standard guidelines for green design formulated by international standards New product or material designs are incorporated into energy efficiency standards, and existing product designs are changed to achieve energy efficiency goals. Environmentally-friendly materials and product designs with extended service life are enhanced.
	Customers' requirements for suppliers to save energy and reduce carbon emissions	Requests from customers to investigate Advantech's greenhouse gas emissions, carbon reduction goals and measures have increased, thus deriving the pressure of carbon reduction and related costs.	High	Short-term	<ul style="list-style-type: none"> Increase operating cost Impact on orders to decrease operating revenue 	

Category	Risk or opportunity issues	Advantech encounters risk or opportunity.	Level of Impact	Affected schedule	Financial impact	Advantech's response strategy
Product/ Supply Chain Transition Risk	Low carbon products or product energy efficiency requirements	The EU ErP Energy Efficiency Directive has expanded its regulatory scope. Those that don't meet energy efficiency requirements could face a drop in sales. In response to demands for low-carbon products, the US Energy Star standard was voluntarily introduced to expand competitive advantages.	Medium	Short-term	<ul style="list-style-type: none"> • Increase operating cost • Impact on shipment to decrease operating revenue 	<ul style="list-style-type: none"> • The weight and size of the packaging materials are adjusted to reduce the use of materials and the carbon emissions of transportation. • The communication between suppliers and customers has been strengthened to facilitate the promotion of green material procurement and compliant products. • Investigate, assess, and coach improvement on ESG risks of suppliers. It is planned to require key/high energy-consuming suppliers to be subject to carbon inventory. • The introduction of the assessment of the carbon footprint of the product life cycle of the main product LCA is planned.
Market Opportunity	Participate in investment in the renewable energy supply market	We invest in the green energy industry, such as cooperating with Micropower Energy to set up solar power plants to comply with the increasingly stringent renewable energy regulations and the trend of RE100, in order to develop related market opportunities.	Medium	Short-term	<ul style="list-style-type: none"> • Increase operating revenue 	<ul style="list-style-type: none"> • We invest in renewable energy companies or cooperate with them in technology to ensure the future supply of renewable electricity and improve the cloud management platform technology related to new energy cases. • The products, solutions and technical services that integrate the Internet of Things are expanded to be used in client-side energy management, renewable energy and energy storage equipment, and environmental monitoring. • Regional Business Units and Emerging Business Opportunities Department shall keep abreast of new business opportunities in climate-related markets to formulate business development plans. • Green operating revenue brought by the planning of quantified low-carbon/climate-related solutions
	Expand climate mitigation market demand	The world is accelerating the expansion of the goal of net zero emissions and the policy-derived demand for carbon control. Advantech's IoT hardware and software products just cut into the application market that can mitigate climate change, including energy information management systems and so on.	Medium	Short-term	<ul style="list-style-type: none"> • Increase operating revenue 	
	Participate in the construction of relevant renewable energy infrastructure	In response to the needs of renewable energy development, intelligent maintenance and monitoring solutions related to the development of energy and energy storage equipment can increase the market share of new energy industries, such as communication gateways for renewable energy.	High	Short-term	<ul style="list-style-type: none"> • Increase operating revenue 	
	Expanding demand for climate adaptation solutions	The intensification of climate change brings about the need for adaptation. Advantech integrates IoT technologies to provide solutions such as monitoring of landslides and flood control, sponge cities, and smart agriculture to tap into emerging and adaptive business opportunities.	Low	Mid-term	<ul style="list-style-type: none"> • Increase operating revenue 	

***Note:**

1. The degree of impact: Internal assessment is conducted and classified into "high, medium, and low" according to the possibility of occurrence and the degree of impact.

2. The duration of the impact: The consideration of the possible timing of occurrence is divided into "short-term (<3 years), medium-term (3-5 years), and long-term (>5 years)".

4.3

Greenhouse Gas Inventory and Energy Resource Management

▲ Highlight Projects

**-9.0%**

Advantech's overall* GHG emissions per unit of revenue decreased by 9.0% compared to 2022, and decreased by 24.3% compared to 2019 in 2023

B List

2023 CDP Climate Change Questionnaire was ranked B List

RE 100

Advantech joined the RE100 initiative in 2023, announcing to fully use renewable electricity by 2040

ISO 50001

In 2023, the ISO50001 certification for the factories in Taiwan and Kunshan was completed

*Note: Main operating bases and manufacturing factories.

Adheres to the original devotion to the idea of being a global citizen, Advantech has completed third-party verification since 2019, in addition to the self-assessment required by ISO 14064-1:2018 and the GHG Protocol. In recent years, we have continued to implement GHG management based on the results of our annual inventory checks. We have also made efforts in product design, product material management, product energy efficiency improvement, and renewable energy use. Starting from 2023, in addition to completing the ISO 50001 certification in 2023 for Taiwan and Kunshan Factories, Advantech joined the RE100 initiative on the same year, announcing to fully use renewable energy by 2040. Currently, Kunshan and Europe are both using renewable energy. This chapter's writing scope covers Advantech's main global operations and production factories, together accounting for 92.6% of total consolidated revenue.

▲ Phased Achievements and Future Goals of GHG Management

Item	Achievements in 2023	2024 Goals	2025 Goals
	Achieved 100% of the target set in 2023		
GHG management	<ul style="list-style-type: none"> In 2023, the Company's overall GHG emissions per unit of revenue will decrease by 9.0% compared to 2022. Initiate the GHG inventory and verification of subsidiaries Taiwan and Kunshan operating locations obtained ISO 50001 certification 	<ul style="list-style-type: none"> Initiate the GHG inventory and verification for overseas significant locations of operation Formulate and trial internal carbon pricing 	<ul style="list-style-type: none"> Advantech's GHG emission intensity per unit of revenue decreased by 36% compared to 2019
Energy management	<ul style="list-style-type: none"> Join RE100 and actively engage in low-carbon investments 	<ul style="list-style-type: none"> The Taiwan factory starts using renewable energy Per capita office electricity consumption by 3% compared to 2023 Reduce electricity consumption per working hour at production sites by 5% compared to 2023 	<ul style="list-style-type: none"> Advantech Taiwan uses renewable energy to reach 25% of its total electricity consumption Per capita office electricity consumption is reduced by 6% compared to 2023 Reduced electricity consumption per working hour at production sites by 10% compared to 2023

4.3.1 GHG Inventory and Management

In order to create a low-carbon emission business environment, Advantech has established the "Greenhouse Gas Inventory Promotion Committee" based on the quantification, monitoring, reporting, and verification procedures for GHG inventory provided by Taiwan's Climate Change Response Act and the ISO 14064-1 standards to promote GHG inventory and reduction work in order to reduce direct and indirect GHG emissions year by year. And joined the Carbon Disclosure Project (CDP) since 2015 to disclose the Company's carbon reduction plans and performance annually.

GHG Inventory Check

Advantech's verified main operating locations and production factories in the GHG inventory verification process in recent years are ACL and AKMC. Starting from 2024, these will be included in the main overseas operating locations and production areas.

ACL refers to ISO 14064-1 and the GHG protocol, in addition to requiring self inventory, and had also undergone third-party on-site verification by a third-party verification agency since 2019. Organizational boundaries are based on the requirements of ISO 14064-1:2018. The boundaries of the organization are set based on operational control, and the Company's GHG inventory management procedures, inventory report, and emission source inventory are established. The organizational boundary includes Rueiguang Headquarters, Taipei Sunny Building, Donghu factory, and Linkou Campus. In addition to the qualitative and quantitative inventory of Scope 1 (Category 1 direct GHG emissions) and Scope 2 (Category 2 indirect GHG emissions associated with energy production), inventory the emission sources of

Scope 3 (Categories 3, 4 and 5 indirect GHG emissions). In 2023, the total emission of Scope 1 emissions from ACL was 615.4740 metric tons of CO₂e.

In 2015, AKMC conducted its first ISO14064-1 GHG emissions inventory for 2014, which was verified on-site by the China Quality Certification Center (CQC), a third party. The results of the 2023 inventory showed that AKMC generated a total of 2,530.75 metric tons of CO₂e. In addition, this year, we strengthened the inventory of GHG emissions from Scope 1 energy use at our sites in Japan, Korea, the U.S., and Europe. The emissions in each region are shown in Table 4.3.1, and we will continue to expand the scope of the inventory in the future.

Table 4.3.1: Scope 1 GHG emissions by Advantech's Main Global Operations and Production Factories in 2023

Region \ Greenhouse gases	Carbon dioxide (CO ₂)	Methane (CH ₄)	Nitrous oxide (N ₂ O)	Hydrofluorocarbons (HFCs)	Perfluorocarbons (PFCs)	Sulfur hexafluoride (SF ₆)	Nitrogen trifluoride (NF ₃)	Total (Metric tons CO ₂ e)
ACL, Taiwan	35.0930	0.0224	0.0265	580.3320	0	0	0	615.4740
AKMC, China	1,411.6620	22.3166	2.9664	1,093.8077	0	0	0	2,530.7526
AJP, Japan	12.1982	0.0333	0.3314	0	0	0	0	12.5629
AKR, Korea	0	0	0	0	0	0	0	0
ANA, USA	14.1478	0.0003	0.0000	0	0	0	0	14.1481
AEU, European	55.0948	0.0773	0.1682	0	0	0	0	55.3403
Total	1,528.1958	22.4499	3.4925	1,674.1397	—	—	—	3,228.2779

*Note: For AJP, AKR, ANA and AEU, only GHG emissions from energy use (natural gas, diesel, gasoline, liquefied petroleum gas) are measured for Scope 1 emissions.

Among Advantech's Taiwan factories(ACL), Scope 2 only involve the use of purchased electricity. Carbon emissions are calculated based on the 2022 electricity carbon emission factor of 0.495 kg CO₂e announced by the Bureau of Energy, Ministry of Economic Affairs, which amounts to 9,723.0184 metric tons of CO₂e. For Advantech's Kunshan factories(AKMC), Scope 2 includes the use of purchased electricity and purchased steam, a total of 15,399.91 metric tons of CO₂e (market-based). The carbon emission calculation of electricity refers to the emission factor of "The average carbon dioxide emission factor of China's regional power grid in 2011 and 2012." The emission factor for East China Regional Power Grid in 2012 was 0.7035 kgCO₂e; the carbon emissions from steam were calculated based on the "Guidelines for Accounting Methods and Reporting of Greenhouse Gas Emissions of Enterprises in Other Industries"; the emission factor for steam was 110 kg CO₂/GJ. In addition, factories in Japan(AJP), Korea(AKR), USA(ANA) and European(AEU) use purchased electricity only among scope 2 GHG emission. The electricity emission factors for AJP, AKR, and ANA are derived from the electricity emission factors announced by their respective countries, and are 0.3650 kgCO₂e/kWh, 0.4781 kgCO₂e/kWh, and 0.2079 kgCO₂e/kWh, respectively; the emission factor for AEU is 0 kg CO₂e/kWh, as AEU relies entirely on renewable energy sources.

Table 4.3.2 shows the amount of Scope 1 and Scope 2 GHG emissions from Advantech's main operating and production factories. The total Scope 1 and Scope 2 emissions in 2023 were 29,866.6190 metric tons of CO₂e (Market-based). Figure 4.3.2 shows the amount of Scope 1 and Scope 2 GHG emissions by Advantech's main operating locations and production factories in recent years.

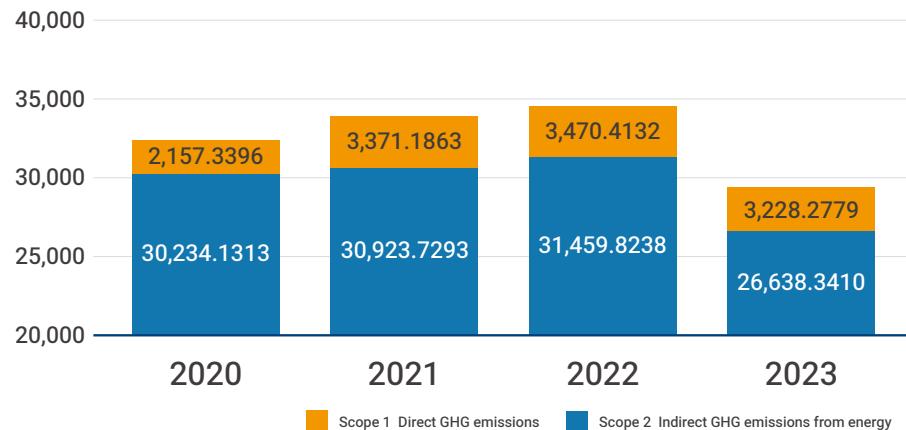
Table 4.3.2: Scope 1 and Scope 2 GHG emissions by Advantech's Main Global Operations and Production Factories in 2023

Region	Scope 1 Direct GHG emissions	Scope 2 Indirect GHG emissions from energy		Total (Metric tons CO ₂ e)	
		Market-based	Location-based	Market-based	Location-based
ACL, Taiwan	615.4740	9,723.0184	9,723.0184	10,338.4924	10,338.4924
AKMC, China	2,530.7526	15,399.9083	16,948.2759	17,930.6609	19,479.0285
AJP, Japan	12.5629	1,201.1242	1,201.1242	1,213.6871	1,213.6871
AKR, Korea	0	136.4239	136.4239	136.4239	136.4239
ANA, USA	14.1481	177.8662	177.8662	192.0144	192.0144
AEU, European	55.3403	0	54.7120	55.3403	110.0523
Total	3,228.2779	26,638.3410	28,241.4206	29,866.6190	31,649.6986

***Note:**

1. The GHG inventory check of AJP, AKR, ANA, AEU has not been verified by third party.
2. In the market-based calculation, the GHG emissions from renewable energy sources in AKMC and AEU were calculated with the electricity emission factor as 0.

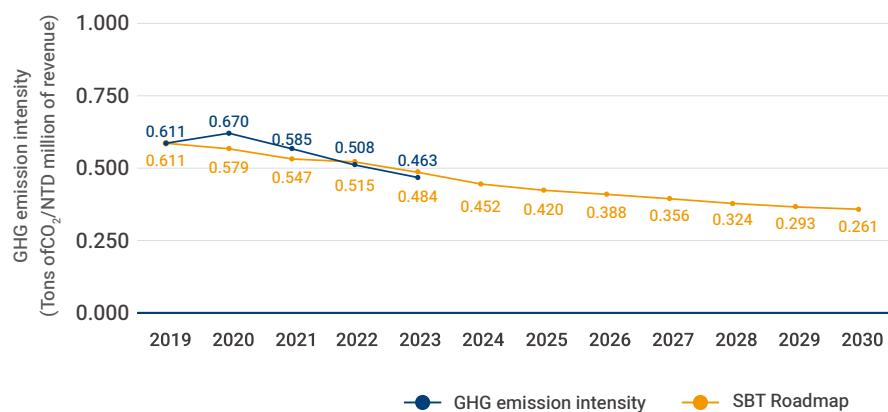
Figure 4.3.1: Scope 1 and Scope 2 greenhouse gas emissions of Advantech's main global operations and production factories in recent years



***Note:**

1. The 2020 GHG emissions from electricity use was not available in Korea and the United States, while emissions from other energy sources were not available in the United States.
2. In 2023, statistics for Scope 1 GHG emissions from AJP, AKR, ANA, AEU were added. and the scope 2 emissions in AJP and AKR have been updated due to the emission factors changed.
3. The scope 2 data are GHG emissions from "market-based" sources.

Figure 4.3.2: GHG emission intensity and SBT carbon reduction roadmap of Advantech's main operating locations and production factories in recent years



- *Note:** The second category of statistics refers to "market-based" GHG emissions

In 2023, the average amount of GHG emissions per unit of revenue (Scope 1 and Scope 2) of Advantech's main operating locations and production factories was 0.463 tons CO₂e/NT\$ million revenue, reduced by 24.3% and 9.0% respectively compared with 2019 and 2022, and continue to move towards the SBT goal of 60% reduction by 2030, as shown in Figure 4.3.2. In 2023, in addition to establishing an energy management policy and adopting the ISO 50001 energy management system, Advantech uses its iEMS intelligent energy management platform to monitor energy consumption in real time, optimize equipment operation and improve power consumption efficiency. It also holds energy project meetings regularly. We share and interact to continuously improve energy efficiency. In the future, we will continue to set the goal of GHG reduction per unit of sales per year. In addition to achieving the goals set by the SBT announcement, this will also deeply embed the concept of energy saving in the hearts of colleagues and help it become an important part of the Company's culture.



Table 4.3.3: Scope 3 identification and emissions of greenhouse gases from Advantech Taiwan and Kunshan factories

In order to find out the key factors for climate change, in addition to the GHG emissions from its own operations, Advantech Taiwan has also started to identify the significance of other indirect emission sources according to the ISO14064-1 inventory method since 2019, and has established related inventory methodologies to identify emission hotspots, set reduction targets, and gradually implement reduction measures. Advantech's Scope 3 identification and emissions in 2023 for Taiwan and Kunshan, China are shown in Table 4.3.3. Among them, Advantech's Scope 3 GHG emissions per unit of revenue in 2023 decreased by 8.71% compared to 2022, which is mainly due to the 14.31% reduction in C11 (product use) (carbon reduction: 173,769.64 tons CO₂e). The Scope 3 emissions reduction will continue in the future through internal energy-saving label, energy-saving product designs, power efficiency improvement, and the promotion of internal carbon pricing.

Category Item	Verification scope description	Emissions from ACL (tons CO ₂ e)	Emissions from AKMC (tons CO ₂ e)
C1/Category 4	Procurement of goods and services	213,927.8894	21,036.8456
C2/Category 4	Capital goods	5,357.6987	1,612.4929
C3/Category 4	Upstream fuels and energy	1,921.0098	6,629.5758
C4/Category 3	Raw material transportation	46.0543	199.3373
C5/Category 4	Operational waste	41.5930	22.5382
C6/Category 3	Business travel	119.5119	30.1799
C7/Category 3	Employee commute	476.0058	300.7053
C8/Category 4	Upstream leased assets	73.1892	52.6521
C9/Category 3	Product transportation	2.0403	87.4167
C10/Category 5	Product processing	0	0
C11/Category 5	Product use	716,553.0502	Included in the Taiwan headquarter office
C12/Category 5	Product end-of-life treatment	17.0716	Included in the Taiwan headquarter office
C13/Category 5	Downstream leased assets	0	426.3576
C14/Category 5	Franchise	0	0
C15/Category 5	Investment	7,524.9078	Included in the Taiwan headquarter office

***Note:**

1. Scope 3 C1-C15 correspond to ISO14064-1:2018 Categories 3-6
2. The use of products and the disposal of products are the scope of the global inspection of Advantech.

▲ Highlighted Projects: Participation in the international Carbon Disclosure Project (CDP) evaluation

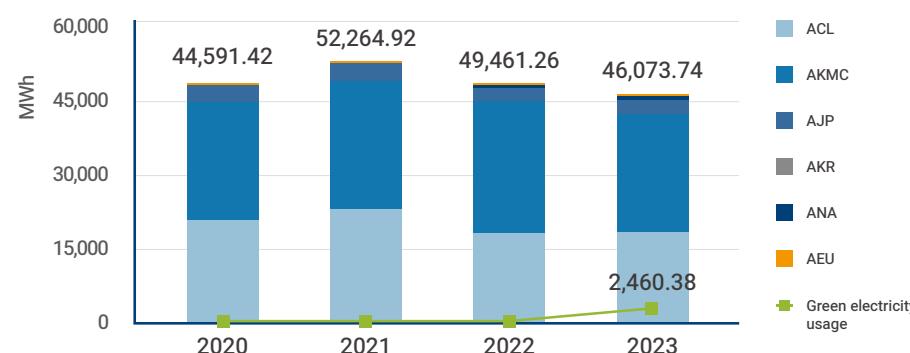
Advantech has been cooperating with customers in participating in the Carbon Disclosure Project (CDP) since 2015. CDP is the largest database of climate change-related data in the world. They also assess the risks and opportunities brought by climate change to these companies through questionnaire every year to investigate companies' response to climate change and GHG emissions and reductions. Through the annual CDP information disclosure, Advantech reviews climate regulations, climate disasters, and other climate-related issues one by one to uncover hidden risks in our operations and management, further takes effective measures to reduce and eliminate potential risks in operation and management, thereby complying with international customers' requirements on GHG management requirements. Selected as B List by Advantech in 2023.



▲ Energy Data Management

The main source of GHG emissions from Advantech's factories is the carbon dioxide generated during the generation of purchased electricity required for the Company's operations. This source of emissions accounted for over 80% of the Company's overall emissions in 2023. In 2023, the overall energy (electricity, steam, gasoline, diesel, natural gas) consumption of Advantech's main operating locations and production factories was 201,449.24 GJ, of which purchased electricity accounted for 82.34% of the energy consumption (including 5.34% of the renewable energy use), and the total consumption is 9.73% lower than in 2022.

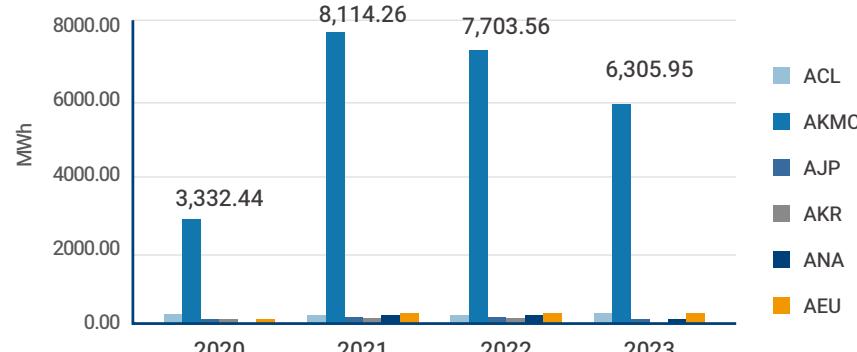
Figure 4.3.3: Electricity Consumption among Advantech's Main Operations and Production Factories in Recent Years



*Note:

1. No statistics on consumption in 2020 for AKR and the ANA.
2. The 2022 electricity consumption data for AJP and AKR has been revised, so the total data has been revised from 49,509.69 MWh to 49,461.26 MWh.

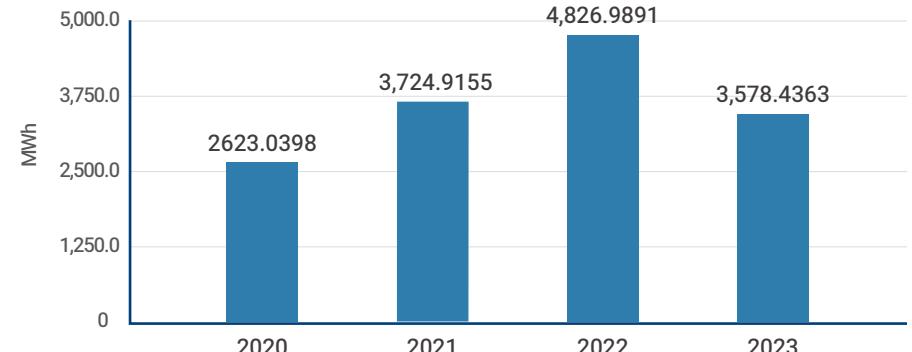
Figure 4.3.4: Non-renewable Fuels Consumption among Advantech's Main Operations and Production Factories in Recent Years



*Note:

1. No statistics for 2020 was reported for the ANA.
2. The 2022 natural gas data for ANA has been revised, so the total data has been revised from 7,702.30 MWh to 7,703.56 MWh.

Figure 4.3.5: Non-renewable energy consumption (purchased steam) by Advantech's main operating locations and production plants in recent years



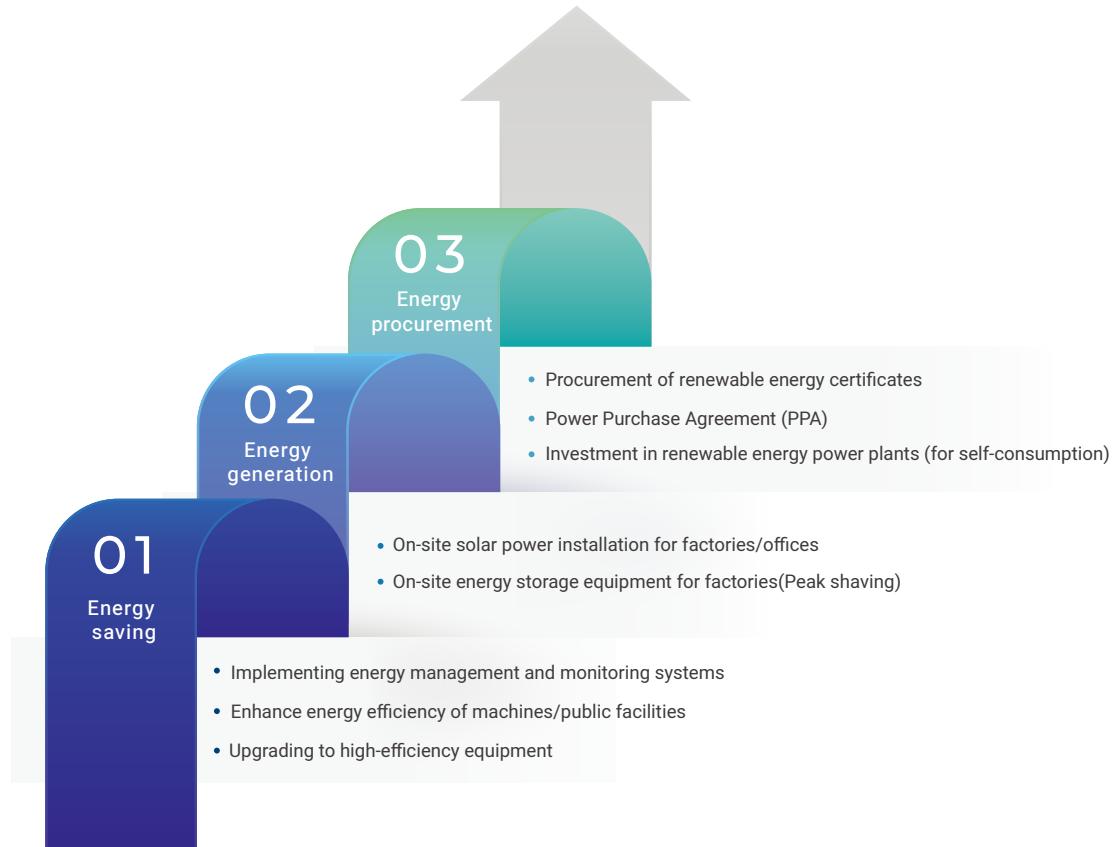
- *Note: The scope covers Advantech's main global operations and production factories, but only the AKMC uses steam.

4.3.2 Energy Management Actions

▲ Energy Use Overview

Electricity is Advantech's main energy source. Therefore, in order to reduce the environmental impact of products and production activities, and improve energy efficiency and renewable energy ratio, Advantech has established an [energy management policy](#) and implemented ISO 50001 Energy management systems at main production factories (ACL and AKMC). The management system systematizes the processes of energy review, energy-saving solutions, and benefit analysis; we have also established the iEMS intelligent energy management platform to enable real-time monitoring of energy consumption, optimize equipment operations, and enhance power efficiency. Since 2023, Advantech has become a member of RE100 and committed to the global RE100 goal and launched global projects. Advantech's energy management team also regularly holds energy project meetings to follow up on the implementation progress, and continues to improve energy efficiency and the use of renewable energy through sharing and interaction among factories.

▲ Energy Management Strategy



▲ Energy Efficiency Management Mechanism

Advantech has established an internal energy management mechanism and introduced the ISO 50001 Energy management systems. Through the effective operation of the management system, Advantech implements source management from the procurement side, evaluates the organization's energy consumption through energy review, and identifies energy consumption hot spots. This is combined with the self-developed iEMS. We implement real-time monitoring using the system's energy dashboard to manage major energy-consuming equipment to ensure optimal energy efficiency. We also formulate energy-saving solution benefit analysis processes in a series for continuous improvement, constantly optimize energy management processes and measures, and continuously improve energy efficiency.



▲ Management of Significant Energy Uses (SEUs) Equipment at Major Production Sites in 2023

Advantech has six RBUs in the global layout, among which Advantech Taiwan and Advantech Kunshan are the main production sites. Therefore, the implementation of the ISO 50001 Energy management system is a priority for systematic energy conservation management.



ACL

Significant energy uses (SEUs) equipment

Water chiller

Temperature & Humidity Chamber

Real-time monitoring of the operation of the water chiller and temperature control of the inlet and outlet water using the SCADA system, and regular maintenance matters specified with the SOP.

Regulate maintenance and management through SOP, including daily spot check management and regular maintenance.



AKMC

Significant energy uses (SEUs) equipment

Manufacturing equipment (Solder Reflow Oven, Liquid baking line, Solder pot, etc.)

Air conditioner

Based on the qualification requirements of operators at each position, regular monitoring plans are formulated. The plans include monitoring methods, frequency, personnel, and record-keeping.

The air conditioning equipment is maintained, operated, and managed according to the SOP. The operation process is monitored with the air conditioning automatic control system, and the water temperature of the main machine is controlled.

Energy Saving Management Actions at Each Operating Sites in 2023



Air conditioning system

Energy saving topics

- Adjust the operating hours of the air conditioner and water chiller
- Inverter transformation of air conditioners
- Replacement of VAV equipment

Energy saving **138,875 kWh**



Lighting system

Energy saving topics

- Manufacturing line work table LED tube replacement
- Optimization of fluorescent lighting occupancy and lighting scheduling control
- Replacement of lighting fixtures with LED lights (parking lot, office lighting)
- Office scheduling control

Energy saving **105,100 kWh**



Manufacturing improvement

Energy saving topics

- Digitization of instructions in the manufacturing process testing section
- Introduce Advantech's program control to optimize the burn-in process.
- Replacement and upgrade of air compressor equipment

Energy saving **33,772 kWh**

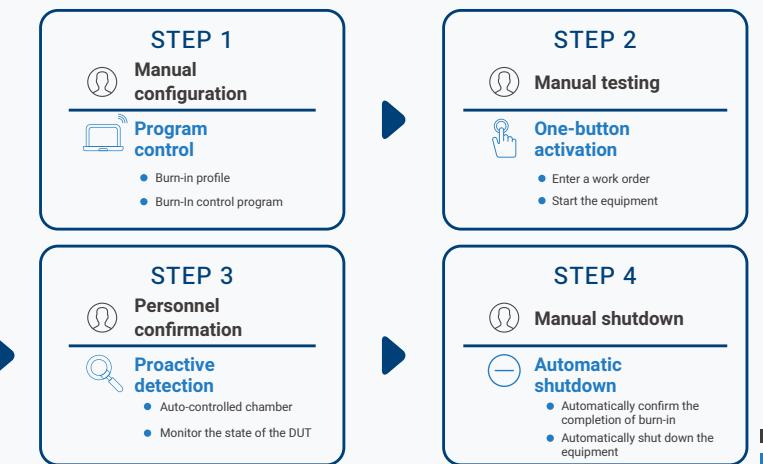
***Note:** Since 2022, relevant energy-saving projects have been enhanced with the activation of projects, therefore 2022 is used as the base year.

Process Energy Saving Management Project Highlight in 2023



Process - Burn-in Intelligentization and Energy Saving
Savings of 15,826.16 kWh in 2023

In addition to detecting the status of the test object, we have automated the start and stop of the main engine through the digitization of the test machine commands. Energy conservation and consumption reduction are achieved by actively disabling the test machine's power after the testing process is concluded. This results in a 29.5-minute reduction in the average wait time for the subsequent operation.



Process - Printing Technology
2023 has reduced 19,500 m³

The original high-temperature ink baking temperature was 190 degrees, and the low-temperature ink baking temperature was 130 degrees to replace the high temperature ink to reduce the natural gas energy consumption. By comparing the energy costs before and after optimization, the baking temperature was reduced by 31.6%, and the natural gas consumption was reduced by 20% (19,500 cubic meters/ year)

Establish the Intelligent Energy Monitoring Platform - Continue to Promote Energy Saving Projects

Advantech effectively implemented the iEMS (Intelligent Energy Management System) intelligent energy management solution across its operating locations in the United States and Europe in 2023. Through digital professional integration technology, we provide energy consumption monitoring and management, HVAC energy efficiency management, air compressor energy efficiency management and other functional solutions. This solution featured energy efficiency management capabilities, which assisted organizations in optimizing energy consumption, enhancing energy efficiency, capitalizing on energy-saving opportunities, and facilitating carbon trading. The objective is to facilitate low-carbonization via digitalization, enable businesses to conserve energy and decrease emissions through the management of online data in order to drive offline improvement, and aid the Company in transitioning to environmentally sustainable operation.



Renewable Energy Promotion Program

Since becoming a RE100 member in 2023, Advantech has been actively taking the following measures to ensure that Advantech achieves 100% renewable energy use globally by 2040.

Management model

In the same year, Advantech officially established Advantech's global RE100 working group. The ESG Corporate Sustainability Development Office will drive and coordinate the implementation of Advantech's RE100 task force and review the progress of renewable energy use. The President of General Management conducts the review during the quarterly ESG regional meeting. The RBUs under this team span across Advantech headquarters and five countries/regions: China, the U.S., Europe, Japan, and Korea. Each RBUs has appointed renewable energy responsible personnel to make local planning to promote renewable energy compliance depending on local policies, regulations, and electricity price markets.

The progress of achieving renewable energy in 2023 is included in the performance indicators of the chairpersons and responsible supervisors, and a long-term incentive mechanism (employee stock options).

Renewable energy promotion process

2021	2022	2023
Started investment in fish-electricity symbiosis solar power plant transfer	Installation of solar photovoltaic panels in Linkou plant and Kunshan plant	<ul style="list-style-type: none"> • Each RBUs set the target and practice path for renewable energy use for 2024-2040. • Officially joined RE100 • Form the RE100 Global Task Force • Integrate the achievements of meeting renewable energy targets into the KPI assessment for middle and senior executives, and plan financial incentive mechanisms accordingly.



Renewable energy promotion practices

Advantech prioritizes self-generation and self-consumption, and encourages local factories to install solar photovoltaic panels for self-generation and self-use. Examples include the installation of solar photovoltaic panels at the Linkou campus of the Headquarters, the Kunshan factory of China, and the New HQ phase-I facility (AASC-II) in the United States. The investment in the fish-electricity symbiosis solar power plant (located in Tainan, Taiwan), which started in 2021, is expected to open at the end of 2024. In the future, we hope to supply 5% of Taiwan's renewable energy in the first year. Secondly, purchase renewable energy directly from local areas. For example, Advantech's operating location in the Netherlands adopted direct purchase of local renewable energy generated from solar power and wind power. And, purchase renewable energy certificates based on local assessment needs. For example, Advantech Japan is actively negotiating matters such as the purchase of renewable energy certificates and renewable energy.

Training Program

To enhance the awareness of Advantech's internal colleagues on energy conservation and carbon reduction, the energy management team organizes energy management-related training courses or external participation from time to time. The types of courses include energy knowledge courses and professional technology courses. The summary content of each course and the participating units are shown below. We hope that energy management professionals can improve their careers in the field of energy management and gain access to relevant information at home and abroad to enhance the acquisition and application of knowledge.

Category	Contents	Training unit
Knowledge training	ISO 50001 Management system training: Through the PDCA management system, concepts such as energy review, energy baseline, energy performance indicators, and energy procurement are added to provide organizations with a framework for integrating energy efficiency and management practices. The clauses are explained one by one, each correspond to the audit items and concept learning of auditing skills.	Energy management team
	RE100 Technical standard training: Analyze the RE100 technical standards, explain the current status of the global and Taiwan renewable energy market, and the role of RE100 in net-zero roadmap.	Energy management team, investment team, procurement personnel, ESG Corporate Sustainability Development Office, product and corporate quality and management department, intelligent energy management product planning and design department
Technical training	Equipment technical training for processes with significant energy consumption: Operating environment temperature and humidity control, equipment operation in the burn-in section, powder and liquid baking operations.	Operator, burn-in operator, and spraying all technicians
	Specific job technical training: Air compressor operation and maintenance, air conditioning & water chiller system operation.	Engineering, Facility, General affairs

4.4 Environmental Management

▲ Performance Highlights



No violation of environmental laws and regulations, as well as fines in the past 3 years.



The ANA's AASC factory promoted the smart irrigation system water-saving solution, reduced water consumption by half, and achieved an important milestone in water saving.



The new building of ACL in Taiwan obtained the Taiwan Green Building Labeling (EEWH).

4.4.1 Environmental Responsibility

In terms of environmental management, in addition to implementing wastewater and waste-related environmental protection work in accordance with relevant laws and regulations, Advantech has formulated the "ESH management system manual" as the guiding principle for the operation of the management system, and regularly inspects and implements management. The wastewater meets the discharge standards and has been declared according to the regulations, and the industrial waste is also cleared and treated by qualified firms. The Company's [environmental policy](#) has been confirmed by the Board of Directors upon commitment and announced on the official website.

▲ Environmental Promotion Procedures and Actions

Promotion procedures	Management actions	
Environmental management operating regulations, environmental management system (ISO 14001), GHG inventory system (ISO 14064-1), energy management system (ISO 50001)	<ul style="list-style-type: none"> • Pollution control and prevention • Environmental responsibility training for employees, such as water conservation, water efficiency management programs, waste reduction, etc. • Environmental management system maintenance 	<ul style="list-style-type: none"> • GHG management • Monitor and improve energy performance

Environmental Promotion Targets

Since last year, Advantech has expanded the collection of environmental data to include data of AJP, AKR, ANA, and AEU. Therefore, in 2023, we set corporate environmental management objectives for each RBU or production factory, as shown in the table below.

	2024	2025
Water consumption	Compared to Y2023 ↓ 2% (M3/people)	Compared to Y2024 ↓ 2% (M3/people)
	Each RBU	Each RBU
Waste volume	Compared to Y2023 ↓ 5% (ton/million production hours)	Compared to Y2024 ↓ 5% (ton/million production hours)
	Each RBU	Each RBU
VOC emissions	Compared to Y2023 ↓ 5% (ton/million production hours)	Compared to Y2024 ↓ 5% (ton/million production hours)
	Kunshan, China (AKMC)	Kunshan, China (AKMC)

To fulfill our commitment to green management and sustainable development, the Company has established an environmental management system since 1996 to further implement the planning of environmental protection issues and achieve the effective use of resources. At the same time, through the "Environmental Safety and Health Committee" or "management review meeting" of each production factory, we establish Advantech's EHS concept, advocate energy conservation, and improve energy efficiency. We also list energy cost reduction as one of the key annual audit items. In addition, we review the performance of our environmental management system, GHG inventory, and energy management system on a regular basis. Table 4.4.1 shows the certifications of Advantech's environmental management system, GHG inventory, and energy management system at each factory. AEU that have not yet obtained ISO14001 certification will have regular internal audits planned by the headquarters in the future to ensure that the plant systematically implement environmental management. This chapter covers Advantech's main operating locations and production factories around the world, which account for 92.6% of the total consolidated revenue.

In 2023, there was no fine imposed for violating environmental laws and regulations. Table 4.4.2 shows the environmental violations committed by Advantech's global main operating locations and production factory in the past four years.

Environmental Certification Items \ factory	ACL	AKMC	AJP	AKR	ANA	AEU
ISO 14001:2015	✓	✓	✓	✓	✓	-
ISO 14064-1:2018	✓	✓	-	-	-	-
ISO 50001:2018	✓	✓	-	-	-	-

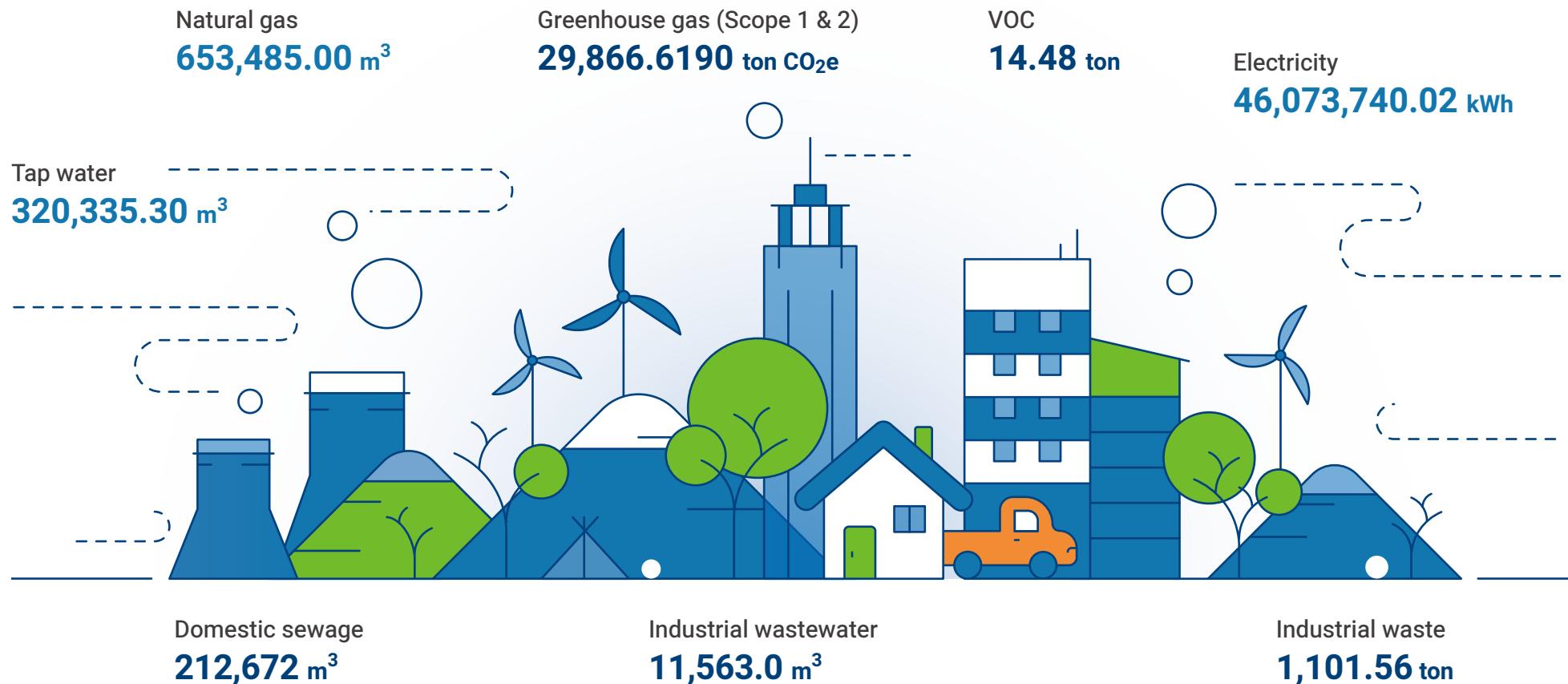
Table 4.4.1: Environmental certifications of Advantech's global main operating locations and production factories

Year \ factory	ACL	AKMC	AJP	AKR	ANA	AEU
2023	0	0	0	0	0	0
2022	0	0	0	0	0	0
2021	0	0	0	0	0	0
2020	0	0	0	0	0	0

Table 4.4.2: Environmental violations by Advantech's global main operating locations and production factories

▲ Advantech's Environmental/Resource Input/Output (Covering ACL, AKMC, AJP, AKR, ANA, and AEU)

- █ Energy and resources consumption
- █ Output



4.4.2 Resource Use and Waste Management

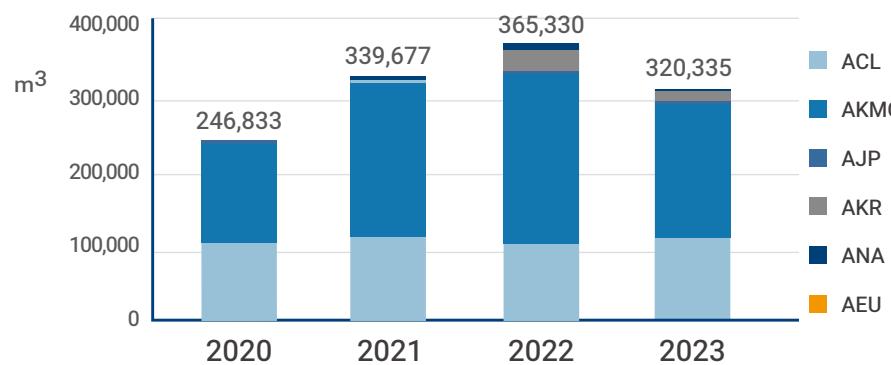
Water Use and Management

Advantech has implemented the ISO 14001 environmental management system to assess water resources and wastewater treatment processes, identify water-saving opportunities, and actively implement water-saving management factories to reduce the water consumption and wastewater discharge. All factories and offices are located in developed industrial areas or parks in the metro area, and water is supplied using tap water without any groundwater or well water extraction. Figure 4.4.1 shows the total water consumption of Advantech's global main operating locations and production factories in the past four years.

Except for the process water used in AKMC factory in China, the rest of the factories uses water for domestic use or irrigation. However, we still regularly conducts water efficiency management programs promotion and awareness training for employees, and each factory also continues to implement water-reduction improvement plans. In Taiwan, rainwater recycle for daily use, smart water saving, and smart air conditioning cooling water and ice water system monitoring and control, etc., continue successfully. In terms of process, AKMC, applies a water recycling project to save about 8,000 tons in 2023, and a smart water efficiency management project implements automatic monitoring and early warning of firefighting water, saving about 180 tons in 2023. In 2023, ANA's AASC factory implemented an irrigation system optimization and water-saving plan. It

intelligently adjusts the operation time of the irrigation system under the condition of ensuring plant health to significantly reduce water consumption. In 2023, a total of 4,000 tons of water was saved, or about 50% of water consumption. An important milestone in water conservation in the AASC factory area. In the future, each plant will continue to plan more management factories to conserve water resources.

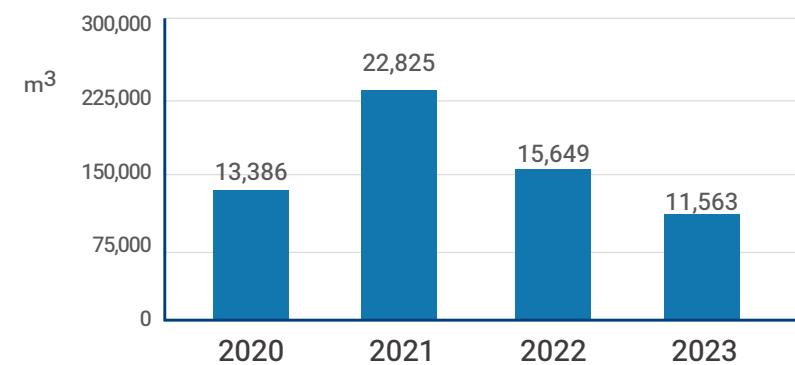
Except for AKMC that discharges industrial wastewater, Advantech's other factories do not discharge industrial wastewater. The wastewater discharge volume of AKMC in the past four years is shown in Figure 4.4.2. AKMC has a wastewater treatment system. The acid-base neutralization and biological treatment are used to treat wastewater in the factory. And the quality of the wastewater discharged is also monitored regularly to ensure that all wastewater meets the standards before it can be discharged. In 2023, no fines were imposed due to non-compliance with wastewater quality standards. In terms of reducing wastewater discharge, in 2023, the Kunshan factory launched a process wastewater recycle solution to recycle wastewater from the manufacturing process to reduce wastewater discharge. The wastewater volume is reduced by about 4,000 tons compared to 2022. The table 4.4.3 summarizes the recent annual water usage of Advantech's global main operating locations and production factories.



***Note:**

1. Water usage for 2020 and 2021 was not recorded in South Korea; water usage for 2020 was not recorded in the United States.
2. The water consumption data for Korea in 2022 was revised, so the total data was revised from 361,640 m³ to 365,330 m³.

Figure 4.4.1: Water consumption of Advantech's main operating locations and production factories in recent years



***Note:** Only AKMC discharges industrial wastewater among Advantech's main operating locations and production factories.

Figure 4.4.2: Discharge of industrial wastewater by Advantech's main operating locations and production factories in recent years

		2020	2021	2022	2023
Water withdrawal		246,833	339,677	365,330	320,335
Discharge volume	Domestic sewage	169,780	232,973	240,082	212,672
	Industrial sewage	13,386	22,825	15,649	11,563
Water consumption		63,667	83,879	109,599	96,101
Scope covers Advantech's consolidated revenue		92.3%	92.3%	92.3%	92.6%

***Note:**

1. Domestic sewage is calculated by multiplying the water withdrawal by 70% and minus the industrial sewage.

2. Water consumption is calculated by subtracting water discharge from water withdrawal.

3. Water usage for 2020 and 2021 was not recorded in South Korea.

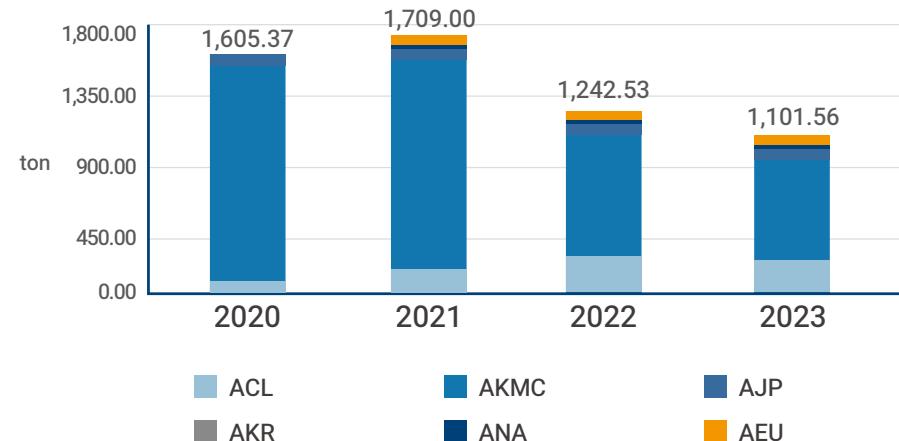
4. Water usage for 2020 was not recorded in the United States.

