

ADVANTECH

2022 Sustainability Report



About Advantech Technology

2022 Sustainability Report

Editorial Principles of the Report

Advantech Corporation ("Advantech") has issued our 2022 Corporate Sustainability Report to openly and transparently present the Company's governance, environmental, and social-related strategies, management policies, practical results, and future direction of progress to stakeholders and the general public. This report has been published in June 2023. The annual key work is based on the GRI (Global Reporting Initiative) Universal Standards 2021 Reference (Reference) option, the sustainability indicators that should be disclosed in specific industries (industry: computer and peripheral equipment industry) required by the Financial Supervisory Commission, and AA1000 to report.

Report Boundaries and Scope

The boundaries of this report include important operating bases and major factories of: Advantech Taiwan's Ruiguang, Taipei Sunny, Donghu, Linkou (collectively referred to as ACL) and Advantech Kunshan Manufacturing Center (AKMC). The scope of disclosure of overseas operating bases includes: Advantech Corporation (ANA), Advantech Europe B.V. (AEU), Advantech Japan Co., Ltd (AJP), Advantech KR Co., Ltd (AKR), Advantech China Co., Ltd (ACN). The manufacturing capacity of the above bases accounts for 100% of Advantech's manufacturing capacity. Consolidated revenue accounted for 92.3% of the group. The number of employees accounts for 95.96% of the total number of employees. In addition, relevant content concerning the Advantech Foundation constitutes voluntary disclosure. Regarding branches and offices in other regions, even if the associated control rights are greater than 50%, most of them focus on marketing and business activities. Due to the difficulty of data collection and other matters of inaccessibility, they have not yet been included in this Report. In the future, we expect to gradually disclose the ESG (Environmental, Social, Governance)-related content that can be collected. In addition, Advantech's Annual Report is in compliance with International Financial Reporting Standards (IFRS) with a scope of coverage comprising Advantech and its affiliated companies; the information of affiliated companies is not included in this Report.

Reporting Period

Presentation is primarily made of each performance data item for 2022 (2022/1/1-2022/12/31). Partial disclosure will also be made in this Report of information prior to this period or for subsequent strategies, goals, plans, and so on.

Standards Used as a Basis for the Report

This Report follows the Reference options of the GRI Standards in disclosing Advantech's strategies, management policies, projects, and performance in corporate sustainability. Financial statement figures in this Report are calculated in New Taiwan Dollars. Performance related to environmental protection, safety and health is expressed in terms of internationally accepted indicators. Any estimates or assumptions will be noted in the relevant chapters.

Report Assurance and Third Party Verification

In order to provide readers with reliable public information, this report has been guaranteed and assured by a third party. Please refer to the appendix for assurance indicators: GRI, SASB, assurance indicator index table. This report is verified by an independent third-party unit, SGS Taiwan Limited, to meet the requirements of AA1000AS* Type II High Assurance Level, GRI (Global Reporting Initiative) Universal Standards 2021 Reference option, the sustainability indicators that should be disclosed in specific industries (industry: computer and peripheral equipment industry) required by the Financial Supervisory Commission for reporting purposes. According to Taiwan Standard on Assurance Engagements 3000 (TWSAE3000) "Assurance engagements that are not audits or reviews of historical financial information", PwC Taiwan performs independent limited assurance processing for selected key performance indicators. The limited assurance report is included in the appendix of this report.

***Note:** Regarding AA1000AS, it constitutes the AA1000 assurance standard for the principle of accountability for sustainable development issued by the United Kingdom's Account Ability organization and stands as one of the international standards for verification of corporate CSR reports.

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Time of Report Issuance: Scheduled to be Issued Annually

Current edition: Issued in June 2023

Prior edition: Issued in June 2022

Next edition: Scheduled to be released in June 2024

Report Issuance and Contact Details

In response to environmental concerns and paperless implementation, this Report shall be published in an electronic version on the Company's website. You are welcome to contact us if you have any suggestions or inquiries on related information concerning this Report.

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Message from Chairman

In 2022, the global environment continued to be affected by the aftermath of the pandemic. Geopolitical disputes have set off supply chain issues. Also, the trend of energy saving and carbon reduction is rapidly heating up, bringing opportunities and transformation drives for Advantech.

The year of 2022 was also for Advantech to strengthen its investment in ESG work and upgrade and transform. The following aspects are used to illustrate the work achievements of this year:



Strengthening of corporate sustainable governance

We established the Sustainable Development Committee (SDC) at the board level. ESG-related actions are supervised and implemented from the level of corporate strategic. Moreover, the sustainable performance and positive incentive mechanism for senior executives has been activated. Also, sustainable performance indicators are formulated to drive accountability in ESG management and implementation performance. In 2022, we was among the top 5% in corporate governance evaluation. This also urges us to keep moving forward and operate with integrity.



Improvement of public welfare social influence

It has been 22 years since the establishment of the Advantech Foundation. Over the years, we have spared no effort to invest in public welfare, art, Internet of Things education and innovative education. The social impact indicator document was developed more actively this year in anticipation that it can be transformed into an impact donation model. In this way, social pain points are effectively solved or the trend of social transformation is led.



The accelerated entry of the smart energy-saving industry and its leading role

Advantech has invested heavily in the Energy Management System Intelligent Energy Management Solution (iEMS) industry this year. The smart energy-saving system is promoted with the core industry as the core and combined with partners in the energy-saving ecosystem. Global corporate practices can reduce carbon emissions to create Advantech's sustainable advantages.



Re-upgrading of workplace well-being

An upgrade of the interactive platform On Demand ABLE Club 2.0. Employees' sense of belonging and identity are deepened with diverse and rich employee feedback and participation in activities.



Deep cultivation of IoT education and industry-university cooperation

WISE-IoT platform is used to cultivate innovative talents in the field of IoT and incubate innovative solutions. We are committed to the goal of expanding IoT education to IoT education in 50 universities in 11 countries around the world by 2025. IoT talents are cultivated and energy is innovated to achieve the sustainable goal of "finding the future for students and finding talents for jobs".

Advantech looks forward to 2023 and will focus on the following goals:

- **iEMS Global Roll out**

Advantech headquarters and major overseas bases were first established as demonstration sites for energy conservation and carbon reduction. Also, real-time information on sustainable goals and energy-saving achievements were publicly disclosed. The goal of the global office is to save energy by 7%, and the goal of the main factory is to save energy by 8%.

- **Application to join the RE100 initiative**

50% use of renewable energy by 2030. In 2040, the utilization rate of renewable energy is 100%. Also, global energy information is collected systematically. Global bases are pushed to implement various renewable energy measures.

- **The deepening of employees' sustainable participation**

The employee volunteer leave system has been implemented. Each person has a total of 2 days of volunteer leave per year to encourage employees to serve the society.

- **Improvement of ESG sustainability evaluation**

The goal is to be selected as one of Dow Jones Sustainability Index companies in 2025, to obtain A level in the CDP carbon disclosure questionnaire (climate change), and to continue to maintain a leading position of 5% in corporate governance evaluation.

- **Anchor of innovative education to expand influence**

It focuses on the trend of future education which is the link between PBL (Project Based Learning) innovative education and SDGs. It combines the educational ecosystem, key primary and secondary schools and communities, and to be is expected to establish the influence of education.

Finally, 2023 marks the 40th anniversary of Advantech. The activity planning of Advantech's global bases has been intensively launched. The global partner conference, the global employee wellbeing program and so on have been expanded. Advantech's achievements are shared with global employees and customer partners.

Let us imagine 40 together and create a common prosperity and vision for the future.

Chairman, Advantech
K.C. Liu February, 2023



Message from President

The efficiency of global cross-border business activities and supply chains in 2022 was affected and limited by the threat of COVID-19 pandemic. However, Advantech's overall operating performance is still positive. Both revenue and profit showed double-digit growth. In addition to the aforementioned growth in business operations, Advantech is also actively expanding ESG sustainable development projects from its headquarters to its overseas subsidiaries. The progress of key work is as follows:

Environment aspect

- The assessment report on the financial quantification of TCFD (Task Force on Climate-related Financial Discourses) has been completed. The risks and opportunities of the Company's climate change are clearly quantified with financial data. All categories of the inventory and verification of scope 1, 2 and 3 of ISO 14064- 1: 2018 greenhouse gas emissions have been completed.
- The self-owned energy-saving iEMS software was introduced into the manufacturing factories on both sides of the Taiwan Strait. Also, it was gradually expanded to own buildings worldwide. The scenario of self-owned application and management was implemented as an energy-saving display field.
- Prepared to join the RE100 initiative as a corporate member. The target process for the use of renewable energy is set to: In 2030, it will reach 50% (both sides of the Taiwan Strait). In 2040, Advantech will reach 100% of the world's use of renewable energy.
- Other material topics such as the mechanism of green product design, the evaluation of green supply chain, and the inventory of the carbon footprint of the first product have been launched successively, and are expected to achieve results in 2023.

Social aspect

- Talents are the source of Advantech's driving innovation. At present, talent attraction, selection and retention are particularly important due to the global shortage of jobs, waves of resignation, and the trend of declining birthrates. Advantech has been strengthening talent cultivation and high-level inheritance in 2022. Workday HCM (Human Capital Management) is imported as a global talent management database. It is expected to accurately improve the quality of talents and optimize the process experience, including talent cultivation, new recruits and employee assessment.
- In order to strengthen the policy of settling down and childbirth, Advantech increased employee maternity subsidies and launched the iTeleMed employee health care platform. This promotes workplace wellness and emphasizes work-life balance.

Also, employee engagement survey measures are implemented to enhance employees' sense of belonging.

Governance

- Sustainable Development Committee(SDC) was established. Working groups are set up to focus on environmental topics, talent cultivation and high-level inheritance. The guidance and support of the strategic direction is given at the height of the board of directors.
- The linkage between the salary of senior executives and the performance of E, S, and G is promoted. Also, KPIs for senior executives and corresponding positive incentive mechanisms are set.
- Awarded in the top 5% of listed companies in Taiwan for evaluation and governance.

Looking forward to 2023, below is additional to the above-mentioned key work being continuously promoted. This year marks Advantech's 40th anniversary. We've planned a global tandem celebration of Global Cycling 40. Our ESG communication with employees and partners will also be strengthened. Through the regular publication of e-newsletters and sustainability special issues, everyone can understand Advantech's sustainability progress. We even join hands with co-creation partners to launch more sustainable intelligent solutions. In this way, the earth we live in is more sustainable and environmentally friendly.

Advantech Technology's
President of General
Management

Eric Chen February, 2023

陳清熙



1

Sustainability Vision and Goals

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



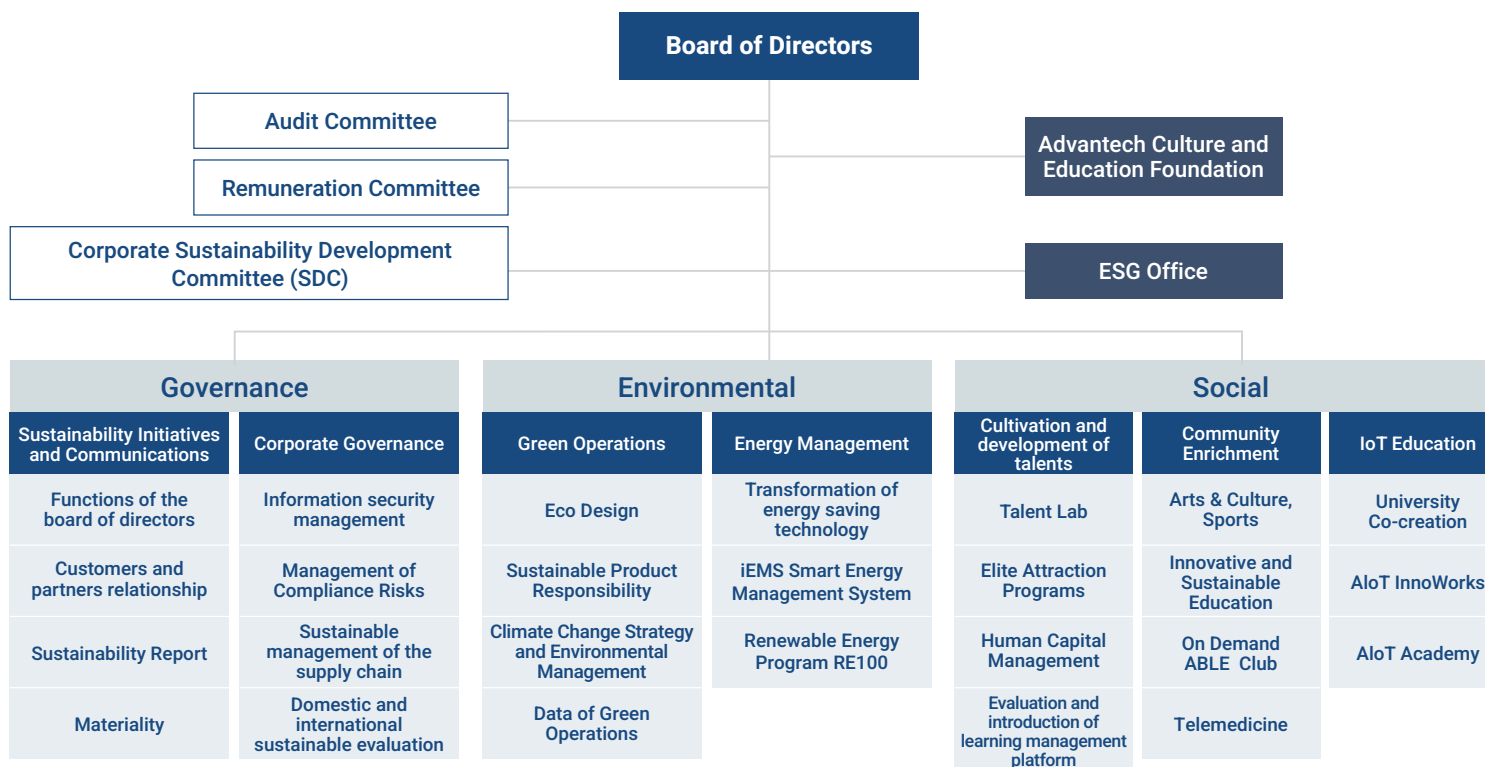
ADVANTECH

1.1

ESG Governance Structure

Advantech has issued a Corporate Social Responsibility Report since 2013. The President reports the issuance of the yearly Report and a summary of CSR work priorities to the annual Board of Directors meeting. Meanwhile, the Board of Directors is responsible for reviewing the yearly Report, and the Chairman leads important CSR-related projects. In 2020, Advantech established the ESG Corporate Sustainability Committee and the ESG Office, managing projects related to corporate sustainability from the three aspects of governance, environmental, and social-related. Immediately afterwards, Advantech promoted the ESG Corporate Sustainability Committee to the board-level SDC Corporate Sustainability Committee in July 2022. This organization is shown in Figure 1.1.1.

Figure 1.1.1 ESG Organizational Structure of Advantech



Advantech's SDC Corporate Sustainability Development Committee consists of 3 members including the chairman (founder), Hung-Tse Chen as independent director, and Ling-Han Chang as director. The ESG Office draws up an annual plan, reporting the progress of material ESG topics and projects to Committee meetings on a quarterly basis. Climate issues are included in the Board's agenda at least once a year. The role of the Sustainability Special Committee is to manage climate change. After a new project is confirmed by the Committee, the responsible team will take action and the ESG Office will regularly track the results and propose improvement plan. In 2022, a total of four board meetings was held. The agenda that includes ESG-related topics involved: the Company's risk management plan, the evolution of the human resources organization's mechanism for talent cultivation and inheritance, the greenhouse gas inventory plan, the compilation of the sustainability report, the report topic for communication with stakeholders, and the progress and planning of RE100, etc. The dedicated ESG unit also reports to the chairman on the planning and progress of related projects from time to time. The chairman personally gives direction and strategic advice. Also, the general manager is entrusted to participate in important meetings and decisions.

Recognitions and Honors

Please refer to the following table for recognitions made in relation to Advantech's efforts in the ESG/CSR fields in 2022:

Item	Unit/Award	Category/Group	Ranking/Honor
1	Taiwan Stock Exchange 8th Annual Corporate Governance Evaluations, 2021 TWSE	listed companies	Top 5%
2	CommonWealth Magazine Corporate Citizen Award	Large enterprise group	27th
3	GCSA Global Corporate Sustainability Award	Electronics and information manufacturing industry	Bronze Award of Sustainability Report Award
4	Taiwan Corporate Sustainability Awards (TCSA)	Electronics and information manufacturing industry	Taiwan Top 100 Sustainability Model Enterprises Award
5	Taiwan Corporate Sustainability Awards (TCSA)	Electronics and information manufacturing industry	Silver Award of Sustainability Report Award
6	Best Taiwan Global Brands	-	5th
7	Eco Vadis	-	Silver medal
8	BCCTaipei Better Business Awards	Best Innovative Health and Wellbeing Award	Winner
9	Buying Power	Social Innovation Product and Service Procurement Awards	Second prize
10	Women's Fan DEI Vision Award for Diversity and Inclusion	Large enterprise	DEI Vision Award for Diversity and Inclusion
11	Veken Cup · OFweek 2022 Artificial Intelligence Network Industry	-	Most Innovative Product Award AIR-020 Edge AI Inference System News
12	The 18th CONTROL ENGINEERING China - Best Product Award	-	Best Product Award AIR-500D Edge AI Server News



Item	Unit/Award	Category/Group	Ranking/Honor
13	The 30th Taiwan Excellence Award	Productivity & Energy Collection	Taiwan Excellence Award Smart building e-paper solutions Product Number: EPD-662 News
14	The 30th Taiwan Excellence Award	-	Taiwan Excellence Award EI-52 Edge Intelligence System News
15	2022 VDC Research's Gold Award	-	Gold Award for IoT & Embedded Technology Vendor Satisfaction in the Boards & Modules categories News
16	2022 Bloomberg Green Gold ESG	-	Annual Responsibility Pioneer Award
17	2022-2023 China Automation + Digitalization	-	Top 50 Brands
18	2022 AIoT New Dimension Award	-	Pilot Enterprise Award
19	2022 Polaris Cup	-	Comprehensive Energy Service Excellent Case Enterprise Award
20	Included in Yuanta FTSE4Good TIP Taiwan ESG ETF, TWSE Corporate Governance 100 Index, and TIP Taiwan Environmental Sustainability Index		
21	CDP Carbon Disclosure Program - Climate Change BLevel		




1.2 Stakeholder Engagement



Based on the Company's operational conditions, with reference to the annual international sustainable trends, the Company's own operational development, and the sustainable development process of related peers, and based on the sustainability reports of previous years, the ESG Office invites colleagues of key departments to identify stakeholders with reference to AA1000 SES Stakeholder Engagement Standard to identify communication targets and consider adjustment principles. Key stakeholders include: employees, customers, partners and universities and research institutions, suppliers and contractors, media and public associations and the government, shareholders and institutional investors, communities and non-profit organizations as a total of seven categories of stakeholders.