Table 4.4.3: Water consumption of Advantech's main operating locations and production factories in recent years

▲ Waste Management and Recycling Management

Advantech's waste management strategy is to reduce the total amount of waste and turn waste into resources. We regularly promote and train employees on waste reduction management, and the production factory also holds regular meetings to track the waste reduction plans and performance of each unit. In addition to reducing waste output through source management measures such as the reduction of raw materials, Advantech also monitors waste types and disposal methods to identify opportunities for improvement, and actively promote process improvement or waste resource utilization, such as replacing the existing tube disposal model through recycling of reusable packaging materials, in order to turn waste into useful resources, not only a true recycling and reduce the resource consumption and cost of waste disposal. Advantech monitors waste disposal contractors every year. If contractors are in breach of contract or violate government regulations, we will take corresponding disposal, guidance, or replacement measures. In 2023, Advantech did not have any major breach of contract or violation of law by any of its waste contractors. The Company's [waste management model](#).

Regarding the final amount of business waste disposal at Advantech's main operating locations and production factories, as the weight of domestic waste is the estimated quantity for clearance and transportation contracted for, and further information on the weight of disposal and classification is not available, only the information on industrial waste is disclosed, see Table 4.4.3 and Figure 4.4.3.

***Note:**

1. Statistics on the waste weight of ACL and AKMC are the data reported by each plant to the competent authority; statistics on waste of AJP, ANA and AEU are the data from outsourcing.

2. The waste weight in South Korea was not calculated from 2020 to 2023.

3. The waste weight for ANA and AEU were not calculated in 2020.

Figure 4.4.3: Amount of industrial waste disposal by Advantech's main operating locations and production factories in recent years



Highlight case AKR "No Plastic Day" challenge



Single-Use Plastic Zero Challenge & Poster for Proper Recycling Guidelines and Encouragement

In November, AKR responded to the Korean government's "No Plastic Day" challenge by reducing the amount of single-use items purchased at the factory by about 20%.



Highlight case Introduction to the project of waste tin recycling and reuse



In recent years, Advantech's Taiwan factory has begun to introduce the thinking of circular economy. Principles are valued and introduced into the project of tin slag reuse, such as resource reuse, waste reduction, waste reduction, etc. Therefore, harmful waste tin slag is successfully recycled and reused by using a solder spatter separator. The amount of tin dross waste was reduced by 68%, resulting in a reduction in the output of hazardous waste.



Highlight case AEU Clean -Up for Environmental Day



Advantech organized a Clean-up for Environmental Day at its European AESC plant in Eindhoven, Netherlands, and held garbage disposal activities in the suburbs near the AESC plant.



Advantech's European APSC plant in Kazimierz Dolny, Poland held a cleanup operation in the Wąwoz Hałajowy canyon on 12th, September. Forty-four Advantech's employees brought 100 garbage bags to restore its natural beauty.



According to statistics, the total waste disposal volume of Advantech's main operating locations and production areas outsourced in 2023 was 1,101.56 metric tons, of which non-hazardous waste was 914.09 metric tons (83.0 %) and hazardous waste was 187.47 metric tons (17.0%). For waste disposal and its percentage, see Table 4.4.4 and Figure 4.4.4. In order to reduce the amount of hazardous industrial waste, AKMC developed and implemented a project to replace the liquid coating process with the powder coating process to reduce the amount of lacquer residue. In 2023, a total of 47 metric tons was reduced compared to 2022.

	Incineration	Landfill	Recycle
Hazardous business waste (metric tons)	95.49	0	91.98
Non-hazardous business waste (metric tons)	0.23	0	913.86
Percentage of disposal method	8.69%	0%	91.31%

*Note:

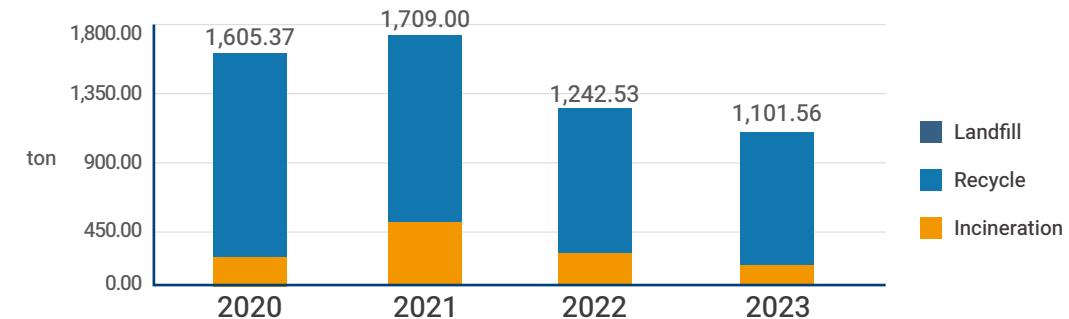
1. Statistics on the waste weight of ACL and AKMC are the data reported by each factory to the competent authority; statistics on waste of AJP, ANA and AEU are the data from outsourcing.
2. The waste weight in South Korea was not calculated in 2023.

Table 4.4.4: Waste disposal methods of Advantech's main operating locations and production factories in 2023

Air Pollutant Management

Advantech compiled air pollution data and information disclosure into three key points:

- Advantech's production process does not produce ozone depleting substances (ODS), and therefore there are no ODS emissions.
- Advantech's manufacturing processes in Taiwan and Japan are mainly assembly processes. Since these processes have low air pollution load, they do not emit nitrogen oxides, sulfur oxides, or volatile organic compounds (VOCs).
- Advantech Kunshan Plant, China has liquid coating and powder coating processes, and the emitted VOCs are in compliance with local regulations.



*Note:

1. Statistics on the waste weight of ACL and AKMC are the data reported by each factory to the competent authority; statistics on waste of AJP, ANA and AEU are the data from outsourcing.
2. The waste weight in South Korea was not calculated from 2020 to 2023.
3. The waste weight for ANA and AEU were not calculated in 2020.
4. According to the waste disposal code reported by the AKMC to the competent authority, the data for the waste disposed of by AKMC in landfills from 2020 to 2022 should be disposed of for recycling and reuse, hence this is revised.

Figure 4.4.4: Industrial waste disposal status of Advantech's main operating locations and production factories in recent years

The VOCs of Advantech's manufacturing factories in recent years are shown in Table 4.4.5. The significant increase in VOCs in 2021 is due to the increase in production capacity.

Year \ factory	ACL	AKMC	AJP	AKR	ANA	AEU
2023	—	14.48	—	—	—	—
2022	—	27.57	—	—	—	—
2021	—	31.42	—	—	—	—
2020	—	8.94	—	—	—	—

*Note: Only AKMC produces VOC emissions among Advantech's main operating locations and production factories.

Table 4.4.5: Emissions of VOCs by Advantech's main operating locations and production factories in recent years (unit: metric tons)

To implement environmental reduction targets, Advantech Kunshan adopts effective control of VOCs, installs activated carbon control equipment to treat exhaust gas, and manages emissions through online real-time continuous monitoring and outsourced testing. There are improvement projects to reduce exhaust gas emissions, such as the transformation of process technology. In 2023, we will continue to expand the use of powder coating to liquid coating and improve the equipment processing efficiency of the production line to effectively reduce the generation of energy, exhaust gas, and VOCs. The amount of VOCs generated in 2023 is 47% lower than that in 2022.

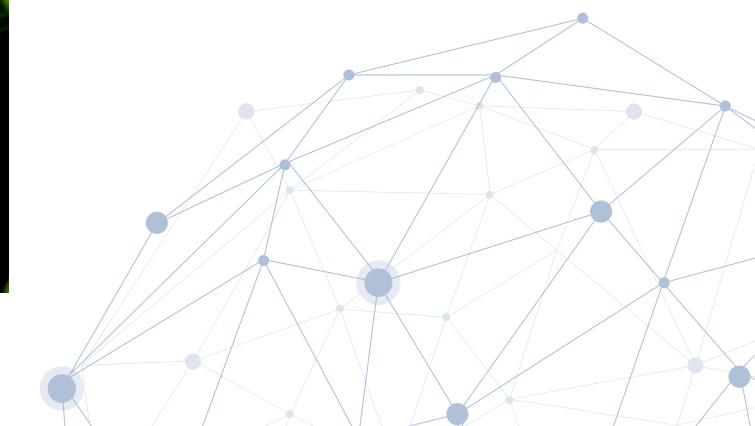


4.4.3 Biodiversity and Forest Protection

Starting in 2022, Advantech has begun focusing on biodiversity and forest protection issues. The company has joined the "Taiwan Nature Positive Initiative (TNPI)", initiated by the Business Council for Sustainable Development of the Republic of China. Advantech is taking more proactive steps towards this initiative to enhance the company's resilience and apply its IoT expertise to empower natural conservation efforts.

▲ Performance of Taskforce on Nature-related Financial Disclosure (TNFD)

In 2023, Advantech investigated its own operation locations and the biodiversity risk assessment in the supply chain (Scope: headquarters and Mainland China) to identify major risk items, affected sites, potential risks, and risk management recommendations. Relevant information and Advantech's biodiversity commitments are disclosed on [AdvaAdvantech's ESG official website](#). We are committed to publishing the 2025 fiscal year TNFD report in 2026, and the abbreviated version of the disclosure in 2023 can be found on [AdvaAdvantech's ESG official website](#). In the future, we will gradually improve the disclosure.



▲ Sustainable Forests and Green Office

Advantech headquarters and major overseas business units have implemented the green office plan. Encourage and promote a paperless office, the use of double-sided office paper for printing, paper recycling, and the use of FSC (Forest Stewardship Council)-certified sustainable forest paper or other recycled paper materials for office and household paper.

In its forest conservation efforts, Advantech has sponsored the Taiwan Forestry Restoration Association's "Taichung Mt. DaDu Ecological Reforestation Project." The project aims to rehabilitate ecological tree islands and firebreaks in two designated areas, with plans to restore 52 species and 500 native seedlings in one area, and 125 species and 1,000 native seedlings in another. The estimated benefits are as follows:

- **Environmental education:** The ecological green space has been increased by 0.81 hectares through the ecological afforestation plan to enhance the public's understanding and knowledge of forest restoration in Mt. DaDu.
- **Impact on forest fires prevention:** The reference research of this restoration project indicates that in the sampling area with an arbor layer and guinea grass coverage rate of less than 30%, fires cannot be extinguished and cannot be prolonged. In the demonstration area of the plan, firebreaks are planned at the boundaries prone to fires to reduce the probability of flashovers and prolonged fires and to achieve fire protection.
- **Impact on carbon sequestration:** The estimated total area designated for ecological afforestation in two locations is 0.81 hectares. As the seedlings grow strong, it is expected to sequester about 1.78 metric tons of carbon per year in the future.

▲ AIoT for Biodiversity: Bird Sound Monitoring and AI Automatic Identification Solution

There is currently a US\$700 billion shortfall in nature positive investments. Biodiversity Credit will play a key role in how to effectively invest capital where it is most needed and show its "nature positive" impacts on the income statement. The World Economic Forum (WEF) believes that the development of effective, trustworthy, and diverse measurement methods is the most urgent need for biodiversity credit, and scientific and automated AIoT monitors are one of the solutions. Bio-acoustic monitoring is up due to its low cost and low power consumption, making it more suitable for monitoring biological activities in a large area than imaging.

Therefore, in addition to its own efforts in biodiversity management, Advantech cooperates with external industry, academia and experts to apply its core AIoT capabilities to develop soundscape monitoring and AI automatic identification solutions with the experimental forest indicator site of National Taiwan University as the first experimental base, expects to effectively improve the efficiency of ecological monitoring and the quality of biodiversity databases. In 2023, the prototype of this solution was completed and verified on the National Taiwan University farm. In 2024, the introduction of the National Taiwan University experimental forest will be completed.



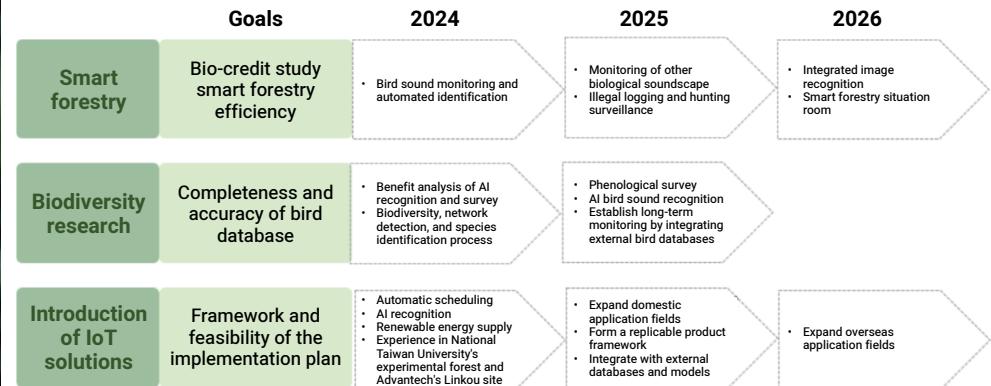


✓ Development of solutions for sound alarm monitoring and AI automated recognition
✓ Effectively enhance the efficiency of ecological monitoring and the quality of biodiversity databases
✓ Completed solution verification in 2023
✓ Introduced the solution to National Taiwan University's experimental forest in 2024

120 threatened bird species
5 threatened species

Reduce bird survey costs by 56%

Produce a document of the principles and implementation process for biodiversity monitoring and automatic species identification



Biodiversity Volunteer Service

Starting in 2023, each Advantech employee is entitled to 2 days of paid volunteer leave per year. To encourage employees to participate in social welfare activities, Advantech has launched the following volunteer service activities. The goal is to allow employees to experience the ecological working holiday and benefits the sustainability.

Activity name	Main activity
Xiaocukeng eco-trail restoration volunteer day	Under the leadership of the community association and professional trail experts, we built the ancient Raknus Selu Trail using the ecological trail construction method.
Waimushan beach cleanup volunteer day	Organized marine education orientation before departure, participated in beach cleaning activities at Waimusan beach, and sorted and weighed marine waste according to ICC marine monitoring principles.
Alibang wetland maintenance volunteer day	Organize wetland ecology education and awareness activities of native ecology plants, and assist in the removal of powerful invasive species from the wetland.
Great wall at sea•century-old stone weir restoration volunteer day	Before leaving, the participants listened to a course that explained the topography of stone weir and Taiwan's biodiversity, and they collaborated with the community association and restorers to restore an ancient fishing method and preserve local coastal biodiversity.

5

Talent and Employee Relations

- 5.1 Cultivation and Development of Industrial Talents
- 5.2 Employee Communication and Benefits
- 5.3 Diversity, Equality and Inclusive Workplace
- 5.4 Human Rights Protection
- 5.5 Occupational Health and Safety (OHS)



5.1

Cultivation and Development of Industrial Talents

Item	Explanation											
Policy or commitment	<p>"Advantech employee development statement"</p> <p>The essence of Advantech's employee cultivation and development is to enhance their sense of self-worth, support their career development, and provide them with sufficient resources for continuous growth, thereby allowing them to unleash their potential. Through the annual Organization & People Review (O&PR) and performance evaluation, Advantech can assist supervisors and employees in integrating the Company's strategic development direction and personal career planning to gain insight into the developmental needs of employees. Advantech provides employees with comprehensive development opportunities through resources such as promotions, rotations, and training courses. The training courses cover diverse topics including new employee hires orientation, job function enhancement, management skill training, and business acumen development.</p> <p>Advantech encourages employees to vigorously chase their potential and creates an environment conducive to self-motivated continuous learning. Besides physical training programs such as supervisor management training courses, APEX Program, 100 reading club, practical seminars on labor laws, career sharing lectures, and technical forums, Advantech constantly updates its all-round digital learning platform "Advantech Academy," and strives for excellence. The digital platform provides diverse courses, including various professional skill development courses, business philosophy inheritance and sharing, and training for middle and high-level management talents. Create an exclusive learning list to facilitate learning anytime, anywhere.</p>											
Impact description	<p>Advantech helps supervisors and colleagues gain a full understanding of the Company's strategic development direction and personal career development plans. This is to ensure the identification of competency gaps and items awaiting development, thereby offering comprehensive support and assistance. Furthermore, the Company strives to enhance individual capabilities and accumulate experience via resources such as promotions, rotations, and training programs. The training courses cover new employee hires orientation, job function enhancement, management skill training, and business acumen development, hoping that colleagues can give full play to their strengths, grow together with Advantech, and enhance workplace competitiveness. At present, the Company's employee development has no negative impact on the economy, environment, and people (including their human rights).</p> <p>If Advantech does not proactively develop and cultivate employees, it will lead to 1) talent drain, 2) declines in both productivity & work quality, 3) talent shortages and increasing recruitment costs, 4) hindered innovation - employees will lack innovative thinking and problem-solving skills, in turn affecting the Company's competitiveness in the market. Therefore, Advantech employs the following measures to vigorously train and develop key talents:</p> <ol style="list-style-type: none"> 1. A sound cultivation and development plan is the key to maintaining a competitive advantage in the market. Through the annual Organization & People Review (O&PR), Advantech helps supervisors and colleagues understand the Company's strategic development direction and individual career plans. By identifying personal development needs, Advantech can provide them with comprehensive training and refine employee development plans accordingly. 2. Training courses were gradually developed including new employee hires orientation, job function enhancement, management skill training, and business acumen development, hoping that colleagues can showcase their strengths, grow together with Advantech, and enhance workplace competitiveness. 3. Incentives for internal promotions and career development: Enhance personal ability and accrue experience through resources such as promotions, rotations, and training courses. <p>Talent cultivation and development are extremely important for the Company because they promote organizational development, reduce costs, increase competitiveness, and shape the Company's corporate image. In light of this, Advantech not only prioritizes talent cultivation and development but also formulated corresponding strategies and plans.</p>											
2023 Goal achievement status	<p>Goals achieved:</p> <table border="1"> <thead> <tr> <th>Development project management goals</th> <th>2023 goals</th> <th>2023 achievement rate</th> </tr> </thead> <tbody> <tr> <td>E-Learning global employee (indirect employee) participation rate</td> <td>65%</td> <td>82.68%</td> </tr> <tr> <td>Promotion success rate of the LEAP Workout</td> <td>20%</td> <td>46.67%</td> </tr> </tbody> </table> <p>*Note: LEAP Workout promotes outstanding supervisors at the managerial level and above.</p>			Development project management goals	2023 goals	2023 achievement rate	E-Learning global employee (indirect employee) participation rate	65%	82.68%	Promotion success rate of the LEAP Workout	20%	46.67%
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2030 Goals	<ul style="list-style-type: none"> E-Learning global employee (indirect employee) participation rate reached 90% LEAP Workout promotion success rate reached 40% 																				
	To enable talents to maintain a competitive edge, Advantech plans diverse training programs to enhance their capabilities and experience. The training courses cover new employee hires orientation, job function enhancement, management skill training, and business acumen development, hoping that colleagues can give full play to their strengths, grow together with Advantech, and enhance workplace competitiveness. Relevant trainings are listed below:																				
Key actions or programs	<table border="1"> <thead> <tr> <th>Item</th><th>Overview</th><th>Participants</th><th>Coverage rate</th></tr> </thead> <tbody> <tr> <td>E-Learning Advantech academy online learning platform</td><td>Through online learning, employees around the world can understand Advantech's business philosophy and corporate culture, and at the same time, learn on their own terms and obtain the latest learning information. This enables employees to transcend geography and time restraints to engage in synchronous learning and exchange with colleagues across the globe.</td><td>General employees (Indirect employees)</td><td>Covered 82.68% of global indirect employees</td></tr> <tr> <td>100 reading club</td><td>Invite supervisors who are interested in using the CommonWealth Leader Campus (CWLC) platform to join the learning plan. Every month, a physical book club is held where participants read designated sections beforehand. During the meeting, there is an exchange of experiences and sharing among department supervisors. Thereafter, participants can then apply new insights to their management work.</td><td>Colleagues at the supervisory level and above</td><td>Covered 31.76% of CWLC users</td></tr> <tr> <td>Integrity business code education and training</td><td>Advantech's philosophy of integrity management and related regulations are provided to employees through online courses.</td><td>General employees (Indirect employees)</td><td>Online courses covered 98.12% of global indirect employees (excluding direct employees)</td></tr> <tr> <td>Occupational health and safety education and training</td><td>Employees receive annual online training on the concepts of occupational health and safety, safety regulations and knowledge, emergency response procedures, common knowledge of fire safety, first aid, and drills. Employees receive regular annual training annually through online courses.</td><td>All employees (Direct employees and indirect employees)</td><td>Covered 80.87% of employees in Taiwan (Including direct employees and indirect employees)</td></tr> </tbody> </table>	Item	Overview	Participants	Coverage rate	E-Learning Advantech academy online learning platform	Through online learning, employees around the world can understand Advantech's business philosophy and corporate culture, and at the same time, learn on their own terms and obtain the latest learning information. This enables employees to transcend geography and time restraints to engage in synchronous learning and exchange with colleagues across the globe.	General employees (Indirect employees)	Covered 82.68% of global indirect employees	100 reading club	Invite supervisors who are interested in using the CommonWealth Leader Campus (CWLC) platform to join the learning plan. Every month, a physical book club is held where participants read designated sections beforehand. During the meeting, there is an exchange of experiences and sharing among department supervisors. Thereafter, participants can then apply new insights to their management work.	Colleagues at the supervisory level and above	Covered 31.76% of CWLC users	Integrity business code education and training	Advantech's philosophy of integrity management and related regulations are provided to employees through online courses.	General employees (Indirect employees)	Online courses covered 98.12% of global indirect employees (excluding direct employees)	Occupational health and safety education and training	Employees receive annual online training on the concepts of occupational health and safety, safety regulations and knowledge, emergency response procedures, common knowledge of fire safety, first aid, and drills. Employees receive regular annual training annually through online courses.	All employees (Direct employees and indirect employees)	Covered 80.87% of employees in Taiwan (Including direct employees and indirect employees)
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<p>In addition to internal employee cultivation, recruiting outstanding talents is also one of the drivers of corporate growth. Advantech has created the "Elite" recruitment project inspired by the core concept of "Right People on the Bus", by inviting outstanding talents who are highly compatible with and identify with Advantech's corporate spirit to join. It is expected that full-time colleagues recruited through this program will successfully adapt to the Company's corporate culture, achieve a retention rate of over 80%, and demonstrate better-than-average performance in performance appraisals. Advantech will begin reviewing the program's effectiveness in 2024.</p>																					
Effectiveness assessment	<table border="1"> <thead> <tr> <th>Item</th><th>Effectiveness assessment mechanism</th><th>2023 assessment results</th><th>2024 management policy adjustments</th></tr> </thead> <tbody> <tr> <td>E-Learning Advantech Academy online learning platform</td><td>Utilization rate and course satisfaction are used to control course quality</td><td>Utilization rate 82.68%</td><td>Restructure the academy (management, professional, general education, new hires) and adjust the curriculum based on various academies' plans to increase the utilization rate of the platform by global indirect employees.</td></tr> <tr> <td>LEAP Workout</td><td>Promotion rate</td><td>Promotion rate 46.67%</td><td>The plan will continue to be promoted at Advantech headquarters and Advantech China</td></tr> <tr> <td>Integrity business code education and training</td><td>Indirect employee coverage rate</td><td>Covered 98.12% of global indirect employees</td><td>Continue to implement digital courses</td></tr> <tr> <td>Occupational health and safety education and training</td><td>Indirect employee coverage rate</td><td>Covered 80.87% of indirect employees in Taiwan</td><td>Continue to implement digital courses</td></tr> </tbody> </table>	Item	Effectiveness assessment mechanism	2023 assessment results	2024 management policy adjustments	E-Learning Advantech Academy online learning platform	Utilization rate and course satisfaction are used to control course quality	Utilization rate 82.68%	Restructure the academy (management, professional, general education, new hires) and adjust the curriculum based on various academies' plans to increase the utilization rate of the platform by global indirect employees.	LEAP Workout	Promotion rate	Promotion rate 46.67%	The plan will continue to be promoted at Advantech headquarters and Advantech China	Integrity business code education and training	Indirect employee coverage rate	Covered 98.12% of global indirect employees	Continue to implement digital courses	Occupational health and safety education and training	Indirect employee coverage rate	Covered 80.87% of indirect employees in Taiwan	Continue to implement digital courses
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Stakeholder engagement	Employees are Advantech's most important asset and the driving force behind the Company's sustainable development. Consequently, Advantech values employee suggestions and feedback on talent development and training. The company understands employees' ideas and needs through post-class questionnaires in training courses and annual performance interviews, and also uses the performance evaluation system to formulate Individual Development Plans (IDPs). Subsequently, annual satisfaction surveys are used as quantitative indicators to evaluate improvement efforts and assess their effectiveness.																				

5.1.1 Talent Attraction and Retention

Talent Attraction

In response to various impacts and challenges, such as the aging population structure and the low birth rate, as well as values and career changes of the new generation of talents, Advantech has upheld the core concept "Right People on the Bus" to develop diverse and flexible recruitment methods. "First Who, Then What": The right key talents will work with Advantech to create the vision. Apart from professional competence, Advantech places even greater emphasis on the "altruistic passion" of talents. The Company attracts innovative professionals from diverse fields to join the Advantech family via diverse recruitment channels and flexible recruitment projects. The goal is to provide outstanding talents with unrestricted room for development and diverse career possibilities. Advantech will continue to optimize and promote different initiatives to attract, nurture, and retain talents with altruistic passion.

Advantech's featured recruitment program - the Elite series

The Elite recruitment activities are inspired by the theme "Right People on the Bus", allowing Advantech and talents to gain a deeper mutual understanding, with the goal of finding key talents (A talent). Programs catering to varying levels of expertise, are designed to accommodate everyone from interns to academia-industry collaborations, graduates entering the workforce, as well as seasoned industry elites. These Elite programs are designed to target key talents needed by Advantech, inviting them to join the Company through diverse recruitment initiatives.

Elite program

- Elite Champion:** Recruit high-potential elites with more than three years of experience

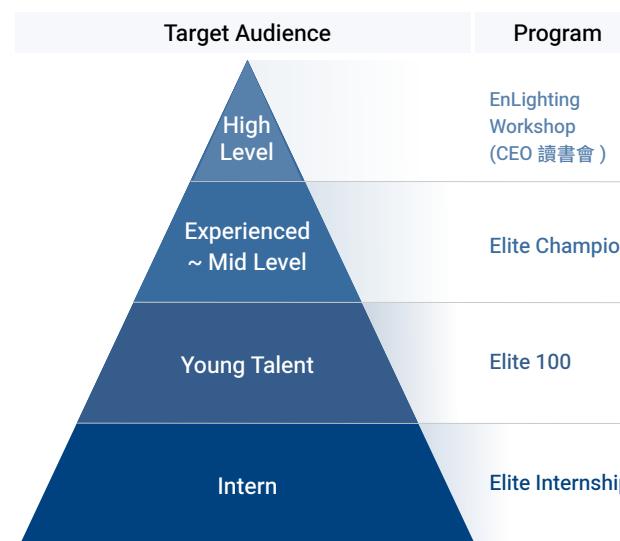
For the recruitment of high-potential industrial elites with more than three years of experience, talent identification will be conducted via phone interviews and pre-ranking before the event, and executive level supervisors will be invited to participate in on-site interviews on the day of the event to identify and recruit A Talents.

- Elite100 - Training and recruitment of talents with less than three years of work experience**

For the training and recruitment of entry-level talents or graduates with less than three years of work experience, executive level supervisors will share Advantech's cultural values and career directions. The session will be conducted in the form of group interviews (preliminary face-to-face interviews) to discover outstanding talents for various job positions. Thereafter, a secondary interview will be carried out to select outstanding talents.

- Elite100 internship - Undergraduate junior, senior, and graduate internship project**

The internship program for undergraduate juniors, seniors, and graduates allows Advantech to reach out to promising students in advance. By observing their performance during the internship, the Company can consider whether to extend their internship or offer them full-time positions.



Effectiveness of the Elite recruitment campaign

Year	Region	Effectiveness of the Elite recruitment campaign				
		Elite Champion	Elite 100	Elite Internship	Overall effectiveness of Elite activities	
2021	Actual	Headquarters	22%	10%	17%	16%
2022	Actual	Headquarters	13%	8%	22%	17%
2023	Target	Headquarters	20%	10%	25%	20%
		(Headquarters and China) Total	NA	11%	25%	21%
		Headquarters	NA	11%	27%	22%
	Actual	Advantech China	NA	NA	8%	8%
2024	Target	(Headquarters and China) Total	20%	10%	25%	20%
2025	Target	(Headquarters and China) Total	20%	10%	25%	20%

***Note:**

- The effectiveness ratio of the Elite recruitment activities = number of targeted key talents joined through the Elite recruitment activities/total number of targeted key talents
- Headquarters data for 2021 and 2022 In 2023, the scope of the statistics was expanded to include Advantech China, thus the data in 2023 includes the effectiveness of the Elite recruitment activities of the headquarters and Advantech China.
- In 2023, the Elite Champion recruitment event was originally scheduled for the second half of the year, but it was canceled due to a mismatch between the nature and quantity of job openings in the latter half of the year.

Internal employee referral

In response to the challenges of talent transformation among the new generation and the difficulty in manpower recruitment, Advantech also strives to diversify its talent recruitment channels and has devised improvement plans for its recruitment strategies. Recognizing the high suitability of candidates referred by internal employees, Advantech substantially increased the internal talent referral bonus at its headquarters in Taiwan in 2023. The referral bonus was raised from NTD 10,000~20,000 to NTD 15,000~30,000 (depending on the job position of the referred candidate).

Despite the increase in the referral bonus, the success rate of internal referrals at the headquarters in Taiwan decreased from 34.5% in 2022 to 19.3% in 2023 due to diminished job demand as a result of the economic downturn. Generally speaking, the new employee hires referred by internal employees were better suited to their jobs than those recruited via other channels, making internal referrals an important talent source for the Company. Consequently, Advantech will continue to promote the program.

Advantech believes that through current employees' high degree of recognition of industry development and corporate culture, as well as the spontaneous invitation of professionals from diverse disciplines to join the Company's open development platform, besides showcasing employees' recognition of the company, the analysis of the performance of new hires who come through internal referrals reveals that they tend to be more stable compared to new hires from other channels. The employee referral ratio in the past three years is illustrated in the table below. In 2023, the statistical internal referral data was expanded to cover six major regions. The percentage of internally referred employees in the six major regions was 13%, and the target is for internal referrals to reach 15% by 2025.

Internal employee referral bonus

	Assistant project manager/ assistant managers and below	Project manager/ managers and above
2023 bonus	NTD 15,000	NTD 30,000
Original bonus	NTD 10,000	NTD 20,000

Percentage of internal employee referrals

		Region	Direct employee (DL)	Indirect Employees (IDL)	All employees
2021	Actual	Headquarters	NA	24%	24%
2022	Actual	Headquarters	22%	34%	28%
2023	Target	Headquarters	25%	35%	30%
	Actual	Six significant locations of operation	24%	13%	16%
	Actual	Headquarters	13%	21%	19%
		Advantech China	26%	0%	12%
		Advantech Japan	NA	10%	10%
		Advantech Korea	0%	0%	0%
		Advantech Europe	100%	0%	12%
		Advantech USA	0%	33%	32%
2024	Target	Six significant locations of operation	25%	15%	15%
2025	Target	Six significant locations of operation	25%	15%	15%

*Note:

1. Percentage of internal employee referrals = number of new employee hires referred by internal employees/total number of new employee hires.
2. Total number of new employee hires only includes full-time employees (full-time and contract employees), excluding part-time employees (interns).
3. In 2023, the statistical scope of the internal referral ratio was expanded to include the six significant locations of operation (including Advantech Headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech USA, and Advantech Europe), so the target value of internal employee referrals for 2024 and 2025 will be updated concurrently.

New Employee Hires

New employee hires in 2023

Region	Item	Number and percentage of males		Number and percentage of females		Number and percentage of people with undisclosed gender		Number of qualified new employee hires	Total number of employees	New employee hires ratio by region (%)	New employee hires ratio (%)
Headquarters	below 30 years old	82	11.2%	72	12.6%	0	—	367	3,588	10%	11%
	31 - 49 years old	109	3.2%	88	3.3%	0	—				
	over 50 years old	9	1.0%	7	1.7%	0	—				
Advantech China	below 30 years old	97	13.3%	57	10.0%	0	—	283	3,357	8%	8%
	31 - 49 years old	71	2.1%	55	2.1%	0	—				
	over 50 years old	2	0.2%	1	0.2%	0	—				
Advantech Japan	below 30 years old	3	0.4%	4	0.7%	0	—	31	232	13%	13%
	31 - 49 years old	8	0.2%	9	0.3%	0	—				
	over 50 years old	4	0.5%	3	0.7%	0	—				
Advantech Korea	below 30 years old	10	1.4%	8	1.4%	0	—	42	129	33%	33%
	31 - 49 years old	8	0.2%	15	0.6%	0	—				
	over 50 years old	1	0.1%	0	0.0%	0	—				
Advantech Europe	below 30 years old	14	1.9%	5	0.9%	0	—	104	525	20%	20%
	31 - 49 years old	40	1.2%	30	1.1%	0	—				
	over 50 years old	12	1.4%	3	0.7%	0	—				
Advantech USA	below 30 years old	15	2.1%	10	1.7%	1	100%-	77	536	14%	14%
	31 - 49 years old	27	0.8%	14	0.5%	0	—				
	over 50 years old	8	0.9%	1	0.2%	1	NA				
Other regions	below 30 years old	29	4.0%	14	2.4%	0	—	87	462	19%	19%
	31 - 49 years old	19	0.5%	17	0.6%	0	—				
	over 50 years old	6	0.7%	1	0.2%	1	1%				

*Note:

1. New employee hires ratio by region = Number of new employee hires of various ethnic groups in the region/total number of employees of that ethnic group; Overall new employee hires ratio = Number of new employee hires in the current year/ total number of employees.
2. The number of new employee hires only includes full-time employees (full-time and contract employees), and excludes part-time employees (interns).
3. The denominator of the new employee hires ratio is the number of employees in service as of December 31, 2023, excluding those who have resigned.
4. For Advantech USA, new employee hires aged 50 years and above who did not disclose their gender also resigned in the same year, thus the ratio could not be calculated.

New employee hires in the past four years

Region	2020		2021		2022		2023		
	New employee hires	Proportion of new employee hires	New employee hires	Proportion of new employee hires	New employee hires	Proportion of new employee hires	New employee hires	Total for the six significant locations of operation	Proportion of new employee hires
Headquarters	383	12%	487	15%	713	20%	367	3,588	10%
Advantech China	549	17%	1,010	28%	669	18%	283	3,357	8%
Advantech Japan	26	11%	14	6%	23	10%	31	232	13%
Advantech Korea	14	13%	44	37%	47	37%	42	129	33%
Advantech Europe	45	12%	63	17%	113	23%	104	525	20%
Advantech USA	NA	NA	NA	NA	105	21%	77	536	14%
Other regions	NA	NA	NA	NA	NA	NA	87	462	19%
Total	1,017	14%	1,618	21%	1,670	19%	991	8,829	11%

The average cost of new employee hires

Region	2020		2021		2022		2023	
	NTD	NTD	NTD	NTD	NTD	NTD	NTD	NTD
Headquarters	971	1,126	1,912	15,848				
Advantech China	2,900	3,013	3,736	3,523				
Advantech Japan	87,453	71,218	232,830	40,564				
Advantech Korea	9,972	14,143	7,972	7,822				
Advantech Europe	117,348	137,445	89,925	71,859				
Advantech USA	—	—	37,710	17,961				
Other regions	—	—	—	12,802				
Total average cost (NTD)	9,458	8,572	13,568	18,536				



*Note:

1. Unit: NTD/person; formula: average cost of new employee hires = annual recruitment cost/number of new employee hires

2. The recruitment fee includes advertising, recruitment bonus, and recruitment activity funds.

A Talent Retention

Advantech's industrial characteristics of small volume and diverse products, emphasis on innovation, and flexibility, as well as its global presence, offer employees opportunities for cross-field transfers, cross-border collaboration, and overseas work, allowing them to benefit from diverse career choices. The Company will continue to optimize its promotion, performance evaluation, and employee development plan-related mechanisms to provide employees with a platform to pursue their careers; it will also develop comprehensive education and training courses to nurture and train outstanding talents; furthermore, Advantech will engage in market salary surveys to provide employees with competitive remuneration; the outstanding employee selection event is held annually to acknowledge employees' exceptional performance and enhance their sense of belonging. Advantech is also committed to supporting employees' lives. Through the Advantech ABLE Club, employees are encouraged to innovate, learn, experience life, and give back to society after work (please refer to 5.2 Employee communication and benefits). Support employees' long-term development and growth through diverse programs.

Diverse career development opportunities

• Cross-border cooperation/overseas job opportunities

Advantech boasts locations around the world to support the international development of employees and encourage employees to apply for vacancies at various global locations. In addition, they can keep up with the rest of the world by collaborating with colleagues from different countries, enriching their professional career and personal interests. Through engaging with international teams and sharing viewpoints, Advantech can foster talent that embraces diversity and broadens horizons, in turn becoming more innovative problem solvers and value creators. Advantech also encourages the implementation of cross-border projects that enable employees to gain valuable experiences.

• Internal transfers - My Career +

Advantech supports employees in their long-term career development within the Company. The senior management has taken the initiative to shape a corporate culture that encourages internal transfers. Since the official implementation of the global human capital management system, Workday, in 2023, the internal transfer mechanism, My Career+, has become more streamlined, providing employees with channels for skill growth and expansion through a more open and transparent process. In turn, this helps them to broaden their horizons, thereby cultivating cross-departmental talent. My Career+ facilitates the transition process, not only promoting internal talent mobility and training all-round outstanding talents but also furthering the objective of talent retention.

Number of Employees Transferred and Promoted

Transfer/ promotion %	2020			2021			2022			2023		
	Number of people transferred and promoted	Total indirect employees	Percentage %	Number of people transferred and promoted	Total indirect employees	Percentage %	Number of people transferred and promoted	Total indirect employees	Percentage %	Number of people transferred and promoted	Total number of employees	Percentage %
Headquarters	412	2,276	18%	296	2,282	13%	824	3,488	24%	740	3,588	21%
Advantech China	389	1,648	24%	410	1,675	24%	361	1,784	20%	1,502	3,357	45%
Advantech Japan	29	238	12%	12	231	5%	13	231	6%	12	232	5%
Advantech Korea	18	86	21%	22	95	23%	5	99	5%	11	129	9%
Advantech Europe	—	—	—	—	—	—	—	—	—	56	525	11%
Advantech USA	—	—	—	—	—	—	58	512	11%	64	536	12%
Total for the six significant locations of operation	848	4,248	20%	740	4,283	17%	1,261	6,114	21%	2,385	8,367	29%

*Note: Unit: Person; Formula: Number of employees transferred or promoted in the year/number of employees in the year

Performance Reward System

Advantech engages in market salary surveys and provides employees with competitive remuneration. The remuneration structure can include year-end bonuses, personal performance bonuses, team bonuses, business performance bonuses, outstanding talent shares or cash dividends, etc., developing diverse rewards and applying various remuneration methods to motivate employees of different groups. This is to attract, develop, retain, and effectively reward talents who will continue to generate value alongside Advantech.

Gender compensation gap analysis

Advantech's remuneration policy is based on job responsibilities and duties, and complies with all local government laws and regulations. Taking Taiwan as an example: This includes complying with laws such as the "Labor Standards Act", the "Gender Equality in Employment Act", and the "Employment Service Act". The salary structure is designed to prevent any pay gap. In line with global talent management practices, the Company engages in external salary surveys and takes into consideration salary data from other market reports to align its compensation packages with market salary trends. This involves designing pay ranges based on parameters such as job functions and positions. By doing so, its talent selection and retention measures can be aligned more closely with prevailing market salary levels to ensure fair and competitive remuneration. The headquarters started developing and optimizing pay range tables (focusing on job functions and positions) in 2022, with plans to gradually incorporate all six significant locations of operation over the coming years. Advantech establishes pay range standards based on functions and positions to prevent gender pay gaps. However, it has been observed that many key roles are held by male employees. In the future, more internal emphasis will be placed on promoting female employees into such positions and encouraging female employees to take on these key roles. For external recruitment, efforts will focus on the diversity of candidates for these key positions, so as to increase the diversity of employee composition and facilitate the Company's diverse developments.

The following table illustrates Advantech's average gender pay gap at different job bands, with male average salaries serving as the benchmark at 1 for comparison purposes.

1. Among executive level supervisors, there are more males with roles directly related to profit-making, and performance bonuses are reflected in the bonus component of compensation, hence the overall compensation tends to be higher on average for males.
2. Among general employees, there are more male R&D engineers than females, while there are more females in administrative support-related roles. The gender pay gap is attributed to gender concentration within job functions.
3. The gender pay gap at the headquarters is minimal, with female executives earning higher salaries than their male counterparts.
4. The direct employees of the headquarters included foreign migrant workers who were mostly female, which accounted for the gender pay gap.
5. The sales locations in the five major regions are China, Japan, Korea, Europe, and the US. The employee competency category is predominantly profit-related, with higher salaries for profit-related roles, which are more often held male employees.
 - For the general indirect employees of the Kunshan plant in China, the pay gap originates from job function. The remuneration of key job functions (such as product engineering and intelligent automation technology) is higher than that of administrative functions. Moreover, critical functions have a higher proportion of male employees.
 - Among the general indirect employees in Japan, there are more male employees in positions related to profit, and the pay gap is attributed to this.
 - In Korea, all supervisor-level administrative function supervisors are female, and profit-related functional supervisors are all male. The pay gap comes from job function differences.
 - Due to the wide range of employees in Europe, pay gaps not only stem from differences in job functions but also include factors such as employees coming from different countries, leading to variations in salary based on nationality.
6. In the US, among executive level supervisors and management-level supervisors, there is a predominance of male individuals in profit-related management roles which leads to the pay gap.

Average		Headquarters		China		Kunshan plant, China		Japan		Korea		Europe		United States	
Job band classification	Base salary only/annual salary	Average annual salary of female employees	Average annual salary of male employees	Average annual salary of female employees	Average annual salary of male employees	Average annual salary of female employees	Average annual salary of male employees	Average annual salary of female employees	Average annual salary of male employees	Average annual salary of female employees	Average annual salary of male employees	Average annual salary of female employees	Average annual salary of male employees	Average annual salary of female employees	Average annual salary of male employees
Executive level supervisor	Base salary only	1.08	1.00	0.99	1.00	—	—	1.19	1.00	0.85	1.00	0.68	1.00	0.87	1.00
	Base salary + other cash incentives	1.12	1.00	1.09	1.00	—	—	1.11	1.00	0.89	1.00	0.62	1.00	0.55	1.00
Management-level supervisor	Base salary only	0.96	1.00	0.86	1.00	0.92	1.00	—	1.00	0.76	1.00	0.74	1.00	1.00	1.00
	Base salary + other cash incentives	1.00	1.00	0.86	1.00	0.94	1.00	—	1.00	0.74	1.00	0.72	1.00	0.73	1.00
General indirect employees	Base salary only	0.88	1.00	0.93	1.00	0.88	1.00	0.76	1.00	0.95	1.00	0.92	1.00	0.93	1.00
	Base salary + other cash incentives	0.86	1.00	0.87	1.00	0.85	1.00	0.77	1.00	0.94	1.00	0.86	1.00	0.91	1.00
General direct employees	Base salary only	0.90	1.00	—	—	0.89	1.00	—	—	—	—	—	—	—	—
	Base salary + other cash incentives	0.87	1.00	—	—	0.91	1.00	—	—	—	—	—	—	—	—

*Remarks:

1. Advantech conducted the Global Job Band alignment in 2022, where global job bands were divided into A to H. Management-level supervisors (manager level) were classified as Job Band E, while executive level supervisors (including Assistant Vice President level and above) were classified as Job Band F and above.
2. The Kunshan plant in China is listed separately due to the difference in employee composition and salary structure.

The table below presents an analysis of male and female employee compensation across six significant locations of operation, displayed in terms of average and median. Male compensation is set as 1 to serve as the benchmark for illustrating the difference.

Analysis of male and female compensation		Average for six significant locations of operation		Mean for six significant locations of operation	
Job band classification	Base salary only/annual salary	Average annual salary of female employees	Average annual salary of male employees	The median annual salary for female employees	The median annual salary for male employees
Executive level supervisor	Base salary only	0.94	1.00	1.08	1.00
	Base salary + other cash incentives	0.87	1.00	1.12	1.00
Management-level supervisor	Base salary only	0.89	1.00	0.96	1.00
	Base salary + other cash incentives	0.85	1.00	1.00	1.00
General indirect employees	Base salary only	0.87	1.00	0.88	1.00
	Base salary + other cash incentives	0.84	1.00	0.86	1.00
General direct employees	Base salary only	1.04	1.00	0.90	1.00
	Base salary + other cash incentives	1.01	1.00	0.87	1.00

*Remarks:

1. Advantech conducted the Global Job Band alignment in 2022, where global job bands were divided into A to H. Management-level supervisors (manager level) were classified as Job Band E, while executive level supervisors (including Assistant Vice President level and above) were classified as Job Band F and above.

▲ Improvement Plan

Advantech's talent recruitment strategy is continuously adjusted according to market fluctuations, and it also continuously optimizes mechanisms including promotion, internal transfers, performance evaluations, employee development, education and training, outstanding employee commendation, compensation and benefits, and employee care. To adapt to rapid changes in the talent market and industry, there is a need for more agile and responsive digital tools. Furthermore, to constantly expand global locations, establishing a comprehensive global talent pool is gradually becoming more important and urgent. Emphasizing investment in the digital transformation of human resources, Advantech launched the Global Human Capital Management System in September 2022 and Workday in May 2023, while the Talent Optimization module was launched in January 2024 to progressively form a visualization of Advantech's global talent needs.

▲ Employee Turnover/Resignation Rate

Turnover rate in 2023

Region	Classification	Item	Male		Female		Non-disclosure of gender		Total number of employees who have resigned	Total number of employees	自願離職率	Turnover rate by region	Overall turnover rate				
			Number of people	Percentage	Number of people	Percentage	Number of people	Percentage									
Headquarters	Age of employees	below 30 years old	52	7.13%	38	6.64%	0	—	346	3,529	9.49%	9.80%	13.91%				
		31 - 49 years old	113	3.27%	115	4.32%	0	—									
		over 50 years old	17	1.98%	11	2.72%	0	—									
	Job band	Executive level supervisor	5	2.96%	1	3.33%	0	—	346								
		Management-level supervisor	13	2.25%	3	1.66%	0	—									
		General staff	164	3.82%	160	4.66%	0	—									
Advantech China	Age of employees	below 30 years old	121	16.60%	95	16.61%	0	—	631	3,355	17.97%	18.81%	13.91%				
		31 - 49 years old	212	6.13%	189	7.09%	0	—									
		over 50 years old	9	1.05%	5	1.23%	0	—									
	Job band	Executive level supervisor	3	1.78%	0	0.00%	0	—	631								
		Management-level supervisor	7	1.21%	0	0.00%	0	—									
		General staff	332	7.72%	289	8.42%	0	—									

Region	Classification	Item	Male		Female		Non-disclosure of gender		Total number of employees who have resigned	Total number of employees	自願離職率	Turnover rate by region	Overall turnover rate					
			Number of people	Percentage	Number of people	Percentage	Number of people	Percentage										
Advantech Japan	Age of employees	below 30 years old	3	0.41%	1	0.17%	0	—	23	212	10.38%	10.80%	13.91%					
		31 - 49 years old	6	0.17%	5	0.19%	0	—										
		over 50 years old	6	0.70%	2	0.49%	0	—										
	Job band	Executive level supervisor	1	0.59%	0	0.00%	0	—	23									
		Management-level supervisor	2	0.35%	0	0.00%	0	—										
		General staff	12	0.28%	8	0.23%	0	—										
Advantech Korea	Age of employees	below 30 years old	5	0.69%	6	1.05%	0	—	25	114	21.93%	21.92%						
		31 - 49 years old	9	0.26%	5	0.19%	0	—										
		over 50 years old	0	0.00%	0	0.00%	0	—										
	Job band	Executive level supervisor	0	0.00%	0	0.00%	0	—	25									
		Management-level supervisor	0	0.00%	0	0.00%	0	—										
		General staff	14	0.33 %	11	0.32%	0	—										
Advantech Europe	Age of employees	below 30 years old	0	0.00%	1	0.17%	0	—	44	522	6.13%	8.40%						
		31 - 49 years old	22	0.64%	10	0.38%	0	—										
		over 50 years old	9	1.05%	2	0.49%	0	—										
	Job band	Executive level supervisor	3	1.78%	0	0.00%	0	—	44									
		Management-level supervisor	5	0.86%	0	0.00%	0	—										
		General staff	23	0.54%	13	0.38%	0	—										
Advantech USA	Age of employees	below 30 years old	13	1.78%	7	1.22%	0	—	63	523	9.56%	12.02%						
		31 - 49 years old	12	0.35%	6	0.23%	0	—										
		over 50 years old	18	2.09%	7	1.73%	0	—										
	Job band	Executive level supervisor	2	1.18%	1	3.33%	0	—	63									
		Management-level supervisor	1	0.17%	2	1.10%	0	—										
		General staff	40	0.93%	17	0.50%	0	—										
Other regions	Age of employees	below 30 years old	13	1.78%	12	2.10%	0	—	77	434	14.98%	17.74%						
		31 - 49 years old	28	0.81%	17	0.64%	0	—										
		over 50 years old	5	0.58%	1	0.25%	1	NA										
	Job band	Executive level supervisor	0	0.00%	0	0.00%	0	—	77									
		Management-level supervisor	7	1.21%	1	0.55%	0	—										
		General staff	39	0.91%	29	0.85%	1	100%										

***Note:**

1. Advantech conducted the Global Job Band alignment in 2022, where global job bands were divided into A to H. Management-level supervisors (manager level) were classified as Job Band E, while executive level supervisors (including Assistant Vice President level and above) were classified as Job Band F and above.
2. Individual turnover rate by age, job band, and gender = number of employees who have resigned in that area and group/total number of employees in that group.
3. Total turnover rate = total number of employees who have resigned/total number of employees.
4. Only full-time employees who have resigned were included in the statistics, excluding contracted and part-time employees (interns).
5. For years before 2022 (inclusive), only voluntary severance was disclosed, while 2023 is for global data (other regions are additionally disclosed), and includes voluntary and involuntary severance.
6. In 2023, the disclosure of other regions was added to include all of Advantech.
7. Regions that are not considered significant locations of operation (Headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech Europe, and Advantech USA) are Indonesia, Mexico, India, Czech Republic, Australia, Malaysia, Singapore, Thailand, Russia, Turkey, Brazil, the Emirates, Vietnam, Canada, and Israel. "Other regions" mentioned below all have the same definition.