We interact with stakeholders by using a range of channels including telephone communication, 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, and other means, as well as by using the corporate social responsibility mailbox (csr@advantech.com) and CSR website "Contact Us" section of the CSR official website for stakeholder consultations. Responsible colleagues of each unit shall respectively engage with the demands of our stakeholders and respond accordingly.

Table 1.2.1 Stakeholder Communication Channels of Advantech

Stakeholder	Issues of concern	Communication Channel	Communication Frequency	Responses and Action Results	Covered Region	Response to Chapters or Public Information
 <p>Employees</p>	<ul style="list-style-type: none"> Information security Sustainable Intelligent Solutions Human rights 	Employee Welfare Committee/ Overseas Labor Union	Permanent	<ol style="list-style-type: none"> 81.14% of the execution rate of the budget for employee welfare activities For more responses and action results, please refer to 5.2.1 Employee Relations. The annual Kick-off Meeting and Employee Zone are used to convey information to colleagues with disabilities or special needs. Besides, Advantech has also set up a complaint mailbox for employees to provide employees with complaints. There was no appeals in 2022 Meanwhile, Advantech set up a feedback mailbox, Suggestion Box. In 2022, there were a total of 71 feedbacks. All units have been tasked with responding, addressing and closing the case. In addition, the LINE community is set up to respond to the real-time situation, and the feedback on the implementation direction of various policies is understood through the annual employee satisfaction survey. In addition, Advantech cooperates with Focus & Forecast to provide various assistance programs for Advantech employees. We are available 24 hours a day to solve and assist colleagues' difficulties 	Due to different regulations/national conditions	<ul style="list-style-type: none"> 5.2.1 Employee Relations Advantech ABLE Platform
		Physical and online employees meetings	Semiannual		Launched by headquarters and held by each respective global region/ business group	
		Employee intranet and social networking websites	Permanent		Held by each respective global region	
		Employee newsletter	Weekly		Held by each respective global region	
		Global electronic dashboard	Permanent		Launched by headquarters and held by each respective global region	
		Employee complaint mailbox	Regular		Launched by headquarters and held by each respective global region	
		ESG education and training	New hire training		Headquarters	
		ABLE Line Community	Permanent		Headquarters	
 <p>Customers</p>	<ul style="list-style-type: none"> Information security Sustainable management of the supply chain Eco Design and Sustainability Liability of Product Co-creation of customers and partners 	Key account quarterly meeting	Quarterly	<ol style="list-style-type: none"> Survey of global customer satisfaction is handled once a year The Corporate Social Responsibility section of the Company's website is updated once a year and the latest news from time to time to communicate Advantech's sustainable performance to stakeholders MyAdvantech magazine is released quarterly to communicate with customers about the latest products and solutions, and Advantech's sustainable strategy and direction Communication with stakeholders is expected to be better through 960 interactive posts on social media LinkedIn, and a total of 778 interactive posts on social media Facebook The Corporate Social Responsibility section of the Company's website has a dedicated telephone line and a comment mailbox. They are used to respond to the audit of ESG-related questionnaires from time to time. Its feedback goes to the annual issues of material stakeholders or to be included in the reference of sustainable project work through consultation on sustainability topics 	Held by each respective global region/ business group	<p>3.4 Co-creation of customers and partners</p>
		Advantech Connect (online seminar)	Intermittent		Launched by headquarters and held by each respective global region/ business group	
		Local business and engineering assistance	Immediate		Global	
		Customer Satisfaction Survey	Intermittent		Available for global regions/business groups	
		MyAdvantech Magazine	Quarterly		Headquarters/global regions (Chinese, English)	
		Customer ESG Audit	Intermittent		Headquarters/global regions	
		Corporate Social Responsibility area of the Company's website	Regular		Headquarters (Chinese, English)	
		Collect customer opinions and engage in two-way communication with customers through social media	Regular		Launched by headquarters and held by each respective global region/ business group	

Stakeholder	Issues of concern	Communication Channel	Communication Frequency	Responses and Action Results	Covered Region	Response to Chapters or Public Information								
 <p>Supplier and Contractor</p>	<ul style="list-style-type: none"> Information security Co-creation of customers and partners Eco Design and Sustainability Liability of Product Sustainable management of the supply chain 	Supplier ESG promotion and evaluation	Annual	<ol style="list-style-type: none"> An assessment of ESG sustainability risks was conducted and a total of 271 suppliers were identified 11 suppliers with high sustainability risks were audited and coached. 332 new suppliers were implemented and 296 new suppliers were approved 88 existing suppliers were planned to perform the audit with a total of 77 completed the audit Advantech discloses its sustainability report every year to fully explain supply chain issues so that stakeholders can fully understand them 	Headquarters/global	<ul style="list-style-type: none"> 2.3 Sustainable management of the supply chain 2.1.2. Corporate Governance 								
		Supplier ESG assessment	Annual		Headquarters/global									
		Supplier conference	Intermittent		Headquarters/global									
		Supplier Evaluation	Annual		Headquarters/global									
		Mailbox for reporting integrity and ethics concerns	Regular		Headquarters/global									
 <p>Shareholders and Institutional Investors</p>	<ul style="list-style-type: none"> Sustainable management of the supply chain Innovative mechanism Risk Foresight and Crisis Management Information security Greenhouse Gas Inventory and Energy Management 	Investor service mailbox and telephone on the Company's website	Permanent	<ol style="list-style-type: none"> Response actions in 2022: Overall communication times > 1,000 investors (Chinese/English) Material topics of sustainability that investors are concerned about are responded to in writing/ESG special meetings, and the results are presented in major international ESG evaluations. <table border="1"> <tr> <td>General shareholders meeting</td> <td>1 events (physical + video's auxiliary)</td> </tr> <tr> <td>Quarterly large-scale institutional investors' conference</td> <td>4 events</td> </tr> <tr> <td>Invited to participate in institutional investors' conference/investment forum</td> <td>21 events</td> </tr> <tr> <td>1X1 institutional investors exchange</td> <td>> 200 events (online + physical)</td> </tr> </table> The investor relations monthly report is issued every month, and institutional shareholder feedback and public opinion collection are provided for the reference of the high-level management team 	General shareholders meeting	1 events (physical + video's auxiliary)	Quarterly large-scale institutional investors' conference	4 events	Invited to participate in institutional investors' conference/investment forum	21 events	1X1 institutional investors exchange	> 200 events (online + physical)	Headquarters (Chinese, English)	<ul style="list-style-type: none"> 2.1 Operational Performance and Corporate Governance Structure Public Information for Investor Relations Events & Presentations - Investor Relations - Advantech
		General shareholders meeting	1 events (physical + video's auxiliary)											
		Quarterly large-scale institutional investors' conference	4 events											
		Invited to participate in institutional investors' conference/investment forum	21 events											
		1X1 institutional investors exchange	> 200 events (online + physical)											
		Market Observation Post System	Regular		Headquarters									
		Shareholders' meeting	Annual		Headquarters									
		Large-scale institutional investors' conference	Quarterly		Headquarters									
		Seminars for domestic and overseas institutional investors as well as face-to-face meetings	Intermittent		Headquarters/global									
Issuance of the Company's Annual Report	Annual	Global												
Announcement of Company news on the official website	Intermittent	Global												
Investor area of the Company's website	Regular	Global												
 <p>Media/Public Associations /Government</p>	<ul style="list-style-type: none"> Co-creation of customers and partners Information security Application advocacy and education of IoT 	Interviews, phone interviews, video interviews	Intermittent, averaging once a month	<ol style="list-style-type: none"> A regular media-exclusive law conference every quarter, and an operating revenue message every month Arrangement of 15-20 one-on-one media interviews (face-to-face interviews, telephone interviews, video conferences) Actively participate in 15-20 key meetings of various associations to drive partners from different industries to introduce intelligent solutions. They are even allowed to join Advantech and become partners in promoting IoT solutions and co-creation 	Available globally/regionally	<p>Advantech News Center News & Archives - Advantech (advantech.com)</p>								
		Media luncheons	Intermittent, averaging once every six months		Available globally/regionally									
		Operating revenue announcements	Monthly		Headquarters (Chinese, English)									
		Press conferences	Intermittent, averaging four sessions per year		Headquarters									
		Press release	Intermittent, averaging one article per month or more		Available globally/regionally									
		Company-specific events	Intermittent		Available globally/regionally									
		Media-exclusive investor conferences	Regular		Headquarters (Chinese, English)									
		Media exclusive institutional investors' conference	Annual		Headquarters									

Stakeholder	Issues of concern	Communication Channel	Communication Frequency	Responses and Action Results	Covered Region	Response to Chapters or Public Information
 Community/ Neighborhood / Non-Profit Organizations	<ul style="list-style-type: none"> Neighborhood and Community Care Human rights 	Neighborhood/ Community Communication	Intermittent	1. The sustainability report is published once a year, and the sustainability official website is updated once a year	Launched by headquarters and held by each respective global region	<ul style="list-style-type: none"> Chapter 6: Altruism and Social Benefit
		Setup of a ESG mailbox on the Company's website	Regular		Headquarters (Chinese, English)	
		Disclosure of CSR Report as well as website information	Regular		Headquarters (Chinese, English)	
		Collect stakeholder opinions through social media and engage in two-way communication	Regular		Launched by headquarters and held by each respective global region	
 Partners, Universities and Research Institutions	<ul style="list-style-type: none"> Information security management Application and advocacy education of IoT Eco Design and Sustainability Liability of Product Innovative mechanism 	Directly contact partners or research institutions through the contact window of dedicated personnel	Regular	1. The experience and suggestions of students participating in the activities are collected through the opinion survey form. It is also provided to internal units as a basis for platform technology optimization, education and training documents, and adjustment of activity mechanisms. More than 80% of the respondents to the questionnaire think that they have learned and deeply used a new tool (WIS-IoTSuite, the IoT cloud platform). 75% of the students think that they can better understand the practical operation of the industry through this activity. Nearly 70% of the feedback from the students indicated that they experienced teamwork. Nearly 60% of respondents indicated that participating in this activity challenged themselves and gained a sense of accomplishment	Available globally/regionally	<ul style="list-style-type: none"> 3.3 Application advocacy and education of IoT 6.1 Neighborhood and Community Care

Annual Stakeholder Survey

Through the annual stakeholder survey, we understand sustainability topics that are of concern to our stakeholders. The scope of our survey was expanded in 2022 for the sake of obtaining deeper and more comprehensive insights. The scope of questionnaire distribution and recovery is consistent with the boundary of the report. We also conducted an impact survey on Advantech's global senior management.

To encourage more stakeholders to participate in the surveys, Advantech donates NT\$100 for forest protection and biodiversity work for every valid survey collected. A total of 1,022 questionnaires was collected in the annual stakeholder survey in 2022. A total of accumulated donations of NT\$102,200 were donated to forest conservation units and wetland biodiversity conservation units as promised to fulfill sustainable responsibilities. The details are as follows: In terms of forest protection, we donated to the Tse-Xin Organic Agriculture Foundation for the adoption of 102 trees in Shalun, Taoyuan, and maintenance work for three consecutive years. In terms of biodiversity protection issues, we have cooperated with Kuandu Natural Park and donated 5 hectares of paddy fields and wetlands in the Guandu Plain. The environment and biodiversity are maintained through the cleaning and dredging of irrigation and drainage ditches, the waterways are guaranteed to be unobstructed, siltation is reduced, flood water storage space is provided, and the pressure of wetland terrestrialization is reduced.

Table 1.2.2 Advantech's 2022 Stakeholder Survey and impact assessment of materiality - Number of Valid Surveys Received

Stakeholder	Aspect of investigation	Valid surveys received		
		Advantech Headquarters and Global Locations	Advantech China	Subtotal
Employees	Level of concern	622	54	676
Customers		24	8	32
Partners/Universities/ Research Institutions		30	17	47
Supplier and Contractor		65	91	156
Media/Public Associations/ Government		20	4	24
Shareholders/ Institutional Investors		31	X	31
Neighborhood/Community/ Non-Profit Organizations		18	1	19
Directors and senior executives	Impact	31	6	37
Total		841	181	1022

1.3 Sustainability Goals and Materiality

1.3.1 Identification of Material Issues

Advantech pays attention to international sustainability trends and standards, including: GRI Standards, UN Sustainable Development Goals (SDGs), Responsible Business Alliance(RBA), Sustainability Accounting Standards Board(SASB); and concerned isusses in international sustainability evaluation such as DJSI and MSCI ESG Ratings, CDP, TCFD, and other disclosure frameworks. Each year, Advantech conducts a survey and assessment on sustainability issues relevant to the company. This includes stakeholder engagement surveys to understand the level of concern regarding these sustainability issues' economic, environmental, and social (including human rights) impacts. The evaluation of senior management on the degree of actual and potential positive/negative impact on Advantech's operations and financial performance. Through a two-dimensional analysis of significance conducted by the Sustainability Development Committee and reported to the Board of Directors, the identified results serve as a reference for information disclosure and the basis for developing sustainability strategies and planning related projects.

Figure 1.3.1 Advantech's Sustainable Goal Setting and Strategy Development Process



Collection/Identification of Advantech's Related Sustainability Issues

Given the breadth of sustainability topics, we collect and identify Advantech-related sustainability issues from both internal and external sources. Collection sources are shown in Table 1.3.1 below.

Table 1.3.1 Sources of Advantech's sustainability topics

External	Internal
<ul style="list-style-type: none"> Stakeholder feedback (investment institutions, clients, etc.) International sustainability standards and regulations (GRI Standards, RBA, SDGs, SASB) International sustainability ratings (DJSI, CDP, MSCI ESG Index, TCFD, etc.) 	<ul style="list-style-type: none"> Feedback from management Advantech's operational strategy and objectives Advantech's ESG vision

Before conducting the stakeholder survey, we strengthened the process of collecting stakeholder opinions. Through multiple communication meetings with investment institutions and clients and participation in external sustainability-related conferences, we gained insights into the issues that external stakeholders value, such as human capital and potential risks, product energy consumption standards and green design, and Advantech's overall carbon reduction targets. Consequently, we provided detailed descriptions of these issues in the questionnaire. Additionally, we proactively engaged with various stakeholder units (including sales, public relations, employee relations, investor relations, emerging business development units, and supply chain) to solicit feedback on whether there were any additional issues they would like to add or discuss in the questionnaire. This approach aimed to understand stakeholders' perspectives on the questionnaire design and the significance of Advantech's initiatives.

On the other hand, starting from Advantech's ESG vision to "Enable an Intelligent Planet in a sustainable manner," we believe that Advantech's core IoT technologies and solutions, as well as our corporate culture of open innovation and co-creation with partners and our long-standing IoT industry-university cooperation, shall enable us to effectively utilize the core capabilities of the business to respond to the UN Sustainable Development Goals (SDGs), specifically SDG 4 (Quality Education), SDG 7 (Affordable and Clean Energy), SDG 13 (Climate Action), and SDG 17 (Partnerships for the Goals). In addition to addressing these specific SDGs, we also align our efforts with other SDG targets through various material topics, as outlined in Section 1.3.2 - Management Guidelines for Material Issues.

Figure 1.3.2 Process of Advantech's material issues survey

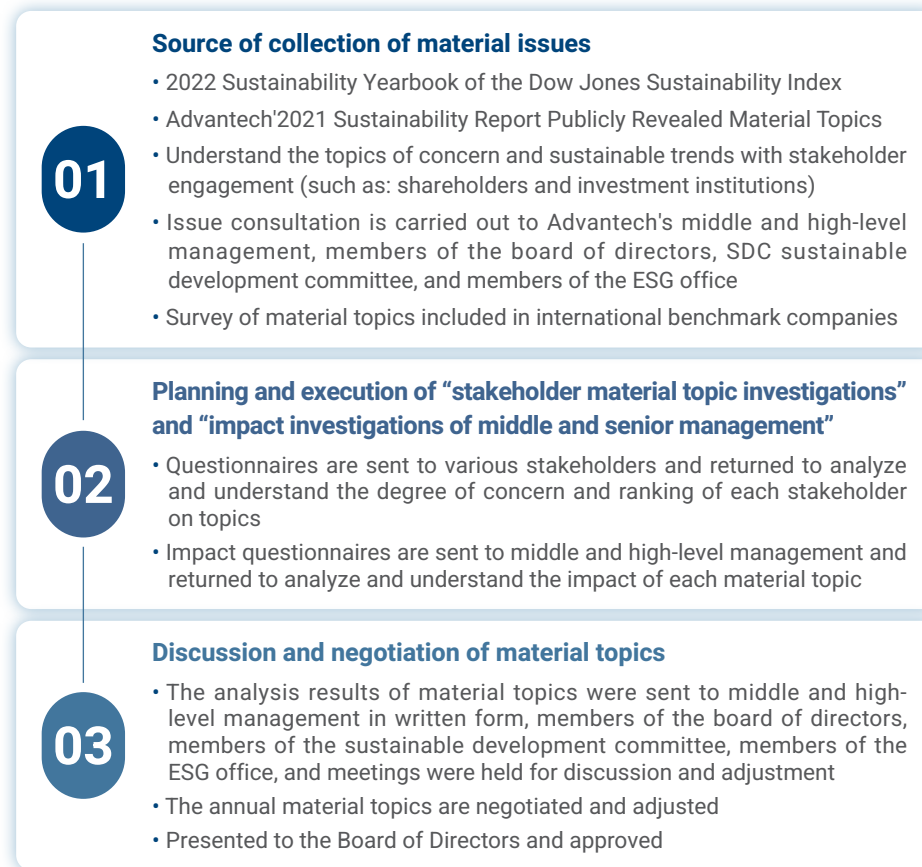


Table 1.3.2 Refinement of survey work on material topics in 2022

Convergence of Issue Focus	Increase in breadth of investigation	Target setting mechanism
<ul style="list-style-type: none"> Focusing on the ESG three-aspect topic was converged, and this topic is clearly provided in the questionnaire A benchmark for issue adjustments was established to respond to sustainable trend changes resulting in rapid response to stakeholders 	<p>The survey of interested parties has been expanded and sent to 6 main domestic and oversea operations (Advantech Headquarters, Advantech China, Advantech Europe, Advantech America, Advantech Japan, Advantech Korea)</p>	<p>The viewing period of the analysis results of material topics has been extended. The material topics for this year are all proposed for 2023 and 2025, for expecting us to fully review and respond to the expectations of stakeholders</p>

Figure 1.3.3 Advantech's ESG Vision

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



Employee and Community Enrichment

- Implementing employee care and social benefit using the ABLE Club platform
- Construction of an online learning platform for colleagues around the world, and multiple channels for cultivating talents
- Global talent to be visualized through construction of the Human Capital Management (HCM)
- Sustainable and innovative education supported by Advantech Foundation

AIoT Popularization and mutual benefit

- AI Academy
- AIoT InnoWorks Industry-Academy Collaboration
- IoT ecosystem partner co-creation

2025 Goal: Co-creation partnerships established with 50 universities worldwide

Green Operations

- Climate change strategy and energy management
- Eco design and sustainable product
- Sustainable Intelligent Solutions

- 2021 Announced Science Based Targets initiative (SBTi)
- 2022 Issuance of Task Force on Climate-Related Financial Disclosure (TCFD) report
- 2025 Inclusion in the Dow Jones Sustainability Indexes (DJSI)
- 2025 Carbon Disclosure Project (CDP) score of A
- 2030 Advantech Kunshan & Taiwan factories renewable energy utilization rate reached 50%
- 2040 Advantech Global renewable energy utilization rate reached 100%
- 2050 Goal of net zero carbon emissions



The ESG Office has selected 14 Sustainability Topics in 2022 (Table 1.3.3) and formulated survey content accordingly based stakeholder input, external reference indicators and international initiatives (Table 1.3.1), and internal development strategies and goals (Figure 1.3.3). Simultaneously, the results of stakeholder opinion surveys and definition of material topic were sorted, and were reported by the Sustainable Development Committee to the Board of Directors for approval in the second quarter.