Four-year employee turnover rate

Region	2020		2021		2022		2023	
	Total number of resigned employees (Voluntary resignation)	Turnover rate (Voluntary resignation)	Total number of resigned employees (Voluntary resignation)	Turnover rate (Voluntary resignation)	Total number of resigned employees (Voluntary resignation)	Turnover rate (Voluntary resignation)	Total number of resigned employees	Turnover rate
Headquarters	405	12.8%	434	13.6%	585	16.8%	346	9.8%
Advantech China	127	11.3%	1,597	43.6%	1,101	29.6%	631	18.8%
Advantech Japan	15	6.6%	21	8.9%	25	10.8%	23	10.8%
Advantech Korea	3	2.9%	2	1.7%	18	14.1%	25	21.9%
Advantech Europe	0	—	0	—	87	18.0%	44	8.4%
Advantech USA	0	—	0	—	106	20.7%	63	12.0%
Other regions	0	—	0	—	0	—	77	17.7%
Total	550	11.9%	2,054	26.8%	1,922	22.4%	1,209	13.9

*Note:

1. The total turnover rate (involuntary resignation) for 2020-2022 is estimated. The 2020, 2021, and 2022 turnover rates were 12.5%, 28.2%, and 23.6%, respectively.

2. In 2023, global data was disclosed (other regions were also disclosed), which includes voluntary and involuntary resignations.

3. Only full-time employees who have resigned were included in the statistics, excluding contracted and part-time employees (interns).

4. The voluntary turnover rate for 2023 was 14.9%.

5.1.2 Employee Development Plan

Employees are the key to the momentum behind corporate growth. Advantech values the training and development of its employees and regards it as one of the Company's most critical development programs. The Company is committed to creating a workplace that inspires passion and enables employees to unleash their individual and team potential fully. Advantech encourages its employees to actively explore their potential and it has created an environment conducive for autonomous and continuous learning. The Company offers a variety of physical training courses such as supervisor management training courses, APEX Program, 100 reading club, practical lectures on labor laws and regulations, career sharing lectures, and technical forums. Meanwhile, Advantech continues to enhance the all-round digital learning platform, the "Advantech Academy." Advantech pursues excellence by meticulously designing digital platform courses with diverse content. These courses encompass training programs for various job functions, the passing and sharing of corporate philosophies, as well as training for middle and senior management talents. At Advantech, employees can formulate their exclusive learning checklists to facilitate learning anytime, anywhere.

2023 employee training overview

Item	Overview	Participants	Coverage rate
E-Learning Advantech Academy online learning platform	Through online learning, employees around the world can understand Advantech's business philosophy and corporate culture, and at the same time, learn on their own terms and obtain the latest learning information. This enables employees to transcend geography and time restraints to engage in synchronous learning and exchange with colleagues across the globe.	General employees (Indirect employees)	Covered 82.68% of global indirect employees
100 reading club	Invite supervisors who are interested in using the CommonWealth Leader Campus (CWLC) platform to join the learning plan. Every month, a physical book club is held where participants read designated sections beforehand. During the meeting, there is an exchange of experiences and sharing among department supervisors. Thereafter, participants can then apply new insights to their management work.	Colleagues at the supervisory level and above	Covered 31.76% of CWLC users

Item	Overview	Participants	Coverage rate
Integrity business code education and training	Advantech's philosophy of integrity management and related regulations are provided to employees through online courses.	General employees (Indirect employees)	Online courses covered 98.12% of global indirect employees (excluding direct employees)
Occupational health and safety education and training	Employees receive annual online training on the concepts of occupational health and safety, safety regulations and knowledge, emergency response procedures, common knowledge of fire safety, first aid, and drills. Employees receive regular annual training annually through online courses.	All employees (Direct employees and indirect employees)	Covered 80.87% of employees in Taiwan (including direct employees and indirect employees)
Information and cyber security promotion course	Common information and cyber security risks and case studies, basic principles of information and cyber security, as well as information and cyber security regulations that employees should comply with, are offered through online courses annually.	General employees (Indirect employees)	Covered 86.48% of indirect employees in Taiwan (excluding direct employees)

▲ Management Courses

To strengthen the professionalism of the management, improve competitiveness, and foster long-term organizational development, Advantech continues to plan and implement management courses including leadership techniques - coaching-based counseling, labor laws and management application practices required for supervisors, the 100 Reading Plan, and Leadership M'golf, etc. These courses aim to improve the management skills of supervisors, including leadership, communication skills, problem-solving skills, and decision-making skills. Through these courses, supervisors can learn and improve these key skills to more effectively manage the team, achieve goals, and unleash the potential of team members, thereby bolstering Advantech's corporate structure.

Leadership technique - Coaching-based counseling

Advantech strives to establish an effective management style to motivate and guide team members to achieve the long-term success of the organization. The management and leaders play crucial roles, and their management styles have a direct impact on the performance of the team and the organization. Consequently, Advantech has continuously cultivated the communication and counseling skills required for team management and leadership. In 2023, the Company introduced the leadership technique, coaching-based counseling. The course aims to improve the personal communication and counseling skills of mid- and entry-level supervisors using a logical and systematic teaching method. The course endows supervisors with key expression skills tailored to different situations, helping mid- and entry-level supervisors to be more effective in managing and guiding their teams. The course includes numerous practical case studies and hands-on exercises, enabling mid- and entry-level supervisors to flexibly apply what they have learned, broaden their perspectives, and reinforce leadership within diverse teams. Through this training, Advantech strives to maximize the leadership influence of mid- and entry-level supervisors as well as facilitate the long-term development and success of the organization. In 2023, two training sessions were held for 63 mid- and entry-level supervisors. The training will be arranged annually for supervisors who have yet to receive the training. It is hoped that Advantech will foster a more stable and competitive organization in a bid to realize its sustainable development goals.



Labor laws and management application practices required for supervisors

In 2023, to ensure the compliance of Advantech's supervisors in management leadership, minimize legal risks, improve supervisors' understanding of and response to labor laws, and protect Advantech's interests and image, the labor laws and management application practice course required for supervisors was introduced. Directors of prominent domestic law firms were invited to engage in exchanges and discussions with on-site and online supervisors and colleagues. The course focuses on practical management problems and case studies to ensure that supervisors can comply with all relevant labor laws and regulations to avoid illegal conducts or legal risks. At the same time, the course aims to raise supervisors' awareness of labor law issues and teach supervisors how to adequately address and solve these problems in their daily work. In 2023, a total of 833 supervisors participated in this course. Among them, 807 supervisors passed the post-course test, achieving a pass rate of 96.9%. The course content has been uploaded to the Advantech Academy (digital learning platform) on a chapter-by-chapter basis to expand the learning benefits. The course has successfully enhanced supervisors' understanding of and response to labor laws, established a corporate culture at Advantech that respects legal regulations and values legal compliance, as well as improved employees' compliance awareness and behavior. The measure will lay a solid foundation for Advantech's sustainable development in the future, allowing the Company to continue complying with the highest legal standards to protect its interests and goodwill.

100 reading plan

To fortify the eight core competencies (digital competency, strategic competency, leadership, operational competency, international perspectives, market insight, management competency, and innovation) of entry- and mid-level supervisors, Advantech introduced CWLC in 2022, providing over 2,000 learning modules containing articles, audio files, videos, and other contents. The modules are available in website and app versions, allowing supervisors to improve themselves anytime, anywhere. To encourage supervisor to read, Advantech has introduced the 100 Reading Plan, aiming to achieve the goal of reading 100 articles within a year. In 2023, a total of 59 supervisors completed the target of reading 100 articles. In 2024, the program was expanded to include all employees, where diverse activities will be conducted to encourage them to achieve the goal of reading 100 articles to improve the management and general knowledge of Advantech's supervisors.

Technical Sharing Forum (Advantech China)

Advantech China (ACN) organizes technical forums annually to strengthen internal technical exchange and collaboration, promote organizational innovation and improvement, enhance employees' professional capabilities and job satisfaction, and ultimately enhance competitiveness and sustainable development capabilities. The aim is to achieve the following objectives:

- **Benefits of technical training:** Advantech is dedicated to elevating the professional skills and standards of its R&D personnel through technical training and expanding cross-departmental technical knowledge. The measure not only increases design efficiency and work quality but also indirectly bolsters the competitiveness of the Company's products.
- **Overcome technical barriers:** Technical forums are held to overcome technical barriers among business groups, ensure the passing of design experience, as well as minimize and avoid design traps. The knowledge sharing and exchange help to improve the overall R&D efficiency and product quality.
- **Continuous improvement awareness:** Enhance the R&D unit's awareness of continuous improvement in new technologies and processes through technical training. Advantech encourages and facilitates a positive atmosphere for internal technical discussion and sharing, which is conducive to the development and improvement of the professional skills of R&D personnel.

In 2023, six technical forums were held, covering nine technology-sharing topics that lasted nine hours. These efforts not only improve the technical level and efficiency within the organization but also promote the sustainable development of the entire industry, thereby achieving long-term economic and social impact.

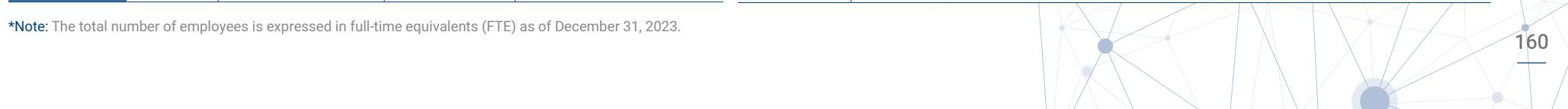
Event time	Topic	Participants	Number of participants	Effectiveness
June 21	"DDR5 Design Experience Sharing"	Hardware PM&RD	Around 60 people	The achievement rate of 2023Q1 results was 120.9%, with a growth of 14.7%
December 22	"Zhaoxin, Glenfly, and UnionTech Software Technology"	PM&RD&SW	Around 120 people	DMS invests in localization projects, with a 2023 annual performance achievement rate of 118% and a growth of 13%
August 18	"Power over Ethernet (PoE) technology sharing" "Case study of commonly Used BUS-DMS on the X86 platform"	Hardware PM&RD	Around 80 people	94.7% achievement rate for 2023
October 25	"Analysis of optical modules" "AI & NVIDIA AI module application" "CRPS application sharing"	Hardware PM&RD	Around 50 people	
December 21	"SI/DQA/Power/EMC Design Validation Case Interpretation"	Hardware PM&RD	Around 100 people	
December 28	"Introduction to Open VPX"	Hardware PM&RD	Around 100 people	

Average Training Hours Per Employee

Region	Gender	Total training hours	Total number of employees ^{Note}	Average training hours per employee
Headquarters	Male	190,446	1,953	97.5
	Female	111,911	1,576	71.0
	Total	302,357	3,529	85.7
Advantech China	Male	285,613	1,883	151.7
	Female	162,810	1,472	110.6
	Total	448,422	3,355	133.7
Advantech Japan	Male	4,056	143	28.4
	Female	1,761	69	25.5
	Total	5,817	212	27.4
Advantech Korea	Male	2,088	78	26.8
	Female	1,113	36	30.9
	Total	3,201	114	28.1

*Note: The total number of employees is expressed in full-time equivalents (FTE) as of December 31, 2023.

Region	Gender	Total training hours	Total number of employees ^{Note}	Average training hours per employee
Advantech Europe	Male	6,538	344	19.0
	Female	2,612	178	14.7
	Total	9,150	522	17.5
Advantech USA	Male	4,510	339	13.3
	Female	2,942	183	16.1
	Not Declared	0	1	0.0
Total	Total	7,452	523	14.3
	Male	493,251	4,740	104.1
	Female	283,148	3,515	80.6
Data coverage	Not Declared	0	1	0.0
	Total	776,399	8,255	94.1
	In 2023, employees at Advantech headquarters (including headquarters business units, logistics units, and Advantech Taiwan), China, Japan, Korea, Europe, and the US accounted for over 80% of the Company's global workforce (excluding contract and intern staff). The total training expenditure amounted to NTD 23,179,814, with an average training cost per employee of ND\$2,807.97. The total course training hours (both online and offline) were 776,399 hours (offline education and training included headquarters and Advantech Korea), with an average of 94.1 hours of online course training per employee.			



Average Education and Training Hours by Job Category

Region	Job category	Total training hours	Total number of employees ^{Note}	Average training hours per employee	Region	Job category	Total training hours	Total number of employees ^{Note}	Average training hours per employee	
Headquarters	R&D personnel	170,314	1,504	113.2	Advantech Europe	R&D personnel	2,107	100	21.1	
	Marketing and sales	33,495	310	108.0		Marketing and sales	4,675	228	20.5	
	Administrative personnel	43,963	471	93.3		Administrative personnel	1,354	113	12.0	
	Manufacturing personnel	54,585	1,244	43.9		Manufacturing personnel	1,014	81	12.5	
	Total	302,357	3,529	85.7		Total	9,150	522	17.5	
Advantech China	R&D personnel	27,594	623	44.3	Advantech USA	R&D personnel	2,207	105	21.0	
	Marketing and sales	12,492	512	24.4		Marketing and sales	2,838	202	14.0	
	Administrative personnel	17,095	373	45.8		Administrative personnel	1,363	118	11.6	
	Manufacturing personnel	391,242	1,847	211.8		Manufacturing personnel	1,044	98	10.7	
	Total	448,422	3,355	133.7		Total	7,452	523	14.2	
Advantech Japan	R&D personnel	1,117	31	36.0	Total	R&D personnel	204,004	2,385	85.5	
	Marketing and sales	2,434	84	29.0		Marketing and sales	57,576	1,394	41.3	
	Administrative personnel	423	31	13.6		Administrative personnel	64,491	1,120	57.6	
	Manufacturing personnel	1,843	66	27.9		Manufacturing personnel	450,328	3,356	134.2	
	Total	5,817	212	27.4		Total	776,399	8,255	94.1	
Advantech Korea	R&D personnel	665	22	30.2	Data coverage	In 2023, employees at Advantech headquarters (including headquarters business units, support units, and Advantech Taiwan), China, Japan, Korea, Europe, and the US accounted for over 80% of the Company's global workforce (excluding contract and intern staff). The total training expenditure amounted to NTD 23,179,814, with an average training cost per employee of NTD 2,807.97. The total course training hours (both online and offline) were 776,399 hours (offline education and training included headquarters and Advantech Korea), with an average of 94.1 hours of online course training per employee.				
	Marketing and sales	1,642	58	28.3						
	Administrative personnel	293	14	20.9						
	Manufacturing personnel	600	20	30.0						
	Total	3,201	114	28.1						

*Note: The total number of employees is expressed in full-time equivalents (FTE) as of December 31, 2023.

Average Education and Training Hours by Age Group

Region	Age	Total training hours	Total number of employees ^{Note}	Average training hours per employee	Region	Age	Total training hours	Total number of employees ^{Note}	Average training hours per employee		
Headquarters	below 30 years old	43,447	463	93.8	Advantech Europe	below 30 years old	543	49	11.1		
	31-49	210,268	2,464	85.3		31-49	5,653	324	17.4		
	over 50 years old	48,642	602	80.8		over 50 years old	2,954	149	19.8		
	Total	302,357	3,529	85.7		Total	9,150	522	17.5		
Advantech China	below 30 years old	67,427	567	118.9	Advantech USA	below 30 years old	335	68	4.9		
	31-49	361,965	2,645	136.8		31-49	4,758	254	18.7		
	over 50 years old	19,030	143	133.1		over 50 years old	2,359	201	11.7		
	Total	448,422	3,355	133.7		Total	7,452	523	14.2		
Advantech Japan	below 30 years old	273	10	27.3	Total	below 30 years old	112,804	1,190	94.8		
	31-49	2,629	97	27.1		31-49	587,196	5,850	100.4		
	over 50 years old	2,915	105	27.8		over 50 years old	76,399	1,215	62.9		
	Total	5,817	212	27.4		Total	776,399	8,255	94.1		
Advantech Korea	below 30 years old	778	33	23.6	Data coverage	In 2023, employees at Advantech headquarters (including headquarters business units, support units, and Advantech Taiwan), China, Japan, Korea, Europe, and the US accounted for over 80% of the Company's global workforce (excluding contract and intern staff). The total training expenditure amounted to NTD 23,179,814, with an average training cost per employee of NTD 2,807.97. The total course training hours (both online and offline) were 776,399 hours (offline education and training included headquarters and Advantech Korea), with an average of 94.1 hours of online course training per employee.					
	31-49	1,924	66	29.2							
	over 50 years old	499	15	33.3							
	Total	3,201	114	28.1							

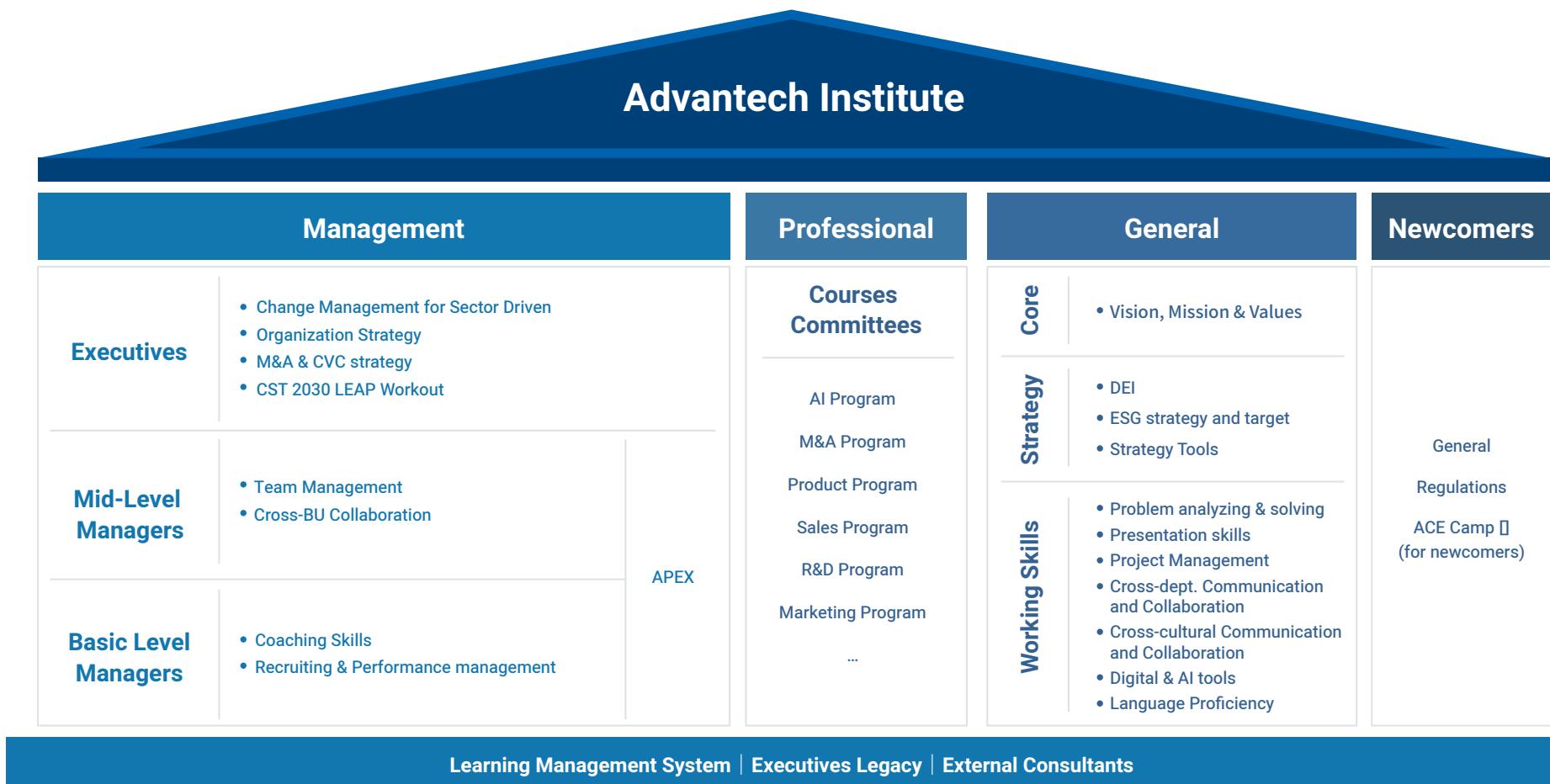
*Note: The total number of employees is expressed in full-time equivalents (FTE) as of December 31, 2023.

Improvement Plan

To further promote internal talent mobility, the Company will continue to optimize the transfer, rotation, and secondment mechanisms in 2024 to increase employees' opportunities for horizontal growth and enhance their experience in this regard, while cultivating versatile talents under the IDP (Individual Development Plan).

In 2023, the utilization rate of the e-learning platform continued to rise. The HR department will integrate Advantech's Corporate Strategy Transformation 2030 (CST 2030) vision and focus on four major education and training aspects of "leadership management, professional competence, general corporate knowledge, and new hires orientation" to formulate a structured training system based on job functions. Furthermore, the Advantech Academy will be transformed and restructured to further enhance the user experience. In 2024, in addition to increasing the utilization rate of the digital learning platform, the Company will plan and launch more diverse and enriched offline training activities.

圖 5.1.1 結合 CST 2030 願景，以職能為基礎發展結構化訓練體系



Invigorating the Human Spirit and Developing Talent Honesty, Integrity, and Accountability Excellence and Innovation Altruism and Community Contribution

5.2

Employee Communication and Benefits

5.2.1 Employee Relations

ABLE Club Collaborates with Advantech Beautiful LifE to Create an Altruistic and Happy Enterprise

"People orientation" is the essence of Advantech, while "work, study, and love" are the driving forces behind the growth of Advantech employees. Advantech's "ABLE Club" consolidates employee relations (ES&R), the foundation, and the welfare committee to encourage employees to engage in innovative learning, experience life, and contribute to society. From various aspects such as sports, wellness, health, arts and culture, education, and public welfare, the Company aims to enhance interactions among employees, their families, and the community, thereby fostering a sense of cohesion! In addition, Advantech supports colleagues in extending their influence from the workplace to society, caring for communities, and promoting public welfare. Through sharing and mutual assistance, the Company strives to practice the philosophy of altruism and manifest a fulfilling life!

2023 coincides with Advantech's 40th anniversary. Advantech firmly believes that the Company's success is attributed to the endeavors and dedication of every employee. Consequently, the 40th-anniversary happiness project was kicked off in 2023 to provide each employee around the world with a subsidy of USD1,000. At the headquarters, the ABLE platform was used to distribute points (a total of 668 points), hoping that employees and their families can spend quality time together, enjoy journeys, visit exhibitions, immerse themselves in the lively atmosphere of concerts, indulge in delicious food, and share happiness while celebrating Advantech's birthday together through the project.

Employee Relations and Communication

To foster harmonious and smooth employee relations, Advantech has established several two-way communication channels. Besides disseminating information, the Company also listens to and responds to colleagues' feedback in real-time in order to improve and optimize employee services, maintain harmony in the workplace, as well as protect the rights and well-being of employees.

Channel		Description
Employee communication	Website	<ul style="list-style-type: none"> Employee Zone: To disseminate critical company information to colleagues, columns such as Corporate News, Office Bulletin, and Regional News were created based on information gathered from the employees. Additionally, detailing company policies and various management procedures on the website facilitates easy access for employees at any time. ABLE Club website: Eight major sections covering the topics of employee care, welfare committee, foundation event information and registration, club information, employee health management system, authorized shops, event reports and highlights were set up to provide employees with an all-round digital platform to enjoy a happy life.
	Video	Published the Executive Talk video on the internal platform, featuring executive level supervisors delivering a concise 5-10 minutes message in Chinese and English. Topics include annual strategic development, financial trends, sustainability vision, innovative mechanisms, and new market strategies to communicate corporate strategies to global Advantech employees, thereby achieving effective and transparent communication.

	Channel	Description
Employee communication	Email announcements	<ul style="list-style-type: none"> HR: Important company information, courses, salaries, and attendance-related information. ES&R: Employee benefits and events-related information. The ABLE Club e-newsletter is distributed weekly, the health report is distributed monthly, and the ES&R e-newsletter is distributed quarterly. ESG: Advantech's ESG quarterly highlights in each country, the ESG key points for the next quarter, and international sustainability trends are shared in the quarterly ESG e-newsletter.
	Physical meetings	<ul style="list-style-type: none"> Kick-off meetings are held for employees to disseminate the Company's important strategies and visions, making sure that all colleagues understand the Company's future vision and are able to grow with Advantech. Quarterly labor-management meetings are held at the Advantech headquarters (Neihu) Various departments convene their internal communication meetings on departmental directions, work progress updates, and sharing of new knowledge, thereby realizing smooth communication and interactions within different departments.
	Regular domestic and foreign periodicals	Edited and distributed by the PR unit, the content includes executive level supervisor's visions, key business practices, case studies, etc.
	Social media	<ul style="list-style-type: none"> ABLE Club FB: Announcement of event information, event photo albums, employee happiness feedback, and other text, audio and video highlights. LINE community: Event information sharing and announcements, push notification of important information, and consultation for colleagues' urgent needs.
	Other	<ul style="list-style-type: none"> Communicate Advantech's corporate culture, spirit, and announcements on the Company's internal digital bulletin boards. In addition to learning courses, the e-Learning website also features numerous videos that convey the Company's core values and culture. Communication with migrant workers: Important messages from the Company are posted in English in the migrant workers' dormitory to increase message exposure, and keep migrant workers informed of the Company's policies. They are also encouraged to sign up for ABLE Club activities.
Employee grievance	Grievance channels: Grievance hotline, e-mail, suggestion box (EZ), or the HR unit of the business group. Please refer to Figure. 5.4.2 Whistleblowing and grievance mechanism	

▲ Employee Care and Benefits

Life is not just about work. We hope that our employees are healthy and happy, and that they can enjoy a good life with their families. Therefore, we provide a variety of benefits, including marriage allowance, childbirth allowance, hospitalization condolence allowance, bereavement condolence allowance, emergency aid, and benefits for the Dragon Boat Festival, Mid-Autumn Festival, and birthday. In addition, the Company provides pension contributions and group insurance in accordance with the law to ensure the safety of employees at work and in life. We also continue to promote various activities, such as sports, LOHAS, health, arts and culture, education and public welfare, to enrich the life experience of employees.



Overview of benefits by region

	Headquarters	Advantech China	Advantech Japan	Other regions
Employee group insurance	<ul style="list-style-type: none"> • Term life insurance • Medical insurance • Injury insurance 	<ul style="list-style-type: none"> • Accident Insurance • Public transport accident insurance • Employer liability insurance 	No employee group insurance (the government offers labor insurance), but health insurance subsidies are provided	Group insurance provided
Health benefits	<ul style="list-style-type: none"> • Provide annual employee health checkups that are better than legal requirements* • One health checkup for supervisors at the manager level or at least every two years 	<ul style="list-style-type: none"> • Annual employee health checkup • Kunshan: Employees at the assistant manager level and above are entitled to additional health checkup items 	Annual employee health checkup	Statutory health checkup benefits are provided to all Advantech employees based on the location of the Company's subsidiaries
Marriage allowance	✓	✓	✓	✓
Maternity allowance	✓	✓	✓	✓
Hospital condolence allowance	✓	✓	✓	—
Bereavement condolence allowance	✓	✓	✓	✓
Emergency assistance fund	Supported by the Foundation's emergency fund (within NTD 200,000)	<p>Advantech China:</p> <ul style="list-style-type: none"> • Poverty relief fund: A one-time subsidy of RMB 2,000-20,000 is given to employees or their immediate family members who are in financial difficulty due to a critical illness. • Emergency relief fund for critical illnesses: Employees, their spouses, or children suffering from critical illnesses are provided with assistance ranging from RMB 10,000 to 100,000, depending on the severity of their conditions. In the event of death due to illness or accident, employees, their spouses, or children will receive a relief fund of RMB 10,000 per person. <p>Advantech Kunshan: The foundation will provide emergency relief funds (within RMB 10,000) to support employees, their children, or spouses suffering from serious injuries, illnesses, or emergencies.</p>	Accident/sickness allowance: 15% of daily salary x number of days	Internal units in Advantech collaborate to launch the volunteer donation activity. In the event of a natural disaster, Advantech's local subsidiaries and the Human Resources Department will provide disaster relief funds for employees affected by the disaster.
New Year festival benefits (Dragon Boat Festival/Moon Festival/birthday)	✓ Indigenous employees can also apply for the "Indigenous peoples' ceremony leave" according to the time of the tribal ceremonies.	✓	—	✓

*Note:

1. According to Taiwan's Regulations Governing Labor Health Protection, employers should conduct regular general health checkups for in-service workers based on the following regulations: (a) One checkup for workers over 65 years old annually. (b) Employees over 40 but under 65 years old are subject to a checkup every three years. (c) Those under 40 years old are receive a checkup every five years.
2. Regions that are not considered significant locations of operation (Headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech Europe, and Advantech USA) are Indonesia, Mexico, India, Czech Republic, Australia, Malaysia, Singapore, Thailand, Russia, Turkey, Brazil, the Emirates, Vietnam, Canada, and Israel. "Other regions" mentioned below all have the same definition.

▲ Marriage and Maternity Cash Gifts

Aside from the above policies, Advantech also provides marriage and maternity cash gifts that are better than legal requirements. All full-time Advantech employees, regardless of gender, are protected by gender diversity and marriage equality. As long as colleagues are legally married, they may apply for the gift. A wedding invitation or a marriage certificate is required to apply for the marriage cash gift of NTD 10,000 per person; in 2023, 70 people applied for the wedding cash gift worth NTD 700,000.

Maternity cash gift applications, on the other hand, require the submission of a birth certificate. The amount of cash gift per child was NTD 10,000 (NTD 20,000 for twins). In 2023, 101 people applied to the headquarters for maternity cash gifts worth NTD 1,030,000.

▲ Parental Leave

According to Article 16 of the Gender Equality in Employment Act in Taiwan, after being in service for six months, employees may apply for parental leave before any of their children reach the age of three. The period of this leave is until their children reach the age of three but may not exceed two years in length. Advantech headquarters (Taiwan) employees are entitled to parental leave by law, which shall not exceed two years. In China, in addition to statutory maternity leave and paternity leave, employees can apply for up to six months of paid breastfeeding leave (at 75-80% salary) until their children reaches one year old. In Japan, labor laws allow for parental leave until the child turns two, during which the salary is subsidized by the government. In Korea, employees can apply for parental leave for up to two years until their children reach eight years old.

In 2023, 12% of all employees (including male and female employees) at Advantech headquarters (Taiwan) applied for parental leave, with a return to work rate of 78%. In 2022, the retention rate of employees who returned to work after taking parental leave and continued working for more than one year was 91%. Compared to 2022, there has been a significant increase in both the application rate and the ratio of employees who continue working for more than one year after returning to work*.

The application status of Advantech China, Advantech Japan, and Advantech Korea in 2023 is shown in the table below.

*Note: In 2022, the application rate for parental leave of all employees was 10.46%, and the return to work rate was 41.18%. In 2021, the retention rate for those who had worked for more than one year after returning from parental leave was 73%.

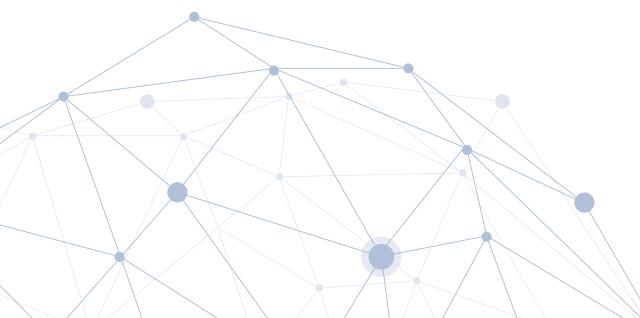
The application status of Advantech China, Advantech Japan, and Advantech Korea in 2023 is shown in the table below. Relevant data tables are illustrated below:

研華總部	Headquarters	Advantech China	Advantech Japan	Advantech Korea
(a) Number of employees eligible for parental leave in 2023 (2021-2023 maternity leave/paternity leave)	211	31	13	14
(b) Number of people who applied for parental leave in 2023	25	31	4	5
(c) Number of people expected to return to work after parental leave in 2023	36	24	2	2
(d) Number of people who returned to work after parental leave in 2023	28	24	2	2
(e) Number of people who applied for parental leave and returned to work after parental leave in 2022	22	32	2	3
(f) Number of employees who applied for parental leave and continued working for one year after returning work in 2022	20	27	2	1
Application rate for parental leave b/a	12%	100%	31%	36%
Return to work rate for parental leave d/c	78%	100%	100%	100%
Retention rate for parental leave f/e	91%	84%	100%	33%



▲ Family Care Leave/WFA (Work from Anywhere) System

As countries around the world announced the lifting of lockdown measures, the impact of the COVID-19 pandemic in Taiwan also came to an end, ushering in a new era of post-pandemic life. Advantech has formulated the WFA mechanism to help employees maintain the flexibility to balance work and family responsibilities as society returns to normal routines. Indirect employees may apply for WFA for one day per week. Under special circumstances, the supervisors can adjust the number of WFA days based on the team's manpower conditions. As for the provisional family care leave system established during the pandemic, after the pandemic prevention mechanism was withdrawn, the family care leave categories will be listed in accordance with the law in 2024 and incorporated into personal leave for the colleagues' convenience.



Region	Year	2021	2022	2023
Headquarters	Percentage of employees applying for family care leave (%)	2.71%	15.95%	0.27%
	Percentage of employees applying for WFA (%)	4.76%	76.31%	42.05%
Advantech Japan	Percentage of employees applying for family care leave (%)	0%	0%	19.6%
	Percentage of employees applying for WFA (%)	0%	0%	42.71%
Advantech Europe	Percentage of employees applying for family care leave (%)	N/A	3.87%	0
	Percentage of employees applying for WFA (%)	N/A	55.19%	52.6%
Advantech USA	Percentage of employees applying for family care leave (%)	N/A	3%	0
	Percentage of employees applying for WFA (%)	N/A	14%	0

*Note:

1. Advantech China (including Kunshan) did not have a family care leave or work-from-home (WFH) application mechanism. Due to the impact of the pandemic, a mandatory WFH system was implemented in accordance with local government regulations.
2. The percentage (%) in the above table refers to the number of applicants/total number of indirect employees in the region.

▲ Retirement Provision

Headquarters: There are two types of pension contributions. The monthly contributions shall be made in full according to the law.

1. Old pension scheme: 2% of the pension fund is appropriated monthly into a special account held in Taiwan Bank.
2. New pension scheme: The Company contributes 6% of the employee's monthly salary to the special account of the Labor Insurance Bureau.

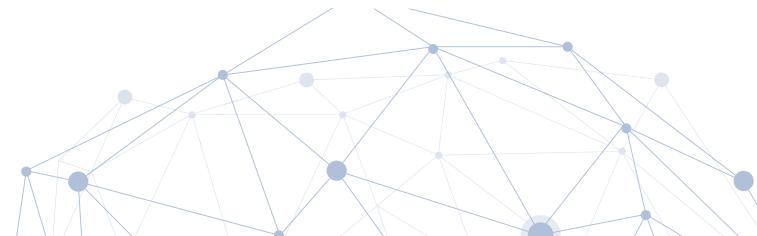
Advantech China: Implemented according to retirement laws and regulations in China. Employees who have paid the statutory social insurance for 15 years can collect a monthly pension after retirement. The retirement age is regulated by the Labor Standards Act: 60 for male employees, 55 for female management, and 50 for female employees. Furthermore, Advantech China has a "Deferred Retirement Management Policy": Non-management female employees can delay retirement until the age of 55. After completing the retirement process at the age of 55, female management and non-management employees can apply for re-employment. Executive level supervisors can apply for re-employment after the age of 60.

Advantech Japan: Contributes 9.15% of the employee's monthly salary to the government pension account according to the law, and contributes an additional 1.73%-2% of the total monthly salary to the bank's pension account.

Other overseas Advantech locations: Employee retirement is processed according to local laws and regulations.

▲ Employee Stock Ownership

To attract and retain outstanding talents in the Company, as well as to enhance employees' sense of belonging and loyalty to the Company, and to foster benefits for Advantech and shareholders, the issuance and subscription rules for employee stock options were formulated in accordance with relevant regulations such as Article 28-3 of the Securities and Exchange Act and the "Regulations Governing the Offering and Issuance of Securities by Securities Issuers" promulgated by the Securities and Futures Bureau of the Financial Supervisory Commission (Taiwan, ROC), Executive Yuan. Please refer to the annual report for relevant information.



▲ Employee Health Promotion

- Advantech offers employees a free annual health checkup (which is better than the legal requirement as it includes non-routine checkups such as fecal occult blood and cancer screening). In consideration of the post-pandemic era in 2023 and the importance of lung health for its colleagues, the Company has added lung function tests to the health checkup program. A total of 14 sessions of health checkups were conducted for 3,784 people (including their families).
- Moreover, a "Foot Health Testing Event" was held in conjunction with the health checkup in 2023, allowing employees to understand their physical fitness and take care of their foot health. A total of 68 people participated in four sessions.
- To reduce the risk of infection for the Company's colleagues visiting hospitals and clinics, and considering that many colleagues are preoccupied with work and unable to pick up chronic prescription drugs from pharmacies, Advantech began collaborating with the "Call the Pharmacist" drug delivery platform in January 2021, offering monthly drug delivery and collection services (family members can pick them up on behalf of employees) in the Company for the colleagues' convenience. In 2023, 21 employees made use of the service.
- In 2023, 238 people participated in the "Yanyan 40, Health+U" weight loss competition, which resulted in a total weight loss of 448.5 kg. The goal of the event is to let colleagues start and maintain good habits like healthy eating and regular exercise.
- "Metabolic Syndrome" was the number one cause of physical examination abnormalities in 2022. Consequently, three health lectures (physical+online) were conducted in 2023, focusing on topics such as weight loss and diet. Also, muscle massage and stretching workshops were arranged to look after employees who sit or stand for long periods at work.

Lecture date	Activity name	Number of participants
2023/03/30 (Thu)	"Self Pain Relief"	176
2023/08/30 (Wed)	"Stay Healthy by Eating Right (Diet Lecture)"	102
2023/09/27 (Wed)	"The Office is My Gym (Exercise Lecture)"	206

▲ Diverse Club Activities

To promote more interactions among employees and allow them to achieve work-life balance, Advantech has encouraged them to establish various clubs over the years. In 2023, 25 clubs including sports, LOHAS, arts and culture, and charity were formed at the headquarters, attracting more than 1,000 participants. There were 83 clubs in China (including various offices) with more than 2,600 participants, and seven clubs in Kunshan with 151 participants.

2023 Charity club blood drive



Sports club activities



▲ Four Major Categories Of Corporate Volunteers

"Give back to society". Advantech encourages employees to engage in volunteer activities and contribute to the benefit of others. The Company also hopes employees can gain experience and skills from volunteering that they wouldn't normally be exposed to in a conventional work environment. In 2023, Advantech accrued more than 1,062 volunteer hours, including biannual blood drives, ecological farm habitat maintenance, food banks, stone weir restoration, ecological trail restoration, and beach cleanup day. Advantech pursues sustainability with employees, their families, and friends.

In addition, to encourage more employees to engage in volunteer services, Advantech has implemented a volunteer leave system since 2023, providing employees with two days of paid volunteer leave a year. Four major volunteer activity themes were devised: energy conservation, public welfare (including environment), education, and arts. In 2023, 125 employees from the headquarters applied for volunteer leave. It is expected that the volunteer leave system will be applied to other overseas subsidiaries starting in 2024.

Volunteer activities for the restoration of "great wall on the sea, century-old stone weirs" in 2023



2023 Beach cleanup



Volunteer activities at Alibang Ecological Farm wetlands in 2023



Volunteer activities for the restoration of Xiaogukeng ancient trail in Taoyuan in 2023



Volunteer with Andrew Charity Association for Food Bank activity in 2023



5.2.2 Employee Living Wage

Advantech believes that taking the living wage into account is an important measure to improve the living conditions of workers. By ensuring that workers receive a fair wage to maintain their basic needs, it can promote economic growth and sustainable development. Therefore, Advantech follows the living wage guidelines and has established alliances to promote the living wage concept.

As a people-oriented company that respects human rights, Advantech continues to explore opportunities to introduce a living wage. Since 2022, Advantech had promoted the living wage methodology to six significant locations of operation, including the headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech USA, and Advantech Europe. Through internal cross-functional living wage seminars, we develop promotion plans that meet the living standards of various countries and conduct living wage training for internal employees.

Advantech defines a living wage as the minimum wage an employee earns within their basic working hours, excluding bonuses and overtime pay. This wage must ensure that the worker and their family can meet basic needs, including food, clothing, and housing expenses, and cover the minimum costs of living. In 2023, Advantech's living wage standards adopted relevant data from 2022 provided by regulatory authorities. For example, in Taiwan, the benchmark is based on the Household Income and Expenditure Survey Report from the Directorate-General of Budget, Accounting and Statistics (DGBAS). This helps to establish a living wage standard that meets local living conditions and compares it with the prevailing wage to ensure that employees' wages are sufficient to support the local standard of living.

As a leading company in the IoT industry, Advantech provides living wage assessments and commitments that are better than the industry standard. In 2023, Advantech conducted an internal survey to examine the living wage of 8,285 employees at six significant locations of operation to fulfill our commitment to paying a living wage for all employees. This commitment is gradually extended to Advantech's internal full-time employees, major suppliers and contractors.

The Living Wage Methodology

The latest living wage trial formula is derived from DGBAS's 2022 data:

Average monthly consumption expenditure per capita X percentage of average monthly food, clothing, and accommodation-related consumption per capita X (1 + number of people in the average household)

Living wage implementation process:

1. Advantech continues to implement a living wage mechanism for employees and upholds its commitment to fair remuneration, demonstrating that it values employee wages and benefits.
2. Compare the prevailing wage and the living wage to confirm if the employee's wage is sufficient to support the local living standards. In particular, the prevailing wage includes fixed salaries but excludes variable remuneration (such as overtime pay, production bonuses, and so on).
3. For the basic living expenses of households, Advantech Taiwan refers to the Household Income and Expenditure Survey conducted by the DGBAS every year to calculate the average monthly consumption expenditure per capita, multiplied by the average monthly consumption of food, clothing, and accommodation per capita before adding the average number of people in a household. For other countries/regions, Advantech refers to information released by the local government, or employee income and expenditure surveys are conducted.
4. When calculating the living wage, at the very least the expenses of food, clothing, and accommodation are considered, but whether other expenses (such as health, transportation, and education) will be included depends on the actual situation of various locations.
5. Calculate and set the living wage during the salary adjustment month each year to ensure that the salary of employees is sufficient to support local living standards. The living wage system is established to make sure that all new and existing Advantech employees can earn a living wage that can support the standard of living in the country/region where they are located.

Region	NTD\$	Exchange Rate as of 15 March 2023	Number of Employee	% of the operations cover in the assessment	Coverage of living wage assessment (%)
Headquarters	29,868	1	3,529	100%	100%
Advantech China	11,218	4.42	3,357	100%	100%
Advantech Japan	42,519	0.21	236	100%	100%
Advantech Korea	55,964	0.024	128	100%	100%
Advantech Europe	58,231	34.61	518	100%	100%
Advantech USA	85,455	31.93	517	100%	100%

***Note:**

1. Advantech Europe's living wage framework encompasses the Netherlands, Germany, Poland, France, Italy, Spain, the United Kingdom, Austria, Belgium, Czech Republic, and Ireland, and the five Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden).

2. Advantech USA's living wage framework encompasses Milpitas, Irvine, Illinois, Ohio.

6. Advantech conducted a living wage survey on our tier 1 suppliers and a total of 1,127 tier 1 suppliers were returned. According to the analysis of these tier 1 suppliers, 36% (403) had already assessed the living wage of their employees. The survey results show that our suppliers are working hard to raise their employees' living wages. Currently, only less than 1% of suppliers have employees below the market living wage standard. We will encourage more suppliers to implement the living wage system through continuous publicity and improving the living wage achievement rate.

Medium- and long-term planning for the promotion of the living wage concept

Living wage enhancement plan in 2024:

1. Advantech will team up with WTW to develop a robust framework for fair/competitive compensation to guide the Company's global practices. The framework is consistent with Advantech's business principles and supports its commitment to providing employees with a living wage.
2. Regional implementation plans: Expand the living wage promotion territory and develop an implementation plan to ensure the effective integration of the living wage concept and address the specific challenges and opportunities of the market.
3. Employee engagement and training: Strengthen internal and external training programs to promote awareness and understanding of the living wage principles among employees, contractors, and part-time workers.
4. Advocacy and collaboration: The Company will continue to collaborate with stakeholders to advocate for a national living wage movement that emphasizes the benefits of a living wage to individuals, businesses, and the economy.

Promote the concept of living wage to all of Advantech's domestic and overseas operating locations by 2025. By 2030, all Advantech employees (direct and indirect) will be entitled to a guaranteed living wage in the country/region where they are located. Advantech will continue collaborating with stakeholders and implementing living wage initiatives at various locations to promote the concept of living wage and practice with industry partners and supply chain partners.

Conclusion

Advantech dedicates itself to foster fair compensation practices globally and progressively implement a living wage system for all employees worldwide. We achieve this through ongoing assessment, strategic planning, and collaboration with stakeholders. Our commitment extends to establish and integrate global fair wage standards across Advantech's operational sites worldwide, as well as advocate for these standards with our supply chain partners. This comprehensive effort aims to foster inclusive economic growth and ensure equitable compensation for all Advantech employees.



5.3

Diversity, Equality and Inclusive Workplace

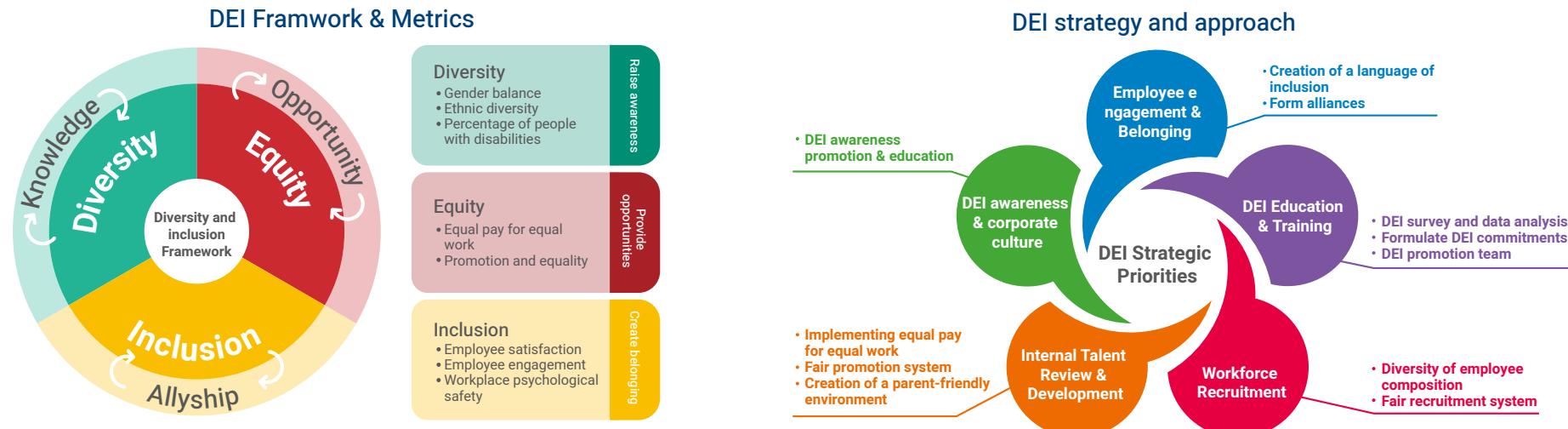
Item	Explanation
Policy or commitment	<ul style="list-style-type: none"> By establishing diverse two-way communication channels, besides disseminating information, the Company also listens to and responds to colleagues' feedback in real-time in order to improve and optimize employee services, maintain harmony in the workplace, as well as protect the rights and well-being of employees Carried out the annual employee satisfaction survey to understand various aspects of the Company and employees' opinions over the past year Formed the DEI team to promote, implement, and materialize Advantech's DEI development. Bolstered support for employees to settle in and start their families Improved employee health and well-being Increase employee volunteer hours
Impact description	<p>DEI has become a sustainable development trend for businesses, and many competitors in the market are implementing relevant system reforms. Since Advantech is not among the forerunners in this regard, and the development speed of DEI remains to be improved, failure to engage in proactive actions or adequate management will lead to a negative impact on the Company. Besides lagging behind the market, it is also detrimental to talent recruitment and may result in talent loss.</p> <p>In addition to the blueprint drawn up by the DEI team to facilitate implementation, the consensus of top-level decision-makers and employees is crucial to the sustainability of DEI and maintaining Advantech's market competitiveness. The formulation of a policy to help employees settle in and start their families requires the Company's support and the infusion of more funds and human resources in the short term. The policy is a necessary measure for Advantech's sustainable operation and to ensure employees' livelihoods. At the same time, it also fosters a good employer brand that is conducive for recruiting more outstanding talents to join the Company.</p>
2023 achievement status	<ul style="list-style-type: none"> Employee satisfaction survey: A 75% response rate was achieved at Advantech headquarters, and the coverage area has been expanded to include Advantech's significant locations of operation (six major regions, achieving a coverage rate of 100%) → Completed. an 80% response rate was achieved at Advantech headquarters this year, and the questionnaire coverage rate has reached 100% Advantech headquarters maternity leave/competitor paternity leave/market survey → Completed and submitted Advantech's "maternity leave/paternity leave" proposal, which offers better benefits than legal requirements Advantech headquarters' ABLE healthcare connectivity platform has reached 60% utilization rate → Completed. Advantech's dual health platforms are operating currently. Besides the corporate employee health management system that has reached 100% coverage at Advantech headquarters, the blood pressure, blood oxygen levels, body temperature, and other metrics of 342 employees are also regularly monitored through the iTeleMed physiological measurement station More than 1,000 employees participated in healthcare activities/lectures at Advantech headquarters → Completed. In 2023, 2,710 employees participated in health care activities (health checkups), 68 employees took the foot health test, and 238 people partook in weight loss activities, leading to a total weight reduction of 448.5kg; also, 484 people attended the annual health lectures Advantech headquarters accumulated a total of 500 volunteer service hours → Completed. In 2023, Advantech accumulated more than 1,062 hours of volunteer service, attaining a completion rate of 112% Advantech achieved a 100% performance appraisal participation rate globally → Completed.
2024 Goals	<ul style="list-style-type: none"> Employee satisfaction survey: Global completion rate reached 84% with 84% satisfaction rate Optimization of the maternity leave and paternity leave systems at Advantech headquarters Evaluate and provide a childcare subsidy plan for Advantech headquarters Gradually establish paid volunteer leave at Advantech's significant locations of operation (six major regions) and increase the number of volunteer service hours worldwide to 1,500. Advantech headquarters' response to DEI promotion and development: Organize biannual career lectures for women and parenting education sessions, as well as an annual cultural diversity and inclusion activity. Up to 3,000 employees from Advantech headquarters participated in sports/health activities Advantech achieved a 100% performance appraisal participation rate globally

2025 Goals		<ul style="list-style-type: none">Employee satisfaction survey: Achieve 85% global satisfaction rateOptimize the paid family care leave and paid parental leave systems at Advantech headquartersAdvantech headquarters provide a monthly childcare subsidy for children aged 0-3 years100% paid volunteer leave coverage for Advantech's significant locations of operation (six major regions) and achieve 1,800 hours of volunteer service for the Company's global employeesAdvantech achieved a 100% performance appraisal participation rate globally					
2030 Goals		<ul style="list-style-type: none">Employee satisfaction survey: Achieve a global completion rate of 85% with 86% satisfaction rateAdvantech headquarters will provide a monthly childcare subsidy for children aged 0-6 yearsThe number of employees with disabilities at Advantech headquarters will be higher than the legal requirementAdvantech headquarters will launch telemedicine services and health activities for employees and their families and increase participation to 3,500 individualsAdvantech employees worldwide will contribute 2,000 hours of volunteer serviceAdvantech achieved a 100% performance appraisal participation rate globally					
Key actions or programs		<ul style="list-style-type: none">For the employee satisfaction survey, in addition to formulating an implementation plan based on the feedback every year, the Company will continue to monitor and develop an incentive system through its regional human resource business partners (HRBPs) to encourage employees to offer their feedback, in the hope of increasing the response rate and satisfaction rateAdvantech headquarters will implement and promote maternity leave and paternity leave systems that are better than legal requirements in Q1Progressively promote and implement paid volunteer leave at Advantech's significant locations of operation (six major regions), and assist various regions to start volunteer activities in a bid to increase the number of global volunteer service hours to 1,5002024 is Advantech's inaugural Sports and Health Year, and a series of activities to raise employees' health awareness will be organized. The ABLE healthcare platform has joined forces with EHS and iTelemed to facilitate the digital presentation of employee health checkup statistics and monitor abnormal values. Furthermore, it is possible to make an appointment with the on-site physician or receive telemedicine service, as well as conduct workplace health monitoring and linking physiological measurement valuesThe effectiveness of Advantech's global performance appraisal is controlled and managed by the human resources information digital management platform, where supervisors, HR, and colleagues are reminded and monitored to achieve 100% participation rate in required assessments					
Effectiveness assessment		<ul style="list-style-type: none">To increase the employee satisfaction survey response rate, Advantech will regularly monitor the progress of various departments and utilize the Company's internal communication channels to promote the surveyStatistics on the number of applications before and after the optimization of maternity leave and paternity leaveOne to two quarterly company-sponsored volunteer activities are planned, and Advantech's significant locations of operation (six major regions) are contacted to kick off local volunteer campaigns to ensure that volunteer hours are logged, volunteer leave is utilized, visibility is increased, and gradually encourage more employees to join the initiativeReduce the number of people with hypertension, hyperglycemia, and hyperlipidemia in 2024 by 5% through the implementation of various types of sports, health activities, and competitions					
Stakeholder engagement		Advantech discloses various policies and systems through diverse communication channels, and gauges employee feedback through employee satisfaction surveys; meanwhile, the Company evaluates the impact of various systems on talent retention and recruitment. The Company has also set up an employee grievance channel to respond to, take care of, and protect the rights and interests of Advantech employees.					

▲ Advantech Global Diversity and Equality Policy

To foster workplace diversity and equality, Advantech has long been proactively promoting gender equality in the global workplace. Measures implemented include a gender-neutral pay system, fair and impartial performance appraisal and promotion systems, flexible working hours to support women in management positions, and a strong emphasis on women's family care responsibilities. Advantech ensures that hiring conditions are not influenced by gender, race, religion, political stance, or marital status, nor are there disparities in salary or treatment. Advantech has stipulated clear recruitment strategies globally to enhance employee diversity. Additionally, through internal diversity training and talent development channels, the Company has progressively mitigated fundamental differences that stem from physiological or psychological conditions affecting employees. Moreover, Advantech regularly reviews salary and remuneration-related indicators across different regions and job categories or job bands to ensure the creation of a diverse and equitable workplace.

Advantech formed the Diversity, Equity, Inclusion (DEI) team in 2023 and launched its DEI promotion strategy and blueprint.



▲ Review of Current Initiatives by Advantech's DEI Team

DEI category	Indicator	Solution
Diversity	“Ethnic Diversity” LGBT	Regardless of gender, employees who marry are entitled to a wedding gift subsidy in accordance with the law
Diversity Equity	“Parent-friendly” Measures to help employees settle in and start their families	Through flexible working hours and the WFA policy, Advantech helps employees increase their working hour flexibility/provides practical support for employees to settle in and start their families, thereby ensuring they can achieve a balance between family and career.
Inclusion	“Employees’ sense of belonging” Migrant workers	<p>For the hiring and care of migrant workers in Advantech's manufacturing centers, the Company subsidizes relevant pre-employment expenses (including handling fees and airfare) for foreign migrant workers to alleviate the financial burden of applying for a job in Taiwan.</p> <p>A bilingual policy has been implemented in factories to maintain smooth communication with foreign colleagues</p> <p>Organize special national holiday activities in factories for migrant workers based on their home countries (Philippines)</p> <p>Some factories have established a Muslim prayer room in consideration of employees' religious diversity.</p>
Inclusion	“Employees’ sense of belonging” Indigenous peoples	Indigenous employees can apply for leave according to the time of their respective tribal festivals
Diversity Inclusion	“Ethnic diversity” “Employees’ sense of belonging” People with disabilities	Advantech hires or exceeds the full quota of employees with disabilities as required by law. Furthermore, the Company also encourages and facilitates their career development.



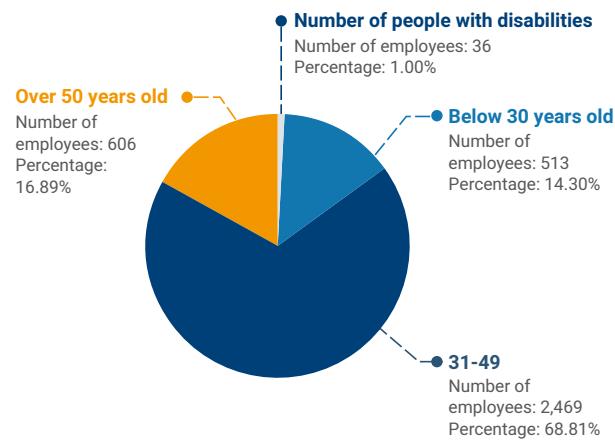
Employee Composition

Country	Number of employees	Percentage of employees	Number of supervisors (Manager level and above)	Percentage of supervisors (Manager level and above)	Country	Number of employees	Percentage of employees	Number of supervisors (Manager level and above)	Percentage of supervisors (Manager level and above)
Not Declared	155	1.76%	40	4.15%	Indonesia	20	0.23%	4	0.41%
Afghanistan	1	0.01%	1	0.10%	Iran	2	0.02%	—	—
Australia	27	0.31%	4	0.41%	Ireland	3	0.03%	—	—
Belarus	1	0.01%	—	—	Israel	5	0.06%	1	0.10%
Belgium	1	0.01%	—	—	Israelis	1	0.01%	—	—
Bosnia and Herzegovina	1	0.01%	—	—	Italy	40	0.45%	5	0.52%
Brazil	61	0.69%	4	0.41%	Japan	210	2.38%	26	2.70%
British Virgin Islands	1	0.01%	—	—	Kosovo	1	0.01%	—	—
Bulgaria	3	0.03%	—	—	Lithuania	3	0.03%	—	—
Burkina Faso	1	0.01%	—	—	Malaysia	54	0.61%	10	1.04%
Cameroon	1	0.01%	—	—	Mexico	20	0.23%	4	0.41%
Canada	11	0.12%	4	0.41%	Morocco	3	0.03%	—	—
China	3334	37.76%	110	11.41%	Myanmar	2	0.02%	—	—
Colombia	2	0.02%	—	—	Netherlands	98	1.11%	21	2.18%
Croatia	1	0.01%	—	—	Netherlands Antilles	1	0.01%	—	0.00%
Czech Republic	72	0.82%	7	0.73%	Nicaragua	1	0.01%	1	0.10%
Denmark	2	0.02%	1	0.10%	North Macedonia	1	0.01%	—	—
Dubai	1	0.01%	—	—	Norway	1	0.01%	—	—
Finland	2	0.02%	—	—	Oman	1	0.01%	—	—
France	17	0.19%	5	0.52%	Pakistan	2	0.02%	—	—
Germany	129	1.46%	15	1.56%	Peru	1	0.01%	—	—
Greece	5	0.06%	—	—	Philippines	302	3.42%	1	0.10%
Haiti	1	0.01%	—	—	Poland	57	0.65%	3	0.31%
Hong Kong	4	0.05%	—	—	Portugal	2	0.02%	—	—
Hungary	2	0.02%	—	—	Romania	4	0.05%	1	0.10%
India	86	0.97%	13	1.35%	Russia	2	0.02%	2	0.21%

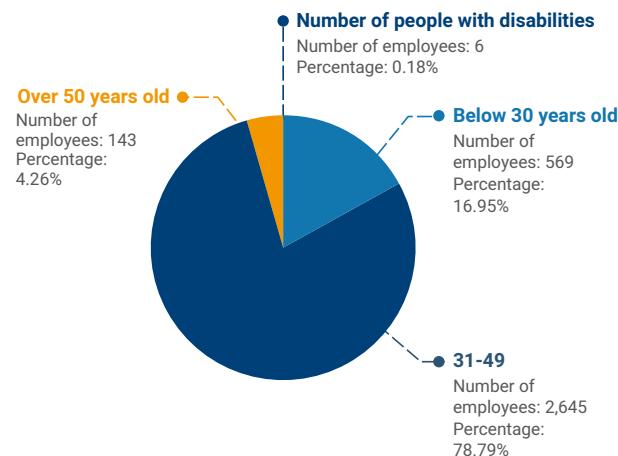
Country	Number of employees	Percentage of employees	Number of supervisors (Manager level and above)	Percentage of supervisors (Manager level and above)	Country	Number of employees	Percentage of employees	Number of supervisors (Manager level and above)	Percentage of supervisors (Manager level and above)
Russian Federation	8	0.09%	1	0.10%	Turkey	8	0.09%	—	—
Singapore	31	0.35%	5	0.52%	Türkiye	21	0.24%	1	0.10%
Slovakia	2	0.02%	—	—	Ukraine	4	0.05%	—	—
SlovakRepublic	2	0.02%	—	—	United Arab Emirates	1	0.01%	1	0.10%
Slovenia	1	0.01%	—	—	United Kingdom	42	0.48%	9	0.93%
South Korea	127	1.44%	21	2.18%	United States	367	4.16%	106	11.00%
Spain	10	0.11%	1	0.10%	United States of America	1	0.01%	—	—
Sweden	10	0.11%	—	—	Uruguay	1	0.01%	—	—
Syria	1	0.01%	—	—	Venezuela	3	0.03%	—	—
Taiwan	3358	38.03%	528	54.77%	Vietnam	42	0.48%	3	0.31%
Thailand	27	0.31%	4	0.41%	Zambia	1	0.01%	—	—
Tunisia	1	0.01%	1	0.10%	Zimbabwe	1	0.01%	—	—

Diverse Employment

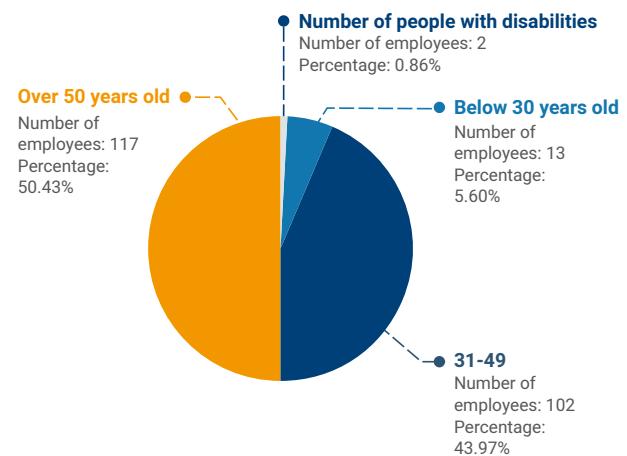
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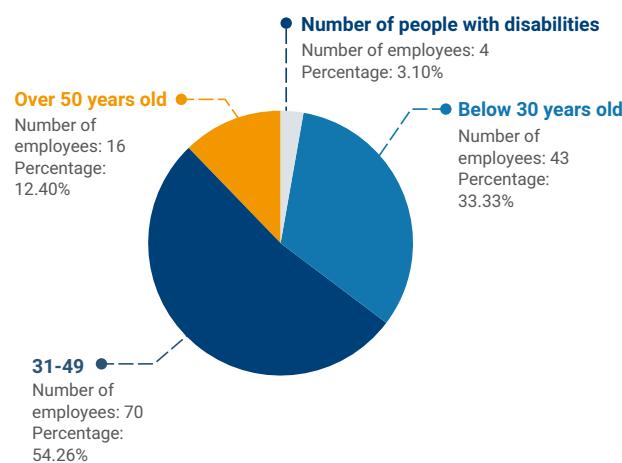
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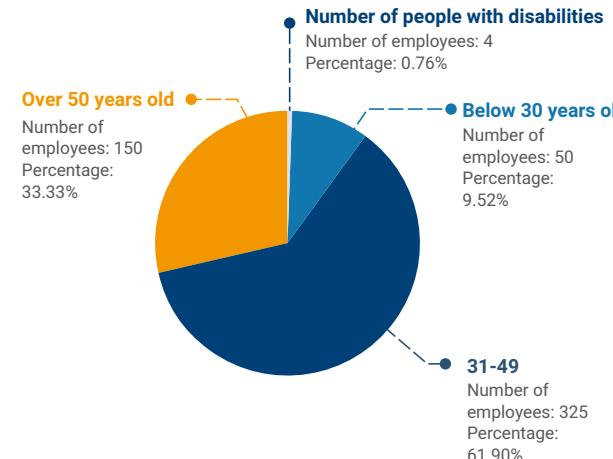
Advantech Japan



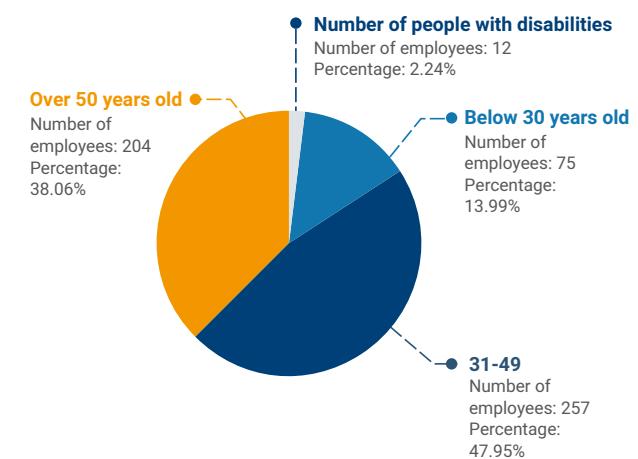
Advantech Korea



Advantech Europe



Advantech USA



*Note: To comply with GDPR regulations, data on people with disabilities are neither investigated nor disclosed.

▲ Employment of People with Disabilities

According to Taiwan's "People with Disabilities Rights Protection Act", the number of employees with disabilities with capability to work in a company shall be no less than 1% of the total number of employees. If the weighted total value fails to meet the standard, the Company must regularly pay the "shortfall allowance" to the disabled employment fund of the labor competent authority. Advantech is legally required to hire 36 people with disabilities and it has achieved the target in late 2023, which accounts for 1% of the total number of employees in the Company. In order to sustainably maintain the 1% ratio of employees with disabilities, the Company continues to vigorously monitor the resumes of people with disabilities through government employment counseling agencies.

In addition, all employees with disabilities actively engage in the Company's operations. Before reporting to work, Advantech offers colleagues assistance regarding commuting routes, work processes, and other practical aspects based on their respective disabilities. After reporting to work, adequate assistance in terms of personnel, equipment, and workplace is provided to them to ensure they can work with peace of mind and unleash their skills.

▲ Percentage of Female Employees/Supervisors

In Advantech's high-tech manufacturing industry, the proportion of female supervisors and executive level supervisor has increased slightly over the past two years. In 2023, the global coverage was expanded to include the statistical regions. In 2022, the statistical regions were expanded to include Advantech's six major regions (including Korea, Europe, and the U.S.), and the definition of supervisor is stricter than that in 2021. The level of entry-/management-level supervisors was adjusted from job band D (section manager/assistant manager) to job band E (manager level) and above. Currently, female employees account for 41.8% of all Advantech employees. In particular, female supervisors account for 22.1% of Advantech's supervisors. Advantech Taiwan expects to increase the percentage of female employees and supervisors to 42% and 24%, respectively by 2025.

More than one-fifth of Advantech's management team at its global headquarters ([management team - Advantech](#)) is female. In 2017, Ms. Shu-Yen Tsai was promoted to become the President of Advantech Industrial IoT, becoming one of the three Presidents and the highest-ranking female supervisor in the Company. Embody the spirit of the succession of professional managers and gender equality.

Region	Year	2021	2022	2023	2025
Advantech	Percentage of female employees	41.8%	42.7%	41.8%	42.0%
	Percentage of female supervisors	28.0%	21.2%	22.1%	24.0%
	Percentage of female entry-/management-level supervisors	14.0%	23.6%	23.7%	24.0%
	Percentage of female executive level supervisor	2.0%	12.8%	15.9%	16.0%
	Percentage of female supervisors in for-profit units (excluding HR, IT, legal affairs, and other support units)	19.0%	16.0%	16.9%	17.0%
	Percentage of female STEM positions (science/technology/engineering/mathematics)	22.0%	25.1%	23.4%	23.5%

***Note:**

1 In 2021, Advantech disclosed information from three major regions: headquarters, China, and Japan. In 2022, Advantech expanded the disclosure to six major regions including Korea, Europe, and the United States. In 2023, disclosure was expanded to include all global operating locations.

2 Advantech conducted the Global Job Band alignment in 2022, where global job bands were divided into A to H. Entry-/management-level supervisors (manager level) were classified as Job Band E, while executive level supervisors (including Assistant Vice President level and above) were classified as Job Band F and above.

3 In 2023, the scope of data disclosure was expanded to include other regions (including Indonesia, Mexico, India, Czech Republic, Australia, Malaysia, Singapore, Thailand, Russia, Turkey, Brazil, United Arab Emirates, Vietnam, Canada, and Israel). In these newly disclosed regions, the employee structure shows a relatively higher proportion of males in STEM positions, impacting two indicators compared to 2022: the overall percentage of female employees and the proportion of female employees in STEM positions, both of which decreased in 2023. Optimization efforts will be implemented annually across all regions to address this trend.

Performance Appraisal and Promotion System

- Management by objectives: Advantech's annual performance appraisal is aligned with the organization's annual strategy and guidelines. Performance appraisal is conducted biannually, at mid-year and year-end.
- Multidimensional performance appraisal: The performance appraisal system includes diverse feedback questionnaires that supervisors can use to carry out performance appraisal. The feedback incorporates opinions from multiple parties and serves as a reference for the direct (evaluating) supervisor. By integrating the opinions of multiple parties, a more objective and fair performance appraisal outcome is expected.
- Evaluation fairness: Implemented in 2023, the performance evaluation is re-subdivided by various job levels. The purpose of this change is to improve the fairness and accuracy of horizontal comparisons among groups within the same job band and to ensure that each group receives appropriate incentives and rewards.
- Agile conversations: Supervisors conduct at least one performance evaluation with each employee annually. At year-end, after employees complete self-assessments, they engage in performance discussions with their supervisors to develop personal development plans. This process ensures that employees receive appropriate performance feedback, and that performance appraisal outcomes and personal development plans are adequately documented in the system. During the annual performance review cycle, supervisors are encouraged to communicate with employees at any time, regularly aligning directions and listening to employee feedback. By providing timely support, the goal is to achieve proper two-way communication and ensure that both parties have a mutual understanding of the performance appraisal results.
- Team-based performance appraisal:
 - Year-based: Advantech's performance appraisal not only focuses on individual job performance but also stresses the importance of teamwork. By setting KPIs and incentive systems that the team is jointly responsible for, the Company can uphold its core values of unleashing individual potential and teamwork. Advantech also sets group goals that applied to all employees and offered incentive bonuses. The group objectives were based on the performance of the respective business units and support units. The final evaluation determined the achievement rate and corresponding rewards were given to employees affiliated with those business units, motivating them to achieve the team's common goals.
 - Project-based: In response to the Company's material topics such as ESG projects and digital transformation projects, project team members not only set personal goals but also team goals and corresponding rewards. The management-level and executive level supervisor were also assigned common KPIs. In addition to the goals for their respective business units and support units, they were also responsible for the Company's strategic KPIs.

Percentage of Employee Performance Appraisals Completed for Four Major Job Categories

Region	Four major job functions	Percentage of males receiving performance appraisals	Percentage of females receiving performance appraisals
Headquarters	R&D	97.9%	96.6%
	Marketing and sales	95.1%	97.3%
	Administration	92.2%	94.5%
	Manufacturing	99.4%	99.2%
Advantech China	R&D	96.6%	98.6%
	Marketing and sales	95.7%	96.2%
	Administration	92.2%	93.6%
	Manufacturing	95.4%	96.5%
Advantech Japan	R&D	100.0%	100.0%
	Marketing and sales	100.0%	100.0%
	Administration	100.0%	100.0%
	Manufacturing	100.0%	100.0%
Advantech Korea	R&D	84.2%	33.3%
	Marketing and sales	77.4%	74.1%
	Administration	77.8%	60.0%
	Manufacturing	78.9%	100.0%
Advantech Europe	R&D	100.0%	88.9%
	Marketing and sales	97.2%	98.8%
	Administration	97.8%	95.6%
	Manufacturing	98.4%	94.4%

***Note:**

1. Calculation of the above performance appraisal ratio
 - a. The numerator and denominator are all full-time employees (excluding contract personnel and interns).
 - b. The numerator is the total number of people who participated in the performance appraisal; China, Japan, Korea, and Europe were assessed annually, while the headquarters conducted both new employee performance appraisals and annual performance appraisals.
 - c. The denominator includes those who were in the three-month probation period, on leave without pay and people who have left the Company during the performance appraisal period without completing the performance appraisal.
2. The participation rate of employees in the six major regions in 2023 was 100%
 - d. Headquarters: Some senior operating management is not required to participate in the annual performance appraisal, and the participation rate after deducting the said senior management was 100%.
 - e. Advantech China: Colleagues on probation were not required to participate in the annual performance appraisal, and the participation rate after deducting the said colleagues was 100%.
 - f. Advantech Korea: Colleagues on probation and those who have been full-time staff for less than six months were not required to participate in the annual performance appraisal, and the participation rate after deducting the said colleagues was 100%.
 - g. Advantech Europe: Colleagues on probation were not required to participate in the annual performance appraisal, and the participation rate after deducting the said colleagues was 100%.
3. Advantech USA cannot disclose the information due to the lack of complete relevant statistics for 2023.

Performance Appraisal Ratio for Employees in the Two Job Functions

Region	Job category	Percentage of males receiving performance appraisals	Percentage of females receiving performance appraisals
Headquarters	Executive level supervisor	88.10%	83.33%
	Management-level supervisor	98.72%	95.56%
	General employees	98.01%	97.83%
Advantech China	Executive level supervisor	90.91%	100.00%
	Management-level supervisor	98.53%	97.62%
	General employees	95.37%	96.28%
Advantech Japan	Executive level supervisor	100.00%	100.00%
	Management-level supervisor	100.00%	NA
	General employees	100.00%	100.00%
Advantech Korea	Executive level supervisor	100.00%	100.00%
	Management-level supervisor	80.00%	100.00%
	General employees	76.27%	67.65%
Advantech Europe	Executive level supervisor	100.00%	100.00%
	Management-level supervisor	97.30%	87.50%
	General employees	98.26%	97.02%

***Note:**

1. Advantech conducted a global job band alignment in 2022, where global job bands were divided into A to H. Management-level supervisors were classified as Job Band E, while executive level supervisor was classified as Job Band F and above.
2. Calculation of the above performance appraisal ratio
 - a. The numerator is the total number of people who participated in the performance appraisal; China, Japan, Korea, and Europe were assessed annually, while the headquarters conducted both new employee performance appraisals and annual performance appraisals.
 - b. The denominator is full-time employees (excluding contractors and interns). Full-time employees include those who were in the three-month probation period, on leave without pay and people who have left the Company during the performance appraisal period without completing the performance appraisal.)
3. The participation rate of employees in the six major regions in 2023 was 100%
 - c. Some senior operating management at the headquarters is not required to participate in the annual performance appraisal, and the participation rate after deducting the said senior management was 100%.
 - d. In China, those who failed the probation period were not required to participate in the annual performance appraisal, and the participation rate after deducting the said colleagues was 100%.
 - e. Employees in Korea who failed the probation period and employees who have been full-time staff for less than six months were not required to participate in the annual performance appraisal, and the participation rate after deducting the said colleagues was 100%.
 - f. In Europe, those who failed the probation period were not required to participate in the annual performance appraisal, and the participation rate after deducting the said colleagues was 100%.
4. Advantech USA cannot disclose the information due to the lack of complete relevant statistics for 2023.

Employee Satisfaction Survey

Advantech upholds the management philosophy of proactively caring for its employees, valuing their feedback and opinions, and strives to provide an open, inclusive, safe, and healthy workplace for all employees. Inspired by Advantech's core values, which include a people-oriented environment, ethics, excellence in innovation, and altruistic contributions, the aim is to enhance mutual understanding between the Company and its employees through the annual employee satisfaction survey, thereby fostering an environment that values employees and offers a more comprehensive benefits system.

In 2018, China was the first region to launch the annual employee satisfaction survey. In 2021, the survey was expanded to include Europe (non-management staff survey) and Taiwan (50 randomly selected employees). Since the launch of the survey, the annual satisfaction rate has consistently reached above 90%. The Company plans to continue expanding the survey regions, with the global survey coverage rate reaching approximately 72.1% by 2021. The survey is used by Advantech as a reference for continuously enhancing employee relations.

In 2023, employee satisfaction surveys from different regions worldwide were integrated for the first time and optimized. A total of 35 questions (Figure. 5.3.2) across seven major themes were designed with the following objectives in mind (Figure. 5.3.1). The themes were corporate culture and management, work environment, work content, teamwork, management and supervision, communication effectiveness, performance appraisal and promotion, as well as training and development. This year's questionnaire was offered in four languages covering 20 countries/regions, including Advantech's six significant locations of operation (Advantech headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech Europe, and Advantech USA). In the future, the Company will maintain the frequency of annual surveys to cover the six significant locations of operation. Advantech will investigate the opinions and feedback from employees of all its global plants/units as well as disclose the goals and results of related surveys and analyses.

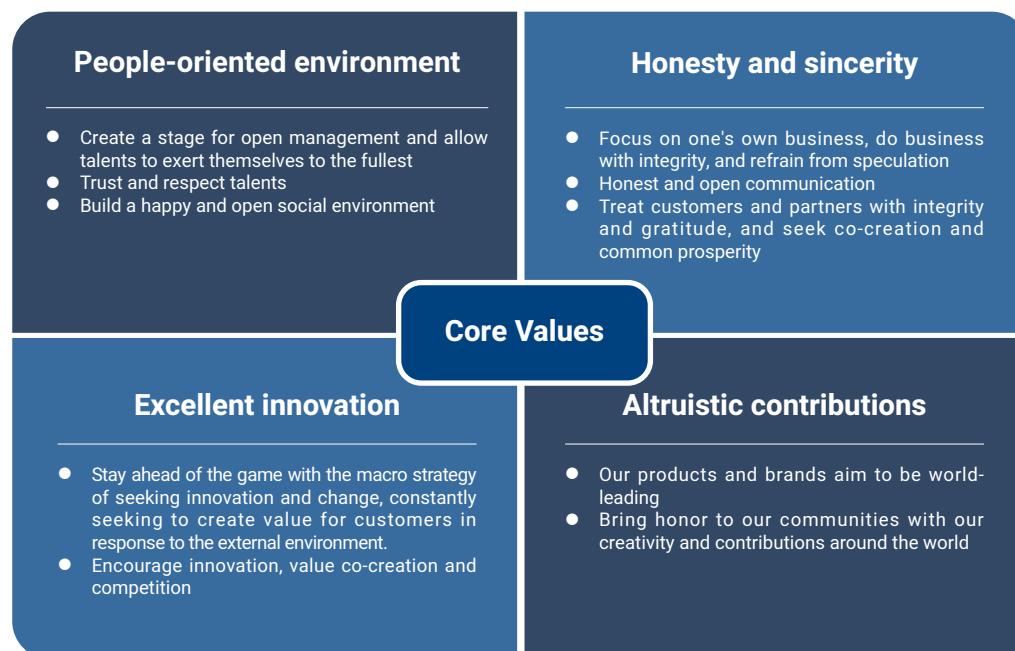


Figure. 5.3.1: Objectives of employee satisfaction survey



Figure. 5.3.2: Seven major themes of the 2023 employee satisfaction survey

The regional coverage rate of the 2023 employee satisfaction survey was 100%. 8,745 people participated in the survey and 7,006 people responded, achieving a response rate of 80%. The satisfaction rate was 83%^{Note 1}.

The Company convened cross-department/plant project meetings to review and follow up on employee satisfaction improvement plans, in turn demonstrating the importance of employee opinions to the Company and Advantech's determination to foster a high-quality workplace. Please refer to Table 5.3.1 for response conditions of various regions and the total score, and Table 5.3.2 for the follow-up feedback of the survey.

Region	The number of people who should fill out the questionnaire ^{Note 2}	Number of respondents	Male	Female	Non-disclosure of gender	Response rate	Satisfaction level
Headquarters	3,549	2,847	1,620	1,227	0	80%	81%
Advantech China	1,206	1,029	624	405	0	85%	94%
Advantech Kunshan ^{Note 3}	2,127	1,832	970	862	0	86%	85%
Advantech Japan	250	191	130	57	4	76%	67%
Advantech Korea	131	114	73	37	4	87%	78%
Advantech USA	541	226	131	77	18	42%	80%
Advantech Europe	578	451	299	131	21	78%	78%
Other regions	363	316	199	95	22	87%	82%

*Note:

1. The overall engagement statistics are the outcome of a weighted calculation: Sum of (engagement level by region * number of respondents by region)/total number of respondents.

2. The number of respondents should be the number of full-time employees, excluding interns and cooperative education students.

3. Advantech Kunshan's satisfaction calculation method will be revised in 2024.

Table 5.3.1: Employee satisfaction survey response conditions of various regions: by gender

Region	Total score	Monitored issues
Advantech Taiwan (ACL)	4.05	The score for the performance appraisal and promotion as well as the training and development group was 3.82. Plans are underway to redesign the Advantech Academy focusing on four major dimensions including management, professionalism, general education, and new hires. Furthermore, communication between the Company and employees was bolstered to realize positive two-way feedback and elevate employee training percentage, as well as optimize employees' career development.
Advantech China (ACN)	4.72	The score for the performance appraisal and promotion as well as the training and development group was 4.59. In the future, the training content will be enriched to include vocational skills, product technology, Advantech product and competitive product comparison meetings, and experience sharing by external experts. The Company will also increase cross-departmental technical training and increase the frequency of personnel exchanges to provide more room for career development by clarifying employees' career development trajectory.
Advantech Kunshan (AKMC)	4.27	The score for the performance appraisal and promotion as well as the training and development group was 4.19. In the future, Advantech plans to improve and meet the learning needs of employees through the "Knowledge Learning and Sharing Circle", and assign learning courses according to personnel and job positions. In addition, the Company has planned training for entry-level supervisors along nine dimensions to improve supervisor roles and functions such as communication and collaboration, promotion and execution, emotion management, stress management, time management, problem-solving ability, talent selection, team cultivation, and innovative learning.
Overseas business group (Include Advantech Japan, Advantech Korea, Advantech USA, Advantech Europe, and other regions)	3.89	Since the overall satisfaction level of the overseas business group is lower than that of other regions, in order to lower the employee turnover rate, strengthen personnel development strategies, and enhance employee happiness, the overseas business group will adopt four major improvement measures to improve employee satisfaction. These include improving interdepartmental communication and collaboration, bolstering leadership and management skills, improving employee welfare and life-work balance goals, and strengthening the implementation of the DEI concept.

Table 5.3.2: Employee satisfaction survey total score and follow-up feedback

Moreover, the survey results indicate that employees in different regions are less certain about performance appraisal, promotion, training, and development plans. Consequently, in line with the vision of Corporate Strategy Transformation 2030 (CST 2030), Advantech will begin to launch a function-based structured training system in 2024 to achieve better talent utilization.

5.4 Human Rights Protection

5.4.1 Employee Human Rights and Employee Rights Protection

Human Rights Management and Commitment

Advantech has established the "Advantech Human Rights Policy", which has been reviewed and approved by the top management to protect the fundamental human rights of all employees, suppliers, customers, and stakeholders. The Company takes the international human rights framework, corporate development strategies, and external trends, including the "Universal Declaration of Human Rights", the "United Nations Global Compact", and the International Labor Organization's "Declaration of Fundamental Principles and Rights at Work" into consideration and complies with the local regulations of the countries where it operates. Furthermore, Advantech has formulated human rights policies based on the UN's "Guiding Principles on Business and Human Rights".

Advantech has established a human rights risk survey procedure, which includes regular stakeholder impact assessments and management improvements. For the human rights risk survey, relevant risk topics (including "human rights risks") were selected by the Internal Audit Committee and other relevant units before reviewing the risk ratings of each issue, identifying high-risk groups, and implementing management measures accordingly. In 2023, there were no reported cases of discrimination or harassment.

Meanwhile, Advantech employees must also comply with the "Employee Code of Conduct", which includes labor standards, humane treatment, prohibition of child labor and discrimination against employees, and equal pay for equal work, clearly stating that employees are prohibited from engaging in any form of discrimination or other human rights violations. To make sure that all employees understand and comply with the above policies, the Company conducts the "Integrity Business Code" and compliance with laws education and training every year. These include provisions for the Company to offer legitimate whistleblowing channels and disciplinary actions. The identity of the whistleblower and the content of the report were kept confidential. In 2023, the education and training coverage rate of the "[Integrity Business Code](#)" was 100% (indirect employees), and the training completion rate was 98.1% (6,198 indirect employees worldwide). For employees who have not yet completed the training, the system will notify them and their immediate supervisors at the beginning of each month to allow the supervisor to request their subordinates to complete the tasks promptly.

In terms of direct employees, Advantech's Taiwan Manufacturing Center (plant) holds annual educational training on the "Employee Code of Conduct", including anti-discrimination and anti-harassment, achieving a coverage rate of 100%.

Freedom of Association

The Company supports all types of employee self-organized clubs and unions at different levels (for instance: Advantech has established labor unions in Germany, the Netherlands, and Japan, as well as labor representatives in Japan and France) to promote employee equality in various regions. In 2023, Advantech's global freedom of association coverage rate reached 94.7% (100% was not achieved due to no information having been collected for other regions^{note} yet).

- In Europe, worker councils were started by employees in some regions of Advantech Germany (Advantech Europe BV and Advantech GmbH) and Advantech in the Netherlands. Employee representatives were elected regularly, and the council held regular labor-management meetings with the Company to discuss employee-related issues. Advantech France also regularly elects labor representatives to speak out on employee-related issues and partake in labor-management meetings.
- In the U.S., employees of Advantech USA are entitled to the freedom of association and are free to join or form labor unions. However, since Advantech USA continues to treat its employees well, they have not exercised their right to form a union. The Company regularly communicates with employees and collects feedback through HR newsletters.

- In Asia, all employees of Advantech Japan are entitled to the freedom of association. In particular, ATJ (Advantech Technologies Japan Corp) has unionized while AJP (Advantech Japan. Co., Ltd.) regularly elects labor representatives to speak out on employee-related issues and partake in labor-management meetings. Advantech China (including plants) regularly discusses and resolves employee welfare-related issues through Employee Welfare Committee representatives. Advantech headquarters is equipped with an Employee Welfare Committee, and quarterly labor-management meetings were convened in various headquarters locations (Rui-guang Headquarters, Yang-guang Building, Donghu, and Linkou plants) to communicate labor rights and interests (including salary, attendance, and benefits), listen to employees' feedback, as well as discuss and decide on various key issues.

Advantech strives to minimize human rights conflicts; hence it has implemented the following management measures on employees, suppliers, and customers. The relevant regulations were also disclosed. After investigation, Advantech does not currently face any risks related to freedom of association and collective bargaining at any of its locations of operation or with any of its suppliers.

***Note:** Regions that were not considered significant locations of operation (Headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech Europe, and Advantech USA) were Indonesia, Mexico, India, Czech Republic, Australia, Malaysia, Singapore, Thailand, Russia, Turkey, Brazil, the Emirates, Vietnam, Canada, and Israel. "Other regions" mentioned below all have the same definition.

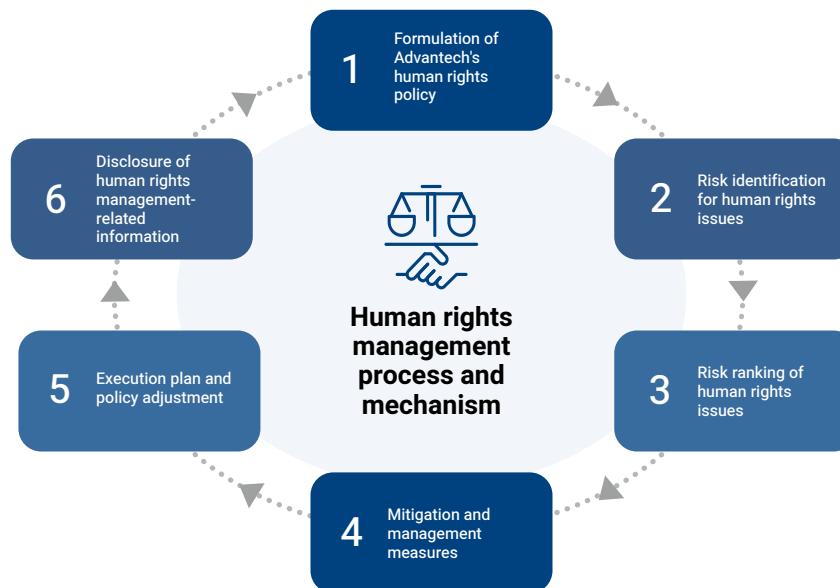


Figure 5.4.1: Human rights management process and mechanism

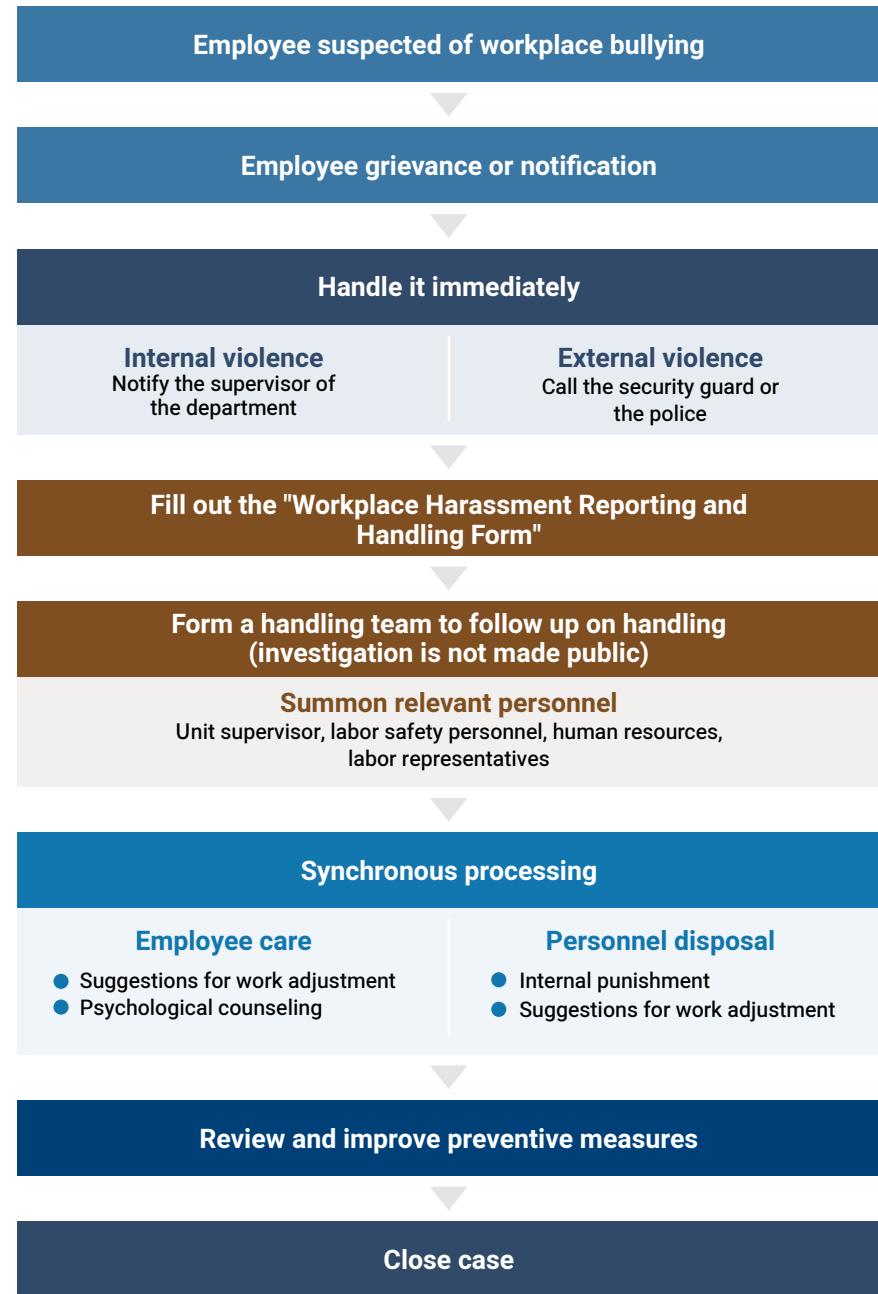


Figure 5.4.2: Reporting and grievance process



5.4.2 Human Rights Due Diligence

Advantech must conduct a triennial re-evaluation of the human rights risks of employees, contractors, and joint ventures. Supplier human rights risks are evaluated biennially. (The first due diligence was carried out in 2022)

Human Rights Due Diligence: Employees

Investigation methodology

First, Advantech identified a list of human rights risk issues relevant to stakeholders based on the UN and international human rights issues as a reference. The 11 risks are as follows:

- 1 Forced labor 2 Human trafficking 3 Child labor 4 Freedom of association 5 Equal pay for equal work
- 6 Non-discrimination, diversity, and inclusion 7 Protection of labor conditions 8 Right to health 9 Privacy
- 10 Freedom of expression (right to collective bargaining) 11 Personal liberty and safety (covers sexual harassment)

Investigation frequency

- Comply with international human rights treaties including the "United Nations Universal Declaration of Human Rights", "United Nations Global Compact", "United Nations Guiding Principles on Business and Human Rights", and the International Labor Organization's "Declaration of Fundamental Principles and Rights at Work" to eliminate any acts of human rights violations and abuses.
- Regularly review the human rights management status based on the above documents, and at least every three years, review human rights management issues, formulate and implement mitigation plans, and issue human rights identification reports. (The first due diligence was carried out in 2022)

Questionnaire design

Through the assistance of the DJSI sustainable development consulting team, a questionnaire was designed that includes the following two components. Advantech conducted a human rights risk assessment to identify high-risk human rights issues.

- Likelihood of occurrence and severity of human rights risks: the first-level supervisors of each department were asked to identify the likelihood of occurrence and the severity of impact for the 11 human rights issues above.

***Note:** The likelihood of occurrence is divided into (1 = will not occur, 2 = low probability (1% - 30%), 3 = moderate probability (31% - 60%), 4 = high probability (above 61%); the level of severity is divided into (1=no impact, 2=not severe, 3=severe, 4=very severe)

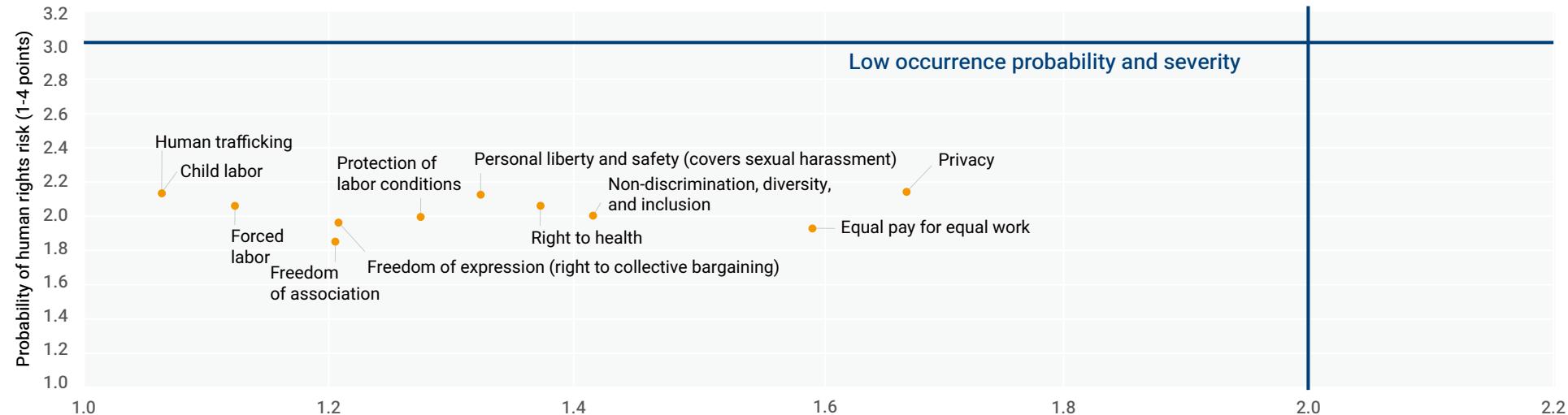
Respondents/coverage rate

- In the questionnaire survey, Advantech's executive level supervisors at the headquarters/branch office personnel received the questionnaire on behalf of all employees. Based on this definition, 31 supervisor representatives were selected, and 24 questionnaires were retrieved, achieving a recovery rate of 77%.
- The global and regional coverage rate of this questionnaire reached 94.8%

Risk topic identification (likelihood and impact)

The questionnaire revealed that the likelihood of human rights risks occurring for employees and the severity of the risks were both low. In particular, Advantech's manufacturing plants (ACL, AKMC, and AJP) have been certified by the Responsible Business Alliance (RBA) Code of Conduct, qualifying them as low-risk.

*Note: High-risk quadrant points: The probability is two or more (representing a possible probability of occurrence); the severity of occurrence is three or more (representing a certain severity)



Statistical method & survey results

The sum average of the likelihood of occurrence for various human rights risks is plotted on the X-axis, while the sum average of the severity of human rights risks is plotted on the Y-axis. The intersection of the two conditions determines the relative position of each human rights risk on the risk matrix.