Table 1.3.3 Sustainability Issues in Advantech's 2022 Survey

Environment	Society	Economic Governance
<p>NO.02 Eco Design and Sustainability Liability of Product</p> <p>NO.13 Climate change strategy and management</p> <p>NO.14 Greenhouse Gas Inventory and Energy Management</p>	<p>NO.03 Application advocacy and education of IoT</p> <p>NO.08 Employer-employee relationship and diverse and inclusive workplaces</p> <p>NO.10 Human right</p> <p>NO.10 Industry Talent Cultivation and Development</p> <p>NO.12 Neighborhood and Community Care</p>	<p>NO.01 Information security management</p> <p>NO.04 Sustainable Intelligent solutions</p> <p>NO.05 Co-creation of customers and partners</p> <p>NO.06 Sustainable management of the supply chain</p> <p>NO.07 Risk Foresight and Crisis Management</p> <p>NO.08 Innovative mechanism</p>

▲ Stakeholder Survey, Impact Survey, and Materiality Analysis

Before conducting stakeholder engagement and materiality assessments, the Sustainability Development Committee's working group also conducted significant issue adjustments with relevant senior management (including consolidation, deletion, addition, and renaming). Through these assessments and stakeholder discussions, no issues were removed or consolidated. The adjustment results are as follows:

- **"Green Design and Product Liability" was renamed "Eco Design and Sustainability Liability of Product":**

The concerns on the issues of life cycle management of our products from green design at the source to end-of-use and after product disposal are increasingly due to the trend of industrial sustainability. The issue of product carbon footprint also affect the choice of clients and the market. Advantech carried out an inventory of the carbon footprint of its first product in 2022. This material topic was renamed to strengthen the meaning of product sustainability.

- **"Risk Management" was renamed "Risk Foresight and Crisis Management":**

Advantech has always paid attention to risk management. In addition to pan-operational risks, we also pay attention to pan-strategic risks and material risks with wide-ranging influence. In addition to risk control, we also need to understand crisis management and respond to risks. Therefore, this topic was adjusted.

- **"Talent Cultivation and Development" was renamed "Industry Talent Cultivation and Development":**

Advantech is a business entity spanning 28 countries around the world. In addition to maintaining a leading position in the industrial computer industry, we are more aware of the need for active transformation in our industry and the selection and cultivation of diverse talents. Meanwhile, Advantech is also committed to cultivating multinational and diverse talents to generate talent roles to meet market requirements. Therefore, this topic was renamed "Industrial Talent Cultivation and Development".

- **"Greenhouse Gas Inventory and Energy Management Actions" was renamed to "Greenhouse Gas Inventory and Energy Management":**

The name change is implemented in order to more accurately explain the management framework, target setting, progress, and inspection standards of the Company's energy strategy

- **"Human Rights Issue" was added:**

Human rights are also an emerging issue for Advantech. In particular, the disclosure of this project has an increasingly transparent and complete demand, facing the requirements of stakeholders and various domestic and foreign sustainable evaluations. Therefore, it was simultaneously added as a new topic.

- **"Climate Change Identification and Strategy" was renamed "Climate Change Strategy and Management":**

Advantech has spared no effort on the topic of climate change this year. We also believe that the topic of climate change needs to be viewed and managed systematically. In particular, systematic work strategies and action plans are required to achieve the response to the ambitious goals that have been set, such as: net zero carbon emission goals, RE100 goals, etc. It is estimated that this topic is called "Climate change strategy and management".

- **"Labor Relations and Equality" Incorporated into: "Employer-employee Relationship and Diverse and Inclusive Workplaces"**

In view of Advantech's demand for international talents, EDI (inequality, diverse, and inclusion) is also an emerging sustainable topic of workplace. In order to strengthen the cultivation of diverse talents, the name was changed.

- **"Application Advocacy and Education of IoT" has been added:**

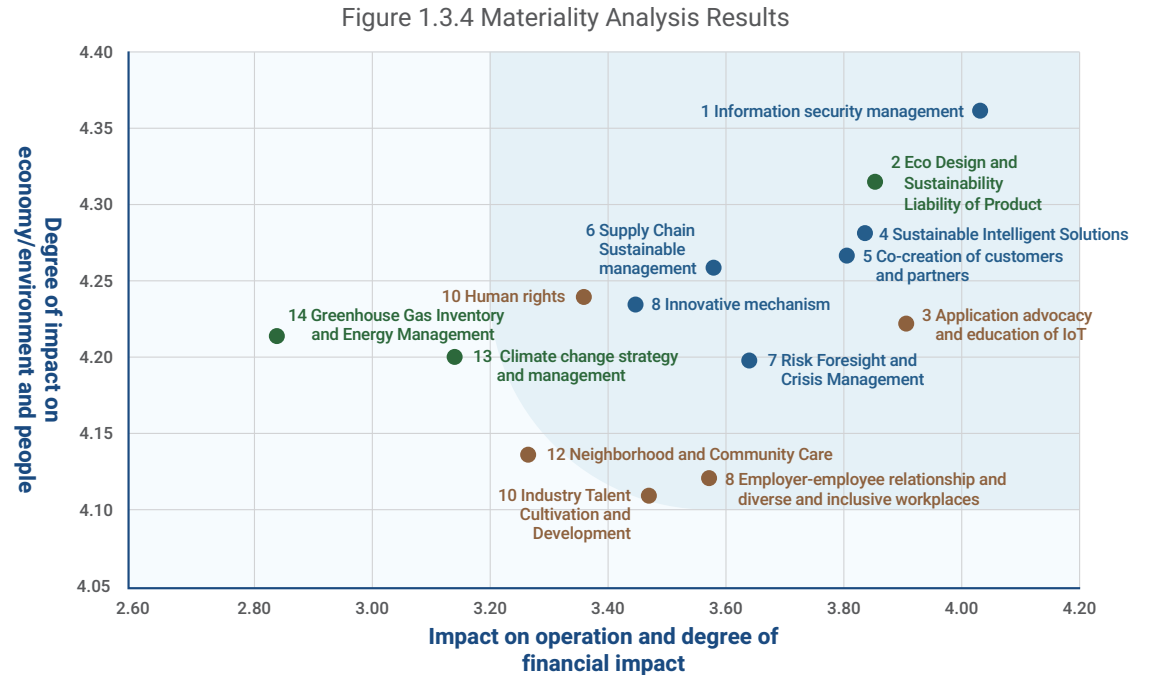
The promotion and application of the Internet of Things and the cultivation of outstanding talents have always been important projects of Advantech. This project is not only related to promoting the achievements of the high-quality education of the United Nations' sustainable indicators SDG 4, but also the possibility of exploring forward-looking business opportunities and cooperating with sustainable market development in innovative development. Therefore, it is independently regarded as a new topic.

List of material topics and description of changes in 2022

Ranking of material topics	Name of the material topic	Orientation of material topics	Changes in the ranking of material topics	Meaning to Advantech	Note
01	Information Security Management	G	▲	Advantech is a global IoT leader. Information security issues involves a company's operational stability, product security, privacy and other aspects. Regarding Advantech's brand value, it is extremely important to stakeholders such as employees, clients, and investors.	
02	Eco Design and Sustainability Liability of Product	E	▲	Green design standards are practiced and environmentally friendly products are provided. Starting from raw materials, product design and extending into manufacturing and environmental management, we are gradually setting goals and introducing each item of the standards. We thus are willing to do our best to improve the environment, reduce environmental impact, and produce environmentally friendly products.	Rename
03	Application Advocacy and Education of IoT	S	—	We promote various industry-university projects with the vision of popularizing and deepening IoT education. We achieve the universal education of the Internet of Things, thematic learning and innovation of the Internet of Things, the career exploration of the Internet of Things, the research and long-term cooperation of the Internet of Things. The gap between industry and education is eliminated, and the talents of the new generation of Internet of Things are cultivated and their energy is innovated.	Addition
04	Sustainable Intelligent Solutions	G	▼	Advantech's software and hardware products and integrated solutions can be used in growing markets such as renewable energy, climate mitigation, climate adaptation, telemedicine, and education. Aside from improving Advantech's corporate competitiveness, continuously developing products for sustainable use can also contribute to sustainability.	

Ranking of material topics	Name of the material topic	Orientation of material topics	Changes in the ranking of material topics	Meaning to Advantech	Note
05	Co-creation of customers and partners	G	▲	Good customer relationships can enhance Advantech's corporate competitiveness; high-quality partnerships can enhance the creativity of the IoT industry as a whole	
06	Sustainable Management of the Supply Chain	G	▼	The main process of Advantech is to purchase components from upstream component manufacturers, assemble and manufacture them in the Company, and then deliver them to our clients. Regarding the variety of items and the high degree of customization, Advantech regularly conducts supplier assessments and ESG management assessments. The concept of "Corporate Social Responsibility and Supply Chain Sustainability Management" is implanted into the evaluation norms, resulting in a win-win situation of sustainable value and service quality.	
07	Risk Foresight and Crisis Management	G	—	The purpose of risk management is to protect and enhance corporate value, being able to structure and systematically assess existing and potential risks that may be faced, making timely and responsive decisions that meet the Company's operational goals, and ensuring that goals are achieved while enabling continuous improvement. As a global leader in our industry, Advantech has had a continuous focus and drive for significant strategic and operational risk management.	Rename
08	Employer-employee Relationship and Diverse and Inclusive Workplaces	S	▼	The diversity of Advantech's talents prompts the integration of EDI (Equity/Diversity/Inclusion) elements into the workplace. Employee communication and welfare are emphasized to respect the diversity and differences of each employee. We support our employees to give full play to their strengths in suitable positions, so that employees have a sense of accomplishment and belonging.	Rename
08	Innovative Mechanism	G	▼	We actively invest in product and technological innovation, and also create a co-prosperity mechanism with ecological partners in R&D and business.	
10	Human Rights	S	—	We fulfill our corporate responsibility to protect human rights to protect the basic human rights and related rights of all employees, clients and stakeholders. We abide by domestic and international human rights laws and norms or guidelines.	Addition
10	Industry Talent Cultivation and Development	S	▼	Due to the characteristics of our industry (with a small amount of diversity and high demand for innovation and flexibility), there is high demand for specialized, interdisciplinary talent. The attraction, cultivation, and retention of talent are thus extremely important to Advantech's operations.	Rename
12	Neighborhood and Community Care	S	▲	Sustainability and altruism are one of Advantech's corporate spirits. Starting from Advantech's own core capabilities, we apply IoT technology to cultivate the field of intelligent medical care and assist in the practice of SDG 3 (Good Health and Well-Being). Beyond this, we additionally respond to topics in SDG 9 (Industry, Innovation, and Infrastructure) and SDG 4 (Quality Education). We offer long-term support for IoT education and each item of innovative to provide a learning experience and benefits for Taiwanese children, teenagers, and youth.	
13	Climate Change Strategy and Management	E	▼	Advantech has included climate change as one of the material risk projects of corporate sustainable management, and has managed it according to the two standpoints of "mitigation" and "adaptation." We are also actively identifying risks, building adaptation capabilities, researching and analyzing opportunities for climate change. We continue to invest in eco energy and in energy-saving products and solutions, and we are integrating them with the core business of energy management to promote energy conservation and sustainability.	Rename
14	Greenhouse Gas Inventory and Energy Management	S	▼	We are committed to reducing greenhouse gas emissions and efficient use of energy resources, and we are also striving to achieve publicly committed carbon reduction goals. The coexistence and co-prosperity of environmental protection and sustainable development of enterprises are ensured.	Rename

As explained in **1.2 Stakeholder Engagement**, Advantech's stakeholder survey and significant impact assessments with senior management in 2022 received a total of 1022 valid surveys, covering 14 sustainability issues and detailed descriptions of each issue (as the above Table). The degree of impact and likelihood of occurrence of material issues on the economy/environment/people (including human rights) were rated on a scale of 1 to 5 by relevant stakeholders. All relevant units are responsible for scoring, and the working group of the Sustainable Development Committee is responsible for compilation. Considering the differences in the numbers of valid surveys received from stakeholder groups, the average results of each stakeholder group were calculated and weighted based on their relationship with Advantech. After the analysis, we communicated and negotiated with the senior management to measure the characteristics of the Company and the industry, refer to the DJSI yearbook, and the renaming and adjustment of material issues by industry benchmark companies. It is fully disclosed in this report as shown in Figure 1.3.4.



As shown in the "Figure 1.3.4 Materiality Analysis Results", we added the two scores to get the ranking of the issues; and for those whose impact level is higher than 3.28 and the stakeholder degree of concern is higher than 4.10, these are regarded as material issues for Advantech. Based on the above analysis results, the Sustainability Committee Working Group has measured the Company's core development strategies. After communicating with the Sustainable Development Committee in writing, 11 material issues have been adjusted and agreed to follow (in order of importance), and these shall be fully disclosed in this Report:

Table 1.3.5 Eleven Material Issues Addressed in the Report

1	Information Security Management	5	Co-creation of customers and partners	8	Innovative Mechanism
2	Eco Design and Sustainability Liability of Product	6	Sustainable Management of the Supply Chain	10	Human Rights
3	Application Advocacy and Education of IoT	7	Risk Foresight and Crisis Management	10	Industry Talent Cultivation and Development
4	Sustainable Intelligent Solutions	8	Employer-employee Relationship and Diverse and Inclusive Workplaces		

Issues Boundaries

For each material issues, we assess the magnitude of the impact and whether it has an impact inside or outside the organization, and determine the level of disclosure. Table 1.3.6 defines the organizational and internal boundaries disclosed by each material issues.

Table 1.3.6 Boundaries of material issues, scope of impact, and corresponding GRI topics

		Internal						External		Range of Influence/ Impact
		Headquarters (Taiwan)	Advantech China	Advantech Korea	Advantech Japan*	Advantech America	Advantech Europe	Supplier	Customers	
Governance	Information security management	●	●	●	●	●	●	●	●	Employees/Suppliers/ Clients
	Sustainable Intelligent Solutions	●	●	●	●	●	●	●	●	Clients
	Sustainable management of the supply chain	●	●					●		Suppliers/Clients
	Innovative mechanism	●	●	●	●		●			Suppliers/Clients
	Co-creation of customers and partners	●	●		●		●		●	Suppliers/Clients
	Risk Foresight and Crisis Management	●	●	●	●	●	●	●	●	Employees/Suppliers/ Clients
Environment	Eco Design and Liability of Product	●	●	●	●	●	●	●	●	Employees/Suppliers/ Clients
Society	Application advocacy and education of IoT	●	●	●	●	●	●		●	Employees/Partners
	Cultivation and development of talents	●	●	●	●	●	●	●		Employees
	Human rights	●	●	●	●	●	●	●		Employees/Suppliers/ Partners
	Employer-employee relationship and diverse and inclusive workplaces	●	●	●	●	●	●			Employees

*Note: Among the 11 material issues, five are self-defined topics and correspond only to GRI 103; namely, information security management, Sustainable Intelligent Solutions, innovation mechanisms, risk foresight and crisis management, and eco design and product liability.

● Fully disclosed in this report ● Partially disclosed in this report

Assessment of Significance Impact

Following the definition of significance in the GRI Standards (2021) framework, Advantech conducted a comprehensive evaluation of the significance of 14 sustainability issues from both the perspective of "Advantech" and their impact on the external economic, environmental, and social (including human rights) aspects. The assessment primarily relied on Advantech's internal impact index, supplemented by stakeholder perspectives, to better understand the effects of Advantech's operations on these significant topics.

Drawing insights from ongoing operational assessments and emerging sustainability trends, we identified the material positive and negative impacts of each of the 14 sustainability issues. We further calculated the "degree of impact" and "probability of occurrence" for each issue.

Evaluation Process

● Quantifying Impact

The degree of impact and probability of occurrence of each material issue on the economy, environment, and people (including human rights) were rated on a scale of 1 to 5. These ratings were provided by relevant departments and consolidated by the Sustainability Development Committee working group. The investigation results of the "positive impact degree" multiplied by the "positive impact probability" and the investigation results of the "negative impact degree" multiplied by the "negative impact probability" were compared using absolute values, serving as the basis for formulating management policies for material issues.

● Impact Ranking

The Sustainability Development Committee working group calculated the quantitative results of the impact for the 14 material topics and made the following observations:

The assessment of significant impacts involves multiplying the "negative impact severity" by the "probability of negative impact occurrence" to determine the "negative impact influence." Based on the sorting of these values, the top three issues with the highest negative impact influence on Advantech's operations are "Green Design and Product Sustainability Responsibility," "Information Security Management," and "Labor Relations and Inclusive Workplace."

Among the 14 material issues, only "Green Design and Product Sustainable Responsibility" has a higher "negative impact" than "positive impact". This highlights the need for further management and preventive measures with this particular topic and the development of mitigation plans.

After the recommendations of the management team are comprehensively considered, a description of the impact and related planning of the management policy are provided. Please refer to "1.3.2. Management Policy for Material Issue".



1.3.2 Management Guidelines for Material Issues

The ESG Office cooperates with the responsible units for each material topic, formulating management policies, setting goals, and implementing and tracking results for material issues; see the table below for details.

Table 1.3.2.1 Goals and Management policy for material issues

1 Information Security Management		Chapters of the Report 2.2 Information security management	
Materiality	With the continuous threat of cyber attacks, information security has become one of the primary risks for global business operations. ESG rating agencies, including the Dow Jones Sustainability Index (DJSI), have incorporated information security management as a crucial criterion in their assessments. IT has obviously become a topic that needs to be taken seriously by enterprises. Advantech is a global IoT leader. Information security issues involves a company's operational stability, product security, privacy and other aspects. Regarding Advantech's brand value, it is extremely important to stakeholders such as employees, customers, and investors.		
Management Strategy	<ul style="list-style-type: none"> ● Improvement of visibility of information security risks ● Decrease in attack surface 	<ul style="list-style-type: none"> ● Improvement of information security governance and risk awareness ● Enhancement of application system resilience 	
Policy or commitment	The Company's business continuity is guaranteed. Risks are effectively reduced, such as the theft, improper use, leakage or destruction of information assets caused by human error, hacker attacks or natural disasters. In this way, the interests of shareholders and customers are guaranteed.		
Description of impact	The topic of Advantech's information security management has not caused any negative impact on the Company, customers, environment, economy, or society in 2022. During this period, the Company had a total of 1 information security incident (Please refer to Chapter 2 - 2.2 Information security management). Advantech will continue to improve the quality of information security management. Therefore, it avoids negative impact on production or operation activities or related compensation to customers, suppliers, and employees if their personal information is stolen in the future.		
2022 Achievement Status	<p>Goals achieved:</p> <ul style="list-style-type: none"> ● Headquarter's ISO 27001 extends the scope of application to the IT room management and backbone network of the headquarter. ● Kunshan, North America and Europe have all passed the ISO27001 certification. ● The availability of ERP, Oracle PLM and MES of factories reached 99.5% during the working hour. The achieved status is as follows: SAP: 99.9%, PLM: 100%, MES: 100%. ● In 2022, the HQ completed the drill of the IT and OT environmental information security red team in the Linkou factory. ● In 2022, the remote backup mechanism was established in Linkou, and all key application systems were included. ● There were no cases of leakage of business information during 2022. ● No unauthorized segment connections during 2022. 	2023 Goals	<ul style="list-style-type: none"> ● Microsoft's security score reached 60%. ● The deployment of Endpoint Protection (EDR) reached a coverage rate of 80%. ● The deployment of system vulnerability patching tools reached a coverage rate of 90%. ● Annual Information Security Advocacy Course completion rate reached 90%. ● The availability of key application systems reached 99.9%
2025 Goals	<ul style="list-style-type: none"> ● Microsoft's security score reached 80%. ● The deployment of Endpoint Security Protection (EDR) reached a coverage rate of 90%. ● The deployment of system vulnerability patching tools reached a coverage rate of 98%. ● Annual Information Security Advocacy Course completion rate reached 99%. ● The availability of key application systems reached 99.95% 	Action Plan	<ul style="list-style-type: none"> ● Key application systems are used to build remote backup mechanisms ● ISO27001 expands the scope of application to the management of the computer room of the information department of the head office, the backbone network, and information operations in North America and Europe. ● The drill of the information security red team was conducted in the IT and OT environment of the Linkou factory

Evaluation of effectiveness	Semi-annual Cyber Security Review Meeting and information security governance group meetings are held. The annual information security goals and the progress of the implementation of material information security projects are continuously tracked.
Stakeholder Engagement	Please refer to Chapter 2 - 2.2 Information security management improvement plans.



2. Eco Design and Sustainability Liability of Product

Chapters of the Report 4.1 Eco Design and Sustainability Liability of Product

Materiality	We are committed to improving the Company's overall product green design standards. Environmentally friendly and high-efficiency products are provided to commit to long-term operation and create a sustainable supply chain. In this way, the responsibility of green product management is fulfilled. Internal standards were gradually raised. It includes the improvement of energy efficiency of products, the adoption of green materials and packaging materials, and the principles of easy disassembly and recycling. Meanwhile, Advantech's overall competitiveness has been enhanced to meet the requirements of international and environmental regulations. We work with suppliers, downstream system integrators and strategic partners to produce low-carbon and environmentally friendly products, which is the goal of green products.	
Management Strategy	<ul style="list-style-type: none"> ● ECO design principles has been spread to more product lines. From the aspect of products' energy saving, all aspects of inspection are comprehensively introduced in the new product development process in order to increase the proportion of green product revenue. ● The green design reward and process system has been fully extended. ● Systematic management (Dashboard) is to establish a visual green product board to improve the performance of Advantech's green products. 	
Policy or commitment	In respect to the global Sustainable Development Goals, Advantech is responding to SDG 9 (Industry Innovation and Infrastructure) and SDG 12 (Responsible Consumption and Production). Starting from raw materials, product design and extending into manufacturing and environmental management, we are gradually setting goals and introducing each item of the standards. We thus are willing to do our best to improve the environment, reduce environmental impact, and produce environmentally friendly products.	
Description of impact	<p>In order to improve the Company's overall green design standards and requirements, the Company may need to invest more research and development resources and expenses in the short term. Moreover, R&D design may encounter a high threshold to break through. However, in the medium and long term, investing in green product design and fulfilling corporate responsibility for environmental sustainability will have a positive impact on the overall environment and economy. Advantech's overall sustainable competitiveness can also be enhanced. Also, the expectations of stakeholders and customers are met. In this way, we align ourselves with leading sustainable enterprises and attract outstanding talents to join us.</p> <p>The decision-making process of material selection and product design is considered in all aspects of green design. The sustainable transformation of internal R&D teams and suppliers is gradually driven to reduce possible environmental pollution and impact. In addition, the increase in the number of product labels that disclose green design to the outside world can enhance Advantech's image and goodwill in corporate sustainability. The impact of environmental protection and energy saving awareness on the Company's operations and sales can also be reduced. The potential loss of losing customers can be reduced by complying with the requirements of international regulations and independently improving the green design of products. In addition, the data of product recyclers are verified and counted through third-party units with plans of life-cycle thinking. Environmental impact and pollution caused by improper handling of product raw materials and waste are therefore avoided.</p>	
2022 Achievement Status	<ul style="list-style-type: none"> ● 100% of raw materials continue to achieve the compliance with mandatory international regulations and Advantech's standards for regulated substances. A total of 41 models of products complying with energy-saving design have reached the goal set last year. ● The achieved quantity of standard products in the newly opened case is 3 models (silver medal). Mass-produced models have introduced 21 models in the next generation of models, reaching 20% of the target set last year. (Several models among the newly developed models are currently under design and development). 	2023 Goals
		<ul style="list-style-type: none"> ● 100% of raw materials continue to achieve the compliance with mandatory international regulations and Advantech's standards for regulated substances. ● The new models of all standard products must meet the specifications of energy-saving design ● The mass-produced IPC system products are strategically introduced into power-saving gold power supply and contributes 8% of revenue ● Overall goals: Eco design new products (four standpoints) achieved silver medals or above reaching 50%. ● The mass-produced IPC system products are introduced into eco design (four standpoints) and contributes 8% of revenue.

<p>2025 Goals</p>	<ul style="list-style-type: none"> ● 100% of raw materials achieve the compliance with mandatory international regulations and Advantech's standards. ● The Energy Star/internal energy-saving high standard gold medal for new products of a specific product line reached 20%. ● The mass-produced IPC system products are introduced into power-saving gold power supply and contributes 15% of revenue. ● Overall Goal: Eco design new products (four standpoints) achieved silver medals or above reaching 80%. ● The mass-produced IPC system products are introduced into eco design(four standpoints) and contributes 8% of revenue. 	<p>Action Plan</p>	<ul style="list-style-type: none"> ● Examination of Product Development Stages is included in the publicity of all aspects of green design. Source management meets the requirements in the development stage with a view to achieving 2023 green design product revenue accounting for more than 10%. ● Efficient power modules are introduced into the product strategy. Using energy saving and high conversion efficiency to improve from the source. Advantech plans to improve the replacement strategy for power modules in the next three years, which was introduced into mass-produced hot-selling products. ● Specific product lines are introduced with Energy Star certification in combination with the energy-saving management software to improve environmental performance Display / Panel PC / Portable, and software are prioritized to be introduced as the scope, and modules for energy-saving management are developed and designed to be evaluated which can be deployed on Advantech products to improve environmental performance.
<p>Evaluation of effectiveness</p>	<ul style="list-style-type: none"> ● Regular check The ESG team regularly review the progress every two weeks. Also, the direction of execution is adjusted in real time to ensure the compliance with the effectiveness of the strategy. ● External resources support and learning from experience Introducing external resource when necessary, also verified the progress and the target. 		
<p>Stakeholder Engagement</p>	<p>Advantech will continue to strengthen product green design and engage the stakeholders. No significantly negative impact was caused by this topic. Therefore, there was no remedial measures.</p>		



<p>3 Application Advocacy and Education of IoT</p>		<p>Chapters of the Report 3.3 Application advocacy and education of IoT</p>
<p>Materiality</p>	<p>Advantech invests in product and technology innovation and creates a co-prosperity mechanism with ecological partners in R&D and business. Industry-university cooperation is the source of external innovation. Expanding the talent pools and partnership with R&D community. The results of R&D are promoted to be industrialized and marketized.</p>	
<p>Management Strategy</p>	<p>We cooperate with leading universities in Taiwan to promote industry-university cooperation and to reduce the gap between studying and application. Enterprise resources are connected in stages to promote the implementation of the industrialization of results in academic researches. We cooperate with global ecosystem partners through online education platforms and open innovation competitions. Internet of things universal education is also jointly promoted.</p>	
<p>Policy or commitment</p>	<p>We cooperate with leading universities in Taiwan to promote industry-university cooperation and to reduce the gap between campus and application. We promote the implementation of the industrialization of results in academic researches. We cooperate with partners through online education platforms and open innovation competitions.</p>	
<p>Description of impact</p>	<ul style="list-style-type: none"> ● No negative impact. ● "Popularizing and Deepening Internet of Things Education" our vision, and carry out IoT projects activity. The programs were developed to cultivate talents for the IoT and shorten the gap between industry and academia. ● The "Co-Creation" value chain of Advantech working with partners to generate applications and solutions. Advantech's capabilities and resources have a positive impact on industries and stakeholders. ● This topic has a positive impact on the society aspect, stakeholders such as universities and students. Positive impact such as cultivate young talent, and developing the commercial value. The outcomes of IoT education have lasting impact. It includes the popularization of the use of Advantech's IoT online teaching materials and the expansion of the use of national/regional branches. It boosts the link between external ideas and practices of internal industry, establishing the IoT education model, and cultivating the talent. 	

<p>2022 Achievement Status</p>	<p>No target set for 2022 / Results achieved in 2022:</p> <p>Popular Education</p> <ul style="list-style-type: none"> ● 14 special researches and plans was produced. a total of 35 interns were recruited from Taiwan region, and 7 students thereof extended their internship after the summer vacation. ● More than 800 technical certifications have been issued in campus cooperation. ● Indicators of influence: Course content is continuously optimized. The usage rate and continuity of Advantech's Internet of Things online teaching materials have been improved. <p>Learning & Field</p> <ul style="list-style-type: none"> ● 6 projects were produced with the collaboration of National Yang Ming Chiao Tung University. ● Indicators of influence: The ratio of industry-university topics to product application and the willingness of students to enter the Internet of Things industry have all been improved. <p>Open Innovation</p> <ul style="list-style-type: none"> ● Total 90 topics were produced by 360 students participated from 16 universities around the world. ● Indicators of influence: the penetration rate of cooperation with colleges and universities, and the ratio of obtaining (Advantech) IoT certificates. 	<p>2023 Goals</p>	<p>Popular Education</p> <ul style="list-style-type: none"> ● 35 students participated in the Elite100 Internship Program. ● A total of 12 cooperation numbers to participate in educational projects or university courses of cultivation. <p>Learning & Field</p> <ul style="list-style-type: none"> ● 3 campus IoT application projects were promoted. ● 7 Industry-University collaboration projects. <p>Open Innovation</p> <ul style="list-style-type: none"> ● 26 schools from around the world participated.
<p>2025 Goals</p>	<p>Popular Education</p> <ul style="list-style-type: none"> ● Relevant courses have been established and optimized, and a total of 30 technical professional courses on the Internet of Things will be accumulated by 2025. ● In 2025, there will be 43 cooperation projects or university courses involved in cultivation education. From 2022 to 2025, there has been more than 70 teaching projects. <p>Learning & Field</p> <ul style="list-style-type: none"> ● There are about 5 - 8 projects of industry-university research projects per year. From 2022 to 2025, there has been more than 20 projects in total.. ● 30 of graduate students on the industry-university interface were trained. ● The Graduate students on the industry-university interface has increased by about 10 people each year. From 2022 to 2025, the cumulative target has been more than 50 people. <p>Open Innovation</p> <ul style="list-style-type: none"> ● In 2025, it will reach 11 countries, 40 schools, 180 teams, and 720 participating students. From 2022 to 2025, a total of 2,000+ students has participated. 	<p>Action Plan</p>	<p>Popular Education</p> <ul style="list-style-type: none"> ● AIoT Internet of Things course materials were co-written by cross-school. ● Outstanding team students are recruited to join Advantech through the Advantech Elite100 Internship Program. <p>Learning & Field</p> <ul style="list-style-type: none"> ● We cooperate with National Yang Ming Chiao Tung University for the Industry Academia Innovation School. There is a model of industry-university co-creation by the original enterprise. Besides, the gap between industry and academia will be bridged through new mechanisms, including the school's sponsorship of Internet of Things innovation projects, industry-university master-doctorate and internship programs, etc. <p>Open Innovation</p> <ul style="list-style-type: none"> ● In order to expand the continuation effect after the event, the depth of cooperation between Advantech and the school has been strengthened through mechanisms such as student internship programs, campus ambassadors, and theme extension sponsorships.
<p>Evaluation of effectiveness</p>	<ul style="list-style-type: none"> ● Advantech cooperates with industry-university partners to promote the Internet of Things. The effectiveness of this approach is checked, and the direction and progress of the project are reviewed through the directors. ● Regular meetings for checking the progress and the gap to secure the efficiency. ● The 19th "Global Views Monthly" ESG Corporate Sustainability Award - Excellent Program Education Promotion Model Award. ● Feedback survey from the participants 		
<p>Stakeholder Engagement</p>	<p>No negative impact caused to any stakeholder or the environment, economy, or society. Therefore, no remedial measures or communicate with stakeholders are required.</p>		



4. Sustainable Intelligent Solutions

Chapters of the Report 3.1 Sustainable intelligent solutions

<p>Materiality</p>	<ul style="list-style-type: none"> ● With the vision of "Enable an Intelligent and Sustainable Planet, Advantech is committed to the sustainable development of the world through IoT solution. ● IoT technology can improve the efficiency of customer resource utilization and production. Both waste and carbon emissions are reduced, thereby promoting sustainable development. IoT software and hardware products and services are developed in scopes such as energy management, transportation and logistics management, smart agriculture, smart factories, telemedicine, education, and operation and maintenance. Advantech will continue to lead the industry and digital transformation, and become a key partner for a sustainable ecosystem. 		
<p>Management Strategy</p>	<p>In key application fields such as factory automation, renewable energy infrastructure, EV batteries and charging pile equipment, and smart medical care, Advantech has assembled product R&D capabilities and local technical teams to meet new opportunities in the industry. Advantech announced the launch of the third global transformation. Sector Driven is the core spirit to plan five pioneer sectors – Embedded Design-in, Ind. System, Ind. Automation, smart medical care, digital marketing e-commerce platform, and six regional markets – North America, China, Europe, emerging markets, Japan, South Korea. Resources are pooled for focused advancement.</p>		
<p>Policy or commitment</p>	<p>The concept of sustainability has been incorporated into the strategic blueprint of new product development and market expansion of business units. A sustainable product and service quantification plan is formulated to expand the organization and performance goals of related product departments (environmental protection and energy, smart medical care). The positive influence brought to the environment and society is further amplified through Advantech products and services.</p>		
<p>Description of impact</p>	<p>This topic does not have a significant negative impact. Advantech will actively and continuously communicate with stakeholders to promote products and services that meet sustainable trends.</p>		
<p>2022 Achievement Status</p>	<p>Goals achieved:</p> <ul style="list-style-type: none"> ● 18.5% of revenue from sustainable products and solutions. (Note: The calculation method for 2022 is different from that for 2021) 	<p>2023 Goals</p>	<ul style="list-style-type: none"> ● 19% of revenue from sustainable products and solutions.
<p>2025 Goals</p>	<ul style="list-style-type: none"> ● 20% of revenue from sustainable products and solutions. 	<p>Action Plan</p>	<ul style="list-style-type: none"> ● Establish a clear blueprint for product development. ● Establish the launch strategy of sustainable products or solutions (market positioning, target customers, price policy, marketing strategy). ● Establish procedures for users' feedback and measurement of satisfaction. ● Regular feedback for improvement. ● Build the ecosystem and leverage the value and technology for sustainability of Advantech, partners of eco system, and customer.
<p>Evaluation of effectiveness</p>	<ul style="list-style-type: none"> ● Reach 90% of user satisfaction of sustainability solution. ● Regularly review the operating revenue from smart energy management solutions, smart factory solutions, smart telemedicine, smart agriculture solutions, smart education solutions, smart transportation and smart logistics, etc. 		
<p>Stakeholder Engagement</p>	<p>This topic has temporarily has no significantly negative impact to environment, economy, or society. Therefore, there was no corresponding remedial measures. Advantech will respond to this issue through real-time communication with stakeholders or identification of any negative impact on the environment, society, and economy to take timely countermeasures.</p>		