Although the likelihood of occurrence of human rights risks among Advantech's employees is low (averaging below probability level 2) and not severe (averaging below severity level 3), the top three risks are ranked below according to the risk percentage:

- Top three perceived human rights risks (scenarios):
 - Privacy: Employee personal information leakage due to system loopholes, security negligence, or failure to cover fulfill reporting obligations
 - Equal pay for equal work: The employer treats workers with the same level of technical and labor skills who are performing the same type of work differently based on factors such as gender, age, ethnicity, or region. This leads to different compensations for the same amount of work.
 - Non-discrimination, diversity, and inclusion: Providing unfair treatment unrelated to job performance during the recruitment, promotion, and compensation of employees. Treated unfairly based on criteria such as nationality, race, gender, age, political affiliation, and disability.
- To mitigate and manage human rights risks, Advantech has established comprehensive policies and procedures for handling human rights incidents that cover Advantech's value chain and all locations of operation.

- In 2023, there were no human rights disputes or legal violations, therefore no compensation actions were taken.

Meanwhile, in Advantech's annual global employee satisfaction survey, the 2023 survey found that employees' positive feedback on an anti-discrimination and anti-sexual harassment work environment is higher than the average score. A similar pattern was observed in feedback from executive level supervisor and local human resources departments, showing higher-than-average scores (refer to the table below for details).

	A workplace that is free from discrimination and sexual harassment	Overall average satisfaction
Advantech headquarters	4.26	4.05
Advantech China (Kunshan plant)	4.31	4.27
Advantech China branch office	4.81	4.72
Overseas branches	4.03	3.89

Human Rights Due Diligence: Suppliers

Investigation methodology

- The Supplier Sustainable Management Sourcing Department identifies the list of supply chain-related human rights risk issues based on various UN and international human rights issues (Advantech Supplier ESG Risk Evaluation Form)

A0. Commitment, management system, and compliance	A3. Working hours (includes forced labor issues)
A1. Freedom to choose an occupation (includes freedom of association issues)	A4. Salary and benefits
A2. Young workers (includes child labor issues)	A5. Humane treatment and non-discrimination
- Potential human rights issue risks have been integrated into the supplier ESG self-evaluation form to further understand the supplier's management methods and improvement actions concerning human rights issues.

When designing the online questionnaire, the scope of investigation includes:

- Key tier 1 suppliers self-assess their prevention and mitigation measures for high-risk issues.
- Provide the name of documents supporting key tier 1 suppliers' self-assessments of their human rights-related measures.
- Advantech's supplier corporate quality and management department will conduct thorough audits and reviews.

Respondents/coverage rate

- In 2022, a total of 271 significant tier 1 suppliers were evaluated, accounting for 100% of all significant tier 1 suppliers for that year.
- In 2024, a total of 1,127 tier 1 suppliers were evaluated, accounting for 100% of all tier 1 suppliers for that year.

Survey results and improvements

- Two suppliers were evaluated with high human rights risks, accounting for 0.74% of all suppliers in the survey. The main reasons are as follows:
 - A1.1 There were no regulations prohibiting the use of forced, bonded (including debt bondage), or indentured labor, and against the use of involuntary or exploitative prison labor, slavery, or trafficking of persons.
 - A2.1 The work rules do not propose the full requirements of the prohibition of child labor.
 - A2.2 The work rules do not propose the full requirements of the protection of young workers.
- All the above nonconformities have been effectively rectified and closed.
- Advantech will continue to conduct on-site audits for high-risk suppliers to ensure they undertake actions to address human rights risks.



Human Rights Due Diligence: Contractors

Investigation methodology

- First, Advantech's corporate quality and management department identifies a list of contractor-related human rights risk issues by referring to the UN and relevant international human rights issues.

A0. Commitment, management system, and compliance	A3. Working hours (forced labor)
A1. Freedom to choose an occupation (freedom of association)	A4. Salary and benefits
A2. Young workers (child labor)	A5. Humane treatment and non-discrimination

- Potential human rights issue risks have been integrated into the Contractor ESG self-evaluation form to further understand the contractor's management methods and improvement actions concerning human rights issues.

When designing the online questionnaires, including

- The contractor's self-assessment of its prevention methods and mitigation measures for high-risk issues.
- The contractor's self-assessment of human rights-related measures and the name of the supporting document is provided.
- Advantech's supplier corporate quality and management department will conduct thorough audits and reviews.

Respondents/coverage rate

In 2022, 17 contractors were evaluated, accounting for 8.9% of all contractors in 2022 (17 of 192).

Investigation results and improvements

All contractors do not have human rights-related risks.

Human Rights Due Diligence - Joint Ventures (JV)

Investigation methodology

- First, Advantech's corporate quality and management department identified the list of human rights risk issues of its joint ventures based on the UN and related international human rights issues.

A0. Commitment, management system, and compliance	A3. Working hours (forced labor)
A1. Freedom to choose an occupation (freedom of association)	A4. Salary and benefits
A2. Young workers (child labor)	A5. Humane treatment and non-discrimination

When designing the online questionnaires, including

- Joint ventures' self-assessment of its prevention methods and mitigation measures for high-risk issues.
- Joint ventures' self-assessment of human rights-related measures and the name of the supporting document is provided.
- Advantech's supplier corporate quality and management department will conduct thorough audits and reviews.

Respondents/coverage rate

In 2022, Advantech's investment department selected ten joint ventures for evaluation based on the shareholding of a certain percentage to a certain percentage (10%) and the investment amount reaching a certain scale (over NTD 100 million), accounting for 37% of all joint ventures in 2022.

Investigation results and improvements

All joint ventures do not have human rights-related risks.



Human Rights Risk Management (Mitigation and Remediation)

The table offers a global overview with supplementary information for specific regions.

Target audience	Topic identification	Due Diligence	Mitigation Actions	Target management	Voluntary disclosure of location
 Employee	1. Privacy	Applicable globally <u>Employee Code of Conduct</u> (Identity protection, prevention of retaliation & data confidentiality)	Applicable globally <ul style="list-style-type: none"> Annual information and cyber security online education and training To enhance VPN connection security, employees were requested to install the Forestscout information and cyber security software. Personal data protection handbook 	Applicable globally No leakage of employee and customer privacy data	Applicable globally <ul style="list-style-type: none"> <u>Advantech Human Rights Policy and Commitment</u> <u>Employee Code of Conduct</u> <u>Personal data protection and management measures</u>
	2. Equal pay for equal work	Applicable globally Advantech's remuneration policy is based on employees' duties and responsibilities. The Company complies with local labor laws and regulations, and salary standards do not vary based on gender. Take Taiwan as an example, the laws and regulations include: The "Labor Standards Act," "Gender Equality in Employment Act," and "Employment Service Act." Advantech has established the Diversity, Equity, and Inclusion (DEI) Team, which reports to the Sustainable Development Committee on a quarterly basis	Applicable globally <ul style="list-style-type: none"> For new hires with work experience, their job band and salary can be determined by referencing the education and experience of current Advantech employees with similar backgrounds Annual salary adjustment & bonus: The Human Resources Department formulates the annual salary budget and operational principles. After approval by the President, it will be submitted to various departmental supervisors for fair salary adjustments based on individual performance appraisals 	Applicable globally The salary job band system is designed to complement the Company's long-term strategies and also provide supervisors with more room in rewarding performance and abilities. The system evaluates the job rather than the individual, taking into consideration seven factors to ensure equal pay for equal work	Applicable to Taiwan <ul style="list-style-type: none"> Advantech sustainability report Advantech announces on recruitment websites (e.g. 104 Job Bank) Remuneration and bonus management and implementation regulations Recruitment and employment management regulations Performance management and rating regulations
	3. Non-discrimination, diversity, and inclusion	Applicable globally In the global employee satisfaction survey, employee feedback on a workplace that is free from discrimination and sexual harassment is higher than average Applicable to Taiwan HR Dashboard monitors work diversity and workforce distribution data (e.g.: gender ratio, workforce age distribution, distribution by job category, etc.) <ul style="list-style-type: none"> Maternity leave/paternity leave is better than the legal requirement Race and cultural communication training course 	Applicable globally <ul style="list-style-type: none"> The non-discrimination clause in the Human Rights Guidelines provides for equal opportunities in terms of external public recruitment and internal transfers Advantech respects employees' equal opportunity in employment and career development, and employment opportunities will not be affected by discriminatory treatment or any form of discrimination based on an employee's gender, race, religious beliefs, political affiliation, sexual orientation, rank or position, nationality, or age 	Applicable globally Candidates were hired based on their education, experience, and ability, the hiring decisions were not affected by gender, race, religious beliefs, political affiliation, sexual orientation, job band, nationality, or age	Applicable globally <ul style="list-style-type: none"> <u>Advantech Human Rights Policy and Commitment</u> <u>Advantech Co., Ltd.'s anti-discrimination and anti-harassment policy</u> Global employee engagement survey RBA Validated Assessment Program (VAP) operations manual Applicable to Taiwan <ul style="list-style-type: none"> Act of Gender Equality in Employment Labor standards act
 Female	Sexual harassment prevention & workplace Zero discrimination	Applicable globally Advantech regularly conducted internal and external audits and supplier audits in accordance with the guidelines in the RBA Validated Assessment Program (VAP) operations manual Applicable to Taiwan Annual employee workplace health survey - includes questions related to the "Workplace violence hazard and risk survey", which monitors the risk of sexual harassment, discrimination, and violence at the workplace	Applicable to Taiwan <ul style="list-style-type: none"> Established the Gender Equality in Employment Committee according to the "Act of Gender Equality in Employment" and formulated <u>Advantech Co., Ltd.</u> <u>Guidelines for Handling Complaint and Punishment of Workplace Sexual Harassment</u>. Furthermore, the regulations were promoted through meetings and emails Implemented the "OHS" regulations and the Prevention plan for unlawful infringement during the performance of duties through the organization of labor (occupational) safety and health and occupational health personnel 	Applicable globally In 2023, there were no reported cases of discrimination or harassment	Applicable globally <u>Employee Code of Conduct</u> Applicable to Taiwan <ul style="list-style-type: none"> <u>Advantech Co., Ltd.</u> <u>Guidelines for Handling Complaint and Punishment of Workplace Sexual Harassment</u> Prevention plan for unlawful infringement during the performance of duties Prevention plan for unlawful infringement during the performance of duties

Target audience	Topic identification	Due Diligence	Mitigation Actions	Target management	Voluntary disclosure of location
 Indigenous peoples	Non-discrimination, diversity, and inclusion	Applicable to Taiwan Advantech's remuneration policy is based on employees' duties and responsibilities. The Company complies with local labor laws and regulations, and salary standards do not vary based on race	Applicable to Taiwan Advantech allowed indigenous employees to apply for public leave during the Indigenous Harvest Festival in accordance with the Labor Standards Act	Applicable to Taiwan No complaints of discrimination against indigenous people were received	Applicable to Taiwan <ul style="list-style-type: none">• Labor standards act• Advantech ESG Report 5.3 Diversity, equality and inclusive workplace
 Child & forced labor	Child labor was prohibited & there were no forced labor/human trafficking	Applicable globally Advantech regularly conducted internal and external audits and supplier audits in accordance with the guidelines in the RBA Validated Assessment Program (VAP) operations manual	Applicable globally <ul style="list-style-type: none">• Advantech verifies the resume and actual age of applicants prior to recruiting and hiring employees. Individuals under the age of 18 will not be hired• All of Advantech's PVL suppliers and new suppliers must sign the "Advantech Supplier Code of Conduct", which stipulates that suppliers should strive to protect labor human rights according to internationally recognized standards	Applicable globally <ul style="list-style-type: none">• In 2023, Advantech and its suppliers achieved zero child labor and zero forced labor• In 2023, all of Advantech's PVL suppliers and new suppliers were required to sign the "Advantech Supplier Code of Conduct."• Passed internal and external audits and audits of existing suppliers in 2023	Applicable globally <ul style="list-style-type: none">• Advantech Human Rights Policy and Commitment• Advantech supplier Code of Conduct• RBA Validated Assessment Program (VAP) operations manual
 People with disabilities	Employment of people with disabilities	Applicable to Taiwan Regularly monitored the number of employees with disabilities monthly according to labor laws and regulations	Applicable globally Advantech respects employees' equal opportunity in employment and career development, and employment opportunities will not be affected by discriminatory treatment or any form of discrimination based on an employee's gender, race, religious beliefs, political affiliation, sexual orientation, rank or position, nationality, or age	Applicable globally According to Taiwan's "People with Disabilities Rights Protection Act", the number of employees with disabilities with capability to work in a company shall be no less than 1% of the total number of employees. If the weighted total value fails to meet the standard, the Company must regularly pay the "shortfall allowance" to the disabled employment fund of the labor competent authority	Applicable globally <ul style="list-style-type: none">• Advantech Human Rights Policy and Commitment• Advantech ESG Report 5.3 Diversity, equality and inclusive workplace
 Migrant workers	1. Zero discrimination in hiring 2. Hiring compliance	Applicable globally Advantech regularly conducted internal and external audits according to the guidelines in the RBA Validation Procedures (VAP) operation manual	Applicable globally At Advantech, foreign migrant workers' employment opportunities are not affected by discriminatory treatment or any form of discrimination based on an employee's gender, race, religious beliefs, political affiliation, sexual orientation, job band, nationality, or age	Applicable globally <ul style="list-style-type: none">• Zero discrimination in hiring foreign migrant workers• Passed external RBA audit	Applicable globally <ul style="list-style-type: none">• Advantech Human Rights Policy and Commitment• Advantech group employee handbook• Advantech ESG Report 5.3 Diversity, equality and inclusive workplace
 Employees of third-party contractors	Comply with the Supplier Code of Conduct	Applicable globally Advantech regularly conducted PVL suppliers and new supplier audits according to the guidelines in the RBA Validation Procedure (VAP) operation manual	Applicable globally <ul style="list-style-type: none">• Comply with various social responsibility standards and the regulations of local competent authorities• Prohibition of child labor and forced labor• Provide a healthy and safe workplace• Promote labor-management cooperation• Do not accept metals (Au, Ta, Sn, W, Co) from countries with conflict mining areas and trace the sources and smelters of metals used in parts• Reject any form of corruption, extortion, blackmail, and bribery	Applicable globally Sign a Supplier Code of Conduct Agreement with third-party contractors	Applicable globally Advantech Supplier Code of Conduct

5.5

Occupational Health and Safety (OHS)

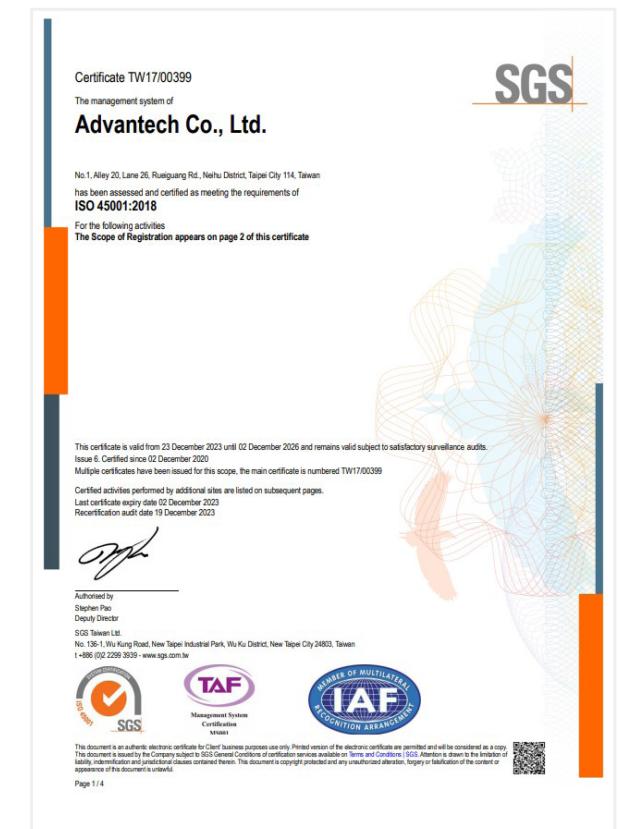
▲ Implementation of the Workplace Safety Management Guideline

Internal organization, environmental safety and health principles

Advantech is a global citizen that upholds the corporate objective of providing people with fulfilling lives. In addition to complying with occupational health and safety related regulations and other relevant requirements, the Company also pays attention to important global OHS issues, hoping that all employees can grow safely in a friendly environment. Consequently, the Company has established an occupational health and safety management system in a bid to foster a safe and healthy workplace, prevent unsafe conduct, minimize occupational disasters, and ensure that employees can enjoy work and lead healthy lives.

Occupational health and safety management system (ISO 45001:2018)

Advantech has obtained ISO 45001 certificates from third-party certification firms for the headquarters, Advantech China, and Advantech USA. Furthermore, it has formulated the "[Occupational health and safety policy](#)". The OHS policy is approved and decided by the board of directors of Advantech and implement the decision and announce it on the official website. The OHS management system covers both Advantech employees and non-employees. The Company adopted a hierarchical and parallel structure extending from top to bottom to various Occupational Health and Safety personnel in different regions. Adhering to the ISO 45001 management system and establish the OHS program, these personnel were responsible for planning, promoting, supervising, and auditing the operation of the system. Management synergy is achieved through procedural document control, regular follow-up management, and compliance with the PDCA approach. The OHS management system was reviewed and adjusted on a rolling basis during the period to reinforce employees' awareness of self-protection. This not only reduces workplace risks but also prevents occupational accidents, thereby ensuring employee safety and health. Although other regions are not the main production regions, the Company is still actively planning to progressively implement ISO 45001 system management.



Health and safety performance indicators

To effectively promote the safety and health implementation plan, the safety and health performance indicators were set, and the implementation status was monitored. The headquarters regularly reported the progress of safety and health projects to the executive level supervisor, various organizational levels of the Company, and labor representatives through the occupational health and safety committee to achieve horizontal internal communication.

Performance management projects of the headquarters in 2023	Actions taken
Regulatory identification	Regulatory identification was carried out quarterly to identify new or revised regulations, ensure the suitability and compliance of plants, as well as monitor and verify the improvement status.
Occupational accident prevention	The Company has stipulated the goal of "zero workplace accidents" and filed monthly reports. A total of five occupational disasters were reported in Taiwan this year. The internal investigation and improvement measures were completed within the month of each accident.
Audits by competent authorities	Competent authorities conduct audits from time to time to confirm the improvement status and deadlines. Advantech will continue to pay attention to the matters set forth by competent authorities. During the year, there have been no instances of violations found during audits that required improvements to be carried out before deadlines or resulted in fines being issued.
Internal and external audits	This year, internal audits revealed 12 minor nonconformity and 33 observation items; external audits resulted in zero deficiencies and 21 observation items, and the relevant responsible units continued to promote and complete the necessary improvements.
Risk and hazard identification	Risk identification operations were checked annually based on plant operations, changes in management, and regulatory changes. Moreover, risk classification and determination were adjusted accordingly. 894 risk identifications and assessments were conducted.
Management of change	For newly purchased and replaced equipment and expansion projects, the risk assessment of change management has been formulated, which utilizes risk identification to enhance safety measures and ensure personnel safety.
Operating environment monitoring	Every half year assessments were conducted regarding the working environment and the exposure of workers, including monitoring chemical factors such as isopropanol, acetone, xylene, hexane, and CO ₂ , as well as physical such as noise and lighting.
Contractor management	Contractors were required to comply with the Company's contractor safety and health management regulations before, during, and after construction, organize contractor OHS education and training, and include audit items in the occupational safety and health management system. This year, there were no contractor-related accidents in the workplace.
Fire safety management	The Company has established a fire safety management system in accordance with fire safety-related laws and regulations. It also reviewed the protection plan regularly and conducted biannual self-defense fire drills to promote fire safety management affairs continuously.
OHS education and training	Confirmed the validity of the licenses of operations supervisors and professionals at all levels (including Occupational Health and Safety personnel, waste management personnel, health care personnel, first aid personnel, organic solvent operations supervisor, fire safety management personnel, and forklift operators). The headquarters organized safety and health education and training for new and in-service employees, including 6S management, hazardous chemical management, and AED education and training. A total of 7,534 participants received training, accumulating 8,498 training hours.
Chemical management	Regularly confirmed existing, new, and modified chemicals, reviewed PPE management according to relevant changes, and conducted self-inspections of operations involving organic solvents at the work site.
Regular inspection of equipment and machinery	Implemented regular inspections, key inspections, and operational inspections of machinery and equipment, as well as operational inspections of operations-related matters, identifying defects in advance through automatic inspections, and taking preventive measures for occupational accidents to protect the safety and health of workers.
Healthcare	Advantech USA and Advantech China (Kunshan plant) go beyond the legal requirements by offering annual employee health checkups, and the headquarters has arranged for on-site physicians to provide consultations and guidance to high-risk employees every month as required by regulations. These measures aim to continuously take care of employee health.

In 2023, Advantech China also formulated relevant safety and health indicators such as major environmental accident control, employee occupational disease control, work-related injury accident control, and emergency response implementation rate. Since Advantech USA is primarily an office area, key indicators include the bolstering of company-wide employee education and training (e.g., environmental safety, CPR, AED, etc.)

Occupational health and safety committee

Advantech headquarters (Taiwan) has established an occupational health and safety committee in accordance with the law, convening regular quarterly meetings. The Committee is composed of management and labor representatives, responsible for coordinating OHS-related affairs and promoting OHS management system development; Internal communication between all levels, relevant external units, and labor representatives to ensure a safe working environment for colleagues.

Occupational hazard identification and risk assessment

All safety and health aspects and workplace operational activities that interact with the Company's activities, products, and services are within the scope of hazard identification and risk assessment. Safety and health hazard identification and risk assessment are carried out by the identification team. Environmental and safety and health impact analysis is conducted based on the identification parameters, risk factors and risk assessments are calculated, and the assessment value levels are divided into 0, 1, and 2. "2" is the risk that should be handled, and needs to be controlled using the priority order, such as eliminating hazards, substitute with less hazardous materials or equipment, engineering control, administrative control, education and training, PPE, and emergency response. Advantech has formulated management plans to improve OHS performance, and set goals for monitoring, control, and improvements. In 2023, Advantech headquarters implemented 894 environmental/OHS risk items for newly purchased equipment, expansion of production lines, and regulatory changes. The risk assessment results revealed a low level of risk. To continuously optimize a friendly workplace, Advantech categorizes risk assessment values to ensure that aspects such as equipment functionality and other aspects related to the environment, safety, and health (ESH) meet the Company's requirements and safety standards.

Besides promoting the safety and health obligations of employees, the importance of self-protection was also emphasized. In accordance with the criteria of "threat of imminent danger" in Article 18 of the Occupational Health and Safety Act and Article 25 of the Enforcement Rules of the Occupational Safety and Health Act, all employees are informed that if there is a threat of imminent danger on the job, apart from reporting it immediately, they may evacuate to a safe place and will not be disciplined by the Company. In 2023, there was no record of employees being disciplined for reporting safety hazards and evacuating to a safe location. For the reporting and grievance mechanism, see Figure 5.4.2 Whistleblowing and grievance mechanisms.

Chemical management

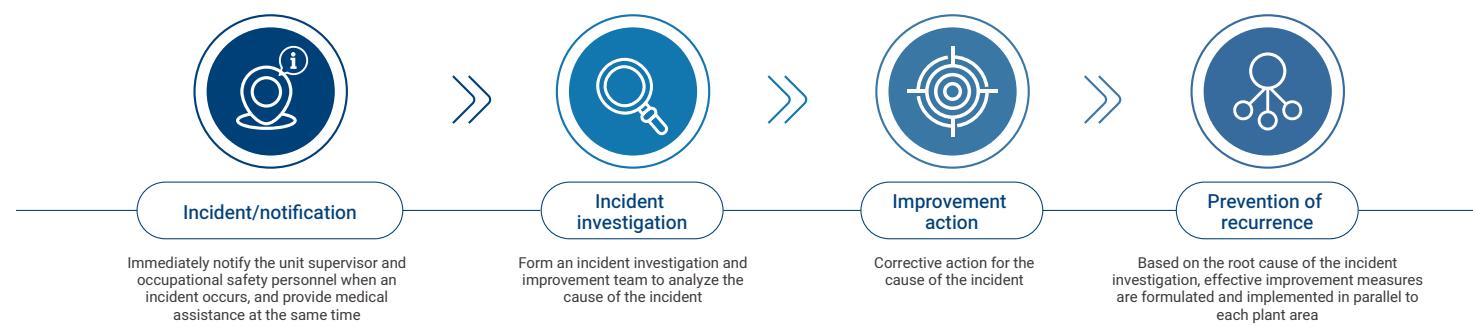
Although the risk assessment result revealed a low level of risk, there is still a certain degree of risk associated with evaluating the use of chemicals. Therefore, chemical management is considered one of the top priorities. Each plant stores all hazardous chemicals used in the process in specific locations. The SDS (Safety Data Sheet) is placed in a conspicuous and easily accessible place for the immediate reference of on-site personnel. A chemical manifest is created and a risk assessment is performed to implement the necessary control measures. The storage sites and containers are labeled in Chinese and English, and managed according to the "Regulations for the labeling and hazard communication of hazardous chemicals" and the "GHS globally harmonized system for classification and labelling of chemicals". The personnel requiring access to the organic solvent room must notify the supervisor of organic solvent operations for on-site supervision. Regarding general education and training for hazardous chemicals, new hires working with hazardous chemicals will be given the required general education and training when reporting for duty. In-service workers who have worked for the Company for three years will also be given the required safety and health education and training. In addition, if the work involves special health hazards, necessary special physical examinations and health checks will be conducted according to the "Regulations of the Labor Health Protection". When an employee is diagnosed with health abnormalities, a work suitability assessment will be conducted immediately, while the employee's exposure time will be reduced or adjusted if necessary. Also, the employee's health status will be monitored at all times.

Disabling injury statistics analysis

Advantech aims to achieve "zero accidents in the workplace" and has established the "Job accident investigation and treating SOP" to regulate accident reporting, incident investigation responsibilities, investigation levels, procedures, and accountability. Following an accident, the group requires immediate reporting by on-site personnel and unit supervisors. Furthermore, unit supervisors, Occupational Health and Safety management personnel, and healthcare providers are tasked with investigating and handling the accident, as well as preparing an accident report.

Incident notification and investigation procedures

Advantech strives to achieve the safety goal of "zero accidents in the workplace" and has established the "Job accident investigation and treating SOP" to regulate relevant procedures such as incident reporting, accident investigation responsibilities, subsequent improvement actions, and preventing similar accidents from occurring again.



Statistics of Occupational Injury of Advantech's Employees

2023	Headquarters	Advantech China	Advantech Japan	Advantech Korea	Advantech Europe	Advantech USA
Total working hours	7,278,048	6,704,216	434,184	34,903	1,055,171	1,127,360
Total number of occupational injuries	5	4	0	0	6	3
Occupational injury categories	Falls/collisions/other	Others	None	None	Falls/collisions/others	Contusion
Working days lost due to occupational injuries	9	210	0	0	43	50
Disabling injury frequency rate (FR)	0.69	0.60	0.00	0	5.69	2.66
Disabling injury severity rate (SR)	1	30	0	0	41	44
Occupational injury fatality rate	0	0	0	0	0	0
Occupational injury absentee rate	0.001%	0.024%	0.000%	0.000%	0.033%	0.037%
Serious occupational injury rate	0	0	0	0	0	0
Occupational disease fatality rate	0	0	0	0	0	0
Number of occupational disease cases	0	0	0	0	0	0
Occupational disease rate	0	0	0	0	0	0

***Note:**

1. Total working hours (Advantech headquarters) = Total working hours are based on monthly reports from Occupational Safety and Health Administration (OSHA), Ministry of Labor.
2. Other regions/total working hours = Number of people in each region x number of working days per year x number of hours worked per day
3. Disabling injury frequency rate (FR) = (Total number of injuries x 1,000,000) ÷ total working hours (rounded to two decimal places)
4. Disabling injury severity rate (SR) = (Total number of days lost due to injuries x 1,000,000) ÷ total working hours (excluding decimals)
5. Occupational injury fatality rate = Number of fatal occupational injuries ÷ total number of occupational injuries
6. Occupational disease fatality rate = Number of occupational disease-related fatalities ÷ number of occupational disease cases
7. Occupational injury absentee rate = (Total absent days due to occupational injuries/total number of working days) x 100%
8. Occupational diseases: Certified by occupational medicine physicians, local labor competent authorities, or Occupational Safety and Health Administration (OSHA), Ministry of Labor.
9. Serious occupational injury rate = Injuries where workers are unable to recover to their pre-injury health status within six months, excluding fatalities.
10. The above data excludes commuting traffic accidents.

Categories of Occupational Injuries for Non-Advantech Employees

2023	Headquarters	Advantech China	Advantech Japan	Advantech Korea	Advantech Europe	Advantech USA
Total working hours	142,736	202,557	9,234	313.5	412	27,040
Total number of occupational injuries	0	0	0	0	0	0
Occupational injury categories	None	None	None	None	None	None
Working days lost due to occupational injuries	0	0	0	0	0	0
Disabling injury frequency rate (FR)	0	0	0	0	0	0
Disabling injury severity rate (SR)	0	0	0	0	0	0
Occupational injury fatality rate	0	0	0	0	0	0
Occupational injury absentee rate	0%	0%	0%	0%	0%	0%
Serious occupational injury rate	0	0	0	0	0	0
Occupational disease fatality rate	0	0	0	0	0	0
Number of occupational disease cases	0	0	0	0	0	0
Occupational disease rate	0	0	0	0	0	0

***Note:**

1. Non-Advantech employees: security personnel, janitors, caterers, and temporary workers.
2. Total working hours (Advantech headquarters) = Total working hours are based on monthly reports from Occupational Safety and Health Administration (OSHA), Ministry of Labor.
3. Other regions/total working hours = Number of people in each region x number of working days per year x number of hours worked per day
4. Occupational injury absentee rate = (Total absent days [injury leave]/total person-days) x 100%
5. Occupational injury rate = Injuries where workers are unable to recover to their pre-injury health status within six months, excluding fatalities.
6. Occupational diseases: Certified by occupational medicine physicians, local labor competent authorities, or Occupational Safety and Health Administration (OSHA), Ministry of Labor every month.
7. The headcount statistics are up to December 31, 2023

Categories of occupational injuries for Advantech employees

2023		Headquarters		Advantech China (Kunshan plant)		Advantech Europe		Advantech USA		
Occupational injury categories		Number of injuries	Injury incidence rate	Number of injuries	Injury incidence rate	Number of injuries	Injury incidence rate	Number of injuries	Injury incidence rate	
Falls	2	0.05744%	0	0.00000%	0.00000%	3	0.57143%	0	0	
Collisions	1	0.02872%	0	0.00000%	0.00000%	1	0.19048%	0	0	
Cut, laceration	0	0.00000%	0	0.00000%	0.00000%	0	0.00000%	0	0	
Contusion	0	0.00000%	0	0.00000%	0.00000%	0	0.00000%	3	0.56%	
Others	2	0.05744%	4	0.11915%	0.38095%	2	0.00000%	0	0	
Monthly average number of employees/number of employees	3,482		3,357		525		536			

*Note:

1. Headquarters injury incidence rate = (Injury incidence rate/average monthly headcount).
2. Injury incidence rate for other regions = (Number of injuries/number of employees).
3. There was no occurrence of occupational injury in Advantech Korea and Advantech Japan.
4. The classification of work-related injuries is determined in accordance with the laws and regulations of local competent authorities.

Absentee rate statistics of Advantech employees

2023	Advantech headquarters	Advantech China (Kunshan plant)	Advantech Japan	Advantech Korea	Advantech Europe	Advantech USA	Total
Total working days	909,756	843,777	54,273	43,420	131,896.35	133,464	2,118,080
Working days lost due to injury leave	9	201	0	0	0	0	210
Working days lost due to sick leave	13047.31	6088.215	0	122.5	5091.73	1615	25964.755
Working days lost due to absences	13056.31	6289.215	0	122.5	5091.73	1615	26174.755
Absentee rate	1.44%	0.75%	0.00%	0.28%	3.86%	1.21%	1.24%

*Note:

1. Absentee rate calculation method: (Total number of absent days [injury leave + sick leave + menstrual leave + pandemic leave]/total person-days) x 100%
2. The absentee rate target for 2023 is 0.9%. The absentee rate calculation includes occupational injury leave, sick leave, and menstrual leave. In 2023, Advantech saw a decrease in overall occupational injury leave through internal education, training, and enhanced awareness efforts. However, the provision of five days of paid sick leave and menstrual leave as employee benefits indirectly influences the overall absentee rate performance.



▲ Emergency Response Measures

Each plant complies with local laws and regulations and offers necessary safety and health education and training to new employee hires. The Company regularly organized OHS education and training courses for in-service personnel, allowing them to understand operating procedure safety as well as potential hazards and risks, in turn enhancing their occupational safety awareness.

Organized biannual fire drills in conjunction with the local fire brigade to help colleagues understand disaster levels within the plants, evacuation routes, and emergency response procedures. Moreover, Advantech provided training on disaster preparedness for fires, typhoons, floods, and earthquakes. The company regularly conducted disaster prevention awareness campaigns among employees to foster a culture of disaster preparedness in everyday life. Such proactive approaches effectively minimized risks and prevented the occurrence of fires in various plants this year.



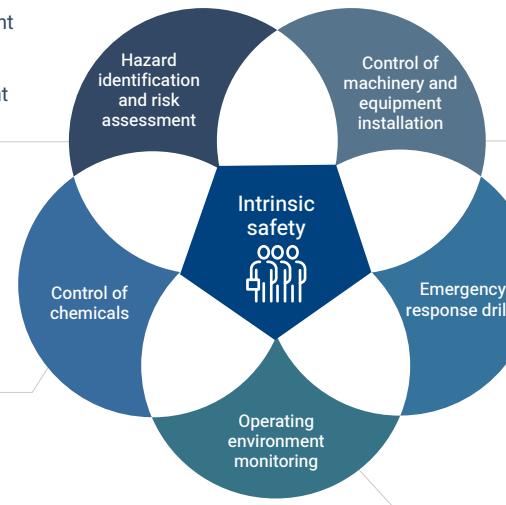
Regularly hold fire drills every six months in conjunction with the fire brigade under our jurisdiction to promote fire protection knowledge.

▲ Intrinsic Safety

Advantech's plants continue to inject resources into planning and creating a healthy workplace, and an intrinsically safe working environment is formed through a people-oriented safety culture in a bid to foster employees' physical and mental well-being, achieve work-life balance, and minimize potential safety concerns, thereby preventing safety accidents. Safety optimization is embodied through the control of machinery and equipment, emergency response and drills, operating environment monitoring, chemical control, as well as hazard identification and risk assessment.

- Scope of hazard identification and risk assessment
- Identify parameters for environmental and safety impact analysis
- Set goals for monitoring, control, and improvement

- Establish a chemical list and perform risk assessment
- Installation of safety facilities and hazard labeling (Chinese and English)
- Workplace control and periodic inspection
- Implement relevant education and training



- Risk assessment of machinery and equipment, machine safety labeling (Chinese and English)
- Automatic inspection plan, regular machinery repair and maintenance, and implementation of relevant education and training

- Form an emergency response team
- Full participation in emergency response drills

- Implementation and planning of operating environment monitoring (every six months)
- Environmental hazard assessment through on-site operation observation
- Inspection items: Carbon dioxide, lighting, noise, organic solvents

Comprehensive Healthcare

To create a high-quality healthcare environment at the workplace, Advantech has progressively raised its standards for employee healthcare services. The demand for healthcare services is becoming more diverse and specialized, so it is hoped to systematically control the health risks in the workplace, safeguard the physical and mental well-being of employees, and foster a preventive medicine mindset among them. By conveying accurate health information and concepts to employees, they can influence their families, achieve a balance between work and life, and expand the benefits of health promotion.

In terms of health and welfare, Advantech headquarters (Taiwan) has appointed four occupational health nurses according to the law. Advantech China (Kunshan plant) has two occupational health management personnel. Furthermore, Advantech headquarters (Taiwan), Advantech USA, and Advantech China (Kunshan plant) all provide an annual health checkup for

in-service employees of all ages, which is better than the statutorily required frequency stipulated by the Occupational Safety and Health Act. Advantech headquarters also continues to organize health promotion activities such as annual health lectures, blood drives, first aid training, family activities, etc. (for details, see 5.2.1 Employee relations_employee health promotion contents), as well as implementing a smoke-free workplace policy and regular environmental monitoring. The Company offers breastfeeding rooms, sports and leisure facilities, and a safe and healthy dining environment for employees.



Organize annual employee health checkups

Implement A Healthcare Resource Map

Employees are the most important asset of an enterprise. Health promotion helps employees develop sound health concepts and lifestyle habits and improve their quality of life and work performance. Advantech headquarters distributed monthly "Health E-newsletters" to all employees based on the solar terms and pandemic conditions, in turn providing colleagues with the latest practical health and macrobiotics-related knowledge.

In recent years, sudden cardiac deaths have become more common among younger individuals, prompting government agencies and public venues to install AEDs (Automated External Defibrillators). Advantech headquarters took the initiative by installing AEDs across its Taiwan plants before such regulations were in place for companies. Additionally, training sessions were conducted for 49 employees in 2023.

In response to the trend of workplace health digitization, smart healthcare products were introduced by Advantech headquarters in September 2022 for employees to browse their health checkup reports, make online appointments for consultations with on-site physicians, check consultation records, and review physiological measurements via LINE. Moreover, on-site physicians offer monthly health consultations and guidance to high-risk employees, ensuring continuous care for their health. This year, 309 employees participated in occupational health consultations.

2023 Advantech headquarters diverse healthcare platform

Category	Various items	Description of actions taken
Employee care	On-site physician consultation service	Regular physician consultation services and health education instructions were provided based on the number of workers in various regions. In 2023, 309 people participated in the consultation.
	Multi-purpose infirmary, physiological measurement station, digital platform tracking	Provided health consultation, emergency injury and illness treatment, illness-related guidance, and other services. Some plants are equipped with blood pressure monitors, scales, body fat monitors, blood glucose meters, and trauma treatment supplies.
	Health concept promotion	Health bulletins were distributed via e-mail or ABLE weekly reports to convey the correct health information.
Health promotion	Health lectures	Lectures on the lifestyle and common diseases among Taiwanese citizens were conducted
	Blood donation activities	Each region organized two to three Blood donation activities annually.
	Health activities (weight loss classes and physical fitness programs)	Organized relevant health promotion activities such as weight loss classes, lunchtime yoga classes, walking, running, etc.
Health management	Health checkup	Employees are provided with an annual health checkup that goes beyond the legal requirement based on labor health protection regulations and out of concern for their health. In 2023, a total of 2,684 people participated in 14 health checks.
	Occupational disease prevention	Arranged physical examinations and provided recommendations on abnormalities based on hazardous jobs and hazardous factors from the EHS.
	High cardiovascular risk group	Professional physicians and nurses provided consultation to prevent cardiovascular disease among high-risk groups
Four major plans	Prevention of musculoskeletal disorders, abnormal workloads, and unlawful infringement in the workplace	A health protection program was formulated according to various guidelines from the Ministry of Labor to implement four major plans. In particular, a questionnaire was designed, and the collected data and survey outcome were used to identify individuals at medium to high risk, who were then included in the consultation management list for effective tracking and management.
	Maternity health protection	Provided breastfeeding rooms and women's health checkups.
Corporate healthcare system	Health management system	The health checkup report and various measurement data are managed by the health management system, which are in turn monitored and managed by the medical staff.
Education and training	First aid training course	First aid training courses were organized to promote first aid skills. Colleagues' memories and learning performance were increased by combining theory with practice in teaching and through repeated drills.
Emergency injury and illness service	Emergency injury and illness treatment	On-site factory nurses were appointed according to laws and regulations to provide employees with emergency treatment for injuries and illnesses, as well as relevant health education instructions.
	AED installation	AED equipment installation, maintenance, and conducted education and training courses
Food safety and nutrition	Restaurant dining	Advantech safeguards the nutrition of employees' meals by requesting the caterer to provide the caloric value for each meal. Vegetable lunch box, fruit lunch box, low-calorie lunch box, etc.
Employee Assistance Programs (EAPs)	Introduction of EAP	By integrating internal and external resources and establishing the Company's EAP, the aim is to help resolve personal problems affecting colleagues' work performance and safety, as well as facilitate the Company and colleagues to grow together steadily in a bid to elevate organizational competitiveness. The design encompasses physical and mental well-being, interpersonal relationship management, self-growth, financial and legal affairs, etc. Advantech is also committed to promoting various services to maintain their physical and mental balance and provide employees with care resources and assistance.

Employee Assistance Programs, EAPs

In recent years, enterprises have often applied the "Employee Assistance Program (EAPs)" to help employees cope with work, life, and health-related issues, hoping to help employees solve problems by establishing a service system and consolidating resources.

Advantech adheres to its "people-oriented" core value, builds an intrinsically safe working environment, and implements the four major plans to provide adequate services for its colleagues. Since 2022, Advantech headquarters has implemented an Employee Assistance Program (EAP) that provides unlimited 24-hour free telephone and email counseling services (completely confidential). Through "employee consultants," this program assists employees in resolving personal issues related to their work, offering support and guidance when facing emotional or psychological challenges. By caring for the "heart" health of employees, we can further improve the work performance and productivity of employees, and reduce human-induced work accidents due to emotional factors. In 2023, a total of 50 people sought assistance from the EAP, which used a total of 75 hours.

Whistleblowing and Grievance Mechanism

Since 2015, Advantech has formulated the "Prevention Plan for Unlawful Infringement During the Performance of Duties" according to the Occupational Safety and Health Administration (OSHA), MOL's Guidelines for Preventing Unlawful Infringement During the Performance of Duties. To prevent employees from being subjected to illegal abuse by their employers, supervisors, colleagues, or clients while performing their duties in the workplace (including commuting), and to protect them from external attacks (hereinafter referred to as workplace violence), which include physical, verbal, psychological abuse, and sexual harassment that may lead to physical or mental harm.

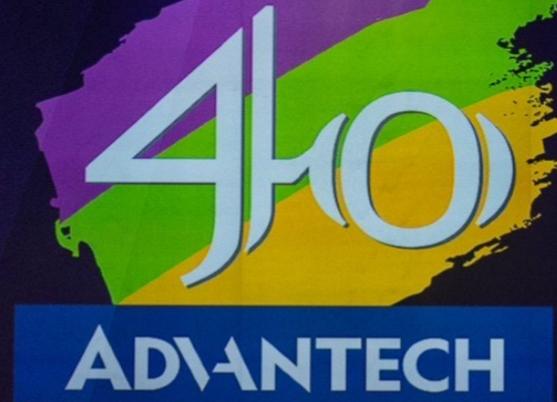
- Grievance or reporting mechanism: When employees experience unlawful physical or mental harm while performing their duties, they shall fill out the Unlawful Infringement in the Workplace Reporting and Handling Form (hereinafter referred to as the "notification form") to report it to supervisors at all levels (or the HR unit). Alternatively, grievances can be submitted through the channels established by the Company (telephone, fax, email). Upon receiving a grievance, relevant personnel will fill out a notification form.
- Reporting and handling: The grievance or reporting process must ensure objectivity, fairness, and impartiality, as well as protect the rights, interests, and privacy of victims, complainants, and whistleblowers. Upon receiving a report, supervisors at all levels, personnel units, and labor safety personnel must complete the Unlawful Infringement in the Workplace Reporting and Handling Form within 24 hours. The process must follow the procedure for handling unlawful physical or mental harm while performing their duties (please refer to Figure 5.4.2 Reporting and grievance process).

Besides promoting the safety and health obligations of employees, the importance of self-protection was also emphasized. In accordance with the criteria of "threat of imminent danger" in Article 18 of the Occupational Health and Safety Act and Article 25 of the Enforcement Rules of the Occupational Health and Safety Act, all employees are informed that if there is a threat of imminent danger on the job, apart from reporting it immediately, they may evacuate to a safe place and will not be disciplined.

6

Altruism and Social Welfare

- 6.1 Neighborhood and Community Care
- 6.2 IoT Education and Industry-Academia Co-Creation
- 6.3 Summary of Foundation Achievements



Enabling an Intelligent Planet



Advantech's Corporate Citizenship Strategy

Advantech has applied IoT technology to develop smart healthcare by leveraging its core competencies, contributing to the realization of SDG 3 Good Health and Well-being. In addition, it has also responded to SDG 9 Industry Innovation and Infrastructure and SDG 4 Quality Education-related issues, and it has been a long-time supporter of IoT education and various innovative sustainable education initiatives, hoping to cultivate Taiwanese children and youth into global citizens with a strong sense of environmental sustainability.

Social investment and education, culture, and public welfare also align with SDG 4. Advantech promotes sustainable education and national aesthetic attainments. In addition to investing in educational innovation, Advantech also encourages and sponsors sustainable education promotion programs in primary and secondary schools, and supports private education platforms to promote Project-Based Learning (PBL). We also continue to invest resources to assist professional schools and arts and cultural groups in cultivating outstanding artistic talents, and actively promote the public's aesthetic attainments while simultaneously enhancing the development of the arts and cultural industries, so as to enhance the soft power of art for Taiwan.

Medium- and Long-Term Goals

The vision of the foundation is based on Advantech's altruistic philosophy, combined with the participation of corporate stakeholders, to promote 'industry-academia collaboration,' 'education innovation,' 'art industry co-prosperity' to promote the development of a smart and happy community" as the foundation vision statement. Advantech is committed to becoming a smart enabler of a sustainable earth and is committed to becoming a brand enterprise of truth, goodness, and beauty. With the goal of cultivating talents to promote a sound society in which technology and humanities advance simultaneously, Advantech will continue to deepen the use of smart healthcare and education on the IoT based on its core competencies in the future; and enhance the arts, culture, and public welfare activities by integrating social development and strengthening the connection between the Company's employees. through the planning of "IoT Industry-Academic Cooperation", "Innovation Sustainable Education", "Co-prosperous Development of Arts and Enterprises", and "Rural Charity" as the key project to promote the annual targets.

All the foundation's projects have been approved by the Board of Directors. Depending on the appropriateness, the community is jointly responded, or employees, customers, suppliers and all stakeholders are invited to participate.

Expenditure type	Arts and literature	Industry-academia	Education	Public welfare	Total	Percentage
Charitable donations	—	—	—	\$ 23,295,775	\$ 23,295,775	22%
Community/community investment	\$ 8,882,336	\$ 51,000	\$ 7,815,000	\$ 6,269,269	\$ 23,017,605	22%
Business initiatives	\$ 7,286,087	\$ 46,275,563	\$ 4,056,885	\$ 1,500,000	\$ 59,118,535	56%
Total	\$ 16,168,423	\$ 46,326,563	\$ 11,871,885	\$ 31,065,044	\$ 105,431,915	100%

Table 6.1.1: List of the foundation's social welfare expenditures in 2023

Form of expenditure	Arts and literature	Industry-academia	Education	Public welfare	Total expenditure
Cash donation	\$ 15,683,370	\$ 41,868,426	\$ 11,515,728	\$ 30,788,624	\$ 99,856,149
Volunteer fees	—	—	—	\$ 276,420	\$ 276,420
Item donation	—	\$ 3,068,340	—	—	\$ 3,068,340
Administrative and marketing expenses	\$ 485,053	\$ 1,389,797	\$ 356,157	—	\$ 2,231,006
Total	\$ 16,168,423	\$ 46,326,563	\$ 11,871,885	\$ 31,065,044	\$ 105,431,915

Table 6.1.2: Analysis of expenditures

Expenditure type	2021	2022	2023
Charitable donations	\$ 30,976,102	\$ 7,476,680	\$ 23,295,775
Community/community investment	\$ 24,675,636	\$ 30,115,185	\$ 23,017,605
Business initiatives	\$ 21,206,083	\$ 54,460,140	\$ 59,118,535
Total	\$ 76,857,821	\$ 92,052,005	\$ 105,431,915

Table 6.1.3: Social welfare expenditure in the recent three years

6.1

Co-prosperity with Innovation Sustainable Education and Arts

Advantech's mission is to "Enabling an intelligent planet." Therefore, we all regard it as our responsibility to promote environmental sustainability, encourage innovation, energy, education and sustainability, enhance the development of arts and cultural industries, and foster talent cultivation so that arts and businesses can co-prosper with cultural sustainability.

**Topics concerned**

- Sustainable Development Goals (SDGs) promotion
- Problem-based learning (PBL) teaching model
- Demonstration of diverse learning processes
- Development of arts and cultural industries
- Cultivation of creative talents
- Improvement of humanistic quality

**Goal to be achieved/problem to be improved**

- Increase social awareness and participation in the SDGs
- Promote the application of problem-based learning and teaching model innovation
- Promote diverse learning experiences and expressions in education
- Promote the sustainable development of arts and cultural industries and cultivating relevant talents
- Cultivate creative talents and improve their humanistic attainments

**Our role**

- Social promoters and leaders, dedicated to promoting social responsibility and sustainable development in the fields of education and culture
- Sponsors and supporters, supporting the development of various innovative educational and cultural programs
- Educators and mentors, cultivating the public's concern and interest in sustainable development and humanistic attainments through activities and projects

**Our method**

- Provide funds to support innovative educational and cultural projects, encourage creativity and cultivate talents
- Organize cultural activities such as performances, exhibitions, salons, lectures, etc. to provide an exchange and learning platform, and to promote the development and exchange of the arts and cultural industries.
- Recording of audiovisual contents to convey core messages and cultural values to the public
- Frequent communication and cooperation with schools and cultural institutions to promote the development of educational and cultural undertakings

**Our strategy**

- Actively engage in sustainable education and integrate the SDGs into practical actions and teaching
- Support and promote innovative education, including problem-based learning and diverse learning experiences
- Promote the development of arts and cultural industries and improve humanistic attainments by organizing various cultural activities
- Collaborate with professional organizations to foster and support the growth and development of creative talent
- Widespread publicity and promotion to raise social awareness and participation in sustainable development and cultural undertakings

**Our actions**

- Participate in various educational and cultural activities to demonstrate our commitment to sustainable development and cultural undertakings
- Encourage employees to participate in volunteer services and social welfare activities to promote the development and diffusion of positive energy in society
- Establish a platform for cross-sector collaboration and collaborate with businesses, academia, and non-profit organizations to jointly promote sustainable development and the development of cultural undertakings.
- Constantly assess and adjust our action plans to ensure their effectiveness and sustainability, and to respond to social and market needs and changes in a timely manner

6.1.1 Innovation Sustainable Education

Advantech Foundation has long been concerned about the innovation and development of education, encouraging the creation of a learner-centered learning model. Combined with Advantech's determination to maintain a sustainable earth, we promote sustainable education, and use the PBL learning model to pave the way for a better future for children, adolescents, and youth in Taiwan. The Company is committed to cultivating future talents through the promotion of various projects, including:

- **ACT Visionaries:** See "Project highlights" below for details.
- **ACT/BPL sustainable teachers and lesson plans:** Collaborate with relevant units to train seed teachers and compile lesson plans for free download from the Insane website. We help teachers and students to have a deeper understanding of SDGs issues and put them into practice through the PBL learning model, so that we can contribute to a better future together.
- **Sponsorship of high-quality sustainable education platforms:** In addition to supporting the team education projects of high-quality education teams such as Junyi Academy, Yingguang Education Association, and Chengzhi Education Foundation, we also sponsor schools in remote townships, such as Future Literacy Academy, to improve their reading skills.