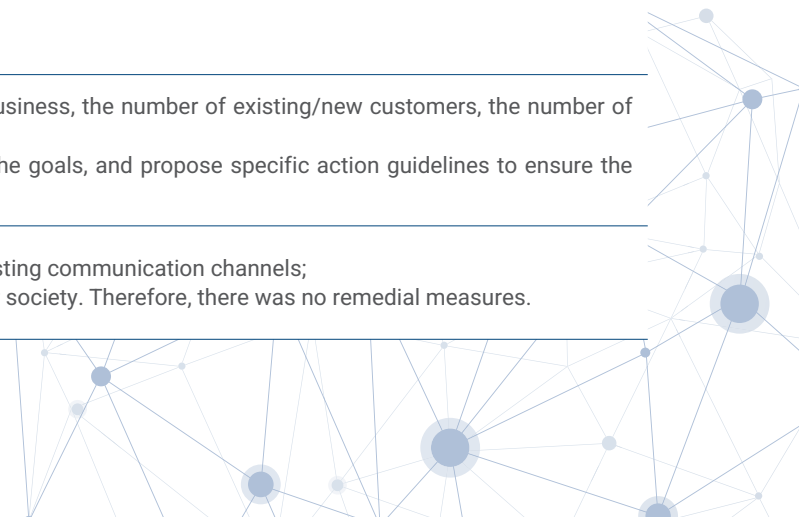


5. Co-creation of Customers and Partners

Chapters of the Report 3.4 Co-creation of customers and partners

Materiality	Good customer relationships can enhance Advantech's corporate competitiveness; high-quality partnerships can enhance the creativity of the IoT industry as a whole	
Management Strategy	We commit to deepening customer connection experience, expanding ecosystem partner management, and institutionalizing distribution authorization management. We also aims at "altruistic cooperation for mutual benefit" and "digital service upgrade". Meanwhile, digital platforms such as order quote system, customer relationship management system and online technical services have been optimized to improve operational and service efficiency.	
Policy or commitment	<ul style="list-style-type: none"> ● Customers are regarded as partners to jointly operate the market based on co-creation mechanism. ● Channel distribution management is improved, global customer relationship management system and technical service platform are optimized, and more diverse online training courses are provided. ● The privacy of customers is ensured to be fully protected, and the rights and interests of customers are also ensured to be not damaged during the pandemic. ● We promise that we focus on the development of the IoT industry and continue to invest in IoT platforms and solutions. 	
Description of impact	<ul style="list-style-type: none"> ● Social aspects: home care, telemedicine will help aging societies and medical services in developing countries. ● Economic aspect: the improvement of the efficiency and performance of production activities and the application of AI technology can greatly improve the level of industrial production. ● Environmental aspects: equipment monitoring and the deployment of a large number of sensing elements will effectively reduce energy consumption and environmental pollution. 	
2022 Achievement Status	<p>No target set for 2022 / 2022 Achievement Status is as follows:</p> <p>Management of dealership authorization</p> <ul style="list-style-type: none"> ● The number of newly signed distribution partners accounted for 15%. The number of selected distribution partners accounted for 18%. ● Customized product education and training checklists are designed according to the type of distribution partner. It was tried to be promoted in emerging countries, and nearly 40 distribution partners were successfully invited to participate in this online training program. <p>Customer Connection Experience</p> <ul style="list-style-type: none"> ● A total of 76 Advantech Connect forums were held around the world. A total of 299 Video-on-Demand videos were uploaded with 72,771 views and 1,899 times of video shares. ● Advantech satisfies the purchase needs of direct sales customers through eStore and IoTMart. Therefore, the main axis is to optimize customers' shopping experience and shorten manual steps. <p>Ecosystem partner management</p> <ul style="list-style-type: none"> ● Entering the field of IoT information security through co-creation. ● Enhancing Edge AI products through co-creation. <p>Digital Service Upgrade</p> <ul style="list-style-type: none"> ● The customer relationship management system is gradually becoming cloud-based. In 2022, the cloud platform Salesforce Sales Cloud has been imported to Taiwan and AIInterCon regions. ● The introduction of the quotation function of Salesforce CPQ, the CRM in the European region, has been carried out. The combination of CRM and quotation functions is also implemented to reduce the business operation platform and improve the immediacy of customer data synchronization. 	<p>2023 Goals</p> <p>Management of dealership authorization</p> <ul style="list-style-type: none"> ● The overall performance of the global distribution channel increased by 3%. The number of selected distribution partners accounts for more than 20% of the total number ● The online training certification program was expanded. In addition to emerging countries and regions, course introduction is also promoted in Japan and Korea, providing local language courses and inviting more distribution partners to join. ● Four global partner summit World Partner Conference (WPC) were held. It is expected to invite nearly 4,000 customers and partners to provide more detailed product content, solutions and application cases to jointly build the vision of the IoT industry model. <p>Customer Connection Experience</p> <ul style="list-style-type: none"> ● The goal of customer satisfaction: the operating revenue of sampled customers accounts for more than 60 (%) of the total operating revenue, and the average score of customer satisfaction is above 90 points. <p>Ecosystem partner management</p> <ul style="list-style-type: none"> ● Adhering to the direction of the AIoT strategy to continue to expand investment and influence globally. ● Continuing to strengthen product competitiveness through co-creation. <p>Digital Service Upgrade</p> <ul style="list-style-type: none"> ● The cloud system of customer relationship management was introduced into the Japan branch and the Korean branch. ● The quotation function of the cloud quotation system Salesforce CPQ was introduced into the Taiwan branch to practice the transparency of Advantech's global price and quotation management. ● The automation system is marketed, and the system platform developed by the local end is transferred to the cloud application.

<p>2025 Goals</p>	<p>Management of dealership authorization</p> <ul style="list-style-type: none"> ● The total number of developed "selected distribution partners" and "industry exclusive distribution partners" accounted for more than 50% of the total number. In total, the compound growth rate of performance in the past two years exceeds 10%. ● The number of global distribution partners exceeded 100 companies to register on the digital course platform and complete exclusive training and certification courses. <p>Customer Connection Experience</p> <ul style="list-style-type: none"> ● The goal of customer satisfaction: the operating revenue of sampled customers accounts for more than 60 (%) of the total operating revenue, and the average score of customer satisfaction is above 92 points. <p>Ecosystem partner management</p> <ul style="list-style-type: none"> ● WISE-Marketplace is an industrial interconnection ecosystem platform powered by empowerment to manage platforms and industry solutions, and more than 100 active industrial apps from Advantech and its partners. ● The number of global industry application partners exceeded 100 companies to register on the digital course platform and complete exclusive training and certification courses. ● More than 300 Domain Focus S/I companies have been successfully supported, and the market value of 10 listed or quasi-listed Domain Focus SI companies has grown significantly as a result. <p>Digital Service Upgrade</p> <ul style="list-style-type: none"> ● The main goal is that the customer relationship management system can cover more than 80% of overseas branches. Meanwhile, Salesforce CRM serves as the main data center to facilitate the optimization of other peripheral systems (cloud quotation system and approval, partnership management, marketing automation, customer service cloud) in the same cloud environment. 	<p>Action Plan</p>	<ul style="list-style-type: none"> ● The deployment of the annual business plan: after the goals of revenue and number of customers are set for different regions and different industries, the organization and manpower required to achieve this goal. ● WISE-IoT Partner Conference was held: Global partners are regularly invited to carry out in-depth product and service development roadmap research and discussion for WISE-IOT IoT solutions to clearly define target markets and business opportunities. ● MBR/QBR review of operational effectiveness: the review of the effectiveness of operational results is carried out monthly/quarterly to allow the goals to be implemented concretely.
<p>Evaluation of effectiveness</p>	<ul style="list-style-type: none"> ● Internal BI System: The data is displayed in a timely manner, including the actual performance of global business, the number of existing/new customers, the number of investment invitations of partners and distributors, etc.. ● MBR/ QBR: The supervisors of relevant business units regularly review the status of the achievement of the goals, and propose specific action guidelines to ensure the achievement of the goals. 		
<p>Stakeholder Engagement</p>	<p>Advantech will continue to collect, pay attention to and respond to suggestions from stakeholders through existing communication channels; This topic has temporarily has no significantly negative impact to stakeholder or the environment, economy, or society. Therefore, there was no remedial measures.</p>		





6. Sustainable Management of the Supply Chain

Chapters of the Report 2.3 Sustainable management of the supply chain

<p>Materiality</p>	<p>We have established the stable development of friendly relations with supply chain partners under our business philosophy of sustainable corporate development. In addition to taking quality into account, we also hope that by building a sustainable supply chain we will fulfill our corporate social responsibilities together with our partners while working together for environmental protection.</p>																					
<p>Management Strategy</p>	<ul style="list-style-type: none"> ● Suppliers should follow the Advantech's Supplier Code of Conduct, making them aware of the standards the Company is expected to follow. ● The Company sets short and medium-term key goals and formulates specific practices to effectively promote and implement. ● It regularly identifies high-risk suppliers, requires audits and deadlines for improvement, and reduces to medium and low risks. 																					
<p>Policy or commitment</p>	<ul style="list-style-type: none"> ● Suppliers are required to comply with Advantech's "Supplier Code of Conduct" policy to observe and improve labor rights, safety and health, environmental protection, business ethics and management system performance. 																					
<p>Description of impact</p>	<p>Advantech expects to establish a responsible and transparent supplier management system. We also look forward to driving the sustainable transformation of the supply chain, so we incorporate the assessment of suppliers' ESG sustainable management into procurement decisions. In this way, possible impacts on environmental pollution, occupational safety, and labor rights are reduced, and the positive environmental and economic impacts of the overall supply chain are also enhanced.</p> <p>In this material issues, the impacted external stakeholders/aspects include: environmental aspects, social aspects, consumers and end users, external employees (such as supply chain). In the view of the social aspect, 100% of Advantech's key suppliers do not use conflict minerals to ensure no negative impact on human rights and labor. In the view of the environmental aspect, Advantech complies with the design principles of green products and produces products that are friendly to consumers and the environment. Therefore, the loss of raw materials, packaging materials, and energy consumption is reduced to improve environmental benefits. In the view of the consumers, consumers are helped to reduce end-use energy consumption. Advantech has implemented a product carbon footprint project in 2022. The first product carbon footprint report is expected to be presented in 2023.</p> <table border="1"> <thead> <tr> <th colspan="5">Impact and explanation of the sustainable management of the supply chain on the value chain</th> </tr> <tr> <th colspan="2">Upstream</th> <th rowspan="2">Company operation</th> <th colspan="2">Downstream</th> </tr> <tr> <th>Raw material procurement</th> <th>Product design</th> <th>Customers use</th> <th>Recycling for re-use</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> </tr> </tbody> </table> <div style="margin-left: 650px;"> <ul style="list-style-type: none"> ● Impact ○ No impact </div>			Impact and explanation of the sustainable management of the supply chain on the value chain					Upstream		Company operation	Downstream		Raw material procurement	Product design	Customers use	Recycling for re-use	●	●	●	●	●
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●	●	●	●	●																		
<p>2022 Achievement Status</p>	<p>100% of the 2022 target was achieved:</p> <ul style="list-style-type: none"> ● 100% of significant suppliers comply with Advantech's Supplier Code of Conduct. ● Significant suppliers 100% do not use conflict minerals ● 100% complete the improvement of deficiencies of suppliers with high sustainability risk. 	<p>2023 Goals</p>	<ul style="list-style-type: none"> ● 100% of Tier 1 suppliers comply with Advantech Supplier Code of Conduct. ● Significant suppliers 100% do not use conflict minerals ● 100% complete the improvement of deficiencies of suppliers with high sustainability risk. 																			
<p>2025 Goals</p>	<ul style="list-style-type: none"> ● 100% of Tier 1 suppliers comply with Advantech Supplier Code of Conduct. ● Significant suppliers 100% do not use conflict minerals ● 100% complete the improvement of deficiencies of suppliers with high sustainability risk. 	<p>Action Plan</p>	<ul style="list-style-type: none"> ● Ask the supplier to sign and follow the "Advantech Supplier Code of Conduct". ● The annual execution of due diligence on supplier's conflict minerals complies with OECD's third-party mechanism ● Regularly identify high-risk suppliers, and conduct audits and counseling. 																			
<p>Evaluation of effectiveness</p>	<ul style="list-style-type: none"> ● Achievement status (KPI) is evaluated every year whether it is improving from the previous year according to the goals set by the management policy. It is presented as a way of managing refinement. ● Refined proposals are provided every year with reference to the best practices of supply chain management of DJSI and benchmark peers. 																					
<p>Stakeholder Engagement</p>	<p>Advantech discloses its sustainability report every year to fully explain supply chain issues so that stakeholders can fully understand them.</p>																					

7. Risk Foresight and Crisis Management

Chapters of the Report 2.4. Risk Foresight and Crisis Management

Materiality	The purpose of risk management is to protect and enhance corporate value, being able to structure and systematically assess risks that may be faced, making timely and responsive decisions that meet the company's operational goals, and ensuring that goals are achieved while enabling improvement. As a global leader in our industry, Advantech has had a continuous focus and drive for significant strategic and operational risk management.		
Management Strategy	<p>In recent years, Advantech has re-examined the governance structure of risk management, the composition and operation of the risk management team, and the operation process of risk management. Hence, risk management is ensured in a systematic and structured manner which has been promoted. The Board of Directors is the highest governance unit for risk management, and directly supervises general strategic risks and information security risks. The Sustainable Development Committee and Remuneration Committee also participate in overseeing some strategic risks. The Audit Committee is mainly responsible for supervising the pan-operational risks.</p> <p>The risk management team is responsible for the risk management process and reviewing as well as tracking the implementation on a quarterly basis. The responsible supervisor is responsible for formulating response measures for risk items and actual implementation. Internal auditors shall closely monitor or in driving all risk management processes. It shall also provide opinions and conduct audits on various risk topics as needed.</p>		
Policy or commitment	Advantech develops risk management policies and operational continuity plans to prepare for possible business interruption risks, or various emerging risks. We also regulate operations when risks occur in order to minimize their potential impact and influence. Then, subsequent correction and management are achieved. In addition, Advantech strives to provide transparent and real-time information delivery and communication to potentially affected stakeholders for various related risks.		
Description of impact	Risks identified by Advantech's risk management process involve economic, environmental, and social issues. If there is no effective management and response to each risk item, the possible negative impact on the company includes the impact of the promotion of the company's strategy and operating performance, the impairment of the company's goodwill, or the increase of the company's operating costs and expenses. On the other hand, risks can be transformed into future business opportunities and competitiveness through early identification and effective response to risk items.		
2022 Achievement Status	<p>The goal of 2022 has been achieved, and the achievement status is 100%:</p> <ul style="list-style-type: none"> ● Experts/consultants are arranged to conduct training and communication on evolutionary risk management to directors and key executives. ● Establishment of risk management mailbox: All employees are encouraged to take the initiative to provide suggestions. ● Investigation of risk issues: The scope of investigation has been expanded to global vice president and the level of associate managers, managers and deputy managers on both sides in cross-strait. 	2023 Goals	<ul style="list-style-type: none"> ● Risk management courses and training are extended to all overseas employees. The target completion rate has exceeded 80% of the global employees (excluding direct employees). ● At least two project discussions of high-level strategic risk issues were facilitated.
2025 Goals	<ul style="list-style-type: none"> ● Over 90% of the global employees (excluding direct employees) have completed the education and training of risk management courses. ● The organizational level of risk management is reasonably improved compared with benchmark peers. 	Action Plan	<ul style="list-style-type: none"> ● Please refer to the chapter 2.4. Risk Foresight and Crisis Management for the action plan for material operational risks. ● Advantech not only reduces or avoids the possible negative impact of risk items on the Company through various actions, but also explores the opportunities that risk items may bring. The latter includes the development of solar energy, wind power industry, related applications of electric vehicles, and the development of energy management platforms.
Evaluation of effectiveness	<p>Review and tracking of risk management and related issues:</p> <ul style="list-style-type: none"> ● Important risk topics are included in the tracking items of the quarterly risk management meeting and reported to the Board of Directors or the audit committee. ● The management owner builds data dashboards and KPIs for real-time exception reporting and tracking for major risks. ● Risk issues are listed as audit topics by the audit department for discussion and tracking. ● The risk team proposes proposals every year with reference to the best practices of risk management of DJSI and benchmark peers. 		
Stakeholder Engagement	Advantech conducts risk surveys every year. The objects of the investigation include directors, accountants, external consultants, etc. In addition to identifying major risk items, the survey also collected opinions on improving risk management. Moreover, a risk mailbox has also been set up to encourage employees to put forward suggestions for improvement. The main risks and related countermeasures are fully disclosed through channels such as the official website, sustainability report, investor conference, press release, and so on to facilitate investors, corporate shareholders and other stakeholders to fully understand.		