Project highlight Taiwan "ACT Dreamer"

Since 2020, the foundation has invested in resources to organize the "ACT Dreamers" activity, introducing the PBL learning model, and "enabling children to deeply learn sustainability awareness through actions through creativity and collaboration" as the main spirit of the ACT Dreamers Program.

All elementary and junior high school students' proposals must be aligned with the United Nations' Sustainable Development Goals (SDGs), with the goal of developing the qualities expected of international citizens through project implementation. The course focuses on connecting with the real world, guiding students to find topics, design problems, plan action plans, collect data, establish decision-making actions, complete the process, and present learning outcomes, to empower children's growth.

We have deepened the project-based exploratory learning ability of Project-Based Learning (PBL) in the established system by adding dual empowerment courses for teachers and students, and also strengthening students' in-depth discussion of the United Nations Sustainable Development Goals, and implementing this in daily life issues. ACT Dreamers solicits Advantech employees to serve as industry mentors on campus, engaging in face-to-face discussions with students to impart practical knowledge and logic. This facilitates students discussing various issues in greater depth. The student organizations are dedicated to addressing a wide range of concerns, such as epidemic, health, ecology, local revitalization, education, and community service. The foundation aspires to foster sustainable action among students by encouraging them to develop concern for society and the capacity and initiative to resolve issues through this endeavor.



In 2023, in addition to promoting and participating in campus presentations at various schools, we held four inter-school presentation sessions at Advantech AloT Co-Creation Campus. In addition, we co-hosted the annual large-scale "Sustainable Action for a Better Future! Annual Conference" with CommonWealth Education parenting family lifestyle magazine at Songshan Cultural and Creative Park. We invited 41 schools from across Taiwan to participate. The event revolved around three major sustainable themes: "sustainable environment," "humanistic care," and "local revitalization." We invited the Director from the Chi Polin Foundation, Chi Ting-Huan, Chairperson of the Plahan Care Labor Cooperative Society, Lin Yi-Ying, and founder of the Before Sunset Sweet Potato Farm, Lai Chia-Hua, to share their knowledge and engage in dialogue with students, assisting teachers and students in connecting their projects to the real world.



ACT inter-school presentation session - elementary school guided visits.



ACT inter-school presentation session.

Linked SDG	Driving force	Theme	Business effectiveness and performance	Social/environmental impact and performance
  	<ul style="list-style-type: none"> Support diverse and innovative education, improve learning effectiveness, and encourage the implementation of a learner-centered education model. Cultivate global citizens with sustainable earth awareness for Taiwan. 	<p>Promote sustainable education and organize "ACT Dreamers"</p> <p>Sponsoring quality sustainable education platforms</p>	<p>With Sustainable Earth as the premise, we help teachers and students understand the United Nations Sustainable Development Goals and implement them in their daily lives. Through the process of dream generation and practice, we develop multiple abilities such as electronic innovation, creativity, practical ability, and teamwork.</p>	<ul style="list-style-type: none"> Sponsored 33 elementary and junior high schools to implement the ACT Dreamer project and facilitated over 40 presentations in school. We sponsored the PBL study group, and more than 30 professionals from the education sector visited the U.S. for a week. Held 4 cross-school sharing sessions with over 400 teachers, students and parents participating Held a large-scale annual education conference, with more than 800 people participating in the morning and afternoon sessions. Published three articles on the promotion of the implementation of sustainability through PBL on Education parenting family lifestyle, with over 75,000 page views The foundation has invested more than NT\$8.87 million.
			<p>Advantech encourages innovative actions and supports innovative education by sponsoring quality education platforms with actual funds to nourish Taiwan's education and cultivate global citizens who are flexible in the use of knowledge.</p>	<ul style="list-style-type: none"> The Company sponsored and cooperated with Junyi Academy to promote the "PBL Teaching Impact Promotion Program" and set up a special section to share PBL teaching resources, making them free for educators to use. We sponsored Yingguang Education Association to promote the "ESD and PBL Model Schools and Teacher Training Program". In 2023, we assisted over 90 elementary, junior and senior high schools in over 570 school attendance sessions. The Company sponsored the Pley School "Sustainable Education Annual Games", which was attended by 194 teachers and affected 5,813 students across Taiwan. Sponsored the 2023 "DFC Challenge Sharing Season" of Taiwan's Childhood Creative Action Council (DFC). Support the DFC Taiwanese team of to participate in the 2023 DFC Children's Summit in India, sharing stories about children's creative challenges in Taiwan and engaging with children around the world. A total of nearly NT\$4 million was invested in sponsorships.

6.1.2 Mutual Prosperity of Arts and Industries

Inheriting and Developing Traditional Culture and Art Education

Promote arts and culture, and create a co-prosperous society with the arts

- The Company supported performing arts groups by organizing the "Art Salon" and sponsoring a number of high-quality Taiwanese performing arts teams.
- Produce and broadcast the "Easy Listening to Arts and Culture" podcast in which artists, curators, authors, and performers are invited to introduce performances, new books, movies, exhibitions, or cultural activities.
- We promote interdisciplinary art, hold diverse exhibitions at Advantech galleries, and host Advantech Junior Painting Competitions.

Sponsorship for the revival of traditional culture

- Support the cultivation of creative talent at top academies: Support the Triennial Musical Theatre Elite Talent Development Program of the Graduate Institute of Performing Arts, National Taiwan Normal University.
- **Sponsorships for the National Taiwan Academy of Traditional Chinese Opera:** Since 2015, Advantech has continuously supported the National Taiwan Academy of Traditional Chinese Opera by sponsoring the Department of Folk Arts' graduation performances and the Peking Opera troupe and aerobatic troupe to advance their skills. The goal is to expand the stage for students engaged in traditional arts and culture to perform and increase the visibility of traditional opera. To encourage students with outstanding skills to persevere in learning, the Company sponsored the Department of Folk Arts to establish the "Advantech ABLE Elite Award" art scholarship to commend outstanding students.
- **Youth Talent Cultivation Program of GuoGuang Opera Company:** To ease the talent gap for Peking Opera, key training programs are provided for potential young talents. From among the official GuoGuang Opera Company members, youth reserve members, and Taiwan Academy of Traditional Arts students, we target, recruit, and nurture new talents.



Driving force	Theme	Business effectiveness and performance	Social/environmental impact and performance
Inherit and carry forward traditional culture and art education, and promote the cultivation and succession of young talents.	Youth Development Project of National Taiwan Academy of Traditional Chinese Opera	Actively interacting with the school by inviting Advantech various internal and external events to increase the visibility of traditional art performances and encourage stakeholders (including employees and customers) to actively enjoy them.	<ul style="list-style-type: none"> [Advantech ABLE Elite Award] A total of 12 people won the arts scholarship. Sponsor the performances of the Peking Opera troupe and aerobatic troupe. Total sponsorship funds exceed NT\$1.25 million.
	Youth Talent Cultivation Program of GuoGuang Opera Company	Through the inheritance and performance of traditional classics, combined with the cultivation of key talents, we aim to comprehensively improve the performance of young performers and promote the development of professional opera talents and the coexistence and co-prosperity of the performing arts market.	<ul style="list-style-type: none"> A total of 380 performances and promotional activities have been held in 2023, with classic repertoires passed down from the teaching staff. Cultivated 15 young talents (including actors, container managers, and technicians) to learn and pay it forward, and played the leading roles in a series of annual performances to demonstrate their skills, and act as important staff to assist in the performances. Annual sponsorship funds exceed NT\$2.5 million.
Promote the development of the arts and cultural industries, support and encourage high-quality arts and cultural groups to perform, train cultural readers, and promote aesthetic literacy education for the entire population.	Promotion of diverse arts and cultures	<ul style="list-style-type: none"> Provide funds, publicity, and audiences through multiple channels at the same time. Promote art culture and aesthetics education internally, and foster professional teams and cultivate art talents externally. Improve the overall cultural quality of society with the participation of corporate stakeholders. Create a high-quality participation experience, enhance the interest and accomplishment of the stakeholders in art, and simultaneously promote the development of the domestic art industry to create a win-win situation for the art industry. 	<ul style="list-style-type: none"> Supported arts and cultural groups for over 130 performances. Brought over 5,500 seats of audience into the theater for the performance. Produced and broadcasted 30 podcast episodes on topics including 19 productions, 4 films, 2 books, and other various large-scale cultural events, which were listened to by more than 30,233 people. Sponsored the "Planting a Note Project". Sponsored the "Musical Theatre Talent Cultivation Program" of the Graduate School of Performing Arts, National Taiwan Normal University; facilitated cross-field collaboration with over 100 students. Sponsored the FOCASA International Circus Festival and gathered 30 circus groups from 8 countries to perform in Taiwan. The event attracted more than 80,000 people to watch the various performances. Two exhibitions held at Advantech's galleries, invited the famous puppeteer and photographer, Xu Pei-Hong, at Yanhua Art Gallery. Invested over NT\$7.38 million.

▲ Support Potential Sports Players and Sponsor Training Equipment and Related Funds

In recent years, sports have continued to achieve good results in international events, and the national athletes have also expressed their hope to nurture the new generation with their own experience and skills. Chuang Chih-Yuan founded a table tennis hall, and Rendy Lu Yen-Hsun founded a tennis school. Advantech is willing to sponsor potential athletes to cultivate future national championships and drive employees to gain a better understanding of national sports events and activities.

Driving force	Theme	Business effectiveness and performance	Social/environmental impact and performance
Help sports players become competitive in international competitions	National athletics inheritance plan	Advantech sponsors promising athletes in various sports. Advantech selects potential athletes with exceptional skills and sportsmanship, and experienced national athletes are invited to share their training experience and morality in order to nurture future national athletes and encourage employees to participate in various sports.	Sponsored the training expenses of five young athletes in hurdles, judo, wrestling, baseball, and basketball, with a total investment of over NT\$1.77 million. (Please refer to the attachment for the match record)

6.1.3 Advantech Global Project Highlight

"Turkey-Syria earthquake, Advantech Employees Donate to Long-term Reconstruction"

The catastrophic Turkey-Syria earthquake of 2023 resulted in the loss of life for millions more, including 53,000 in Turkey and 6,000 in Syria, causing millions more people homeless. Advantech quickly launched a global donation initiative with the spirit of altruism and launched a 1:1 match donation event. A total of 431 colleagues participated in the donation, and the total amount of donations from headquarters was up to NT\$10 million.

To put the donations to good use, Advantech joined forces with the nonprofit organization Mustard Seeds in Taiwan and Medair, a local partner in disaster areas, to begin emergency rescue operations and continue with long-term reconstruction work. The disaster-hit areas benefited from this donation: Turkey: Gaziantep, Hatay, Kahramanmaraş, and Adiyaman; Syria: Aleppo, Hama, and Idlib. Charitable funds were used as follows:



Emergency evacuation kits
Distributed to 1,520 households (approximately 5,330 people) in Syria



Emergency relief fund
Distributed to 154 households (approximately 770 people) in Turkey



Evacuation shelter
Construction of a medium-to-long term evacuation shelter in the Syrian area that can accommodate 20 households with a total of 80 people



Clean drinking water and sanitation facilities
Provided clean water in Aleppo, Syria, benefitting 1,000 people



Health assistance and psychological support
Provided services in Turkey and Syria, a total of 3,265 people



Overall service outcome
Served 1,694 households and 10,445 people in Turkey and Syria

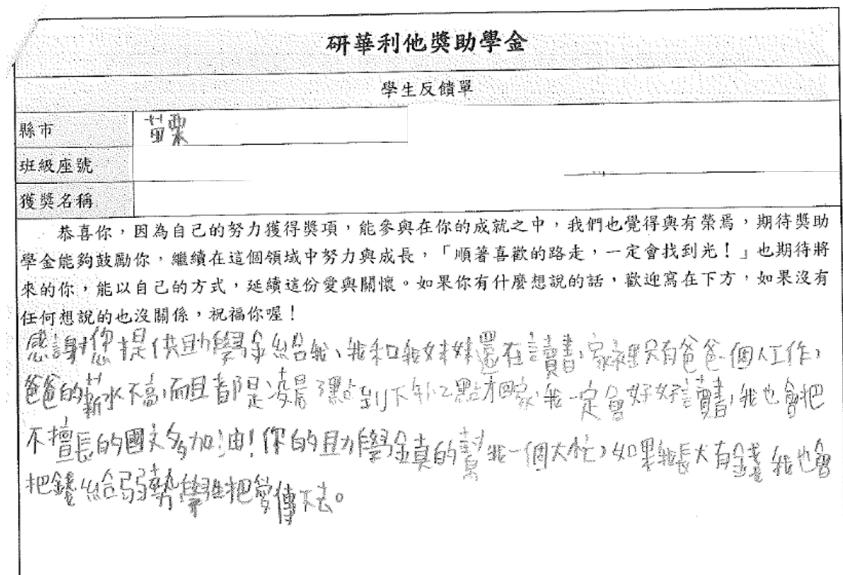
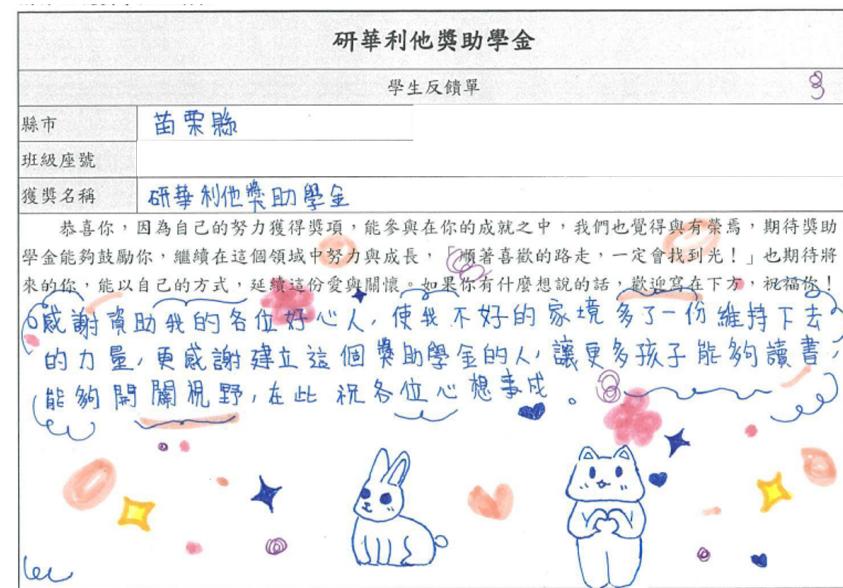
Syria and Turkey Disaster Relief Project in response to SDGs	
	Provision of material support and emergency financial subsidies
	Emergency financial subsidies are provided to help with food needs
	Meet the health needs of disaster victims through medical equipment support, assistive device support, extended medical center service hours, and mental health services.
	Starting from the day of the earthquake, water truck service was provided in Aleppo, Syria, to meet the water demand of the disaster victims (15 liters of water per person per day according to the World Health Organization).
	Expand partnerships and connect enterprises with Medair, the overseas rescue organization for international disaster rescue and reconstruction cooperation.

Advantech USA and Advantech Europe also initiated donations to support post-disaster reconstruction. For example, Advantech Europe employees participated in a donation to support Giro555, a credible local non-profit organization. The funds will be used for long-term community reconstruction and the procurement of relief and reconstruction materials in Turkey, facilitating the promotion of the local economy. Advantech USA also supported three international charitable organizations, Molhamteam, World Vision, and Give2Asia, through donations made by employees to rebuild the disaster areas with diverse rescue services.

Advantech Taiwan's "Altruism Scholarship"

The foundation established the "Hsinchu/Miaoli Rural Care Scholarship" in the Hsinchu-Miaoli region in 2013, which has now been in operation for over ten years. It mainly targets financially disadvantaged students with excellent performance in elementary and junior high schools in the Hsinchu-Miaoli region. School teachers nominate and commend students based on their overall performance in school ethics, academics, etc. In 2023, the program was renamed the "Altruism Scholarship" and continues to be distributed to disadvantaged students or students experiencing family changes. In addition to praising students with outstanding moral and academic achievements, we also encourage students to have the courage to develop in various fields. Our interests and talents become the key to unlocking life-changing opportunities. In addition, the scholarship is also used to strengthen the bonds between the teachers and the students. Through the guidance of teachers, the seed of goodness is planted in the hearts of the students, and they are grateful for the blessings.

學生反饋單	
縣市	苗栗縣
班級座號	
獲獎名稱	學業成績優良
<p>恭喜你，因為自己的努力獲得獎項，能參與在你的成就之中，我們也覺得與有榮焉，期待獎助學金能夠鼓勵你，繼續在這個領域中努力與成長，「順著喜歡的路走，一定會找到光！」也期待將來的你，能以自己的方式，延續這份愛與關懷。如果你有什麼想說的話，歡迎寫在下方，祝福你！</p> <p>家裡爸爸是一位農夫，媽媽在科技公司當作業員生活入不敷出，還有補習班的學費，一個月差不多就3500了，還有甲班的學費、課業費用我都不太敢開口和爸媽拿錢到學校交，因為我知道他們賺錢很辛苦。</p> <p>我在學校，雖然成績不是最好的，但是我上課都認真聽課，作業按時交，我在學校，成績保持在中上的水準。擔任幹部和小老師盡心盡力，是班上的模範生，也是本班的禮儀天使，我希望能夠做到最好。</p> <p>謝謝研華基金會的這筆獎助學金，我將利用這筆獎助學金繼續勤奮努力，將來有能力能回饋社會，謝謝您！</p> <p>平常除了課業，我也很喜歡運動，跑步是我的強項，這個能力應該歸功於我每天騎腳踏車上下學，無論颳風或下雨我都堅持靠自己的雙腳踏著踏板來學校，因為我覺得鍛練體魄也是我的功課，將來我也會靠自己的能力賺很多的錢。</p>	

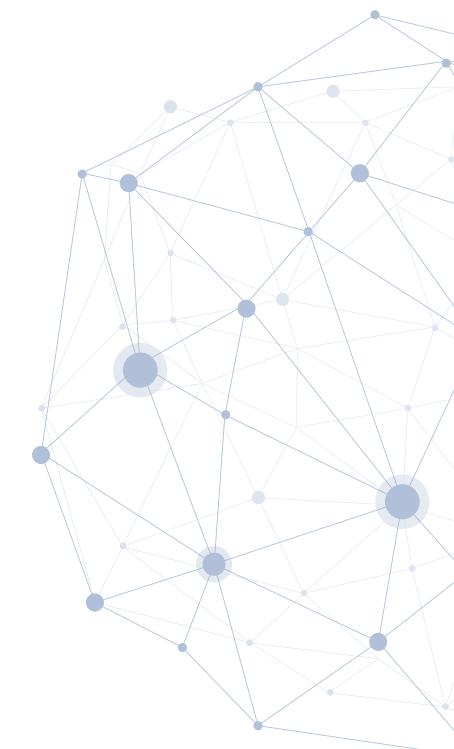


▲ Advantech China's "Western Sunflower High School Student Assistance Program"

The Advantech China Foundation has been providing scholarships to high school students from rural areas since 2011, and this year has entered its 12th year. 203 Advantech employees have sponsored the financial aid program, covering Shanyang County in Shaanxi Province, Huangnan Tibetan Autonomous Prefecture in Qinghai Province, and Zhangjiachuan No. 1 Senior High School in Gansu Province. 100+ people have participated in the home visit activity for underprivileged students, receiving a total of RMB 439,170 in financial assistance over the past 12 years.

The sunflower is a flower that symbolizes light, symbolizing hope and faith. The main purpose of the event is to encourage impoverished high school students in western rural areas with outstanding performance in both morals and academics to persist in completing high school and entering universities with the material and spiritual help of Advantech sponsors, and to change themselves and their families through their own hard work.

Annually, Advantech volunteers conduct home visits in rural areas, where they bear witness to the plight and aspirations of children who, owing to impoverished conditions in the deep mountains, are on the verge of abandoning their education. They offer these children encouragement and care. In addition to subsidizing living expenses, we also correspond with the children every year to support and help them solve their life problems. For example: Since 2019 when Shanghai Gem Foundation acted as a consultant, it has led 10 volunteers internally recruited by Advantech to every poverty-stricken counties in western China. We conduct interviews with students residing in rural areas, engage in on-site communication with school leaders, organize data, and recruit volunteers. 21 students were granted a three-year living allowance in 2023, for a cumulative sum of RMB 44,100. Moving forward, we aim to broaden our scope by incorporating second-hand computer donations and book donations, thereby enabling a greater number of Advantech colleagues to partake.



▲ Advantech Japan's "Future Data Scientist - Programming Course for Elementary and Junior High School Students"

Since 2022, Advantech Japan has been partnering with the Nogata City Government in Fukuoka Prefecture and student clubs from two universities in Kyushu and Fukuoka to organize programming camps for elementary and junior high school students in both summer and winter seasons. GLEAP (the main member of this club, officially established GLEAP Co., Ltd. in April 2023, becoming Advantech Japan's AI software development partner) co-organize programming camps for elementary and junior high school students. Before each three-day event, Advantech's Business Development team and GLEAP Co., Ltd. participants discussed the topic of the course. Advantech's outstanding product performance and easy-to-understand programming languages made the app camps popular among schools and parents in the Nogata City. It also sparked the curiosity of many elementary and junior high school students about IoT.

In 2024, instead of renting a separate venue, the summer and winter programming camps will be held at Advantech's Nogata Campus in Japan. The curriculum design has also evolved beyond simply introducing product performance and programming languages over the past two years. It now includes more industry knowledge related to AI and IoT, as well as practical demonstrations of integrated hardware and software IoT solutions. The aim is to help elementary and junior high school students better understand the application of the IoT in their daily lives.



GLEAP Co., Ltd. Formally incorporated as Advantech Japan's AI program development partner

2023 Summer program camp

Advantech Europe's "Sponsoring PizzAut"

There are more than 600,000 people with autism in Italy, including children, youth and adults. Due to the social atmosphere, they are often neglected and forgotten, thus difficult for them to get employed. In 2023, Advantech Europe's Italy office collaborated for the second time with PizzAut, a local organization that focuses on autism issues.

PizzAut in Cassina de' Pecchi, Milan, Italy is more than a pizza restaurant. It is a laboratory of social inclusion, providing physical training and job opportunities for people with autism, and helping to build dignity as an association and organization. We help autistic patients reintegrate into society through three major areas: "AutAcademy," "PizzAut Restaurant," and "Autonomia Gym."

- **AutAcademy:** AutAcademy provides professional training for children with autism and respects everyone's time and ability. Achieve work autonomy by learning a life skill.
- **PizzAut:** PizzAut is entirely managed by people with autism and provides them with the possibility of job placement. A more inclusive environment for society.
- **Autonomia Gym:** Help autistic children become familiar with daily home management methods, understand how to organize their environment, train independent living, and avoid entering institutions.

By supporting the PizzAut project, we hope to provide more power for all people living with autism, and to allow the employees of Advantech's European offices in Italy to work together to create a more diverse and inclusive society.



**Together
to nourish
the inclusion**



Advantech North America's "A4C Program"

Advantech for the Community (A4C) was established to give back to the local community and to collaborate with charitable organizations and foundations that are of special significance to Advantech. Since Advantech USA launched the A4C (Advantech for the Community) program in 2021, we have encouraged employee proposals and led the use of funds and activity arrangements through the A4C Committee. This series of activities is expected to give back to the community, strengthen the connection between the community and employees, improve employee morale, and further expand the influence to the employees' relatives, friends, and partners.

In 2023, in addition to continuing the collaboration with the Red Cross for blood donation activities, various advocacy activities were undertaken. These included participation in beach cleanup days to maintain environmental sustainability, and collaboration with children's hospitals to support and provide resources for children's medical care. Efforts were made to assist hospitals in promoting and fundraising. Units collaborated with included CHOC (Children's Health of Orange County) in California, St. Jude Children's Hospital, and Cincinnati's Children's Hospital.

In addition to the social benefits that we have focused on and invested in the past, we have two new initiatives for 2023. One is to collaborate with the Ronald McDonald House Charity to provide free accommodation, meals, and transportation subsidies to more families of children receiving treatment away from home; the other is to collaborate with the Arboretum Foundation, which is committed to supporting tree planting charity programs across the United States.

A4C is also actively involved in a variety of local causes, including supporting animal welfare, Habitat for Humanity (building and improving housing), Girls Inc. (empowering girls through leadership programs), and Casey Cares (supporting families with children with critical illnesses). A4C is constantly expanding its activities and initiatives to build a warmer and altruistic community.



6.2

IoT Education and Industry-Academia Co-Creation

The enterprise IoT market will continue to grow in the next five years, and will reach US\$525 billion by 2027. By this time, there will be a global talent gap of more than 10 million people in the IoT industry. Advantech, as an international benchmark company in industrial computers and IoT, sees IoT talent cultivation as a key focus for corporate competitiveness and corporate sustainability. Therefore, with the vision of popularizing and deepening IoT education, we promote three major themes and five learning projects to cultivate IoT talents.

Item	Explanation													
Materiality	With the vision of popularizing and deepening IoT education, we have implemented various industry-academia projects. Achieve universal IoT education, IoT project-based learning and innovation, IoT career exploration, IoT research, and long-term collaborations to bridge the industry-academia gap and cultivate the next generation of IoT talent and innovation.													
Policy or commitment	Collaborate with the academic community to co-create the value chain and promote the industrialization and marketization of R&D achievements. Create a cross-field talent pool for IoT, bridge the gap between learning and application, and promote a win-win situation between industry and academia.													
Impact description	<p>This issue has a positive impact on society, including stakeholders such as universities, colleges, and students. Positive impact helps the industry to cultivate young talents, promote industrial innovation and R&D, and develop the achievements of industry-academia collaboration with commercial value. IoT education has a long-lasting impact. Advantech's IoT online teaching materials have been popularized, expanded through branch offices in countries/regions, and implemented through industry-academia collaboration. Link external ideas with internal industry practices, establish a model for IoT education, and enhance the availability of IoT talent.</p> <p>Without active management, the negative impacts to the Company include: 1) a decline in brand influence, and 2) the inability to cultivate talents for the IoT industry. Therefore, Advantech actively promotes IoT education through the following specific strategies:</p> <ol style="list-style-type: none"> Declining brand influence: As a leading brand in the global IoT industry, Advantech has a social responsibility to promote widespread adoption in the industry. If the brand influence is reduced, Innoworks is expected to connect more colleges and universities for physical promotion, and strengthen the connection with Advantech Elite intern training program. Due to the inability to cultivate talents for the IoT industry, Advantech actively promotes IoT education through the following specific strategies <ul style="list-style-type: none"> With the resources of a leading brand in the IoT field, the vision is to "promote and enhance IoT education." Various IoT industry-academia collaboration projects are actively promoted, focusing on the development of "three major themes and five learning projects" to cultivate IoT talents and narrow the gap between industry and academia. Through the value chain management of "Co-Creation," the academia, Advantech internal employees, and industrial ecosystem partners create applications and solutions together, which will benefit external industries and stakeholders with Advantech's core capabilities and resources and create positive sustainability influence. 													
2023 goals achievement status	<table border="1"> <thead> <tr> <th></th> <th>2023 Goals</th> <th>2023 Results</th> </tr> </thead> <tbody> <tr> <td>IoT Education for All</td><td> <ul style="list-style-type: none"> 35 students joined the Elite100 internship program 12 cases in participating IoT education projects or collaborations with university courses </td><td> <ul style="list-style-type: none"> 59 students participated in the Elite internship program, producing more than 30 project outcomes, and 21 students stayed on after the summer to continue their internship. Participated in 7 nurturing education projects or collaborations with university courses. </td></tr> <tr> <td>Alignment of learning with practical applications</td><td> <ul style="list-style-type: none"> Promoted 3 campus IoT application projects 7 Industry-academia collaboration projects </td><td> <ul style="list-style-type: none"> A total of 7 innovative projects have been promoted, including the application of drone management, industrial energy saving, and campus map guide. A total of 8 industry-academia projects have been implemented, covering IoT Security, Industrial AI Application, and Thermal Solution, with 62.5% of the projects promoting industrialization. Four industry-academia interns were recruited, and the industry-academia projects were integrated with the corporate scenario to enhance industry-academia integration. Implemented Advantech's WISE-IoTSuite for digital campus management. In the first year, the integration, visualization, and analysis of school affairs, ESG indicators, and energy consumption data were completed to improve the efficiency of campus management. </td></tr> <tr> <td>Open innovation</td><td> <ul style="list-style-type: none"> Innoworks coverage: 640 students from 7 countries </td><td> <ul style="list-style-type: none"> 856 students from 7 countries </td></tr> </tbody> </table>		2023 Goals	2023 Results	IoT Education for All	<ul style="list-style-type: none"> 35 students joined the Elite100 internship program 12 cases in participating IoT education projects or collaborations with university courses 	<ul style="list-style-type: none"> 59 students participated in the Elite internship program, producing more than 30 project outcomes, and 21 students stayed on after the summer to continue their internship. Participated in 7 nurturing education projects or collaborations with university courses. 	Alignment of learning with practical applications	<ul style="list-style-type: none"> Promoted 3 campus IoT application projects 7 Industry-academia collaboration projects 	<ul style="list-style-type: none"> A total of 7 innovative projects have been promoted, including the application of drone management, industrial energy saving, and campus map guide. A total of 8 industry-academia projects have been implemented, covering IoT Security, Industrial AI Application, and Thermal Solution, with 62.5% of the projects promoting industrialization. Four industry-academia interns were recruited, and the industry-academia projects were integrated with the corporate scenario to enhance industry-academia integration. Implemented Advantech's WISE-IoTSuite for digital campus management. In the first year, the integration, visualization, and analysis of school affairs, ESG indicators, and energy consumption data were completed to improve the efficiency of campus management. 	Open innovation	<ul style="list-style-type: none"> Innoworks coverage: 640 students from 7 countries 	<ul style="list-style-type: none"> 856 students from 7 countries 	
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2024 Goals	<p>IoT Education for All</p> <ul style="list-style-type: none"> • 60 students joined the Elite100 internship program • Established 10 cooperative courses with universities with a total enrollment of 300 students • Up to 10 sets of professional courses of IoT are provided online. 	<p>Alignment of learning with practical applications</p> <ul style="list-style-type: none"> • Supported the development of campus innovative IoT applications up to 3 cases • Industry-academia co-creation R&D Topic, with a goal of 8 projects • 50% of the annual R&D results can be submitted for papers and intellectual property • Establish a new external technology co-creation cooperation topic (Extended TSU) <p>Open innovation</p> <ul style="list-style-type: none"> • 31 schools from 9 countries, 170 teams and 680 students participated
2025 Goals	<p>Universal education & open innovation</p> <ul style="list-style-type: none"> • UCC expansion/Innoworks launched in 12 Region Business Units • Co-create at least 3 sets of AloT Lab teaching cases with RBU partners • Over 1,000 students have been trained and certified 	<p>Alignment of learning with practical applications</p> <ul style="list-style-type: none"> • Industry-academia co-creation R&D themes x 8; continuation themes > 30% • Internalize the R&D results into Advantech technology modules and enter the productization process; propose papers and intellectual property rights for 60% of the time • Established a total of three Extended TSU technology spindles
2030 Goals	<p>Universal education & open innovation</p> <ul style="list-style-type: none"> • RBU partners have created a total of 10 AloT Lab teaching cases • Over 5,000 students have been trained and certified 	<p>Alignment of learning with practical applications</p> <ul style="list-style-type: none"> • Industry-academia research projects about 5-8 cases per year; more than 20 cases from 2022 to 2025 • The total number of productized processes, derivative IPs, and papers for industry-academia collaborations has reached 30
Key actions or programs	<p>IoT Education for All</p> <ul style="list-style-type: none"> • Based on Innoworks, establish with HR the mechanism and practice of introducing interns, and actively promote them in domestic and overseas universities • Support regional offices to establish a local UCC operation mechanism with resources such as AloT Lab, course modules, and Innoworks <p>Alignment of learning with practical applications</p> <ul style="list-style-type: none"> • Establish comprehensive propositions and project management practices, and confirm industry-academia issues through high-level strategic orientation to respond to Advantech's technology development roadmap for the next 2-3 years • Actively promote the digital campus application of the platform, and establish digital campus application templates with National Yang Ming Chiao Tung University as the indicator 	<p>Open innovation</p> <ul style="list-style-type: none"> • Expand the lasting effect after the event, and strengthen the collaboration between Advantech and the university through mechanisms such as student internship program, campus ambassadors, and outreach sponsorships. • Advantech industry partners are invited to participate in the Innoworks activities as industry experts, providing students with practical experience and advice from the industry, thereby bridging the industry-academia gap. • Advantech provides industry resources and practical field data to support students' advanced development. • Focusing on sustainability issues, we actively respond to the ESG actions and plans advocated by governments, schools, and industries around the world to expand our influence.
Effectiveness assessment	<ul style="list-style-type: none"> • Since IoT education is one of the three main axes of Advantech Cultural and Educational Foundation, Advantech collaborates with industry partners to advance the public good through the widespread adoption of IoT. The organization furnishes financial backing and employs the knowledge of its directors, the majority of whom are senior professors from academic institutions, to assess the efficacy of this methodology and supervise the advancement and trajectory of the initiatives. • Regularly hold internal and external meetings to review the gap between the research direction and internal needs, and to promote the progress and benefits of thematic development. • Fill out the feedback form for teachers and students who participated in the project • In 2024, we launched the SROI project with external consultants to gain an in-depth understanding of Innoworks' internal influence and produce corresponding management indicators. 	
Stakeholder engagement	<ul style="list-style-type: none"> • Partners • Universities and research institutions 	

***Note:** In 2023, 7 of the 12 curriculum collaboration goals originally set were achieved. The reasons for not meeting the goals are as follows:

Advantech promotes IoT education at branch offices around the world. Due to the differences in industry development progress in different countries, there are differences in the cognition and understanding of IoT concepts. Therefore, multiple approaches are needed. In the second half of 2023, the direction of promotion will be adjusted, and the breadth and depth of cooperation will be carried out in conjunction with other industry-academia projects to gradually expand Advantech's campus influence in the field of IoT.

- Breadth: Actively promote the concepts and applications of IoT on campus through IoT-themed lectures and ecosystem partner conferences (one industry-academia ecosystem partner conference with nearly 200 participants, and two IoT-themed campus lectures) to expand influence to the public.
- Depth: Continue to collaborate with key teachers to develop IoT-related courses and teaching materials to shorten the learning gap and achieve better teaching outcomes.

6.2.1 Industry-Academia Co-Creation

★ Practice integration: Promote the co-creation ecosystem to foster industry growth and employment opportunities

- University co-creation Industry-academia project (see [Chapter 3](#) for details)
- Industry-academia-Master's-PhD (see [Chapter 3](#) for details)
- IoT career exploration: Elite 100 IoT Internship Program

The Elite100 Internship Program focuses on forward-looking issues in different application fields. Advantech instructors lead students through user scenario analysis and field interviews to understand actual needs and industry pain points, and then propose innovative concept designs.

- Advantech investing units: human resources, internal business units, Advantech Foundations
- Main beneficiaries: Students, schools
- External collaboration: Advantech partners provide field resources

Since the launch of the IoT Industry Internship Program in 2018, more than 100 students have participated in the program. Through mid-term and final results presentations, senior supervisors are invited to provide guidance and feedback to the students and gain valuable workplace experience; at the same time, over the years, the themes and projects generated by the interns were also promoted and implemented within Advantech.

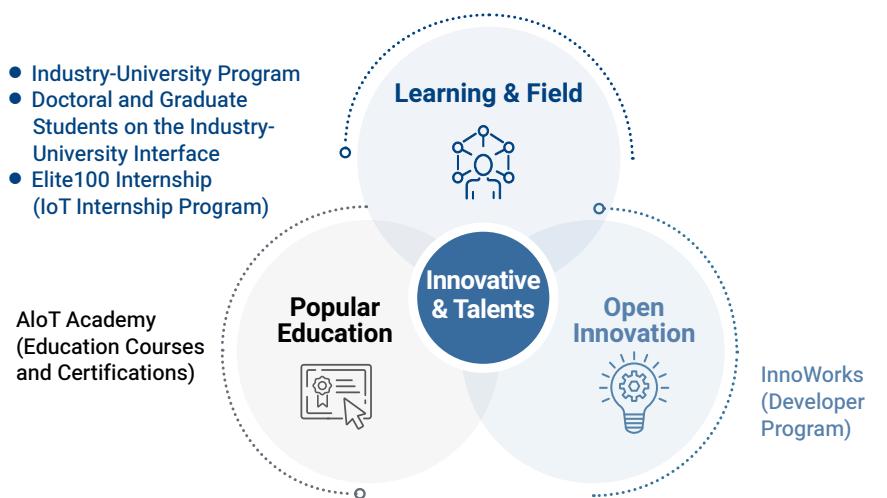
In 2023, a total of 59 students in Taiwan participated in the Elite Internship Program, yielding over 30 project outcomes. 21 students continued their internship after the summer (two of them have turned full-time); in 2023, 30 interns in China were recruited, and 1 student stayed on and is expected to become a regular in July 2024.



- Event website:
<https://intern.advantech.tw/>
- Internship life public:
<https://www.facebook.com/AdvantechCareers/videos/1988021504881763>

- Event assembly:
<https://www.facebook.com/AdvantechCareers/videos/700216665284195>
- Internship's Truth Talk - Yes or No:
<https://www.facebook.com/AdvantechCareers/videos/264806509711180/>

- Internship's Truth Talk - Quickfire Q&A:
<https://www.facebook.com/AdvantechCareers/videos/2647315042082134>



6.2.2 Innoworks Global Developer Program



Project highlight NTUST Campus Seed Program

Internal investment units

Technical support departments, foundations, emerging business development departments

Main beneficiaries

Students, schools, and the general public interested in popularizing education through IoT

External collaboration

Experts and scholars in the field of IoT

Project description

Three students from the Department of Industrial Management, National Taiwan University of Science and Technology participated in the 2022 Innoworks developer program competition. After the selection, the three students became Advantech's WISE-IoTSuite campus seeds to implement Advantech's WISE-IoTSuite campus promotion projects. Including: WISE-IoTSuite workshop, production of teaching video for the smart water dispenser project, and support the front-line students' technical questions and inquiries from Innoworks.

Description of the smart water dispenser project

The ambassadors compiled and recorded a set of instructional videos based on the smart water dispenser project at NTUST. In this project, data such as water intake and temperature on campus were collected and an IoT system was built to monitor students' drinking water conditions with the WISE-IoT Suite data visualization tool, showcasing the applications on campus.

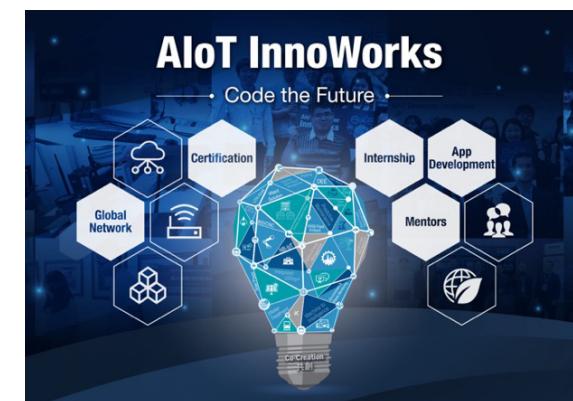


★ Open innovation: Guide students to cross-field co-creation to promote industrial innovation

Innoworks Global Developer Program Competition

- Mechanism:** AIoT Innoworks is a project-based competition focused on IoT applications for students and developers around the world.. Based on Advantech's WISE-IoTSuite IoT cloud platform, the participants learn to develop innovative IoT application solutions in various industries and domains, as well as solve social and environmental problems challenge and get rich rewards. Topics covered public health, solar and wind energy, smart agriculture, smart factories, smart campuses, and smart cities.
- Continuing development mechanism:**
 - Advantech recruited outstanding students to join Advantech Elite 100 internship program.
 - The participating students are invited to join Advantech's WISE-IoTSuite Campus Ambassador program to support the implementation of Advantech's WISE-IoTSuite collaboration projects on various campuses, serve as campus training workshop instructors, provide first line AIoT Innoworks technical support, and answer advanced development questions in the technical forum.
 - We support the team in the continuous development of topics that are in line with Advantech's product development plans or have continual significance, and collaborate with Advantech's internal product departments to form industry-academia projects as needed.
- Quantitative achievements:** Since its establishment in 2019, it is in its fifth year, and a total of 74 schools from 8 countries have participated, including: Taiwan, China, Vietnam, Malaysia, Singapore, Brazil, Indonesia, South Korea and other countries. In 2023, a total of 850 students from 224 student teams from 7 countries participated.

Project-based approach to learn & Innovate



Case study 1 |**China_Deepen Industry-academia collaboration to build China's Industry-academia ecosystem**

Through the University-Industry Collaborative Education Program of Ministry of Education of the People's Republic of China, Advantech supported 9 universities in 2023 to implement IoT laboratories, teacher training, IoT courses, teaching materials, and IoT projects to popularize IoT technology and applications. Advantech provides free access to Advantech industrial cloud platforms, technical training, and technical support for colleges and universities teachers and students. During the collaboration between the two parties, Advantech leverages its hardware and software resources to help integrate teaching into the industry and provide a stage for students to implement IoT application development.



[Reported on Advantech's industry-academia collaboration](#), and on [Advantech x Nanjing Tech Forum](#)



- **Student feedback:** Over 90% of the respondents agreed with the program and considered it helpful
 - Expand imagination of AIoT application scenarios
 - Evaluate and develop IoT projects based on IoT infrastructure and principles.
 - Cross-field combination of own expertise and the application of IoT technology

Case study 2 |**South Korea signed an MOU with Inha University to launch medium and long-term cooperation projects with the goal of cultivating talents**

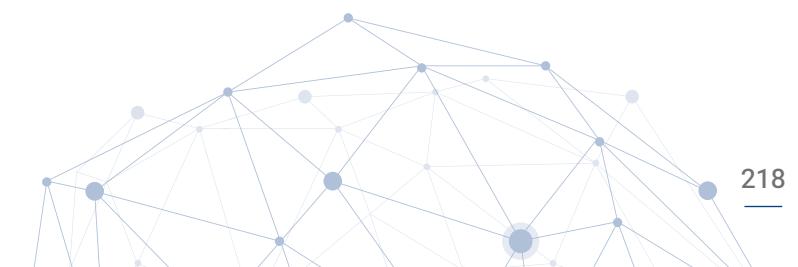
Signed a memorandum of understanding with Inha University as the first step for Advantech to promote industry-academia collaboration projects in South Korea. In addition to the Innoworks developer competition, two participating students were also recruited to serve as interns at Advantech Korea. The goal is to support Advantech Korea in WISE projects by building on the experience and technical power in IoT project development accumulated during the competition. In 2024, Inha University will expand the recruitment of students from non-technical backgrounds to participate in the activities, hoping to create a richer IoT competition with diverse backgrounds and majors.



[Report on the InnoWorks Developer Program competition in South Korea](#)

**Case study 3 |****Indonesia_Proposal to work with industry partners to mentor students**

Advantech Indonesia and its strategic partner Eforel have signed an industry-academia memorandum of understanding with the Institute of Technology and Engineering in Surabaya, Indonesia, to actively promote IoT education. Mentors from Advantech and Eforel provide students with industry-specific application development experience and guide students in project development from the business and technical aspects. In 2024, we will further expand the scope of the event to other regions in Indonesia and connect target schools to build an industrial ecosystem in Indonesia.



6.2.3 AIoT Academy Higher Education Courses and Certification



Project highlight

AIoT Academy Higher Education Courses and Certification

Internal investment units

Technical support departments, foundations, emerging business development departments

Main beneficiaries

Students, schools, and the general public interested in popularizing education through IoT

External collaboration

Experts and scholars in the field of IoT

Project description

This project has invited Professor Chou Shuo-Yen, the director of the IoT Center at National Taiwan University of Science and Technology, to gather professors in the field to focus on the basics of IoT. Through the sharing of practical application experiences, the project aims to provide students with the core competencies needed for IoT-related practical skills and professional talent.



[IoT basic course landing page](#)

★ Universal education: bridging the gap between industry and academia, providing opportunities for summer internships → Long-term internship → Full-time extended training

IoT online learning platform [AIoT Academy higher education courses and certification]

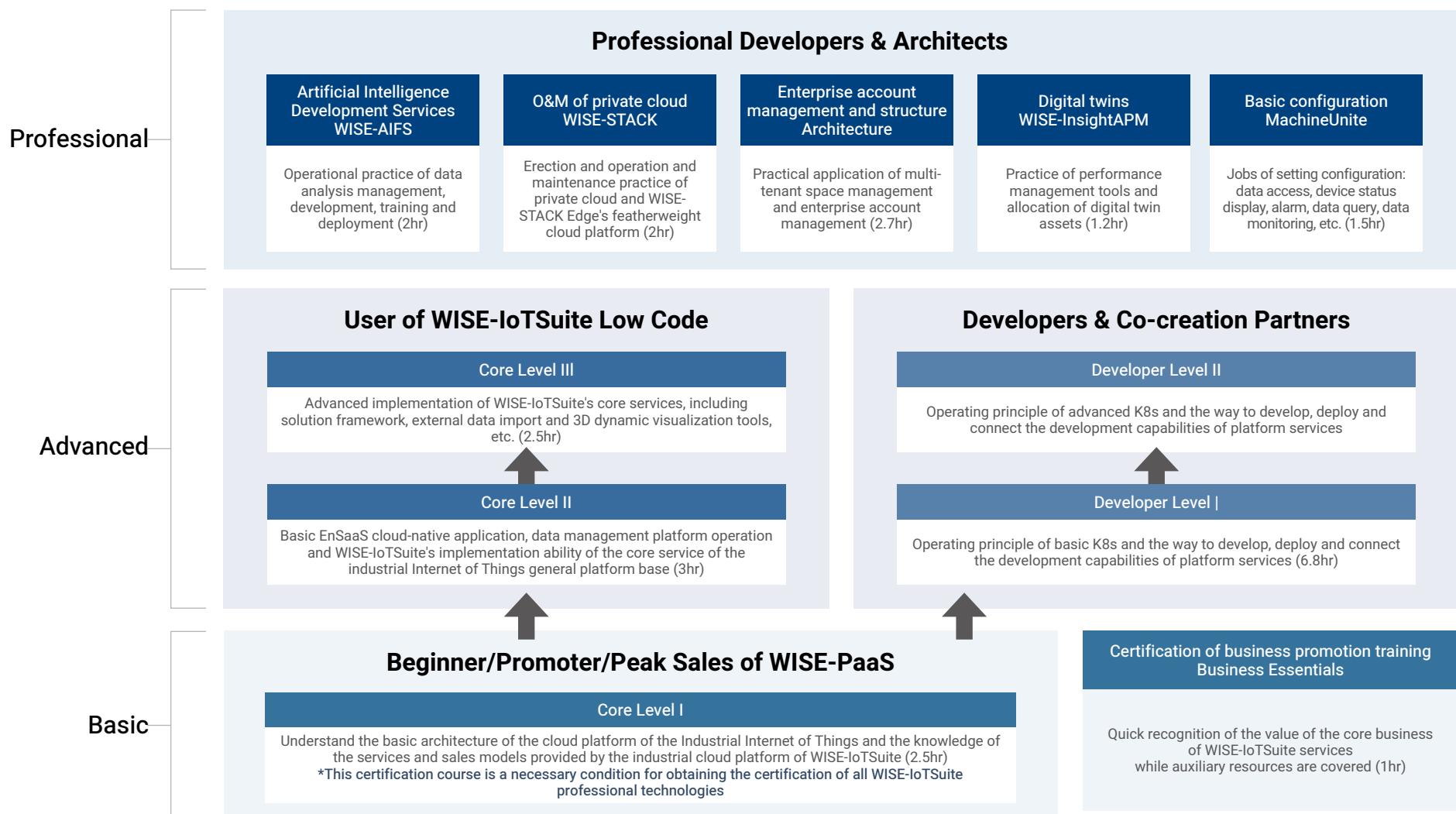
Advantech training and certification official website: <https://academy.advantech.com/>

As an online platform for global learners to develop cloud-related skills, Advantech provides free accounts, teaching, and user spaces to allow more learners to explore industrial cloud applications, including course consultation, technology transfer, co-teaching with industry teachers, and certification obtaining.