8. Employer-Employee Relationship and Diverse and Inclusive Workplaces

Chapters of the Report 5.3. Employer-employee relationship and diverse and inclusive workplaces

<p>Materiality</p>	<p>Advantech has been actively promoting gender equality in the global workplace for a long time to promote diversity and equality. It includes: equal pay, a fair performance appraisal and promotion system, flexible working hours, and family care leave, etc. When hiring, we ensure that gender, race, religion, political affiliation, marital status do not affect the employment conditions, or have differential treatment in terms of salary. Advantech has established a clear recruitment strategy around the world to strengthen the diversity of employees. Also, internal multiple training and talent development channels are used to gradually eliminate the impact of employees' basic differences resulting from physical or psychological conditions. Moreover, the relevant indicators of salaries and rewards between districts, types of work and ranks are regularly reviewed to ensure that a diverse and equal workplace environment is implemented and created.</p>		
<p>Management Strategy</p>	<p>Advantech is committed to promoting various gender equality measures and supporting policies. The annual Kick-off Meeting and Employee Zone are used to convey information. Besides, Advantech has also set up a mailbox for employees for employees' feedback.</p>		
<p>Policy or commitment</p>	<ul style="list-style-type: none"> ● Multiple two-way communication channels are set up for information dissemination and real-time listening and responding to the suggestion. The content of serving employees and the harmony of the workplace are promoted and optimized to ensure the rights and interests of employees through suggestions. ● The annual employee satisfaction survey is carried out to understand the employees' voice. ● Higher support is given to our employee for family settlement, giving birth, and parenting (paid family care leave and paid parental leave). ● Improving employee health and well-being. ● Paid volunteer leave. 		
<p>Description of impact</p>	<p>Paid parental leave, which is superior to that stipulated in the statute, was enacted. Therefore, it needs the support of the company to invest more funds and human resources in the short term. However, this is a necessary measure for sustainable operation for the company's overall workplace environment. While the life of employees is guaranteed, a good employer brand is established to help recruit more outstanding talents to join Advantech.</p>		
<p>2022 Achievement Status</p>	<p>The goals for 2022 have not been set, but there are the following results:</p> <ul style="list-style-type: none"> ● ABL's digital employee care platform has been launched in 2022. ● Eight major topics are set up to take care of the life of employees in an all-round way. ● The employees' health care platforms are connected to facilitate employees to check the health check reports online and track abnormal values. 	<p>2023 Goals</p>	<ul style="list-style-type: none"> ● Employee Satisfaction Survey: ACL's response rate will reach 75%, and the area covered by the response will be expanded to RBU (coverage rate has reached 100%). ● Advantech headquarters will establish a paid family care leave system and a paid parental leave system. ● ABL's healthcare connectivity platform will reach 60% of usage rate. ● More than 1,000 employees will attend health care events/lectures. ● Volunteer hours will reach 500 hours.
<p>2025 Goals</p>	<ul style="list-style-type: none"> ● Survey of employee satisfaction: the involvement rate will reach 80% ● Advantech Headquarters' paid family care leave system and the paid parental leave system will be optimized. ● The Advantech Headquarters' Childcare Grant option will be offered to evaluate the RBU Childcare Grant option. ● Telemedicine services for employees and their families will be promoted, and the number of people served will be increased to 300 per year. ● The paid volunteer leave established by RBU will increase the number of hours that employees around the world devote to volunteering (already reached 1500 hours). 	<p>Action Plan</p>	<ul style="list-style-type: none"> ● In response to the employee satisfaction survey that has been fully implemented this year, the survey field for employee engagement has been deepened, and measures to encourage employees to fill in answers have been used to increase the response rate and engagement. ● Paid family care leave and paid parental leave, which are superior to laws and regulations, have been established and promoted. ● Furthermore, the ABL health care platform cooperates with iTelemed to digitally present employee health checks and abnormal value tracking. It can help to make an appointment with a resident doctor, see a doctor remotely, and also perform the tracking of workplace health care and the binding of physiological measurement values. ● While Advantech provides paid volunteer leave, it has established four main axes. It encourages employees to participate in volunteer activities with direction and goals.

<p>Evaluation of effectiveness</p>	<ul style="list-style-type: none"> ● The completion progress of each department is regularly tracked. It is also publicized and matched with the company's internal communication channels to improve the response rate of employee satisfaction surveys. ● Statistics on the number of applicants before and after the establishment of paid family care leave and paid parental leave. ● Teaching about the use of the ABLE health care platform was promoted. Due to the combination of resident physicians and remote consultations, the utilization rate can be tracked by the number of people who register through the platform. ● Volunteer activities are systematically managed to ensure the number of volunteer hours and the use and exposure of volunteer leave.
<p>Stakeholder Engagement</p>	<p>Advantech discloses various policies and systems through multiple communication channels, and understands employees' thoughts through employee satisfaction surveys. Meanwhile, the impact of each system on retention and talent recruitment is evaluated. In addition, a complaint channel for employees has been set up to facilitate response, care, and protection of the rights and interests of Advantech employees.</p>



9. Innovative Mechanism Chapters of the Report **3.2. Innovative mechanism**

<p>Materiality</p>	<p>"Enable an intelligent and sustainable planet" is Advantech's corporate vision. Also, products and technologies, business innovation, and the mechanism of co-creation and co-prosperity with ecological partners are systematically invested in this strategy.</p>	
<p>Management Strategy</p>	<p>According to the vision defined in 2015 and the "blueprint for the development of AIoT Internet of Things", Advantech regards AIoT as the engine of future industrial growth. Also, we have transformed the Company from a manufacturer of industrial computers into a provider of industrial IoT terminals, cloud solutions, technology suppliers and service providers through various innovative means. Currently, Advantech has an innovation mechanism including three categories and six projects for products, technologies, careers, and academic cooperation.</p>	
<p>Policy or commitment</p>	<p>The process promotion of innovation management is promoted to the level of enterprise development. It is also an important practice in the development of emerging business opportunities. Strategically, we actively communicate with potential external partners for the concept of external strategic cooperation and co-creation. It promotes the diversification of innovative proposals and the flexibility of execution to grasp the opportunities in the development of the AIoT industry.</p>	
<p>Description of impact</p>	<ul style="list-style-type: none"> ● The promotion of innovation is an important strategy for the company to strive for excellence and long-term operation. Meanwhile, it is also a display of investment technology and knowledge to increase the competitiveness of research and development and development of new things. ● The AIoT application solution shows how to use more effective and lower cost means to meet the needs of various industrial and commercial scenarios. For example, the improvement of process optimization yield can reduce waste and reduce energy consumption and other positive effects. ● Benchmarking to innovative solutions for application scenarios can directly solve the problems of business operators or users. For example, the Internet of Things system for self-checkout can alleviate the problem of insufficient manpower in the industry. Also, it also helps consumers to complete a more convenient consumption experience. 	
<p>2022 Achievement Status</p>	<p>No target set for last year/ Description of key achievements for 2022:</p> <ul style="list-style-type: none"> ● Mechanisms such as IMAX-C, A+X, and MCT have been operated for many years. They regularly and systematically conduct proposal dialogues for innovative products and business strategies, and discuss technological innovation in the R&D department as the cornerstone of the innovation mechanism. ● Regarding the innovative development of new business opportunities, there were 28 proposals from Advantech headquarters and branches around the world. 10 of them were voted for potential awards after discussion. Therefore, two new product developments were accordingly launched, a new business unit was successfully established, and two new industry-university cooperation issues were derived. 	<p>2023 Goals</p> <ul style="list-style-type: none"> ● The collection, definition and research of innovation topics for internally innovative emerging business opportunities will reach 20-30 proposals. Also, 6 cases of actual products and business plans will be initiated to facilitate at least 2 cases of innovative project results. ● The goal of innovative cooperation between academic research and start-ups will be 7 to 9 specific plans. At least half of the results will end up in product development or integration. ● The student idea and implementation competition for Internet of Things promotion will be expected to generate 3 research cooperation projects with commercial value. The fruits of the idea will be carried over to a possible commercial product.

<p>2025 Goals</p>	<ul style="list-style-type: none"> ● Innovative mechanisms (IMAX-C, EBO, A+X, MCT, UCC, InnoWorks, etc.) will be continuously invested to expand the goals of quality and quantity. ● More ecosystem partners in the industry will be connected to build a robust innovation and co-creation model. 	<p>Action Plan</p>	<ul style="list-style-type: none"> ● Based on the existing mechanism and objectives of emerging business opportunity management, a new incubation mechanism (EB Studio) was established. Resources are specifically imported and the incubation of innovative proposals is accelerated. ● Internal manpower and resources were assembled, and innovation management was transferred to the corporate development department directly under the chairman. In this way, both the level of authorization and the height of the innovation strategy are raised. ● Links with external expert advisors are strengthened. For emerging innovation issues, their value and feasibility are effectively analyzed. With the guidance of complete information and expert opinions, resource considerations and promotion plans for implementation are completed.
<p>Evaluation of effectiveness</p>	<p>When the innovative mechanism is promoted, different effectiveness indicators are given according to the attributes of the issues that each mechanism focuses on in order to ensure that the innovative measures and mechanisms can exert their maximum benefits. Each innovation mechanism has a way of defining annual goals (KPIs), conditions for achieving goals, and follow-up actions. After regular follow-up, the connection between new products and new revenue generated on the execution side is ensured.</p>		
<p>Stakeholder Engagement</p>	<p>Innovation strategy and direction are linked with SDC (Sustainability Development Committee) decisions at the level of the board. The evaluation of innovative proposals is introduced by external specialist academics and consultants. Co-creation with start-ups, or school research institutions, or strategic cooperation and investment with ecosystem-related manufacturers are applied to the implementation of the plan. Investment units, strategic units, innovation management, product and R&D units of public institutions are connected horizontally within the Company to jointly invest in innovation and co-creation.</p>		



10. Human Rights Chapters of the Report **5.4 Protection of human rights**

<p>Materiality</p>	<p>Advantech and its entire management understand that the compliance with international labor standards and protection of labor rights are the basic conditions for a responsible company. Meanwhile, it is also the expectation of stakeholders such as consumers, the public and the government. Advantech is committed to complying with national labor laws and regulations, internationally recognized labor standards, and other applicable international conventions. Working conditions and employee benefits shall be continuously improved in order to establish, implement and maintain a good human rights management system. Also, the scope of this specification is extended to suppliers and contractors.</p>		
<p>Management Strategy</p>	<p>Advantech's global operations are being gradually promoted to the Responsible Business Alliance (RBA) audit certification. In this way, the company is ensured to have a consistent working structure and follow standards in managing global human rights issues. In 2022, Advantech had no material human rights violations in any of its global operations.</p>		
<p>Policy or commitment</p>	<p>Advantech promises to strictly abide by the labor laws of the local governments where the global bases are located. We also follow the world's major sustainability and human rights standards, such as the Dow Jones Sustainability Index (DJSI) and the Responsible Business Alliance (RBA). In doing so, we ensure that conditions of employment are not influenced by factors unrelated to job ability, such as "race, color, age, religion, national origin, ancestry, marital status, sex, sexual orientation, gender identity, veteran status, or political position" when hiring.</p>		
<p>Description of impact</p>	<ul style="list-style-type: none"> ● Through the due diligence of employees' human rights, the risk of Advantech's employees' human rights occurs with low likelihood. However, Advantech still carries out preventive mitigation and management measures to the top three risks (privacy/equal pay for equal job/non-discrimination and diversity inclusion). ● 270 first-tier suppliers have been evaluated, and 2 suppliers have been evaluated as the manufacturers with high human rights risks. Therefore, the above non-compliance situation of the supplier has been effectively improved and the case has been closed. ● 17 contractors were assessed, and all contractors had no risks related to human rights. ● 10 joint ventures were assessed, and all joint ventures had no risks related to human rights. 		
<p>2022 Achievement Status</p>	<p>Goals not set for 2022:</p> <ul style="list-style-type: none"> ● Human rights due diligence was held for the first time in 2022, covering employees, suppliers, contractors, and JV (joint venture companies). 	<p>2023 Goals</p>	<ul style="list-style-type: none"> ● Mitigation of risk in human rights/management measures will be implemented, and Advantech's global operations will remain free of violations of human rights.



<p>2025 Goals</p>	<ul style="list-style-type: none"> The "Employee Code of Conduct" course to be held with a completion rate of 95%. 	<p>Action Plan</p>	<div style="text-align: center;"> </div> <ul style="list-style-type: none"> Action plans and remedial actions to mitigate negative impacts: 270 first-tier suppliers have been evaluated, and 2 suppliers have been evaluated as the manufacturers with high human rights risks. Therefore, the above non-compliance situation of the supplier has been effectively improved and the case has been closed. Human rights-related education and training: The completion rate of relevant education and training has been continuously improved. Actions to manage positive impacts: freedom of association, regular labor-management meetings, communication of labor rights (including salary, attendance and benefits, etc.), listening to colleagues' thoughts, and discussion and resolution of various key issues. Human rights due diligence: The first all-round due diligence in 2022 continued to improve the coverage rate, completion rate and questionnaire content of the next one.
<p>Evaluation of effectiveness</p>	<ul style="list-style-type: none"> Process for tracking the effectiveness of actions: risk issues are identified through human rights due diligence, and related mitigation and remediation actions are carried out. Goals, objects and indicators used to evaluate the process: year-by-year improvement of DJSI score/improvement of mechanism and content/discipline and coverage of human rights due diligence. The effectiveness of actions, including the process of moving towards the goals and objectives: Advantech continues to improve the content of human rights, due diligence and scoring, learning through benchmarking, and professional advice from consultants. Advantech's human rights risks are proactively disclosed and reduced through regular engagement, and experience is updated in internal regulations. 		
<p>Stakeholder Engagement</p>	<ul style="list-style-type: none"> Labor unions/welfare committees/labor representatives are established in Europe, Asia, Taiwan and mainland China. Representatives should speak out for employee-related issues and hold labor-management meetings to communicate labor rights, listen to colleagues' ideas, and discuss and make resolutions on various key issues. In the 2022 Global Employee Satisfaction Survey, colleagues gave higher than average scores in the anti-discrimination and anti-sexual harassment work environment. 		

11. Industry Talent Cultivation and Development

Chapters of the Report 5.1 Industry Talent Cultivation and Development

<p>Materiality</p>	<p>Talent is the key dynamic of enterprise growth. Advantech regards employee cultivation and development as an important development project, adhering to the concept of Right People On the Bus. We are committed to creating a working environment which can stimulate the enthusiasm of colleagues, develop the potential of individuals and teams to create a benchmark enterprise for excellence and innovation.</p>
<p>Management Strategy</p>	<p>The goal of retaining talents is achieved by the strategic policy of talent development as the main axis, the improvement of the utilization rate of digital platforms, and the institutionalized incentive and development mechanism.</p>
<p>Policy or commitment</p>	<p>Advantech's Employee Development Manifesto:</p> <p>The core of Advantech's cultivation and development of employees is to make Advantech's people feel that their own value is constantly being improved. Their career development is fully supported. Sufficient resources are obtained for continuous growth, enabling Advantech's people to realize their potential. The annual O&PR (Organization & People Review) and performance evaluation can help supervisors and employees understand the direction of the company's strategic development and personal career planning. Individual employee development needs are understood. Advantech provides comprehensive development content for the employees. Employee development is assisted with resources such as promotions, rotations, and training courses. The training courses cover orientation and training, job function improvement, management ability training, and business ability training.</p> <p>Advantech encourages the employees to actively explore their potential to create an environment for independent and continuous learning. The physical training program includes LEAP Camp, Elite LEAP Workout, reading club, Global 50 and other physical training and development activities. In addition, Advantech continues to update its all-round digital learning platform "Advantech Academy". In order to strive for excellence, the courses on the digital platform are diversified. It includes training courses for various levels of functions, inheritance and sharing of business philosophy, and training for middle and high-level management personnel. Advantech's staff create exclusive learning lists to be able to study anytime and anywhere according to individual needs.</p>

Description of impact
 A sound employee development plan is the key to allowing talents to maintain a competitive advantage in the market, and it shall also have a positive impact on the economy and the population. The annual O&PR (Organization & People Review) helps Advantech's executives and colleagues understand the company's strategic development direction and personal career planning. Individual employee development needs are understood. We then provide a full range of development content. Personal ability and experience accumulation are improved through promotion, rotation, training courses and other resources. The training courses cover the education and training of newcomers, the improvement of job functions, the cultivation of management ability, and the training of business ability. In this way, we hope that colleagues can fully perform their strengths and grow together with Advantech to enhance their competitiveness in the workplace.

2022 Achievement Status	Goals achieved:			2023 Goals	<ul style="list-style-type: none"> ● E-Learning's global employee (indirect employee) participation rate will reach 65%. ● LEAP Workout promotion will result up to 20%. ● 95% retention rate of key global talent.
	Management objectives of the development project	2022 Goals	2022 Achievement Percentage		
	Global Employee (Indirect Employee) Participation Rate in E-Learning	60%	75.1%		
	LEAP Workout Promotion Outcomes ¹	20%	36.4%		
	Retention rate of key global talent ²	90%	96%		
	<p>*Note:</p> <p>1. LEAP Workout promotes executives above the manager level with outstanding performance.</p> <p>2. Global Talent retention rate: Global 50 is for high-potential executives above the manager level.</p>				

2025 Goals

- E-Learning's global employee (indirect employee) participation rate will reach 75%.
- LEAP Workout promotion will result up to 20%.
- 95% retention rate of key global talent.

Action Plan
 In order for talents to maintain a competitive advantage in the enterprise, Advantech plans and arranges different training programs and other resources to enhance individual capabilities and experience accumulation. The training courses cover the orientation, the improvement of job functions, the cultivation of management ability, and the training of business ability. In this way, we hope that colleagues can fully perform their strengths and grow together with Advantech to enhance their competitiveness. The relevant training is as follows:

Item	Content overview	Participants	Coverage rate
Talent Radar Review (Global 50)	Annual development plans are established for executives with high development potential in the company. HR regularly tracks the status and effectiveness of its implementation.	Executives above the manager level	100% coverage of high-potential executives above the manager level
Elite Mentoring program	Advantech's first-level executives and mid-to-high-level potential talent are matched via the mentoring system to help mid- and high-level talent improve their management and leadership skills and accelerate their career development. The innovative thinking of talents is stimulated through half-year interaction.	Executives above the manager level	28% coverage of high-potential executives above the manager level
E-Learning Advantech Academy's Online Learning Platform	Global employees can learn about Advantech's business philosophy and corporate culture through online learning. Meanwhile, they may learn according to their own needs. The latest study information is also available. Therefore, learning is not limited by region and time, and colleagues from all over the world can learn and communicate with each other simultaneously.	General employees (indirect employees)	75.1% of global indirect employees are covered
LEAP Workout/DX project	Under the Executive Coach system, senior executives are directly involved in the company's development and highly relevant cross-departmental issues. It has become an important project for Advantech to raise talents and put it into practice. In 2022, we focused more on issues in the field of digital transformation. Talents are accelerated and promoted through customized personal development plans. Therefore, the practice of promote within has assisted Advantech in its growth in digital transformation. Also, we look forward to promoting high potential executives to the next management position.	High-potential executives above the manager level	18.2% coverage of high-potential executives above the manager level



	Item	Content overview	Participants	Coverage rate
Action Plan	Reading Club	In 2022, the National Innovation Academy was introduced. Executives interested in using the platform are invited to join the learning program. A physical event was held monthly. Reading sessions are held prior to assigned reading units. Participants and supervisors exchanged and shared experiences. After the reading session, participants can apply the discussion to management work.	Colleagues above management level	Covering 13.1% of the users of Commonwealth Leader Campus (CWLC)

	Item	Mechanism evaluation of effectiveness	2022 Evaluation Results	2023 Adjustment of management policy
Evaluation of effectiveness	E-Learning Advantech Academy's Online Learning Platform	Course quality is controlled by usage and satisfaction of individual courses	75.1% of usage rate	The categories of the course catalog are planned to be adjusted in 2023. Meanwhile, the online courses have been inventoried and the course content has been fully updated. In this way, the utilization rate of the online learning platform for indirect employees worldwide is increased.
	LEAP Workout	Promotion rate	36.4% of promotion rate	It is planned to add material issues covering European and American companies in 2023
	Elite Mentoring	Satisfaction	4.86 of Satisfaction	
	Talent Radar Review (Global 50)	Global Talent retention rate	Global Talent retention rate 96%	
	New recruit training	Coverage rate of new recruit	4 sessions was held in 2022 with a total of 385 participants	

Stakeholder Engagement Employees are Advantech's most important assets and the driving force behind the company's sustainable development. Therefore, Advantech attaches great importance to employees' suggestions and feedback for talent development and training. Employees' thoughts and needs are understood through the after-course questionnaires of training courses and annual performance interviews. The performance appraisal system is also used to plan the individual development plan (IDP) of employees. Subsequently, the annual satisfaction survey was used as a quantitative indicator of improvement to evaluate its effectiveness.