- From 2018 to 2023, we collaborated with more than 14 universities and universities of science and technology.
- From 2018 to 2023, 35 IoT internship courses were offered, covering a range of topics such as comprehensive smart manufacturing experiment courses, industrial APP development using WISE-IoTSuite, equipment and production line intelligent maintenance, industrial IoT, cloud data platforms, AI, and others. These courses combined theory with practical industry solutions and were taught by industry experts for 6 to 30 hours each.
- In 2021-2023, a total of more than 1000 technical certificates for WISE-IoT Suite were issued in campus collaboration.

Schools with which the program is offered	
Taiwan	National Taiwan University, Yang Ming Chiao Tung University (formerly Chiao Tung University), National Cheng Kung University, Tunghai University, Chang Gung University, National Taiwan University of Science and Technology, National Taipei University of Technology, Chang Gung University of Science and Technology, National Yunlin University of Science and Technology, National Formosa University, National Chin-Yi University of Technology, Lunghwa University of Science and Technology
China	Nanjing University of Science and Technology, Henan University of Technology, National Dong Hwa University, Beijing University of Technology
Creation of IoT and software engineering teaching materials	
Taiwan	National Taiwan University of Science and Technology, Tunghai University
China	Nanjing University of Science and Technology, Henan University of Technology

Learning Path of WISE-IoTSuite's Certification Courses



Case study | China_Nanjing University of Science and Technology to build industry-academia benchmark

In 2023, Advantech and Nanjing University of Science and Technology cooperated to establish an Industrial IoT training base, which entered the operational phase. The collaboration focused on areas such as digital twin systems, edge computing, industrial big data, industrial mechanism models, digital twin and industrial apps. They developed a deep and diverse industry-academia cooperation model including jointly designed courses, lecture materials, practical projects, and graduation designs. So far, 2 sets of lecture materials have been produced, and more than 100 students have covered the IoT popularization course. In the future, we will also develop the possibility of bilateral cooperation in more aspects.

6.3

Summary of Foundation Achievements

In 2023, the Advantech Culture and Education Foundation spent NT\$46,326,563 on cultivating IoT talents, NT\$16,168,423 on promoting arts and culture, NT\$11,871,885 on sustainable education, and NT\$31,065,044 on public welfare and common good initiatives. The focus items are listed below:

Main focus

IoT education and innovative talent cultivation

AIoT Innoworks Developer Program

2023 results

Invested more than NT\$11.74 million

- A total of 850 students from 34 schools in 7 countries participated, producing 224 themes



AIoT Academy higher education courses and certification

2023 results

- In 2021-2023, a total of more than 1000 technical certificates for WISE-IoT Suite were issued in campus collaboration
- From 2018 to 2023, 35 IoT internship courses were offered, covering a range of topics such as comprehensive smart manufacturing experiment courses, industrial APP development using WISE-IoTSuite, equipment and production line intelligent maintenance, industrial IoT, cloud data platforms, AI, and others. These courses combined theory with practical industry solutions and were taught by industry experts for 6 to 30 hours each
- Held 1 conference for industry-academia partners, with nearly 200 participants
- Held 2 campus lectures on the topic of IoT

Elite100 Internship

2023 results

Invested more than NT\$8.06 million

- Produced 30 thematic surveys and plans
- Recruited 59 interns in 2023; 21 students extended their internship after the summer vacation



Institute of Industry and Innovation/IoT Center, Yang Ming Chiao Tung University

2023 results

Invested over NT\$10 million

- A total of 7 innovative projects have been promoted, including the application of drone management, industrial energy saving, and campus map guide
- A total of 8 industry-academia projects have been implemented, covering IoT Security, Industrial AI Application, and Thermal Solution, with 62.5% of the projects promoting industrialization. Four industry-academia interns were recruited, and the industry-academia projects were integrated with the corporate scenario to deepen industry-academia integration
- Introduced Advantech's WISE-IoTSuite for digital campus management. In the first year, the integration, visualization, and analysis of school affairs, ESG indicators, and energy consumption data were completed to improve the efficiency of campus management



2024 goals | Estimated investment: NT\$47.24 million

• Innoworks

31 schools from 9 countries, 170 teams and 680 students participated

• AIoT Academy

1. Established 10 cooperative courses with universities with a total enrollment of 300 students
2. Up to 10 sets of professional courses of IoT are provided online

• Elite100 Internship

60 students joined the Elite100 Internship Program

• Institute of Industry and Innovation/IoT Center, Yang Ming Chiao Tung University

1. Supported the development of campus innovative IoT applications up to 3 times
2. Industry-academia co-creation R&D Topic, with a goal of 8 projects
3. 50% of the annual R&D results can be submitted for papers and intellectual property (IP)
4. Establish a new external technology co-creation cooperation topic (Extended TSU)

Main focus Industry-research collaboration, corporate sponsorship

IoT innovation and entrepreneurship accelerated incubation platform

2023 results

Invested more than NT\$3.8 million

- Sponsored 2 important startups in Taiwan and invited 30 international startups to engage in industry exchanges in Taiwan; also arranged for 15 international startups to have industry exchanges with Advantech
- Advantech has collaborated with entrepreneurs and industry players, including SYSTEK and Chunghwa Telecom, to launch the "AIoT Co-Learning and Co-Creation Project." This initiative selects 13 IoT solution startups from a variety of industries, including smart logistics, smart healthcare, smart manufacturing, and smart environmental protection. The project consists of three workshops on entrepreneurship, innovation, and the IoT industry. It connects large enterprises' resources and experiences to innovative startup solutions, facilitates exchanges on IoT innovation business opportunities and models, and has resulted in 8 corporate meetings and 3 substantive collaborations



2024 goals |

Estimated investment:
NT\$3.8 million

- IoT innovation and entrepreneurship accelerated incubation platform
- Established a new entrepreneur, co-learning and co-creation mechanism, and collaborated with the Taipei Entrepreneur Co-Creation Platform to support 12 industrial IoT startups in the business, product and business growth.
- Co-create 2 product development proposals with internal partners
- Generated 2 proposals for Advantech's new business incubation

Main focus

Innovation and Sustainable Education Program

ACT Dreamer

2023 results

Invested more than NT\$8.87 million

- Sponsored 33 elementary and junior high schools to implement the ACT Dreamer project and facilitated over 40 presentations in school
- We sponsored the PBL study group, and more than 30 professionals from the education sector visited the U.S. for a week
- Held 4 cross-school sharing sessions with over 400 teachers, students and parents participating
- Held a large-scale annual education conference, with more than 800 people participating in the morning and afternoon sessions
- Published three articles on the promotion of the implementation of sustainability through PBL on Education parenting family lifestyle, with over 75,000 page views

Main focus

Inheritance and development of traditional arts

"Taiwan's Peking Opera Successors - Youth Talent Cultivation Program" by the GuoGuang Opera Company

2023 results

Invested more than NT\$2.5 million

- A total of 380 performances and promotional activities have been held in 2023, with classic repertoires passed down from the teaching staff
- Cultivated 15 young talents (including actors, container managers, and technicians) to learn and pay it forward, and played the leading roles in a series of annual performances to demonstrate their skills, and act as important staff to assist in the performances



Talent Development Program of the National Taiwan College of Performing Arts

2023 results

Invested more than NT\$1.25 million

"Advantech ABLE Elite Award"

- A total of 12 people won the art scholarship
- Sponsor the performances of the Peking Opera troupe and aerobatic troupe

"Hua Ching Scholarship"

- The "Hua Ching Scholarship" has been established at the National Taiwan College of Performing Arts. Students actively strive for awards based on their academic performance, and through bursaries, we encourage traditional Chinese opera students to continue their studies in their professional fields
- A total of NT\$200,000 was awarded to select 6 top performing students



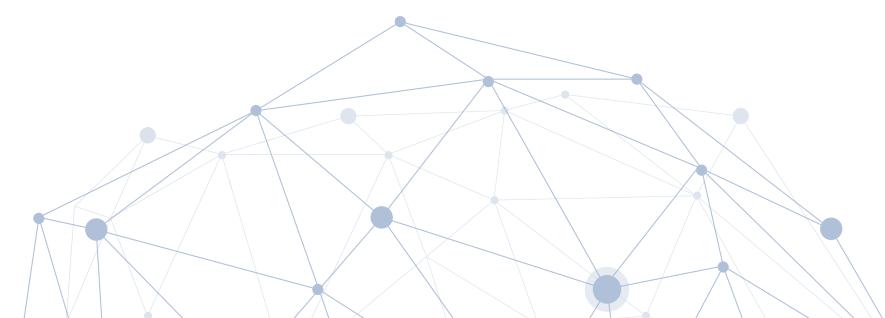
2024 goals

Continue to support the youth talent cultivation program with an estimated investment of NT\$3 million



2024 goals

We continue to support and encourage outstanding students with scholarships, and sponsor the Peking Opera troupe and aerobatic troupe, with an estimated budget of NT\$3 million to be invested



Main focus**Enhancement of aesthetic attainments (arts, sports)**

Support and encourage high-quality arts and cultural groups to perform performances, and promote aesthetics education for all

2023 results

Invested more than NT\$7.38 million

- Supported arts and cultural groups for over 130 performances
- Brought over 5,500 seats of audience into the theater for the performance
- Produced and broadcasted 30 episodes of podcasts, including 19 productions, 4 films, 2 books, and various large-scale cultural events, which were listened to by more than 30,233 people
- Sponsored the "Planting a Note Project"
- Sponsored the "Musical Theatre Talent Cultivation Program" of the Graduate School of Performing Arts, National Taiwan Normal University; facilitated cross-field collaboration with over 100 students
- Sponsored the FOCASA International Circus Festival and gathered 30 circus groups from 8 countries to perform in Taiwan. The event attracted more than 80,000 people to watch the various performances
- Two exhibitions held at Advantech's galleries, invited the famous puppeteer and photographer, Xu Pei-Hong, at Yanhua Art Gallery

Main focus**Cultivate athletes to become competitive in international competitions**

Support sports activities and train young athletes

2023 results

More than NT\$1.1 million has been invested

- The Company sponsored the 2023 Taipei Technology Run - Earth Public Welfare Road Run and the broadcast of the Football World Cup. Around 200 people attended the races and encouraged the Company's stakeholders to participate. We also collaborated with Olympic gold medalist Kuo Hsing-Chun to support the 6 promising young sports athletes recommended by Kuo Hsing-Chun

**Main focus****Social enterprise innovation and cultivation**

Sponsor the sustainable projects of innovative social enterprises.

2023 results

Invested more than NT\$4 million

- The Company sponsored and cooperated with the Junyi Academy to promote the "PBL Teaching Impact Promotion Program" and set up a special section to share PBL teaching resources, making them free for educators to use
- We sponsored Yingguang Education Association to promote the "ESD and PBL Model Schools and Teacher Training Program". In 2023, we assisted over 90 elementary, junior and senior high schools in over 570 school attendance sessions
- The Company sponsored the Pley School "Sustainable Education Annual Games", which was attended by 194 teachers and affected 5,813 students across Taiwan
- Sponsored the 2023 "DFC Challenge Sharing Season" of Taiwan's Childhood Creative Action Council (DFC). Support the DFC Taiwanese team of to participate in the 2023 DFC Children's Summit in India, sharing stories about children's creative challenges in Taiwan and engaging with children around the world

Main focus**Charity and care**

Advantech's Altruism Scholarship

2023 results

- In 2023, the original Hsinchu/Miaoli Rural Care Scholarship was renamed the "Altruism Scholarship" and will be awarded to disadvantaged students or students experiencing family changes. The goal is to inspire students to find the light in their lives in a variety of fields, to let their interests and talents guide them, and to change their lives for the better
- A total of NT\$2.1 million was awarded to 41 schools and over 1,000 students

**2024 goals**

Advantech plans to promote diverse arts and culture by sponsoring high-quality Taiwanese performances, promoting the podcast program "Easy Listening to Arts and Culture" to reach 40,000 listeners, organizing themed exhibitions, and collaborating with professional schools to cultivate creative talents and expand artistic horizons. Their goal is to engage 4,500 stakeholders in arts and culture activities and allocate over NT\$9 million for this purpose

2024 goals

- Continue to support the 5 promising young sports athletes recommended by Kuo Hsing-Chun, including judo, wrestling, track and field, baseball and hurdling
- Invested NT\$2.5 million

2024 goals

It is expected to invest NT\$4 million to continuously support educational organizations in investing in sustainable education to deepen Advantech's ESG strategic cooperation

2024 goals

In 2024, the scope of influence expanded from the Hsinchu and Miaoli areas to the Nantou area, and the total number of schools also increased from 42 to 80. By continuing to encourage students' diversified development, we let our interests become the key and open the door to turn our lives

Appendix 1: Financial Supervisory Commission (Taiwan, ROC)'s Request for Sustainability Disclosure for Certain Industries (Sector: Computer and Peripheral Equipment Industry) and SASB (Sector: Hardware)

Aspect	Code	Accounting Metric	Category	Unit of Measure	Disclosure chapter	page number
Environmental	Financial Supervisory Commission (Taiwan, ROC)'s Request for Specific Industries to Disclose Sustainability Indicator No. 1	Total energy consumption, percentage of purchased electricity, and utilization rate of renewable energy	Quantitative	Gigajoule (GJ), percentage (%)	Chapter 4 GHG Inventory and Energy Resource Management	130
Environmental	Financial Supervisory Commission (Taiwan, ROC)'s Request for Specific Industries to Disclose Sustainability Indicator No. 2	Total water intake and consumption	Quantitative	Thousand cubic meters (m³)	Chapter 4 GHG Inventory and Energy Resource Management	139-140
Environmental	Financial Supervisory Commission (Taiwan, ROC)'s Request for Specific Industries to Disclose Sustainability Indicator No. 3	Weight of hazardous waste generated and percentage recycled	Quantitative	Metric ton (t), percentage (%)	Chapter 4 GHG Inventory and Energy Resource Management	140, 142
Environmental	TC-HW-410a.4 Financial Supervisory Commission (Taiwan, ROC)'s Request for Specific Industries to Disclose Sustainability Indicator No. 5	Weight of end-of-life products and e-waste recovered, percentage recycled	Quantitative	Metric ton (t), percentage (%)	Chapter 4 Eco Design and Sustainability Liability of Product	111
Environmental	TC-HW-410a.1	Product Lifecycle Management Percentage of products by revenue that contain IEC 62474 declarable substances.	Quantitative	Percentage (%)	Chapter 4 Eco Design and Sustainability Liability of Product	109
Environmental	TC-HW-410a.2	Product Lifecycle Management Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	Quantitative	Percentage (%)	Chapter 4 Eco Design and Sustainability Liability of Product	112
Environmental	TC-HW-410a.3	Product Lifecycle Management Percentage of eligible products, by revenue, meeting ENERGY STAR® criteria	Quantitative	Percentage (%)	Chapter 4 Eco Design and Sustainability Liability of Product	112
Social	Financial Supervisory Commission (Taiwan, ROC)'s Request for Specific Industries to Disclose Sustainability Indicator No. 4	Describe the type of occupational disaster, the number of people involved, and the rate	Quantitative	Rate (%), quantity	Chapter 5 Occupational Health and Safety	195-196
Social	C-HW-330a.1	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	Quantitative	Percentage (%)	Chapter 5 Diversity, Equality and Inclusive Workplace	177-180, 253-255

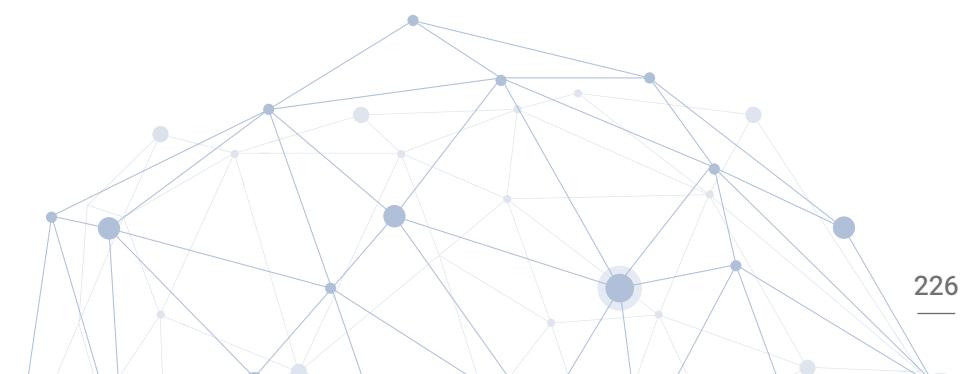
Aspect	Code	Accounting Metric	Category	Unit of Measure	Disclosure chapter	page number
Governance	TC-HW-440a.1 Financial Supervisory Commission (Taiwan, ROC)'s Request for Specific Industries to Disclose Sustainability Indicator No. 6	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	Not applicable	Chapter 2 Conflict Minerals Procurement Strategy	62
Governance	Financial Supervisory Commission (Taiwan, ROC)'s Request for Specific Industries to Disclose Sustainability Indicator No. 7	Total amount of pecuniary losses as a result of legal proceedings related to the anti-competitive behavior-related laws	Quantitative	Currency	Chapter 2 Integrity Management: Compliance with Laws, Anti-Corruption, and Anti-Competitive	37
Governance	TC-HW-000.A Financial Supervisory Commission (Taiwan, ROC)'s Request for Specific Industries to Disclose Sustainability Indicator No. 7	Number of units produced by product category	Quantitative	Number	Chapter 2 Economic Performance and Brand Value	30
Governance	TC-HW-230a.1	Product security Description of approach to identifying and addressing data security risks in products	Qualitative	Not applicable	Chapter 2 Information and Cyber Security Management	46
Governance	TC-HW-430a.1	Supply Chain Management Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances	Quantitative	Percentage (%)	Chapter 2 Sustainable Management of the Supply Chain	58
Governance	TC-HW-430a.2	Supply Chain Management Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances	Quantitative	Rate	Chapter 2 Sustainable Management of the Supply Chain	58

Aspect	Code	Accounting Metric	Category	Unit of Measure	Disclosure chapter	page number
Activity Metric	TC-HW-000.B	Area of manufacturing facilities	Quantitative	Square feet (ft ²)	Chapter 2 Economic Performance and Brand Value	30
Activity Metric	TC-HW-000.C	Percentage of production from owned facilities	Quantitative	Percentage (%)	Chapter 2 Economic Performance and Brand Value	30

Appendix 2: GRI and Assurance Indicators Index

Statement of use	Advantech Co., Ltd. has reported its sustainability report with reference to the GRI standards and reported the information quoted in the GRI content index for the period from January 1, 2023 to December 31, 2023.
GRI used	GRI Standards 2021 reference option

Organization and practice reports			
GRI standards code	Disclosure item	Disclosure chapter	Page number
2-1	Organization details	2.1.1 Company Profile	28
2-2	Entities included in the organization's sustainability reporting	Regarding Advantech's 2023 sustainability report	2
2-3	Reporting period, frequency, and contact point	Regarding Advantech's 2023 sustainability report	2
2-5	External assurance	Appendix: Third Party Verification Statement Appendix: Third Party Assurance Report	256-259



Events and workers			
GRI standards code	Disclosure item	Disclosure chapter	Page number
2-6	Events, value chains, and other business relationships	2.1.1. Company Profile	28
		2.3.1 Overview of Advantech's Industrial Value Chain	30
2-7	Employee	5.1.1 Talent Attraction and Retention	149-157
		5.1.2 Employee Development Plan	157-163
		5.2.1 Employee Relations	164-171
		5.2.2 Employee Living Wage	172-173
		5.3 Diversity, Equality and Inclusive Workplace	174-183
		5.4 Human Rights Protection	184-191
		5.5 Occupational Health and Safety (OHS)	192-200
		Appendix 8: Employee Structure	253-255
Governance			
GRI standards code	Disclosure item	Disclosure chapter	Page number
2-9	Governance structure and composition	2.1.2. Corporate Governance	32
2-10	Nomination and selection of the highest governance body	2.1.2. Corporate Governance	32
2-11	Chair of the highest governance body	2.1.2. Corporate Governance	32
2-12	Role of the highest governance body in overseeing impact management	2.1.2. Corporate Governance	32
2-14	Role of the highest governance body in sustainability reporting	1.1.1 ESG Governance Structure	8
2-15	Conflicts of interest	2.1.2. Corporate Governance	32
2-17	Collective knowledge of the highest governance body	2.1.2. Corporate Governance	32

2-18	Evaluation of the performance of the highest governance body	2.1.2. Corporate Governance	34
2-19	Remuneration policies	2.1.2. Corporate Governance	35
2-20	Process to determine remuneration	2.1.2. Corporate Governance	35
2-21	Annual total compensation ratio	2.1.2. Corporate Governance	35

Strategies, policies and practices

GRI standards code	Disclosure item	Disclosure chapter	Page number
2-22	Statement on sustainable development strategy	1.1 ESG Governance Structure	8
		Message from the Executive Management	5
2-23	Policy commitments	1.1 ESG Governance Structure	8
		5.4 Human Rights Protection	184
2-24	Embedding policy commitments	1.1 ESG Governance Structure	8
		5.4 Human Rights Protection	184-191
2-26	Mechanisms for seeking advice and raising concerns	2.4 Risk Foresight and Crisis Management	63
		5.4 Human Rights Protection	184-185
2-27	Compliance with laws and regulations	2.1.2. Corporate Governance	37
2-28	Membership associations	Appendix 5: List of Public Associations Participated and Description of Investing In Resources	241

Stakeholder engagement

GRI standards code	Disclosure item	Disclosure chapter	Page number
2-29	Approach to stakeholder engagement	1.2 Stakeholder Engagement	11
2-30	Collective bargaining agreements	5.4 Human Rights Protection	184-185

GRI 3 materiality 2021

GRI standards code	Disclosure item	Disclosure chapter	Page number
3-1	Process to determine material topics	1.3.1 Identification of Material Topics	16
3-2	List of material topics	1.3.1 Identification of Material Topics	22

Materiality: information and cyber security management			
3-3	Management of material topics	2.2 Information and Cyber Security Management	41
Materiality: sustainable management of the supply chain			
3-3	Management of material topics	2.3 Sustainable Management of the Supply Chain	48
204-1	Proportion of spending on local suppliers	2.3.1 Supplier Management	52
308-1	New suppliers that were screened using environmental criteria	2.3.3 Sustainable Supply Chain Assessment and Management	57-59
Materiality: risk foresight and crisis management			
3-3	Management of material topics	2.4 Risk Foresight and Crisis Management	63
Materiality: sustainable intelligent solutions			
3-3	Management of material topics	3.1 Sustainable Intelligent Solutions	69
Materiality: customers and partners co-creation			
3-3	Management of material topics	3.4 Customers and Partners Co-Creation	86-89
Materiality: eco design and sustainability liability of product			
3-3	Management of material topics	4.1 Green Eco Design and Sustainability Liability of Product	100
Materiality management: climate change strategy and management			
3-3	Management of material topics	4.2 Climate Change Strategy and Management	114-115
201-2	Financial implications and other risks and opportunities due to climate change	4.2.2 Climate-Related Risks and Opportunities and Identification of Financial Impacts	121
		Appendix 4: Explanatory Report on TCFD Financial Quantification	236
302-4	Reduction of energy consumption	4.3.2 Energy Management Actions	131-135
Management of materiality: cultivation and development of industrial talents			
3-3	Management of material topics	5.1. Cultivation and Development of Industrial Talents	147-148
401-1	New employee hires and employee turnover	5.1.1 Talent Attraction and Retention	149-157
404-1	Average hours of training per year per employee	5.1.2 Employee Development Plan	157-163
405-2	Ratio of basic salary and remuneration of women to men	5.1.1 Talent Attraction and Retention	149-157

Management of materiality: diversity, equality and inclusive workplace			
3-3	Materiality management	5.3. Diversity, Equality and Inclusive Workplace	174-175
404-3	Percentage of employees receiving regular performance and career development reviews	5.3 Diversity, Equality and Inclusive Workplace	180-181
405-1	Diversity of governance bodies and employees	2.1.2 Corporate Governance	32
		5.3 Diversity, Equality and Inclusive Workplace	176-180
		Appendix 8: Employee Structure	253-255
Management of materiality: IoT application promotion and education			
3-3	Materiality management	6.1. Neighborhood and Community Care	214-215

Voluntary Disclosure: Social Aspect

GRI standards code	Disclosure item	Disclosure chapter	Page number
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	5.2 Employee Communication and Benefits	166-173
401-3	Parental leave	5.2.1 Employee Relations	167-168
403-1	Occupational health and safety management system	5.5 Occupational Health and Safety (OHS)	192
403-2	Hazard identification, risk assessment, and incident investigation	5.5 Occupational Health and Safety (OHS)	194
403-3	Occupational health service	5.5 Occupational Health and Safety (OHS)	200
403-4	Worker participation, consultation, and communication on occupational health and safety	5.5 Occupational Health and Safety (OHS)	192-200
403-5	Worker training on occupational health and safety	5.5 Occupational Health and Safety (OHS)	192, 197-198
403-6	Promotion of worker health	5.5 Occupational Health and Safety (OHS)	197-199
403-7	Prevention and mitigation of occupational health and safety impacts directly linked to business relationships	5.5 Occupational Health And safety (OHS)	192-197
403-9	Work-related injuries	5.5 Occupational Health and Safety (OHS)	195-196
403-10	Work-related ill health	5.5 Occupational Health and Safety (OHS)	194-195
406-1	Incidents of discrimination and corrective actions taken	5.4 Human Rights Protection	186-187, 190-191

GRI standards code	Disclosure item	Disclosure chapter	Page number
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	5.4 Human Rights Protection	184-185
408-1	Operations and suppliers at significant risk for incidents of child labor	5.4 Human Rights Protection	191
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	5.4 Human Rights Protection	191
412-2	Employee training on human rights policies or procedures	5.4 Human Rights Protection	184, 190
412-3	Significant investment agreements and contracts that contain human rights clauses or that have undergone human rights screening	5.4 Human Rights Protection	191

Voluntary Disclosure: Environmental Aspect

GRI standards code	Disclosure item	Disclosure chapter	Page number
302-1	Energy consumption within the organization	4.3.1 GHG Inventory and Management	126-130
302-2	Energy consumption outside the organization	4.3.1 GHG Inventory and Management	126-130
303-3	Water withdrawal	4.4.2 Energy Resource Use and Waste Management	140
305-1	Direct (Scope 1) GHG emissions	4.3.1 GHG Inventory and Management	127
305-2	Energy indirect (Scope 2) GHG emissions	4.3.1 GHG Inventory and Management	127
305-3	Other indirect (Scope 3) GHG emissions	4.3.1 GHG Inventory and Management	129
305-4	GHG emission intensity	4.3.1 GHG Inventory and Management	128
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.3.1 GHG Inventory and Management	142
306-3	Waste generated	4.4.2 Energy Resource Use and Waste Management	140
306-5	Waste directed to disposal	4.4.2 Energy Resource Use and Waste Management	142
307-1	Non-compliance with environmental laws and regulations	4.4.1 Environmental Responsibility	136

Assurance Indicator Index

Assurance Item	Disclosure chapter	Page number
Average training hours per employee	5.1.2 Employee Development Plan	160-162
Types of occupational hazards, number of people involved, and percentage	5.5. Occupational Health and Safety (OHS)	195-196
Total amount of pecuniary losses as a result of legal proceedings related to the anti-competitive behavior-related laws	2.1.2. Corporate Governance	38
Percentage of significant suppliers who have signed the "Supplier Code of Conduct Consent"	2.3.1 Supplier Management	50
Amount of fines imposed for violation of environmental laws and regulations	4.4.1 Environmental Responsibility	136
Total waste disposal outsourcing (metric tons)	4.4.2 Energy Resource Use and Waste Management	139-143

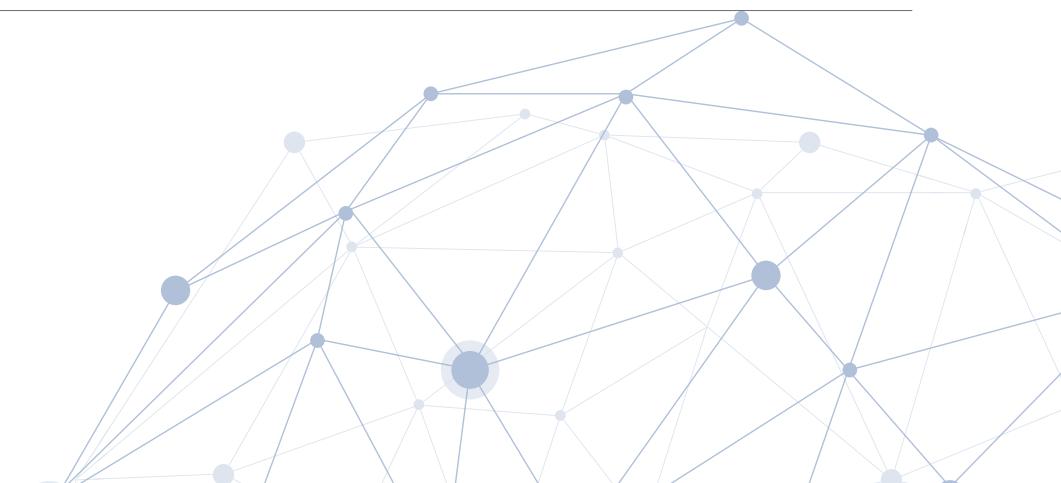
Appendix 3: Basic Information of Affiliates

Country/region	Company name	Principal operating activities
Taiwan	Advantech Co., Ltd.	Manufacturing, processing, and trading of embedded boards, industrial control products, application computers, industrial computers, and IoT hardware and software equipment
	Advantech Intelligent Healthcare Co., Ltd. (AIH)	Information software and data processing services
	Advantech Investment Co., Ltd. (Advantech Investment)	Investment in marketable securities
	Cermate Technologies Inc. (Cermate Taiwan)	Electronic parts manufacturing and computer peripheral equipment manufacturers
	Advantech Intelligent City Services Co., Ltd. (Advantech iCity Services)	Design, R&D, and sale of smart service solutions
	LNC Technology Co., Ltd. (LNC)	Manufacture and trading of controllers
	LNC Mac Technology Corp. (LNC Mac)	System integration and application, smart system furniture design, production, and sales
	Advanixs Corporation (ADVANIXS)	Manufacturing, marketing, and sale of industrial computers
	Huan Yan Water Solution Co., Ltd. (Huan Yan Water Solution)	AIoT application and operation and maintenance management service solution for sewage and wastewater treatment
	Yan Xu Green Electricity Co., Ltd. (Yan Xu Green Electricity)	Renewable energy power plant development

Country/region	Company name	Principal operating activities
China	Beijing Yan Hua Xing Ye Electronic Science & Technology Co., Ltd. (ACN)	Marketing and sale of industrial computers
	Advantech Shanghai Huisheng Intelligent Technology Co., Ltd. (ACI CN)	Manufacturing, marketing, and sale of industrial computers
	Shanghai Yanle Co., Ltd. (AYL)	Smart retail applications and services
	Xi'an Advantech Software Ltd. (AXA)	Software technology development, software product production
	Advantech ServiceloT (Shanghai) Co., Ltd. (SloT (China))	Technology development, consulting, and services in the field of smart technology
	Advantech Technology (China) Company Ltd. (AKMC)	Manufacture and sale of casings, plastic casings, and accessories for interface cards and peripherals
	Shanghai Cermate Technologies Inc. (Cermate Shanghai)	Industrial networked electronic equipment
	Shenzhen Cermate Technologies Inc. (Cermate Shenzhen)	Production of LCD touchscreens, USB cables and industrial computers
	LNC Dong Guan Co., Ltd (LNC Dong Guan)	Manufacture and trading of controllers
	LNC Mac DONG GUAN Technology Co Ltd. (LNC Mac DONG GUAN)	System integration application
Japan	Advantech Japan Co., Ltd. (AJP)	Marketing and sale of industrial computers
	Advantech KR Co., Ltd. (AKR)	Marketing and sale of industrial computers
Europe	Advantech Czech s.r.o. (ACZ)	Automatic control manufacturing
	Advantech Technology Limited (AIE)	Industrial network communication
	Advantech Europe Holding B.V. (AEUH)	Overseas investment in manufacturing and service sectors
	Advantech Europe B.V. (AEU)	Assembly, marketing, and sale of industrial computers
	Advantech Poland Sp z o.o. (APL)	Assembly, marketing, and sale of industrial computers
	Advantech Europe B.V. – Netherlands PE (ADL)	Provide marketing support services
	Advantech Europe B.V. – Netherlands PE (AES)	Provide marketing support services

Country/region	Company name	Principal operating activities
Europe	Advantech Europe B.V. – Netherlands PE (AFR)	Provide marketing support services
	Advantech Europe B.V. – Netherlands PE (AIT)	Provide marketing support services
	Advantech Europe B.V. – Netherlands PE (ANR)	Provide marketing support services
	Advantech Europe B.V. – Netherlands PE (AUK)	Provide marketing support services
United States	Advantech Corp. (ANA)	Assembly, marketing, and sale of industrial computers
	BitFlow, Inc. (ABO)	Core technology for high-speed image capture in the fields of advanced imaging and AI machine vision technology
Other	Advantech Co., Singapore Pte, Ltd. (ASG)	Marketing and sale of industrial computers
	Advantech Corporation (Thailand) Co., Ltd. (ATH)	Marketing and sale of industrial computers
	Advantech International, PT. (AID)	Marketing and sale of industrial computers
	Advantech Co., Malaysia Sdn. Bhd (AMY)	Marketing and sale of industrial computers
	Advantech Industrial Computing India Private Limited (AIN)	Marketing and sale of industrial computers
	Advantech Raiser India Private Limited (ARI)	Marketing and sale of industrial computers
	Advantech Australia Pty Ltd. (AAU)	Marketing and sale of industrial computers
	Advantech Vietnam Technology Company Limited (AVN)	Marketing and sale of industrial computers
	Advantech Automation Corp. (HK) [AAC (HK)]	Overseas investment in manufacturing and service sectors
	HK Advantech Technology Co., Ltd. (ATC HK)	Overseas investment in manufacturing and service sectors
	Cermate Software Inc. (CSI)	Software development
	Advantech Brazil Ltd (ABR)	Marketing and sale of industrial computers

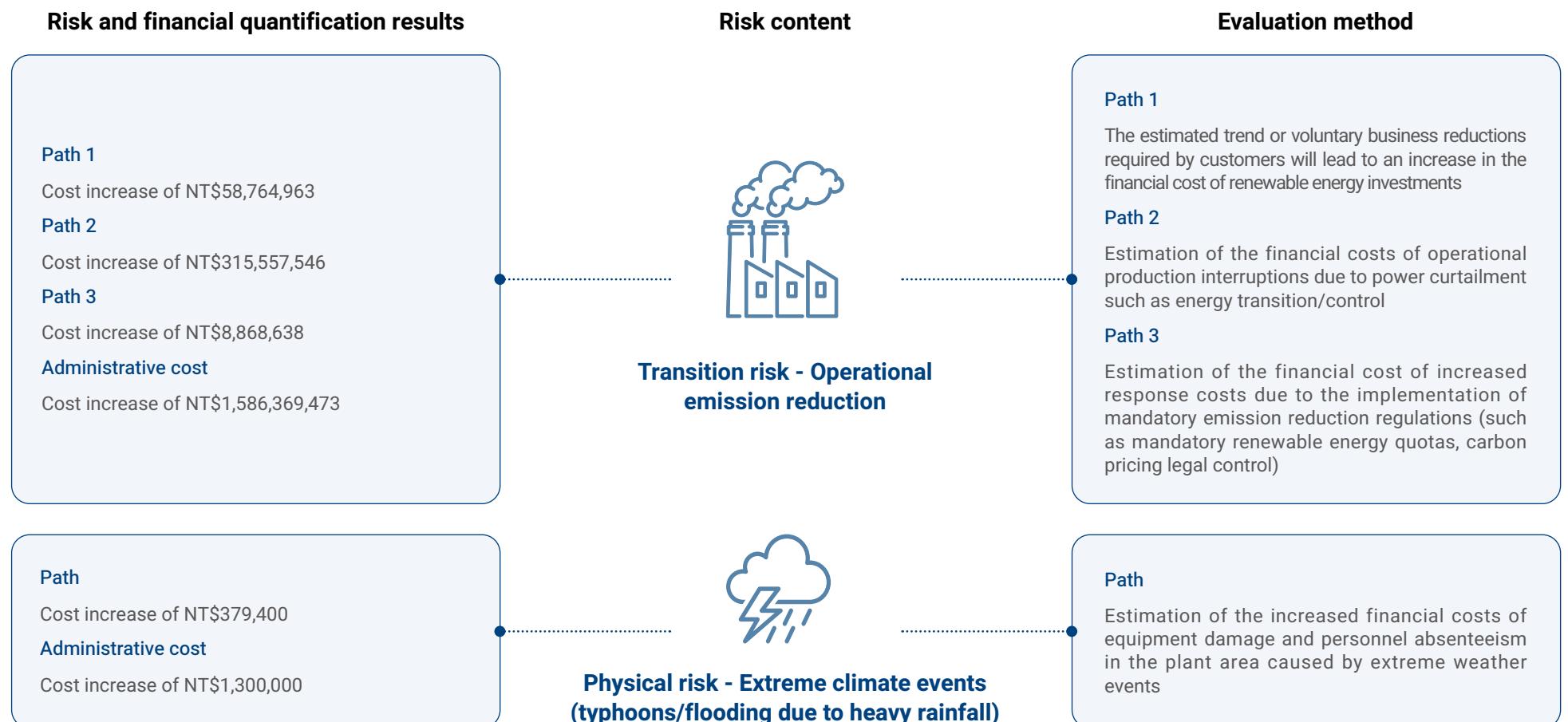
Country/region	Company name	Principal operating activities
Other	Advantech Electronics, S.A.P.I. de C.V. (AMX)	Marketing and sale of industrial computers
	Advantech Technology DMCC (ADB)	Industrial network communication
	Advantech Turkey Teknoloji A.S. (ATR)	Wholesale of computer and peripheral equipment
	ADVANTECH IOT ISRAEL LTD. (AIL)	Industrial network communication
	Advantech Technology Limited Liability Company (ARU)	Marketing and sale of industrial computers
	Advantech Automation Corp. (BVI) [AAC (BVI)]	Overseas investment in manufacturing and service sectors
	Advantech Technology Co., Ltd. (ATC)	Overseas investment in manufacturing and service sectors
	Better Auto Holdings Limited (Better Auto)	Holding company
	Famous Now Limited (Famous Now)	Holding company
	Landmark Co., Ltd. (Landmark)	Investment company
	BEST PLC LTD. (BEST PLC)	Holding company
	BEST SERVO LTD. (BEST SERVO)	Holding company
	Advantech Corporate Investment Ltd. (ACI KY)	Design, R&D, and sales of smart IoT system services
	BEST MACHINE LTD. (BEST MACHINE)	Holding company
	BEST AUTOMATION LTD. (BEST AUTOMATION)	Holding company



Appendix 4: Explanatory Report on TCFD Financial Quantification

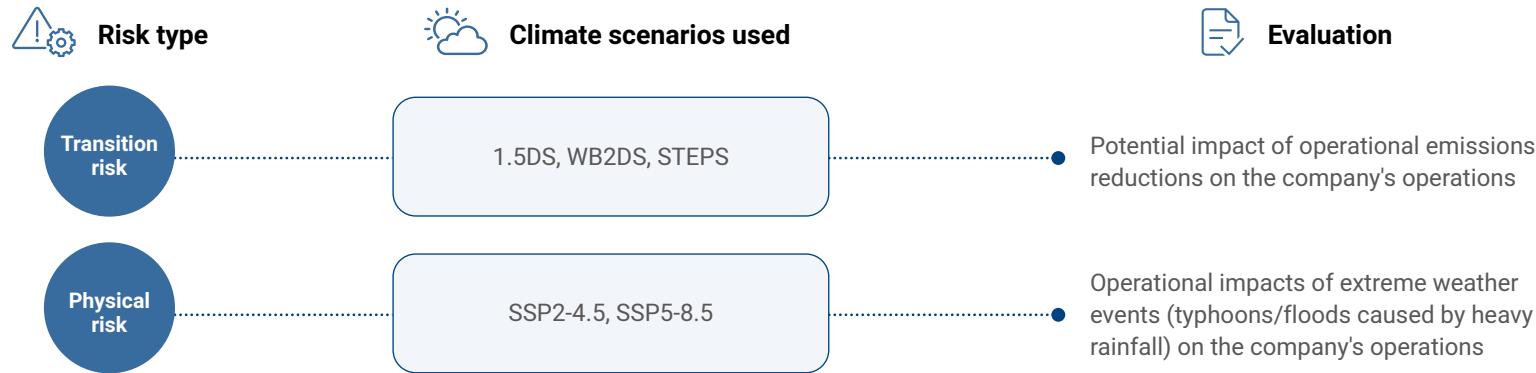
▲ Climate Change Risk and Financial Impact Quantification

Based on the identification of climate risks, Advantech has invited consultants to collaborate on two types of risk issues: "Transition Risk - Operational Emission Reduction" and "Physical Risk - Extreme Weather Events (such as typhoons/heavy rainfall causing flooding)." Considering internal and external environmental changes, and referring to methodologies disclosed by domestic and foreign enterprises, Advantech conducts financial quantitative impact assessment.



Scenario Resilience Analysis

In accordance with the recommended TCFD guidelines, Advantech analyzed and evaluated the impact of different risk scenarios on corporate operations by using various scenarios of transition and physical risk types, and incorporated the analysis results into the strategic resilience assessment.

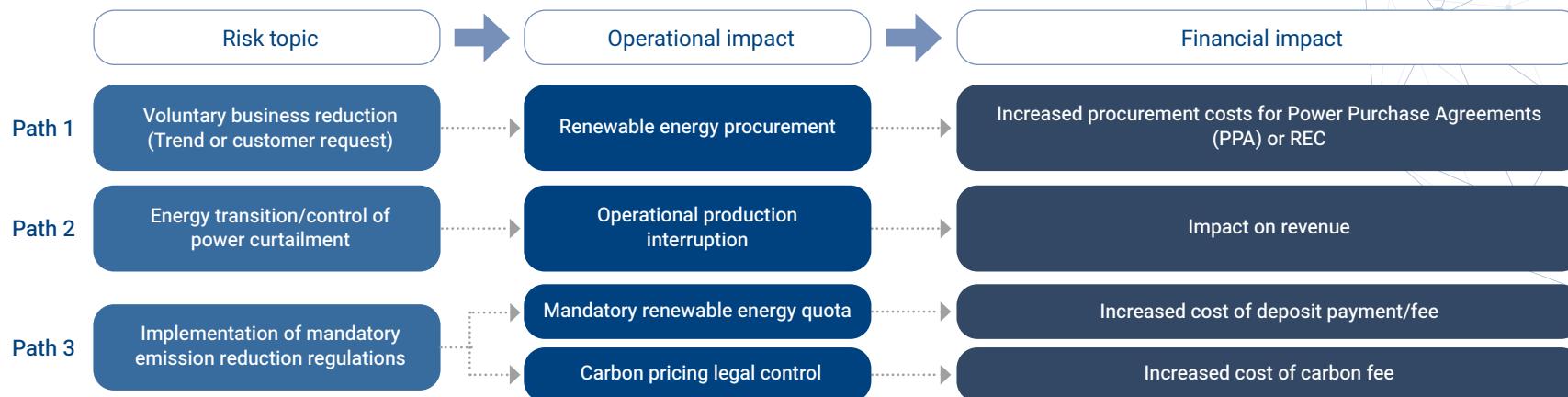


*Note:

- 1.5DS and WB2DS represent the proactive reduction scenario, where net-zero emissions are achieved around 2050 and 2060, respectively, representing a temperature rise of 1.5°C and 1.7°C, respectively.
- STEPS (Stated Policies Scenario) represents countries in which current emission control policies have achieved net-zero emissions between 2070 and 2080, which represents a temperature rise of 2.7°C.
- In the SSP2-4.5 scenario, radiative forcing is projected to reach approximately 4.5 watts per square meter by the end of the century. This represents a middle-of-the-road scenario where countries aim to achieve greenhouse gas reduction targets based on existing policies. It is estimated that global average temperatures will rise by approximately 2.7°C.
- In the SSP5-8.5 scenario, radiative forcing continues to increase to greater than 8.5 watts per square meter, indicating a high forcing pathway. This scenario represents a situation where countries worldwide take no mitigation actions, resulting in an estimated temperature increase of approximately 4.4°C.

Transition Risk - Impact Identification and Potential Financial Impact

We used three scenarios to analyze the impact of operational emission reductions on future operations.





Path 1: Voluntary business reduction

Year of assessment 2030

Key assumptions

The overall assessment considers the financial impact of carbon reduction through the purchase of all renewable energy sources, regardless of the cost of purchasing carbon credits

Use scenario International Energy Agency (IEA) WB2DS, 1.5DS carbon reduction path

Scenario 1

WB2DS (SBT Voluntary reduction scenario)

Results of impact analysis

NT\$57,706,595 for an increase in the purchase cost of renewable energy transition (PPA) and I-REC

Scenario 2

1.5DS (Net Zero scenario)

Results of impact analysis

NT\$58,764,963 for an increase in the purchase cost of renewable energy transition (PPA) and I-REC



Path 2: Energy transition/control of power blackouts

Year of assessment 2021/per year

Key assumptions

China's power curtailment policy caused the interruption of water supply and power supply, as well as the equipment damage and UPS maintenance increased costs, also disruptions in operations and production, resulting in reduced revenue

Use scenario

Control implementation scenario (referring to historical scenarios)

Results of impact analysis

NT\$315,557,546 in costs increased due to the interruption of operational production



Path 3: Enforcement of mandatory emission reduction regulations

Year of assessment 2025-2030/per year

Key assumptions

Advantech Taiwan may be subject to the government's regulations, including tightening terms for large electricity users, setting a certain percentage of renewable energy, and amendments to the climate change interaction act, resulting in an increase in operating costs

Use scenario

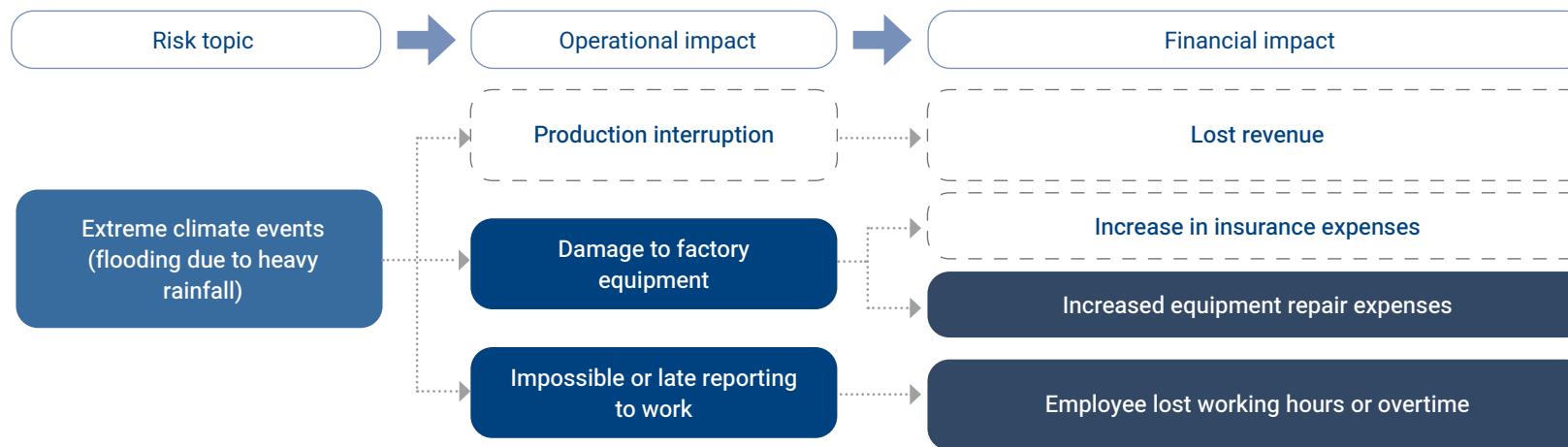
STEPS Existing policy implementation scenario

Results of impact analysis

NT\$8,868,638 of operating cost increased due to renewable energy deposit payment and carbon fee

Physical risk - impact identification and potential financial impact

We used two scenarios to analyze the impact of extreme climate events on future operations.



*Judgment and discussion based on historical occurrence

 <p>Path: Extreme climate events</p> <p>Year of assessment Until the middle of the century (2050)/occurs every 5 or 10 years</p>	<p>Key assumptions The overall assessment considers the financial impact of operational disruptions caused by extreme weather events (such as flooding due to heavy rainfall), without considering the impact of other physical risks (such as temperature rise, drought)</p>	<p>Use scenario Scenarios SSP5-8.5 and SSP2-4.5 of the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP)</p> <table border="1"> <tbody> <tr> <td>Scenario 1 SSP5-8.5 (high-compulsion-pathing scenario)</td><td>Results of impact analysis NT\$379,400 in operating costs due to damaged equipment and absent or delayed attendance of personnel in the factory</td></tr> <tr> <td>Scenario 2 SSP2-4.5 (Medium path scenario)</td><td>Results of impact analysis NT\$189,700 in operating costs due to damaged equipment and absent or delayed attendance of personnel in the factory</td></tr> </tbody> </table>	Scenario 1 SSP5-8.5 (high-compulsion-pathing scenario)	Results of impact analysis NT\$379,400 in operating costs due to damaged equipment and absent or delayed attendance of personnel in the factory	Scenario 2 SSP2-4.5 (Medium path scenario)	Results of impact analysis NT\$189,700 in operating costs due to damaged equipment and absent or delayed attendance of personnel in the factory
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Scenario 2 SSP2-4.5 (Medium path scenario)	Results of impact analysis NT\$189,700 in operating costs due to damaged equipment and absent or delayed attendance of personnel in the factory					

Advantech - Future change rate of heavy rainfall days in Taiwan

- Heavy rainy day: Cumulative rainfall in a single day > 200mm
- Scenario: The Taiwan Climate Change Projection and Information Platform Project (TCCIP) SSP2-4.5, SSP5-8.5

Advantech locations of operation	County/City	Scenario	Base period	Short-term	Medium-term	Long-term
				2021-2040	2041-2060	2081-2100
Ruiguang Headquarters	Taipei City	SSP2-4.5	1.0	+0.1	+0.2	+0.2
Yangguang Building		SSP2-8.5		+0.1	+0.3	+0.6
Donghu Factory	New Taipei City	SSP2-4.5	0.9	+0.2	+0.2	+0.3
		SSP2-8.5		+0.1	+0.3	+0.6
Linkou Industrial Park	Taoyuan City	SSP2-4.5	0.6	+0.1	+0.2	+0.2
				+0.1	+0.2	+0.5

Advantech - Evaluation of future extreme rainfall scenarios in Taiwan

- The rainfall standards for the design of urban rainfall drainage systems:
Current stage: a 5-year return period
Future medium-term goal: a 10-year return period
- Scenario: The Taiwan Climate Change Projection and Information Platform Project (TCCIP) SSP2-4.5, SSP5-8.5

Advantech operating locations	Longitude and latitude	Base period (1976-2005)	Design rainfall change rate	
			Mid century period (2046~2065)	
			SSP2-4.5	SSP5-8.5
Rui-Guang Headquarters	121.583, 25.070	5-year return period 50th percentile	18%	16%
Yang-Guang Building	121.578, 25.073		18%	16%
Donghu Plant	121.623, 25.067		13%	17%
Linkou Industrial Park	121.382, 25.059		19%	14%

Advantech operating locations	Longitude and latitude	Base period (1976-2005)	Design rainfall change rate	
			Mid century period (2046~2065)	
			SSP2-4.5	SSP5-8.5
Rui-Guang Headquarter	121.583, 25.070	10-year return period 50th percentile	23%	20%
Yang-Guang Building	121.578, 25.073		23%	20%
Donghu Plant	121.623, 25.067		17%	16%
Linkou Industrial Park	121.382, 25.059		20%	17%

Appendix 5: List of Public Associations Participated and Description of Investing in Resources

▲ List of Public Associations Participated and Description of Investing in Resources

Significance and importance of association participation

Advantech actively promotes the implementation of various industrial IoT solutions such as smart factory, smart manufacturing, smart healthcare, smart transportation, smart logistics and retail, and intelligent energy management system by participating in governmental and private associations and organizations in Taiwan and abroad. In addition, the company also participates in various IoT technology certification organizations around the world to ensure that the most cutting-edge and advanced IoT technology can be introduced and promoted to the public. Under Advantech's vision as the creator of a smart planet, we have remained true to our core values, persevering in building a complete industrial ecological chain with partners from various industries and creating various solutions for IoT software and hardware.

Performance overview

Participated in more than 40 governmental and private associations and organizations around the world. From different aspects such as industry promotion, deep cultivation of technology, green sustainability, etc., the company participated and invested more than NTD 3 million in actual expenses, and mobilized hundreds of colleagues around the world to participate.



Project highlight 1

Advancing new industrialization through high-quality integration of digital and real, and empowerment with digital intelligence

In 2023, the Alliance of Industrial Internet vigorously promoted the large-scale application of industrial internet under the theme of "Integration of Digital and Real, Empowering with Intelligence - Advancing New Industrialization with High Quality." This initiative aims to facilitate the digital transformation of industries and accelerate the development of new industrialization in Taiwan. Based on Advantech's Industrial IoT cloud platform, Advantech collaborated with the Alliance of Industrial Internet to showcase solutions covering multiple industries and domains including smart factories, metal processing and intelligent machinery, electronics manufacturing, smart cities, energy, and environment. This collaboration aims to accelerate the transformation and upgrade of industries towards digitalization. General Manager of Advantech China, Paul Luo, and the General Manager of IoT business group of Advantech China, Allan Tsay, both personally attended the event. They addressed tens of thousands of industry experts and managers in the audience, explaining how digitalization technologies can be utilized to promote the green and low-carbon transformation of industries, industrial parks, and cities.

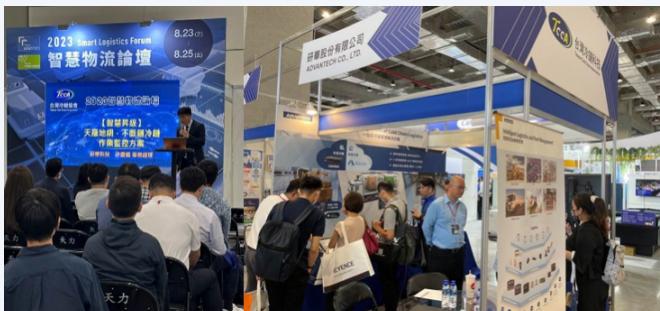




Project highlight 2

Collaborating with Taiwan Cold Chain Association to promote logistics and cold chain intelligence

Advantech and the Cold Chain Association have long been committed to promoting the internet of things and cold chain intelligence. Not only did the joint exhibition at the Logistics and Cold Chain Technology Exhibition in Taiwan last August, but also in new southbound nations such as Malaysia and the Philippines throughout the year roving seminars to form business groups and exhibit various IoT and cold chain solutions.



Project highlight 3

Advocate for IoT cloud platform (ROC-Australia & Australia-Taiwan Business Councils) to accelerate the implementation of smart solutions

Entering the era of the Internet of Things (IoT) poses challenges for many system integrators and small businesses in industries to undergo digital transformation. To accelerate the rapid replication and implementation of industry solutions, Advantech continues to promote the concept of IoT cloud platforms. The aim is to reduce the challenges faced by system integrators in developing industry-specific software and to accelerate the implementation of industry solutions by providing logical and conceptual support.





Project highlight 4

Advantech RE100

Advantech attended the RE100 Taiwan renewable electricity market policy seminar to discuss the RE100 global policy campaign with the official representatives of RE100 headquarters and corporate members in Taiwan, including: discussing the difficulties and solutions of renewable energy purchasers in the Taiwan market, identification and discussion on stakeholder of renewable energy, discussion on the influence path of major policy decision-makers, and communication on the Taiwan renewable energy policy meeting and schedule, etc. Advantech also sponsored the editing and publication of the RE100 annual report this year. The contents include Taiwan's renewable energy market research and Taiwan's renewable energy policy recommendations.

In addition, Advantech fulfills its member obligations by attending the annual general meeting. During the meeting, Advantech shared RE100 plans and the specific RE100 practices of local business units: Renewable electricity direct procurement, REC (Renewable energy certificate) procurement, Fish-electricity symbiosis solar power plant transfer, Self-sustained solar photovoltaic panel installation, and the preparations for the RE100 global working group. During the meeting, Advantech also discussed practical solutions of renewable energy with global leading enterprises. In addition, the company successfully collaborated with RE100 headquarters to organize renewable energy education and training for suppliers, sourcing department, corporate quality and management department, and ESG Office.



▲ Topics of Concern to Advantech's Participation In Public Associations

Issues of concern	Level of support	Advantech positioning and significance of participation	Investment (NTD) in 2023
Smart industry promotion	1. Strong support 2. Join the promotion with practical actions	Actively participates in exclusive associations of different industries to promote the application and implementation of smart solutions to users in the industry through co-organization of forums, exhibitions, and even symposiums; Advantech plays a pivotal role in driving industry advancement, leading by example, and supporting smaller enterprises, and publishes white papers on digital transformation to empower the industry. Practical cases include: driving a well-known tape group to conduct energy data management, helping them gain insight into carbon emissions and energy risks, and adopting effective energy-saving measures. For a renowned automotive wheel steel structure group, customized digital management solutions were implemented to achieve comprehensive equipment lifecycle management. This included streamlining equipment maintenance workflows, digital performance management, and workshop energy usage monitoring. These measures significantly enhanced production efficiency. Advantech will continue to lead the industry forward through industry alliances.	726,283
In-depth cultivation of IoT technology	1. Strong support 2. Support the R&D, promotion, and application of new technologies	By supporting the development of the latest technologies with financial support, Advantech introduces related technologies into Advantech's latest IoT solutions or assist or embed it in customers' smart application fields.	1,291,137
Support for the activities regarding climate change and sustainability	1. Strong support 2. Primarily through sponsoring professional research, participating in climate change-related forum events, educational training activities, policy advocacy, and discussions	Advantech actively participated in the sponsorship and support projects of non-profit organizations related to biodiversity, climate change, and forest protection; regularly attends climate change and renewable energy events organized by RE100, Taiwan Nature Positive Initiative, Business Council for Sustainable Development of the Republic of China, and Taiwan Climate Partnership; furthermore, Advantech engaged in policy seminars, trainings, and seminars. We also actively follow up on the relevant commitments and information disclosure of SBTi, TCFD, and TNFD.	1,061,360

The amount of participation in public associations over the past four years

Item	2020 Investment (NTD)	2021 Investment (NTD)	2022 Investment (NTD)	2023 Investment (NTD)
Lobbying, interest representation or similar	35,000	0	0	0
Local, regional or national political campaigns /organizations / candidates	0	0	0	0
Trade associations or tax-exempt groups (e.g. think tanks)	1,487,865	3,071,628	2,965,615	3,078,780
Other (e.g. spending related to ballot measures or referendums)	0	0	0	0
Total contributions and other spending	1,522,865	3,071,628	2,965,615	3,078,780
Data coverage (as % of denominator, indicating the organizational scope of the reported data)	79.37%	88.86%	90%	88%

*Note: Logic and method of calculation for 2024: *Number of employees covered/number of Advantech employees worldwide=7713(3,588 ACL+536 ANA+1,223ACN+2,134 AKMC+232 AJP)/8,829

- Number of Advantech employees (global): 8,829
- Number of Advantech Co., Ltd. (ACL) employees: 3,588
- Advantech Corp. (ANA) Number of employees: 536
- Number of employees in Beijing Yan Hua Xing Ye Electronic Science & Technology Co., Ltd. (ACN): 1,223
- Number of employees in Advantech Kunshan Manufacturing Center (AKMC): 2,134
- Advantech Japan Co. LTD. (AJP) Number of employees: 232



No.	Association or Special Interest Group (SIG)	Investment Type	Investment (NTD)	Investment (Local Currency)	Association Type (A=Industry, B=Technology C=Sustainable)	Membership Type	Strategic Meaning for Joining the Associations or SIG
1	Taipei Computer Association (Taiwan)	2023 annual membership fee	15,000	—	A	Tier 1 membership	Promotion of computer applications, improvement of economic development, and coordination of industry solidarity
2	Taiwan Automation Intelligence and Robotics Association (Taiwan)	2023 annual membership fee	40,000	—	A	Tier 1 membership serving as director	Promotion of smart manufacturing and factory smart automation, and association's course practice lecturers have served as lecturers for many times
3	Taiwan Electrical and Electronic Manufacturers' Association (Taiwan)	2023 membership fee (January - June)	21,000	—	A	Tier 1 membership	Promotion of Internet of Things platform and smart manufacturing development
4	Taiwan Electrical and Electronic Manufacturers' Association (Taiwan)	2023 membership fee (July- December)	21,000	—	A	Tier 1 membership	Promotion of Internet of Things platform and smart manufacturing development
5	Taiwan Electronic Equipment Industry Association(TEEIA) (Taiwan)	2023 annual membership fee	30,000	—	A	Organization membership	Promotion of the construction of the Internet of Things platform, improvement of Taiwan's electronic equipment cooperation ecosystem
6	Taiwan Printed Circuit Association (Taiwan)	2023 annual membership fee	48,000	—	A	Organization membership	Promotion of Industrial cooperation and marketing
7	Chinese International Economic Cooperation Association (CIECA), Taiwan (Taiwan)	2023 annual membership fee	20,000	—	A	Organization membership	The expansion of substantial relationship between Taiwan's Industrial Internet of Things application and other countries in the world is assisted by participating in the international economic cooperation affairs engaged in by the organization.
8	Taiwan Association of Machinery Industry (Taiwan)	2023 annual membership fee	52,800	—	A	Organization membership	Machine tools and other machinery industries have been assisted to introduce smart machinery applications, and Taiwan's smart machinery cloud ecosystem has been expanded.
9	Taiwan Telematics Industry Association (Taiwan)	2023 annual membership fee	20,000	—	A	Tier 2 membership serving as director	Promotion of the development of Taiwan's Internet of Vehicles industry and enhancement of the industry's international competitiveness
10	Taiwan Cold Chain Association (Taiwan)	2023 annual membership fee	20,000	—	A	Tier 1 membership	Co-organization of the cold chain national team with predecessors in the industry, government and academia within the association to gain a foothold in Taiwan and promote to the Southbound market.
11	Institute for Biotechnology and Medicine Industry (Taiwan)	2023 annual membership fee	20,000	—	A	Organization membership	Jointly promotion of Taiwan's smart medical care with association medical institutions and industrial predecessors by participating in the organization, and jointly promotion of Taiwan's smart medical care to Southeast Asia.
12	Computer Internet of Things for Smart Industry Association (Taiwan)	2023 annual membership fee	50,000	—	A	Tier 1 membership	This is a joint establishment of Taiwan's industrial computer industry to hopefully promote IoT-related policies together and form a consensus and direction for industrial promotion.
13	Intelligent Transportation Society of Taiwan (Taiwan)	2023 annual membership fee	10,000	—	A	Organization membership	

No.	Association or Special Interest Group (SIG)	Investment Type	Investment (NTD)	Investment (Local Currency)	Association Type (A=Industry, B=Technology C=Sustainable)	Membership Type	Strategic Meaning for Joining the Associations or SIG
14	SEMI Semiconductor Equipment and Materials International Taiwan Branch (U.S) (Taiwan)	2023 membership fee for renew	103,858	US\$ 3,100.00	A	Organization membership	Promotion of the application of IoT solutions in semiconductor-related industries
15	ProfiNet/ Profibus Membership (Taiwan) (Taiwan)	2023 Annual Membership Fee	50,000	—	B		
16	AIA (Association for Advancing Automation) (USA)	2023 Annual Membership Fee	57,258	US\$ 1,800.00	B	Enterprise membership	Deepening of industrial automation technology
17	OPC Foundation (USA)	2023 Annual Membership Fee	572,580	US\$ 18,000.00	B	Enterprise membership	Definition of future technical standards for the Industrial Internet of Things
18	ODVA (Open Device Net Vendors Association) (USA)	2023 Annual Membership Fee	248,118	US\$ 7,800.00	B	Enterprise membership	Promotion of related technologies and standards for industrial automation
19	CSIA (Control System Integrators Association) (USA)	2023 Annual Membership Fee	72,368	US\$ 2,275.00	B	Enterprise membership	Promotion of related technologies and standards for industrial automation
		Sponsor of the conference exhibition	63,620	US\$ 2,000.00	B	Enterprise membership	Promotion of related technologies and standards for industrial automation
20	AHTD (Association for High Technology Distribution) (USA)	2023 Annual Membership Fee	106,564	US\$ 3,350.00	B	Enterprise membership	Promotion of related technologies and standards for industrial automation
		Sponsor of the conference exhibition	31,810	US\$ 1,000.00	B	Enterprise membership	Promotion of related technologies and standards for industrial automation
21	APTA (American Public Transportation Association) (USA)	2023 Annual Membership Fee	43,739	US\$ 1,375.00	A	Enterprise membership	Promotion of related technologies and standards for industrial automation
22	Edgecross Consortium (Japan)	2023 Annual Membership Fee	6,900	JPY 30,000.00	A	Enterprise membership	Realization of the connection and integration of factory automation (FA) and information technology (IT) to quickly start Industry 4.0
23	CC-Link Partner Association (Japan)	2023 Annual Membership Fee	21,680	JPY 100,000.00	A	Enterprise membership	Promote industries related to industrial automation.

No.	Association or Special Interest Group (SIG)	Investment Type	Investment (NTD)	Investment (Local Currency)	Association Type (A=Industry, B=Technology C=Sustainable)	Membership Type	Strategic Meaning for Joining the Associations or SIG
24	Anritsu Fuji Meeting annual membership fee (Japan)	2023 Annual Membership Fee	4,336	JPY 20,000.00	A	Enterprise membership	Promotion of related industries for industrial automation
25	Semiconductor Equipment Association of Japan (Japan)	2023 Annual Membership Fee	78,048	JPY 360,000.00	A	Enterprise membership	Japan Semiconductor Technology Promotion
26	Edge Computing Consortium (China)	2023 Annual Membership Fee	88,820	CNY 20,000.00	B	General membership	Promotion of related technologies and trends for industrial IoT
27	Machine Vision Industry Union (China)	2023 Annual Membership Fee	15,544	CNY 3,500.00	A	General membership	Promotion of related technologies and trends for machine vision
28	Zhongguancun Energy Storage Industry Technology Alliance (China)	2023 Annual Membership Fee	35,528	CNY 8,000.00	A	Enterprise membership	Promote energy storage technology and trends
29	China Electronic Circuit Industry Association (China)	2023 Annual Membership Fee	13,323	CNY 3,000.00	A	General membership	
30	Industrial Internet Industry Alliance (China)	2023 Donation	35,528	CNY 8,000.00	A	Vice chairman	
31	Preparatory Advisory member of GO SMART Global Organization of Smart Cities (Taiwan)	Participation in association forums or related exhibition activities	—	—	A	Preparatory Advisory Committee	Implementation of the application plan to promote smart cities, and overseas export of related applications in Taiwan
32	Taiwan Smart City Solutions Alliance (Taiwan)	Participation in association forums or related exhibition activities	—	—	A	Founding membership	Key role to promote Taiwan Real Site Demo, promote smart city exhibition, and promote Taiwanese manufacturers in smart cities
33	Asia Silicon Valley Development Agency (Taiwan)	Participation in association forums or related exhibition activities	—	—	A	General membership	Establishment of the IoT innovations industry through the promotion of the application of IoT technology,
34	e-F@ctory Alliance (Japan)	Participation in association forums or related exhibition activities	—	—	B	General membership	Promotion of factory automation and application of Industry 4.0
35	Embedded Linux & Android Alliance (ELAA) (Worldwide)	Participation in association forums or related exhibition activities	—	—	B	Founding membership	Promotion of open and standardized Linux and Android software and hardware architectures, and establishment of a complete software and hardware industry ecosystem
36	LoRa Alliance (Worldwide)	Participation in association forums or related exhibition activities	—	—	B	General membership	Layout of low-power wide area wireless network in the development of Internet of Things applications
37	Taiwan High-Tech Facility Association (Taiwan)	Participation in association forums or related exhibition activities	—	—	A	Founding membership	Promotion of WISE- IoT platform and ESG-related solutions to customers such as high-tech factories in Taiwan
38	Business Council for Sustainable Development of the Republic of China (Taiwan)	Participation in association forums or training.	90,000	—	C	Standing membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance

No.	Association or Special Interest Group (SIG)	Investment Type	Investment (NTD)	Investment (Local Currency)	Association Type (A=Industry, B=Technology C=Sustainable)	Membership Type	Strategic Meaning for Joining the Associations or SIG
39	Taiwan Climate Partnership (Taiwan)	Participation in association forums or related education and training activities	150,000	—	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
40	Taiwan Nature Positive Initiative (Taiwan)	Participation in association forums or related education and training activities	300,000	—	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
41	CSR@CommonWealth (Taiwan)	Participation in association forums or related education and training activities	120,000	—	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
42	RE100 (Global)	Participation in association forums or related education and training activities	190,860	US\$ 6,000.00	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
		Sponsored Taiwan Renewable Energy Market Research	100,000	—	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
43	RE10 X10 (Taiwan)	Participation in association forums or related education and training activities	—	—	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
44	Tse-Xin Organic Agriculture Foundation(Taiwan)	Sponsor coastal forest restoration	51,100	—	C	Donation	Support forest conservation and improve corporate sustainability performance
45	Guandu Nature Park (Taiwan)	Sponsor wetland biodiversity conservation activities	51,100	—	C	Donation	Support biodiversity activities and provide employee volunteer opportunities
46	SBTi (Global)	Participation in association forums or related education and training activities	—	—	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
47	TNFD (Global)	Participation in association forums or related education and training activities	—	—	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
48	TCFD (Global)	Participation in association forums or related education and training activities	—	—	C	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
49	Taiwan Forestry Restoration Association(Taiwan)	Assisting forest restoration in shallow mountainous areas of Taiwan	110,500	—	C	Donation	Support forest conservation and improve corporate sustainability performance
Total Investment							NTD 3,180,980.50

Appendix 6: Comparison Table of Advantech's ISO Certification and UN Sustainable Development Goals (SDGs)

ISO certification		Certification scope							Corresponding SDGs																
Category	ISO name	HQ	ATMC	AKMC	AJP	AKR	ANA	AEU																	
Quality	ISO 9001 Quality management system	✓	✓	✓	✓	✓	✓	✓	1 NO POVERTY 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	14 LIFE BELOW WATER 													
	ISO 13485 Medical equipment quality management system	✓	✓	✓				✓	3 GOOD HEALTH AND WELL-BEING 	10 REDUCED INEQUALITIES 															
	ISO 17025 Laboratory quality management system	✓	✓	✓				✓								—	—								
Environmental	ISO14001 Environmental management system	✓	✓	✓	✓	✓		✓	1 NO POVERTY 	2 ZERO HUNGER 	3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	6 CLEAN WATER AND SANITATION 	7 AFFORDABLE AND CLEAN ENERGY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 									
	ISO 14064 GHG Inventory check standards	✓	✓	✓					9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	13 CLIMATE ACTION 															
	ISO 50001 Energy management system	✓	✓	✓					7 AFFORDABLE AND CLEAN ENERGY 	11 SUSTAINABLE CITIES AND COMMUNITIES 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	13 CLIMATE ACTION 													
Safety	ISO 45001 Occupational health and safety management system	✓	✓	✓				✓	3 GOOD HEALTH AND WELL-BEING 	5 GENDER EQUALITY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	10 REDUCED INEQUALITIES 	11 SUSTAINABLE CITIES AND COMMUNITIES 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 										
Information	ISO 27001 Information and cyber security management system		✓	✓				✓	✓								—	—	—	—	—	—	—		

Appendix 7: Compliance with Product Environmental Regulations and Calculation Standards for Various Environmental Indicators

Compliance with Product Environmental Regulations

Advantech has revised its internal management standards for various environmental policies related to substances management (such as EU RoHS (including EU 2015/863), REACH, POPs, etc.), and introduced the IECQ HSPM QC080000 hazardous substance management system in 2009. Advantech conducts risk management through its supplier management platform and green information management platform for the supply chain. Advantech selects materials for various products according to the product sales region to ensure compliance with the relevant environmental protection regulations of the following countries, as shown below:

1. RoHS Directive
2. Control requirements for substance of very high concern (REACH SVHC)
3. Product recycling regulations
 - 3.1 EU WEEE (Waste Electrical and Electronic Equipment) Directive
 - 3.2 International standard - ISO 11469 (labeling for plastic parts)
4. Battery recycling regulations
5. Waste packaging material regulations
6. Energy saving regulations
 - 6.1 ErP Certifications
 - 6.2 Energy Star certifications



The Company ensures that all products undergo compliance certification during the design and development phase to meet CE/FCC/CCC safety standards. Advantech adheres to international environmental regulations, from the efficient utilization of natural resources to life cycle assessments (LCA) for the prohibition of hazardous substances and proper management of waste. We comply with international standards for green eco design product. The Company promotes green eco design product based on the three aspects of safety, energy saving and environmental protection. Relevant information announced on the Company's website is described in the product catalogue as follows.

TPC-100W

7"/10.1"/15.6" Touch Panel Computer with ARM Cortex™-A53 Processor



NEW

Features

- NXP® ARM® Cortex™-A53 i.MX 8 Mini quad-core processor
- 7", 10.1" and 15.6" 16:9 LCD with multi-touch P-CAP and true-flat IP66-rated front panel
- Up to 2 GB DDR4 RAM and 16 GB eMMC storage onboard
- 2 x 10/100/1000 Mbps LANs with optional IEEE 802.3at/af PoE-PD module support (7", 10.1")
- 1 mb FRAM backup memory for unexpected power interruptions
- 2 x Serial port with 120Ω termination resistor that one supports the CAN 2.0B protocol and offers a programmable bit rate of up to 1 Mb/sec
- Embedded browser and for rapid Web App development
- Supports Linux Yocto and Android
- Optional and mPCIe expansion modules
- Compatible with VESA and panel mounting
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)

250

International Energy Conservation and Eco Label

Energy Star label: Since 2009, Advantech's specific models have met the Energy Star international energy conservation and eco label. The models introduced in the past five years are shown in the table below.

Product model	Product category
ESY152, ESY15i5, ESY22i2, EY22i5	
ESY20X2; ESY20X3; ESY20X5; ESY20X7	
ESY15X2; ESY15X3; ESY15X7; ESY17X2; ESY17X3; ESY17X7; ESY15X5	
ESY15i2, ESY15i5, ESY22i2, ESY22i5	Panel PC Industrial computer equipment with panel
AIM-37AC, AIM8IAC, AIM8I, AIM 10W	
DSDM-055FD-45NE-V, DSDM-155FD-45NE-V	
DSDW-049FD-45NE-V	
GSC-7152W, GSC-7152W-C3AE	
AIM-75	
DS-085	
AIR-150	
ARK-1125C	Edge Computer

Advantech's Representative Model Achieving the Silver Medal for Green Eco Design Products in 2023

Advantech has responded to international trends in carbon reduction and low energy consumption regulations since 2020. Advantech has established the Green Eco Design standard - Advantech Green ECO Design Guideline. By 2023, models that adopted green eco design standard voluntarily are shown in the figure below.



▲ Advantech's 2023 Product Carbon Footprint

Advantech obtained the SPC-815 carbon footprint ISO 14067 certification for the first product in 2023Q2



◀ SPC-815

15.6" Integrated-Button Panel Computer

- Intel® Core™ i3-6100U 2.3 GHz (dual-core) processor
- Silicone-free enclosure with all-round IP65-rated protection
- Supports the RAFI FS22+ Series pushbuttons
- Supports CP 40 (Rittal) and CS-480 B.Flex (Bernstein) mount standards
- Supports the CP 40 (Rittal) and CS-480 (Bernstein) support arm system standards
- Front-facing USB port and Reset button for easy access and maintenance
- PCAP multi-touch control

Certifications



▲ Calculation Standards for Various Environmental Indicators

New Product Green Eco Design Ratio

Numerator	The number of models that have passed the four aspects of Green Eco Design in the past two years (2022-2023)
Denominator	Number of new models mass-produced in the past two years (2022-2023)

Percentage of Revenue from Advantech Green Eco Design Products/ Energy Saving Labels

Numerator	Total revenue from shipment of the models that obtain Advantech's green eco design standard labels or energy-saving labels of the current year
Denominator	The Company's total revenue from shipments of the current year

Percentage of Revenue from Products Compliant with Type I Significant Eco Labels (Energy Star/CE ErP)

Numerator	The revenue generated from the sales of products compliant with, certified by, or previously certified by ENERGY STAR® and CE ErP in the respective years
Denominator	The Company's total revenue from shipments of the current year

Percentage of halogen-free Mechanical plastic components

Numerator	Number of halogen-free Mechanical plastic components of all product shipments from 2021 to 2023
Denominator	Number of Mechanical plastic components of all product shipments from 2021 to 2023

Calculation Method of Product Recycling Rate

Numerator	The weight of recycling in each country, including estimates based on the proportion of recovery fees, and calculations of global recycling rates based on the Global Transboundary E-waste Flows Monitor.
Denominator	Annual total weight of products shipped

Calculation Method of Product Recyclability Rate (Note: The recyclability rate is estimated using the WEEE calculation tool).

Average Value	Based on the count by product category, calculate the average for proportion of recyclability for the product
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Calculation of product recycling financial benefit

Unit price	European recyclers offer the Finland reward estimation method and the reward is 51 Euros/ton.
Multiple	Annual total weight of products shipped from Finland (metric tons)

Appendix 8: Employee Structure

▲ 2023 Number of Employees

Region	Taiwan	China		Japan	Korea	Europe	United States	Other regions	Global total
		ACN	AKMC (Kunshan)						
Number of employees	3,588	1,223	2,134	232	129	525	536	462	8,829
Remark			Manufacturing Center						

*Note:

1. The number of employees does not include those in the affiliates.
2. The scope of this report only discloses information on the six major regions. The "Global Total" column shows the total number of Advantech employees in the six major regions and other regions around the world.
3. Regions that are not considered significant locations of operation (Headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech Europe, and Advantech USA) are Indonesia, Mexico, India, Czech Republic, Australia, Malaysia, Singapore, Thailand, Russia, Turkey, Brazil, United Arab Emirates, Vietnam, Canada, and Israel. "Other Regions" mentioned below have the same definition.

Region	Item	Male		Female		Non-disclosure of Gender		Total	
		Number	Proportion	Number	Proportion	Number	Proportion		
Taiwan	Employees	Number of people in the Company	1,988	55.41%	1,600	44.59%	0	—	3,588
	Job levels	Senior manager	84	85.71%	14	14.29%	0	—	98
		Manager	312	77.61%	90	22.39%	0	—	402
		Staff	1,592	51.55%	1,496	48.45%	0	—	3,088
	Age of employees	below 30	233	45.42%	280	54.58%	0	—	513
		31-49	1,403	56.82%	1,066	43.18%	0	—	2,469
		over 50	352	58.09%	254	41.91%	0	—	606
	Full-time position and contract position	Full-time position	1,953	55.34%	1,576	44.66%	0	—	3,529
		Full-time contract position	11	52.38%	10	47.62%	0	—	21
		Intern/Part-time	24	63.16%	14	36.84%	0	—	38
	Function	R&D	1,196	78.07%	336	21.93%	0	—	1,532
		Marketing	124	39.24%	192	60.76%	0	—	316
		Administration	187	38.56%	298	61.44%	0	—	485
		Manufacturing (direct + indirect)	481	38.33%	774	61.67%	0	—	1,255
China	Employees	Number of people in the Company	1,884	56.12%	1,473	43.88%	0	—	3,357
	Job levels	Senior manager	22	78.57%	6	21.43%	0	—	28
		Manager	68	61.82%	42	38.18%	0	—	110
		Staff	1,794	55.73%	1,425	44.27%	0	—	3,219
	Age of employees	below 30	348	61.16%	221	38.84%	0	—	569
		31-49	1,417	53.57%	1,228	46.43%	0	—	2,645
		over 50	119	83.22%	24	16.78%	0	—	143
	Full-time position and contract position	Full-time position	1,883	56.13%	1,472	43.87%	0	—	3,355
		Full-time contract position	1	100%	0	—	1	—	0
		Intern/Part-time	0	—	1	100.00%	0	—	1
	Function	R&D	407	65.33%	216	34.67%	0	—	623
		Marketing	303	59.06%	210	40.94%	0	—	513
		Administration	155	41.44%	219	58.56%	0	—	374
		Manufacturing (direct labor)	1,019	55.17%	828	44.83%	0	—	1,847

Region	Item	Male		Female		Non-disclosure of Gender		Total	
		Number	Proportion	Number	Proportion	Number	Proportion		
Japan	Employees	Number of people in the Company	158	68.10%	74	31.90%	0	—	232
		Senior manager	7	77.78%	2	22.22%	0	—	9
	Job levels	Manager	17	100.00%	0	-	0	—	17
		Staff	134	65.05%	72	34.95%	0	—	206
	Age of employees	below 30	9	69.23%	4	30.77%	0	—	13
		31-49	56	54.90%	46	45.10%	0	—	102
		over 50	93	79.49%	24	20.51%	0	—	117
	Full-time position and contract position	Full-time position	143	67.45%	69	32.55%	0	—	212
		Full-time contract position	15	75.00%	5	25.00%	0	—	20
		Intern/Part-time	0	—	0	—	0	—	0
	Function	R&D	32	91.43%	3	8.57%	0	—	35
		Marketing	62	72.09%	24	27.91%	0	—	86
		Administration	13	39.39%	20	60.61%	0	—	33
		Manufacturing (direct labor)	51	65.38%	27	34.62%	0	—	78
Korea	Employees	Number of people in the Company	87	67.44%	42	32.56%	0	—	129
		Senior manager	9	90.00%	1	10.00%	0	—	10
	Job levels	Manager	10	90.91%	1	9.09%	0	—	11
		Staff	68	62.96%	40	37.04%	0	—	108
	Age of employees	below 30	22	51.16%	21	48.84%	0	—	43
		31-49	51	72.86%	19	27.14%	0	—	70
		over 50	14	87.50%	2	12.50%	0	—	16
	Full-time position and contract position	Full-time position	78	68.42%	36	31.58%	0	—	114
		Full-time contract position	9	60.00%	6	40.00%	0	—	15
		Intern/Part-time	0	—	0	—	0	—	0
	Function	R&D	19	86.36%	3	13.64%	0	—	22
		Marketing	31	50.82%	30	49.18%	0	—	61
		Administration	9	52.94%	8	47.06%	0	—	17
		Manufacturing (direct labor)	28	96.55%	1	3.45%	0	—	29
Europe	Employees	Number of people in the Company	345	65.71%	180	34.29%	0	—	525
		Senior manager	20	90.91%	2	9.09%	0	—	22
	Job levels	Manager	38	82.61%	8	17.39%	0	—	46
		Staff	287	62.80%	170	37.20%	0	—	457
	Age of employees	below 30	31	62.00%	19	38.00%	0	—	50
		31-49	200	61.54%	125	38.46%	0	—	325
		over 50	114	76.00%	36	24.00%	0	—	150
	Full-time position and contract position	Full-time position	344	65.90%	178	34.10%	0	—	522
		Full-time contract position	1	50.00%	1	50.00%	0	—	2
		Intern/Part-time	0	—	1	100.00%	0	—	1
	Function	R&D	91	90.10%	10	9.90%	0	—	101
		Marketing	145	63.60%	83	36.40%	0	—	228
		Administration	46	40.00%	69	60.00%	0	—	115
		Manufacturing (direct labor)	63	77.78%	18	22.22%	0	—	81

Region	Item	Male		Female		Non-disclosure of Gender		Total	
		Number	Proportion	Number	Proportion	Number	Proportion		
United States	Employees	Number of people in the Company	342	63.81%	183	34.14%	11	2.05%	536
	Job levels	Senior manager	18	78.26%	5	21.74%	0	—	23
		Manager	102	79.69%	26	20.31%	0	—	128
		Staff	222	57.66%	152	39.48%	11	2.86%	385
	Age of employees	below 30	42	56.00%	27	36.00%	6	8.00%	75
		31-49	157	61.09%	98	38.13%	2	0.78%	257
		over 50	143	70.10%	58	28.43%	3	1.47%	204
	Full-time position and contract position	Full-time position	339	64.82%	183	34.99%	1	0.19%	523
		Full-time contract position	2	16.67%	0	—	10	83.33%	12
		Intern/Part-time	1	100.00%	0	—	0	—	1
	Function	R&D	86	81.13%	19	17.92%	1	0.94%	106
		Marketing	133	62.44%	70	32.86%	10	4.69%	213
		Administration	49	41.53%	69	58.47%	0	—	118
		Manufacturing (direct labor)	74	74.75%	25	25.25%	0	—	99
Other regions	Employees	Number of people in the Company	322	69.70%	140	30.30%	0	—	462
	Job levels	Senior manager	9	81.82%	2	18.18%	0	—	11
		Manager	35	71.43%	14	28.57%	0	—	49
		Staff	278	69.15%	124	30.85%	0	—	402
	Age of employees	below 30	103	75.18%	34	24.82%	0	—	137
		31-49	180	65.93%	93	34.07%	0	—	273
		over 50	39	75.00%	13	25.00%	0	—	52
	Full-time position and contract position	Full-time position	306	70.51%	128	29.49%	0	—	434
		Full-time contract position	6	66.67%	3	33.33%	0	—	9
		Intern/Part-time	10	52.63%	9	47.37%	0	—	19
	Function	R&D	114	95.00%	6	5.00%	0	—	120
		Marketing	124	67.03%	61	32.97%	0	—	185
		Administration	38	35.85%	68	64.15%	0	—	106
		Manufacturing (direct labor)	46	90.20%	5	9.80%	0	—	51

***Note:**

- The denominators of the above percentages are all the total number of employees in the region.
- As of December 31, 2023, there is no significant change in the total number of people in 2022.
- In the above chart, permanent employees are included in "full-time position"; temporary employees are included in "contract position"; part-time employees are "intern"; there is no non-guaranteed hours employees.
- Advantech conducted the Global Job Band alignment in 2022, where job bands are globally divided into A to H, managers (manager) are classified as E, and senior executives (including assistant vice president and above) are classified as F (inclusive) and above.
- For some employees in the USA who chose not to disclose their gender, the column of "Non-disclosure of Gender" has been added to the chart.

Appendix 9: Third Party Verification Statement

SGS

ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE ADVANTECH CO., LTD.'S CORPORATE SUSTAINABILITY REPORT FOR 2023

NATURE AND SCOPE OF THE ASSURANCE
 SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by Advantech Co., Ltd. (hereinafter referred to as Advantech) to conduct an independent assurance of the Corporate Sustainability Report for 2023. The scope of assurance is based on the SGS Sustainability Report Assurance methodology and AA1000 Assurance Standard v3 Type 2 high level to assess whether the text and data in accompanying tables contained in the report and complies with the GRI Standards and AA1000 Accountability Principles (2018), Taiwan Stock Exchange Corporation (the "TWSE") Industrial Sustainability Indicators and Sustainability Accounting Standards (SASB) during on-site assurance in the period of 21 March 2024 to 30 April 2023 (in Advantech headquarter). The boundary of this report includes Advantech Taiwan and overseas operational and production or service sites' specific performance data included the sampled text, and data in accompanying tables, contained in the report presented. The assurance process did not include the evaluation of specific performance information outside the scope, such as climate-related financial disclosures (TCFD).
 SGS reserves the right to update the assurance statement from time to time depending on the level of report content discrepancy of the published version from the agreed standards requirements.

INTENDED USERS OF THIS ASSURANCE STATEMENT
 This Assurance Statement is provided with the intention of informing all Advantech's Stakeholders.

RESPONSIBILITIES
 The information in the Advantech's Corporate Sustainability Report of 2023 and its presentation are the responsibility of the directors or governing body (as applicable) and management of Advantech. SGS has not been involved in the preparation of any of the material included in the Corporate Sustainability Report.
 Our responsibility is to express an opinion on the report content within the scope of assurance with the intention to inform all Advantech's stakeholders.

ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE
 The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognized assurance guidance and standards including the principles of reporting process contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) GRI 1: Foundation 2021 for report quality, GRI 2 General Disclosure 2021 for organisation's reporting practices and other organizational detail, GRI 3 2021 for organisation's process of determining material topics, its list of material topics and how to manage each topic, and the guidance on levels of assurance contained within the AA1000 series of standards.

The assurance of this report has been conducted according to the following Assurance Standards:

Assurance Standard Options	Level of Assurance	
A	SGS ESG & SRA Assurance Protocols (based on GRI Principles and guidance in AA1000)	n/a
B	AA1000ASv3 Type 2 (AA1000AP Evaluation plus evaluation of Specified Performance Information)	High
C	Taiwan Stock Exchange Corporation (the "TWSE") Sustainability Indicators for Hardware Industries	n/a
D	Sustainability Accounting Standards (SASB), HARDWARE, VERSION 2023-12	n/a

SCOPE OF ASSURANCE AND REPORTING CRITERIA
 The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

Reporting Criteria Options
1 GRI Standards (Reference)
2 AA1000 Accountability Principles (2018)
3 Taiwan Stock Exchange Corporation (the "TWSE") Sustainability Indicators for Hardware Industries
4 SASB (HARDWARE, VERSION 2023-12)

- The evaluation includes AA1000 Assurance Standard v3 Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2018).
- The evaluation of the reliability and quality of specified sustainability performance information in Advantech's Corporate Sustainability Report is limited to determined material topics or those clearly marked in the report as conducted in accordance with type 2 of AA1000AS v3 sustainability assurance engagement at a high level of scrutiny for Advantech and moderate level of scrutiny for its subsidiaries or joint ventures
- The evaluation of the report against the requirements of GRI Standards, includes GRI 1, GRI 2, GRI 3, 200, 300 and 400 series claimed in the GRI content index as material and is conducted in accordance with the standards.
- The evaluation of the report against the requirements of GRI Standards is listed in the GRI content index as material in the report and is conducted with Reference to the Standards.
- The evaluate of the report against the Taiwan Stock Exchange Corporation (the "TWSE") Sustainability Indicators for Hardware Industries and conducted alongside an evaluation of accuracy assurance at moderate level of scrutiny.
- The evaluation of the report against the SASB Disclosures and Metrics included in the HARDWARE , Sustainability Accounting Standard (VERSION 2023-12) and conducted alongside an evaluation of accuracy assurance at moderate level of scrutiny.

ASSURANCE METHODOLOGY

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, Sustainability Development committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant.

LIMITATIONS AND MITIGATION

Financial data drawn directly from independently audited financial accounts, Task Force on Climate-related Financial Disclosures (TCFD) has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and assurance, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from Advantech, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, RBA, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

ASSURANCE/VERIFICATION OPINION

On the basis of the methodology described and the assurance work performed, we are satisfied that the disclosure with inclusivity, materiality, responsiveness, and impact information in the scope of assurance is reliable, has been fairly stated and has been prepared, in all material respects, in accordance with the reporting criteria. We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting.

AA1000 ACCOUNTABILITY PRINCIPLES (2018) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS**Inclusivity**

Advantech has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, business partners, universities and research institutes, suppliers and contractors, media and associations and governments, shareholders and investment institutions, communities and non-profit organizations are implemented to underpin the organization's understanding of stakeholder concerns. For future reporting, Advantech may proactively consider having more direct two-ways involvement of stakeholders during future engagement.

Materiality

Advantech has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.

Responsiveness

The report includes coverage given to stakeholder engagement and channels for stakeholder feedback.

Impact

Advantech has demonstrated a process on identify and fairly represented impacts that encompass a range of environmental, social and governance topics from wide range of sources, such as activities, policies, programs, decisions and products and services, as well as any related performance. Measurement and evaluation of its impacts related to material topic were in place at target setting with combination of qualitative and quantitative measurements.

GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, Advantech's Corporate Sustainability Report of 2023, is reporting with Reference to the GRI Standards 2021 and complies with the requirements set out in Section 3 of GRI 1 Foundation 2021. The significant impacts were assessed and disclosed with reference to the guidance defined in GRI 3: Material Topic 2021 and the relevant 200/300/400 series Topic Standard related to Material Topic have been disclosed. The report has properly disclosed information related to Advantech's contributions to sustainability development. For future reporting, Advantech is encouraged to prepare for the transition to reporting in accordance with the GRI Standards, with more comprehensive details of its management processes on the identified impacts on the economy, environment, and people, including impacts on their human rights. In addition, Advantech can enhance their environmental, social and governance due diligence process, such as how to prevent and mitigate the negative impacts. Some employee care activities can expand to outside Taiwan, e.g. Employee Assistance Programs (EAPs) and Employee Health Initiatives.

TWSE Sustainability Indicators CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Advantech has referenced with TWSE Sustainability Indicators for Hardware Industries to disclose information of material topics that are vital for enterprise value creation. The reporting boundaries of the disclosed information correspond to the financial data reported in Advantech's audited consolidated financial statements of 2023. Advantech used TWSE Sustainability Indicators to assess and manage the topic-related risks and opportunities, where relevant quantitative information was assessed for its accuracy and completeness to support the comparability of the data reported. Process to identify, assess, and manage topic-related risks and opportunities were integrated into Advantech's overall management process.

SASB CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Advantech has referenced with SASB's Standard, HARDWARE, VERSION 2023-12 to disclose information of material topics that are vital for enterprise value creation. The reporting boundaries of the disclosed information correspond to the financial data reported in Advantech's audited consolidated financial statements. Advantech used SASB accounting and activity metrics to assess and manage the topic-related risks and opportunities, where relevant quantitative information was assessed for its accuracy and completeness to support the comparability of the data reported. Process to identify, assess, and manage topic-related risks and opportunities were integrated into Advantech's overall management process.

Signed:
For and on behalf of SGS Taiwan Ltd.

Stephen Pao
Business Assurance Director
Taipei, Taiwan
30 May, 2024
WWW.SGS.COM



Appendix 10: Third Party Assurance Report



Independent Limited Assurance Report

PWCM 23000607

To Advantech Co., Ltd.

We have been engaged by Advantech Co., Ltd. (the “**Company**”) to perform assurance procedures in respect of the key performance indicators identified by the Company and reported in the 2023 Sustainability Report (hereinafter referred to as the “**Identified Key Performance Indicators**”) and have issued a limited assurance report based on the result of our work performed.

Subject Matter Information and Applicable Criteria

The subject matter information is the Identified Key Performance Indicators of the Company. The Identified Key Performance Indicators and the respective applicable criteria are stated in the “Summary of Subject Matter Assured” on page 259 of the Sustainability Report. The scope of the Identified Key Performance Indicators is set out in the “Report Boundaries and Scope” on page 2 of the Sustainability Report.

The respective applicable criteria referred to above are the Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports, FAQ issued by TWSE Listed Companies, related laws and regulations, the latest edition of the GRI Sustainability Reporting Standards (the “**GRI Standards**”) published by the Global Reporting Initiative (the “**GRI**”) and the other criteria referred to or designed by the Company based on the Company’s industry characteristics and sustainability performance information reported (hereinafter referred to as the “**Applicable Criteria**”).

Management's Responsibility

The Management of the Company is responsible for the preparation of the Identified Key Performance Indicators disclosed in the Sustainability Report in accordance with the Applicable Criteria. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the Identified Key Performance Indicators that are free from material misstatement, whether due to fraud or error.

Inherent Limitation

Certain subject matter information assured involves non-financial data which is subject to more inherent limitations than financial information. Qualitative interpretations of the relevance, materiality and the accuracy of data are more dependent on individual assumptions and judgments.

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Compliance of Independence and Quality Management Requirement

We are independent of the Company in accordance with the Norm of Professional Ethics for Certified Public Accountant of the Republic of China, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies the Standard on Quality Management 1, “Quality Management for Public Accounting Firms” of the Republic of China, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Identified Key Performance Indicators based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the Standard on Assurance Engagements 3000, “Assurance Engagements other than Audits or Reviews of Historical Financial Information” of the Republic of China. This standard requires that we plan and perform this engagement to obtain limited assurance about whether the Identified Key Performance Indicators are free from material misstatement.

Under the requirements of the aforementioned standards, our limited assurance engagement involves assessing the suitability in the circumstances of the Company’s use of the criteria as the basis for the preparation of the Identified Key Performance Indicators, assessing the risks of material misstatement of the Identified Key Performance Indicators whether due to fraud or error, responding to the assessed risks as necessary in the circumstances and evaluating the overall presentation of the Identified Key Performance Indicators. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above, we:

- Made inquiries of the persons responsible for the Identified Key Performance Indicators to obtain an understanding of the processes and the relevant internal controls relating to the preparation of the aforementioned information, to identify the areas where there may be risks of material misstatement; and



- Based on the above understanding and the areas identified, samples of the Identified Key Performance Indicators have been tested through inquiries, observations, inspections, and other procedures to obtain evidence for limited assurance.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Company's Identified Key Performance Indicators have been prepared, in all material respects, in accordance with the respective applicable criteria.

We also do not provide any assurance on the Sustainability Report as a whole or on the design or operating effectiveness of the relevant internal controls. Furthermore, our assurance does not extend to information disclosed in the Sustainability Report for the period ended December 31, 2022 or prior periods.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Identified Key Performance Indicators in the Sustainability Report are not prepared, in all material respects, in accordance with the Applicable Criteria.

Other Matter

The Management of the Company is responsible for maintaining the Company's website. We have no responsibility to re-perform any procedures regarding the Identified Key Performance Indicators after the date of our assurance report, even if the Identified Key Performance Indicators or the Applicable Criteria have been subsequently modified.

Chao, Yung-Chieh

CHAO, YUNG-CHIEH

Partner

For and on behalf of PricewaterhouseCoopers, Taiwan

July 29, 2024

Advantech Co.,Ltd. Summary of Subject Matters Assured

No	Subject Matter Assured	Information	Page	Applicable Criteria
1	Average training hours for employees	In 2023, the average training time per person was 94.1 hours. (Note 1)	160-162	The statistical data of average training hours in 2023 according to Advantech's regulation of education and training divided by the total number of employees at the end of 2023.
2	Types, number of people and ratio of occupational accidents	Includes statistics of occupational injury of Advantech's employees, categories of occupational injury of Advantech's employees and statistics of occupational injury of non-Advantech's employees.	195-196	Please refer to the content of the sustainability report.
3	Aggregate amount of pecuniary damages resulting from legal proceedings relating to anticompetitive conduct regulations	The overall number of incidents for "Incidents of anti-competitive behavior, antitrust and monopoly behavior, and market manipulation" in 2023 is 0. Therefore, no monetary loss due to litigation.	38	Total pecuniary damages in 2023 resulting from legal proceedings relating to anticompetitive conduct regulations.
4	Ratio of significant suppliers that have signed the "Agreement for Advantech Supplier Code of Conduct"	100% of significant suppliers have signed the "Agreement for Advantech Supplier Code of Conduct"	50	The ratio of significant suppliers at ACL and AKMC that have signed the "Agreement for Advantech Supplier Code of Conduct"
5	The amount of fines imposed for violating environmental laws and regulations	In 2023, there was no fine imposed for violating environmental laws and regulations.	137	The amount of fines imposed for violating environmental laws and regulations related to environmental protection.
6	Disposal volume of total wastes outsourced (metric tons)	The total waste disposal volume in 2023 was 1,101.56 metric tons.(Note 2)	142	Please refer to the content of the sustainability report.

*Note 1: Round training hours for employees to one decimal place.

*Note 2: Round total wastes outsourced to two decimal place.