2

Company Management and Governance

- 2.1 Operational Performance and Corporate Governance Structure
- 2.2 Information 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

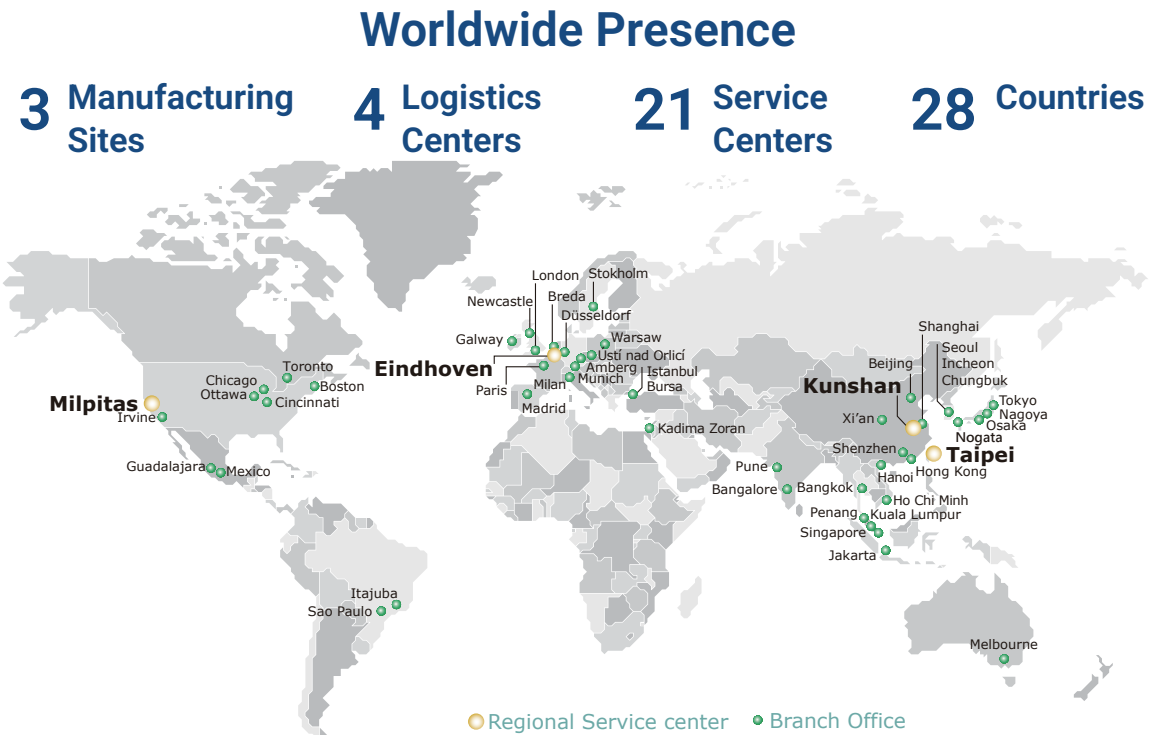
2.1.1 Company Profile

Since Advantech's establishment in 1983, we have played the role of innovator in the development and manufacture of high-quality and high-performance computing platforms. Advantech provides comprehensive software and hardware system integration, customer-oriented design services, global logistics support, and other applications and services.

Advantech was listed in Taiwan in 1999 and our operating headquarters is located in the Neihu Technology Park in Taipei, Taiwan. Our business base spans 28 countries in Europe, the Americas, 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.

***Note:** For details of operating locations, please refer to Advantech's official website <https://www.advantech.com/en/contact> (Please select region/country from the top left menu.)

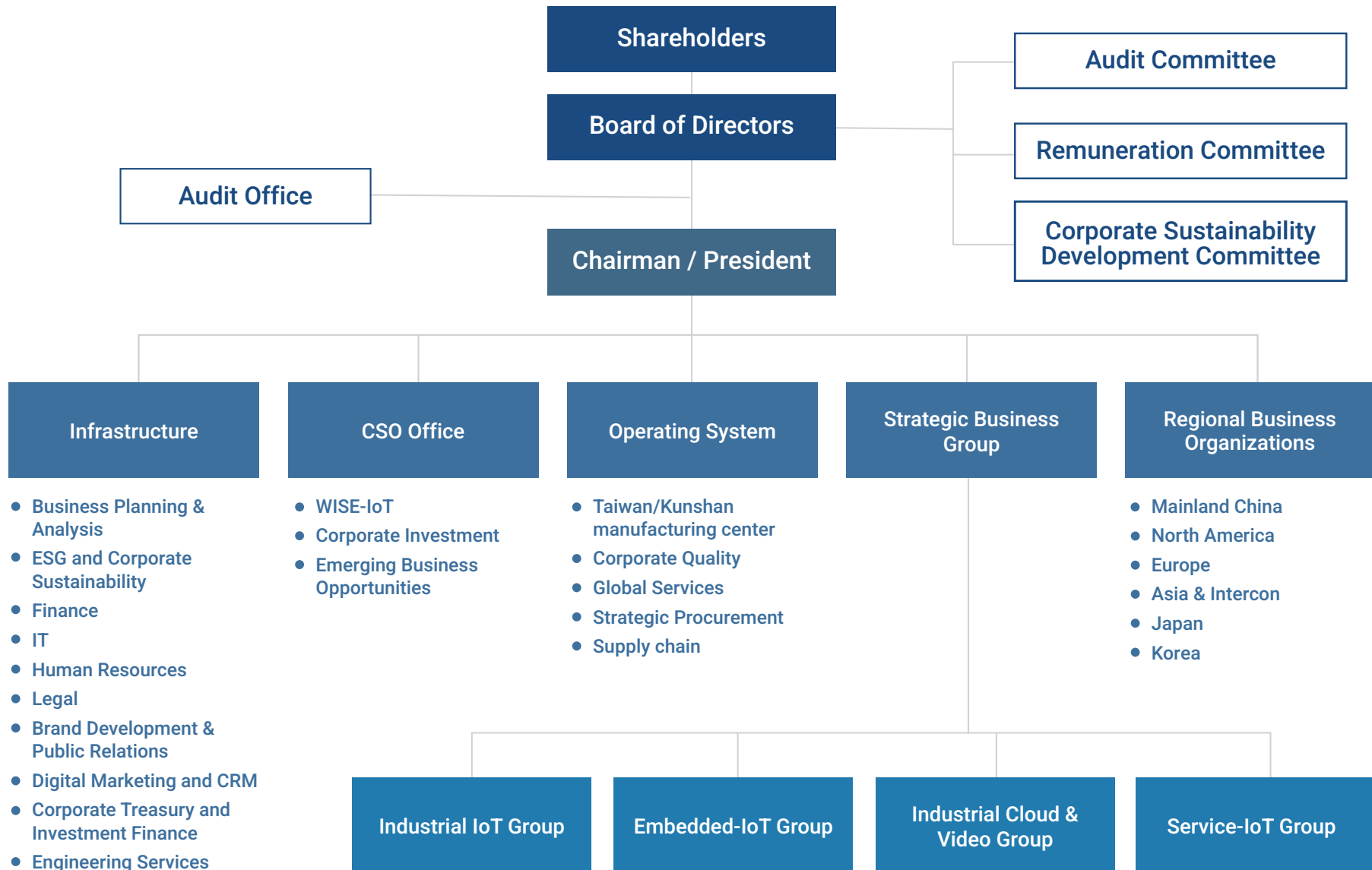
Figure 2.1.1 Distribution of Advantech's Operating Locations



Advantech stands as a global leader in the IoT intelligent system and embedded platform industries. We also hold "Enabling an Intelligent and Sustainable Planet" as its corporate brand vision. In accordance with our customers' needs, our Company is divided into three major business groups: the Industrial IoT Group, the Embedded IoT Group, and the Service IoT Group, and the Industrial Cloud and Imaging Technology Group. To meet the broad trends of the Internet of Things, Big Data, and artificial intelligence, Advantech advances IoT software and hardware solutions centered on the WISE-PaaS industrial IoT cloud platform to help partners and customers connect the industry value chain. In addition, we actively "co-create" an industrial ecosystem with various industrial partners in order to accelerate the realization of the goal of industrial intelligence. Please refer to [this news](#) to learn more about Advantech's vision of "Enabling an Intelligent and Sustainable Planet".

The industries that Advantech and its affiliated companies work on are mainly in the manufacture, assembly, sales and after-sales service of related products of industrial computers. Some affiliated companies invest in related technologies and business activities connected to the aforementioned products to form their business scopes. The organization chart of the Company is shown in Figure 2.1.2.

Figure 2.1.2 Organization Chart of Advantech



For Advantech's corporate profile, culture, products and solutions, please refer to the [video: Company Profile of Advantech](#).

Economy Performance and Brand Value

In 2022, Advantech continued to create excellent report cards despite the challenges of global high inflation and economic downturn. The annual revenue in 2022 hit a record high again with a year-to-year growth of more than 17%. In terms of profit performance, the Company's gross margin, operating margin, and return on shareholders' equity have grown steadily in 2022. The annual EPS reached NT\$13.85, and the Earnings Per Share (EPS) increased by 30%. Please refer to P64 and P84 of the annual report for the Company's product proportion and production volume information in 2022.

Table 2.1.1 Advantech's Products, Revenue Distributions and Product Output in 2021

Major Products	2022		
	Sales unit (NT\$ thousand)	%	Product output (set/piece)
Embedded boards and chassis	34387678	50	3375728
Industrial computers and industrial controls	26699417	39	3305673
After-sales service and others	7657606	11	628162
Total	68744701	100	7309563

Advantech focuses on its business and financial stability, so our operations continue to achieve good results. Meanwhile, a high allotment policy is maintained to share operating results with shareholders. The total profit distribution in 2022 was NT\$11 per share (including: NT\$10 in cash dividends and NT\$1 in stock dividends), a record high in the past years. The total distribution rate was nearly 80%, which also creates higher corporate value for shareholders. Please refer to the [overall financial performance](#) on the official website for detailed operating performance, including operating revenue performance, gross profit margin and operating profit ratio, return on shareholders' equity, and return on assets. Since our establishment, Advantech has continually focused on the management of our own brand and our brand value has been ranked among the top five international brands* in Taiwan for four consecutive years. The growth rate of brand value is as high as 23%, and we are one of the few companies that has achieved double-digit growth.

*Note: An evaluation was conducted by Interbrand, an internationally renowned brand evaluation agency commissioned by the Industrial Development Bureau of the Ministry of Economic Affairs. Please refer to [the website](#).

Advantech's Value Chain

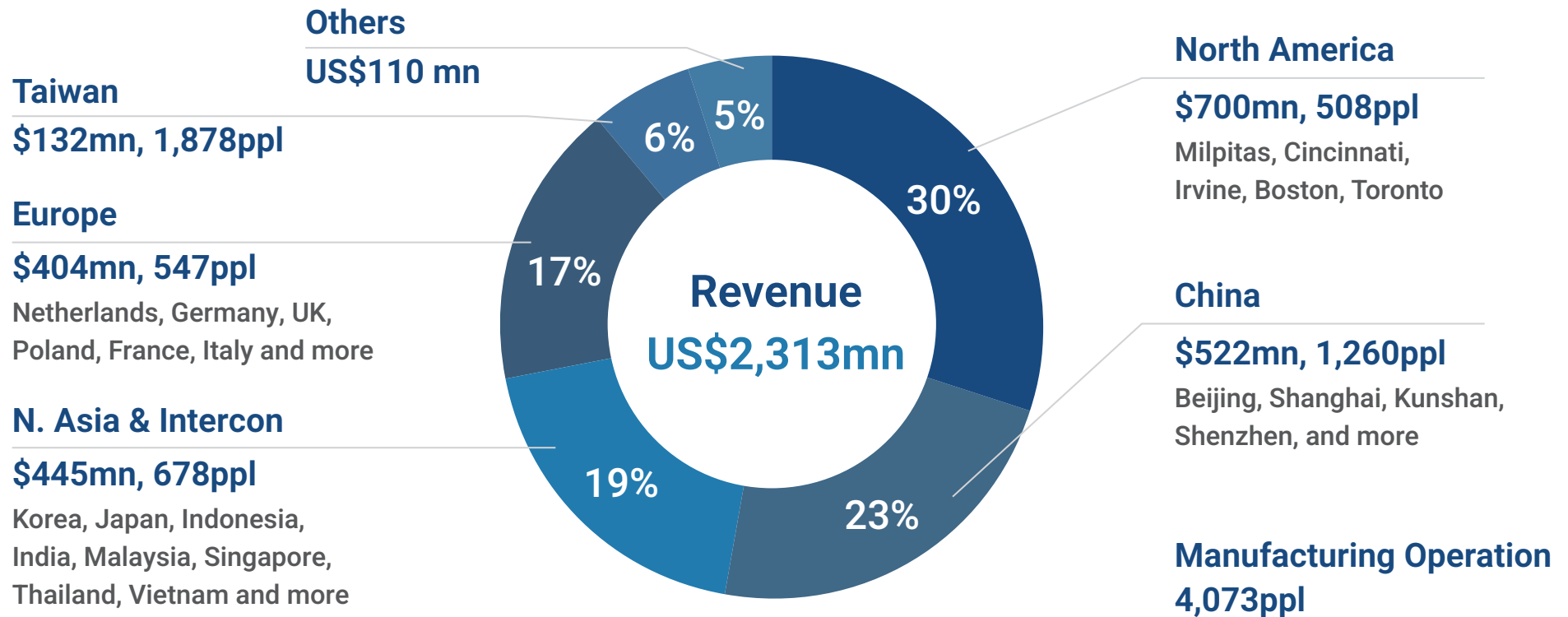
Advantech belongs to the industry of industrial computers, which were first applied in the manufacturing process of factories, including the control, monitoring and testing of instruments and machinery and equipment. In a narrow sense, it is limited to industrial automation board systems, mainly automated equipment. In recent years, industrial computers have been gradually applied to all aspects of life, more application-oriented because of the integration of communication, network, software and optoelectronic applications. It covers applications from MRT card readers, automatic ticket vending machines, ATMs, POS machines, digital electronic signage, intelligent building monitoring and management systems, etc. It makes the IPC industry flourish, and it goes far beyond the industrial field. In recent years, industrial computers has been officially renamed as smart industry by the Ministry of Economic Affairs. The future of IoT technology is promising because it benefits from the rise of intelligence and IoT systems. It may also further change human society. Meanwhile, the ecology and needs of each vertical market are different, so it can promote the development of the entire industry in an ecosystem mode.

In terms of the relationship between the upper, middle and lower reaches of the industry, the supply chain of industrial computers and embedded boards is as follows. In terms of upstream, there are chipsets, CPUs, PCBs, DRAMs, logic ICs, connectors, passive components, and other components. In terms of the midstream, it includes input and output devices, single-board computers, barebones products, industrial computer products, and industrial computer peripheral products. In terms of the downstream, it includes system integrators, distributors, and end consumers. The upstream, midstream and downstream of the Internet of Things are completed by the cooperation of manufacturers of different forms. As a result, customers are provided with effective services, and a close relationship of cooperation with each other is formed.

Advantech uses the concept of co-creation to promote the three-stage development of the AIoT Internet of Things to realize the business model development of the AIoT industry. Advantech regards artificial intelligence and the Internet of Things as the growth engines of future industries. Moreover, internal changes have been made, such as from a product-oriented business model to a business group-based business model with ecosystem development. For more details about Advantech's supply chain, please refer to **2.3 Sustainable Management of the Supply Chain**. The market provided by Advantech's products and services is oriented around the world. In terms of regions, it includes: North America, Europe, China, Northeast Asia (Japan and Korea), Taiwan and emerging countries, etc. The market size and importance of the market are shown in the figure below.

Figure 2.1.3 2022 Global Geo-Region Sales Distribution (USD)

2022 Global Geo-Region Sales Distribution (USD)



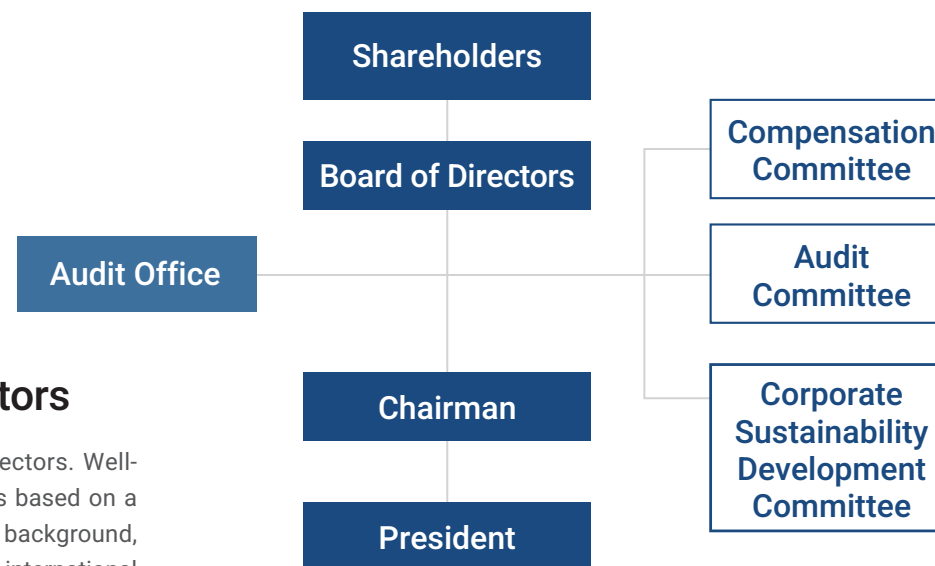
Regarding downstream entities and their activities, we take the iEMS smart energy-saving management solution as an example. Downstream applications include: smart factory energy management. Customers cover areas such as various industrial factories, such as: electronics manufacturing plants, semiconductor manufacturing plants, chemical manufacturing plants, welding consumables manufacturing plants, food manufacturing plants, automobile manufacturing plants and other fields. Also, it includes the total energy management of smart parks, such as: technology parks, data centers, office buildings, public buildings, technology parks and hospitals.

2.1.2. Corporate Governance

Advantech attaches great importance to corporate governance and a spirit of altruism, and strengthens the negotiation and interaction with stakeholders. In terms of the structure of the board of directors and functional committees, self-expectations are set at a higher standard than the regulations, and goals are set every year for continuous optimization.

Please refer to official website: [Internal Audit](#), [Advantech Code of Ethics and Business Conduct](#), [Guideline for Insider Trading Prevention Management](#)

Figure 2.1.4 Advantech' Company Governance Structure



Composition and Operation of the Board of Directors

Advantech pays attention to corporate governance and the functions of the board of directors. Well-rounded directors [selection system](#) are established, and the selection of board members is based on a [policy of diversity](#). The comprehensive assessment is based on aspects such as industry background, professional field, age, gender balance, and so on in order to promote diverse perspectives. Its international market outlook, professional academic cultivation, risk management and other majors are considered. Besides, Advantech also incorporates expertise in the field of sustainability into the evaluation indicators for members of the board of directors. Directors are expected to have strategic contributions and practical experience in areas such as environment, information security, governance, and talent. They should also be constructively helpful to Advantech's ability to cope with the impact of sustainable operations. Director candidates follow a candidate nomination system as stipulated in the "Article 192-1 of the Company Act" with election by the shareholders' meeting from the slate of director candidates. Independent directors are recruited in accordance with the "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies", and the term of the board of directors is three years. The average tenure of the 14th board of directors as of the end of December 2022 was 10.14 years.

The Company's 14th board of directors was elected at the general meeting of shareholders on May 28, 2020. It is composed of a total of seven directors, including three independent directors, accounting for 43% of all directors. Also, the number of companies with three independent directors concurrently serving as directors is less than four. In addition, the Company stipulates in the "Code of Governance Practice" that the minimum proportion of female directors is based on the principle of gender balance. Also, one female director (accounting for 14%) was recruited to the 14th Board of Directors, and this will be continued to be strengthened and promoted in the future. In terms of sustainability expertise, Director, Chaney Ho, was a member of the Sustainability Committee of Tatung Company (TWSE:2371). Independent director, Benson Liu, used to be the chairman of the Taiwan Corporate Governance Association and is also the current standing director of the association. Independent director, Chan-Jane Lin, is currently the supervisor of Taiwan Corporate Governance Association. The composition of the current board of directors is sustainable, and the sustainable function of the board of directors will continue to be strengthened in the future. The founder and chairman, KC Liu, is also the senior management of the Company. The Company complies with the ["Rules of Procedure for Board of Directors Meetings"](#) for avoiding interests, and meanwhile strengthens the perfect mechanism for balancing and decentralizing powers and mitigating conflicts of interest through joint management.

For the structure and diversity of the board of directors, please refer to the official website of [the Board of Directors](#)
 For the regulations on the minimum number of independent directors and female directors, please refer to the official website [Corporate Governance Best Practice Principles](#)

Mechanism of an Expanded Board of Directors

Advantech continues to enhance the functions of the board of directors. Except that the board of directors is convened four times a year according to the law, the enlarged board of directors has been convened every six months since 2015. All directors, external expert consultants, and senior executives were invited to discuss key issues such as Advantech's industrial and organizational transformation, business model innovation, business inheritance, and mid-to-long-term vision.

The discussion proposals for the enlarged board of directors in 2022 include: the concept of core competence driven by the new stage of operation, the evolution of human resources organization, the cultivation of talents and the system of inheritance and rotation, and the overall evolution of corporate development functions which are strategic issues include human resources, procurement and supply chain management, optimization of accounting functions, etc. The opinions of external consultants and experts are broadly absorbed through the expanded board of directors, internal consensus is condensed, and reforms are promoted, showing group knowledge and execution.

Functional Committees of the Board of Directors

The setting of functional committees is superior to regulations and regulations. Statutory functional committees include: an Audit Committee and a Remuneration Committee to implement each supervisory and internal audit functions as well as compensation incentives and training of high-level talent. In response to the development needs with long-term strategies, Advantech officially established a sustainable development committee at the board level in July 2022. It consists of three directors: Chairman, K.C. Liu, Independent Director, Jeff Chen, and Director, Donald Chang. Industry expert consultants are invited to discuss long-term strategies in depth. Major issues such as ESG sustainable strategy, succession training plan, and the nomination of board of directors and senior managers have been accelerated, making corporate governance more sound and complete.



Please refer to Advantech's official website: [Functional Committee](#)

Operational Status, Training and Evaluation of the Board of Directors

Operations Status

The 2022 operation of the board of directors was well. A total of four board meetings and two enlarged board meetings were held, and 100% of all directors attended.

Training Status

The average training hours for each director in 2022 was 9.43 hours, which was 6 hours higher than the hours recommended by regulations. Advantech also encourages directors to continue in their educations, providing monthly information on governance courses for directors to refer to as electives, organized by professional organizations such as the Taiwan Corporate Governance Association, the Securities & Futures Institute, Taiwan Institute of Directors, and so on. We also took the initiative to organize two 6-hour refresher courses for directors in July and October 2022. The topics are all in line with international trends and corporate coping strategies: "Best Practices of Corporate Mergers and Acquisitions" (value creation, organizational integration and regulatory framework are discussed), and "The re-evolution of corporate ESG sustainability strategies and risk management to respond to new global trends" (international sustainable trends, corporate responses to climate change, and possible geopolitical risk management are discussed).

Operation Strategy

Advantech attaches great importance to the high connection between risk management and operation strategy. The selection and confirmation of the training topics for the Company's own board of directors is the result of referring to the management of pan-operational risks. For the planning of the lecturer candidates, external experts and consultants from the industry and academia are specially invited according to the theme. The teaching content takes into account both theory and business practice in order to maximize the strategic effect of business operations.

Evaluation Mechanism

Advantech has established a strict evaluation mechanism of the board of directors and functional committees. Self-assessment is conducted annually. Evaluation results are reported to the board of directors once a year and gaps are addressed for improvement. In 2022, overall satisfaction of Board members with Board operations reached 95%. In addition, a third-party professional organization conducts an overall board performance external evaluation every three years; and in 2020, the Taiwan Corporate Governance Association was entrusted for this evaluation. In addition, Advantech won the highest evaluation of the 8th Corporate Governance Evaluation - Top 5% of Listed Companies. Internally, the Company regularly reviews and improves indicators for gaps. The management team coordinates resources and promotes cross-departmental cooperation from top to bottom to strive for annual improvement.



Please refer to official website [Operational status](#) and [evaluation](#) of the board of directors

New Business Pattern of Co-Creation and Co-Governance

Advantech takes sustainable development as its concept and has laid a century-old foundation. Inheritance and succession planning for the next stage has become an important topic. Therefore, the best interests of the Company and shareholders are the premise. A "professional manager system" is the keynote. The growth mindset of "Equal Emphasis on Internal and External" has been implemented, and Advantech's phased deployment planning has transformed from the "founder's era" to the "co-governance era" in which ownership and management rights are separated. In 2017, Advantech officially appointed three vice-presidents, Eric Chen, Miller Chang and Linda Tsai, as "co-governance general managers". They are expected to uphold the spirit of "co-creation" and "co-governance" to lead the team to fully embrace the new business opportunities of the Internet of Things. The new co-governance formation also implements a more rigorous division of labor: the three co-governance general managers focus on market and business development, manufacturing and supply chain management, daily operation management, and capital expenditure planning. The Founder and Chairman, K.C. Liu, leads key strategic decisions, including corporate vision, new business layout, major investment strategies, etc. The succession issue of corporate inheritance has been listed as an important proposal of the SDC Sustainable Development Committee in 2023. Through in-depth discussions among the board of directors, senior management, and external consultants, the most suitable inheritance model for Advantech will be discussed in the future. Steady executive succession is expected to create higher corporate value for employees, shareholders, and customers.



Please refer to the official website: [Press Release for Corporate Governance](#), [Press Release for the Launch of Executive succession planning](#)

Compensation and Performance of Senior Managers

Policy Purpose

Senior managers are motivated to achieve and exceed corporate goals, create profits, and improve operating performance. Also, the manager's remuneration is regularly evaluated to consider the reasonable correlation with future risks.

Review Process

Advantech has a functional "Salary and Compensation Committee" at the board level. Currently, two independent directors and one external expert serve as committee members. The policy, system, standard and structure of the manager's remuneration are considered by the remuneration committee, based on factors such as the payment level of the industry, individual performance, the Company's operating performance, and the rationality of the relationship between future risks. The Company's directors and managers' performance evaluation and salary compensation system and standards are regularly reviewed and submitted to the board of directors for review. In addition, Advantech pays attention to the participation and feedback of stakeholders (including shareholders). The Company's annual report fully discloses the individual remuneration information of directors. Besides, the proposal of "employee remuneration and distribution of director remuneration" was reported at the annual general meeting of shareholders to inform shareholders and solicit feedback. The 2022 Advantech shareholders' regular meeting was held on May 26. The shareholder attendance rate was 95.75%. The report on "Employee Remuneration and Distribution of Directors' Remuneration" has been brought to the attention of shareholders and there was no objection during the meeting. Please refer to: official website [Compensation Committee, 2022 Shareholders Meeting Minutes](#), 2022 [Annual Report](#) Directors' Remuneration. (Please refer to P22 of the annual report)

Salary Structure

- Fixed salary: It includes basic salary, various allowances or additions. Their professional qualifications and market salary levels are determined by reference.
- Variable salary: It includes bonuses and remuneration. It is evaluated based on the Company's overall operating results, unit performance, and individual relative performance contributions. The core value of the enterprise is practiced, based on the demonstration of leadership and management capabilities. In addition, factors such as the correlation of future risks are considered to be reasonably formulated. The highly linked mechanism of salary and performance is used to stimulate continuous internal evolution. On average, the variable compensation of CEO, President, and senior managers accounts for about 50~70% of the salary structure.

Link of Risks

Material risk events are enough to affect the Company's goodwill, or risk events such as improper internal management and personnel malpractice may occur. If so, it will affect the issuance of the manager's bonus, such as reducing or not issuing it, or recovering the granted bonus and phantom equity (including events occurring during the deferred year) as appropriate. In this way, the effect of risk control is achieved.

Evaluation of the Performance and Salary of the CEO and General Manager

Measured indicators

It covers financial indicators (operating revenue growth rate, gross profit performance, after-tax net profit, ROE), talent and new product development (innovation contribution, talent cultivation), sustainable strategy (ESG KPI, risk control), and relative metrics (TSR*, operating revenue growth). The proportion of financial indicators is 70%, and the proportion of non-financial indicators is 30%.

***Note:**

The relative index TSR and CEO performance are thereof linked together. The benchmarking reference is the annual average of the top 50 electronics companies listed in Taiwan by market capitalization. Relative performance has a linkage relationship with CEO compensation.

*TSR: Total Share-holder Return

ESG KPI Mechanism

Advantech continues to move towards the vision of "Enabling an Intelligent Planet in a sustainable manner". The ESG KPI mechanism for senior managers has been established and implemented in 2022. Environmental, social and governance-oriented ESG sustainability indicators are listed as 2023 and 2024 important performance evaluation items for the chairman, general manager and senior executives, relevant responsible officers, and members of the ESG Office. Incentive rewards are mainly based on Employee Stock Option Plans (ESOP), supplemented by performance bonuses. The settlement schedule is in November each year and issued in April of the following year. Meanwhile, the goal is set, and the plan is promoted and regularly evaluated in conjunction with the annual sustainable material issues. Issuance is based on sustainable goals and quantitative indicators including: "Long-term design and implementation of green and energy-efficient products", "Labeling and declaration of product design and energy efficiency classification", "Sustainable intelligent solutions", "Electricity, water, waste objects and VOC reduction targets", "Information Security", "Power Generation by Solar Panels", "Cultivation and Development of Talents", and domestic and foreign sustainability evaluation results, Advantech's internal ESG process (such as internal carbon pricing projects, biodiversity projects, etc.). Case description: Jamie Lin is currently the chief operating officer, who is responsible for improving the overall environmental operation indicators of the Chinese and Taiwan factories. ESG KPI includes: energy reduction, greenhouse gas reduction, waste reduction and other work. Also, clear annual reduction targets are set to be achieved, and annual performance reviews on climate-related issues are conducted.

Long Term Incentive Plan

The latest version of Advantech's "Manager's Remuneration Management Policy" was implemented after October 28, 2022, after deliberation and approval by the Remuneration Committee. Also, the deferral and recovery mechanism is taken into consideration according to risks. The structure of remuneration for senior management is divided into cash and employee stock option certificates. Performance evaluation indicators refer to individual performance, which are also based on the achievement of financial and other financial-related performance in the Company's operations. The performance of the bonus is linked to the Company's long-term stock price, and it is designed to be deferred for 5 years to be paid to senior managers. In addition to reflecting the future stock value, the managers' salary and the Company's operating performance are also more closely linked. Meanwhile, the recovery clause was also stipulated. Advantech has the right to withdraw the incentive bonus that the manager has not fulfilled if there is a person who violates the labor contract, work rules and other major faults or the work performance is obviously low.

Shareholding Requirements for Senior Managers

Advantech believes that the long-term holding of the Company's stock by the high-level management team can strengthen the concept of linking long-term interests with shareholders. According to Advantech's Remuneration Committee's "Manager's Remuneration Management Policy" revised on October 28, 2022, It clearly stipulates that the number of shares held by the Company's CEO and general manager shall not be less than 10,000 shares in order to implement the promise of sound corporate governance. The shareholding of the Company's founder and chairman, K.C. Liu, in 2022 was approximately 1,264 times his fixed salary. Senior managers are mainly three co-governance presidents. The average shareholding ratio of the three co-governance residents was 7.32 times. (The shareholding multiples of the general manager of co-governance were revealed separately: 11.96 times of President Eric Chen, 7.23 times of President Linda Tsai, 2.77 times of President Miller Chang)

Integrity Management: Compliance with Laws and Regulations, Anti-Corruption and Anti-Competition

Integrity management is an important part of the internal control mechanism of corporate governance. Advantech shall identify various laws and regulations in advance. Furthermore, we communicate with relevant internal units and measure the formulation and implementation of the Company's relevant rules in order to comply with regulations and practice smoothly. The concepts of compliance with laws and regulations, anti-corruption and anti-competition in honest management are closely related to social responsibility and the Company's reputation, which are also one of the key points of Advantech's sustainable management. In accordance with the anti-corruption provisions of the Advantech Code of Ethics and Business Conduct, establishment of "Advantech Global Entertainment & Gift Policy" aims to further clarify the boundaries of business communication.

The total number of trainees for the online ethics and business conduct test is 5,536 according to the 2022 report on Ethics And Business Conduct Management. The data of completion rate are as follows: 95.8% in China, 98.3% in Taiwan, 96.1% in Asia, 93.6% in Europe, 95.0% in the United States, and 99.2% in others. The annual completion rate target is 96.8%, and 95% of the original target has been achieved.

Advantech is committed to ensuring that all business activities are legal, ethical and transparent. Advantech believes that the anti-corruption policy is an extremely important measure. It aims to protect the Company's reputation, the interests of customers and the interests of employees to ensure the Company's long-term and stable development.


Advantech has established "Advantech Business Conduct", and the clauses are formulated to implement the relevant requirements of Company's policies included anti-corruption. Also, Advantech has formed a risk management committee. Relevant risks are regularly assessed to avoid possible disadvantages to the Company. Furthermore, Advantech may also take relevant measures to terminate, prevent or mitigate corruption. It thereof includes the education and training of the annual mandatory "Advantech Business Conduct" for the employees, and the establishment of an internal control system to track corruption and so on. In addition, in order to ensure the legality and morality of business activities, Advantech requires suppliers and partners to comply with relevant anti-corruption measures.

Major violations of laws and regulations in 2022 (including fines and non-monetary sanctions)


* Definition of major violations of regulations: According to the material information of TWSE listed companies listed by the Taiwan Financial Supervisory Commission, violations of regulations.

Incidents of corruption and bribery	0 case
Incidents of discrimination and harassment	0 case
Leakage incidents of customer privacy data	0 case
Incidents of conflict of interest	0 case
Incidents of fraud, money laundering and insider trading	0 case
Incidents of anti-competitive behavior, antitrust and monopoly behavior, market manipulation	0 case
Other incidents related to codes of conduct or any material violations of regulations	0 case

- **The overall number of incidents for "Incidents of anti-competitive behavior, antitrust and monopoly behavior, and market manipulation" in 2022 is 0. Therefore, no monetary loss due to litigation: \$0.**
(including monetary losses during this report and previous report periods)
- **Direct or indirect political contributions in 2022: NT\$0**

 For information about legal compliance and anti-corruption, please refer to Advantech's official website: [Major Internal Policies and Actions](#)

1. [Advantech Code of Ethics and Business Conduct](#)
2. [Guideline for Insider Trading Prevention Management](#)

 For information about the internal audit system, please refer to Advantech's official website: [Audit policy](#)

Tax Policy

Advantech holds the Lita spirit, a concept of altruism within the company, and expects to give back to society while growing the business. Therefore, we take it as our responsibility to contribute reasonable taxes to societies and economies where we conduct our business. We seek to comply with relevant tax laws and regulations but do not seek to conduct aggressive tax planning. According to Advantech Tax Policy, headquarters and its subsidiaries should 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.



Taxation 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 will increase tax liabilities and compliance burdens, which will have an adverse impact on business operation. In order to effectively manage tax risks, Advantech complies with the tax laws and regulations; understands the tax liability and compliance status; identifies potential tax risks; prioritizes the issues and handles them on case-by-case basis. Technology tools are also been used for effective tax management. Aforementioned tasks and results are regularly reviewed by the management.

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

Tax Payment Status

Table 2.1.2

Revenue, Net profit before tax, tax information and number of employees in 2022 (Unit: NT\$ thousand)

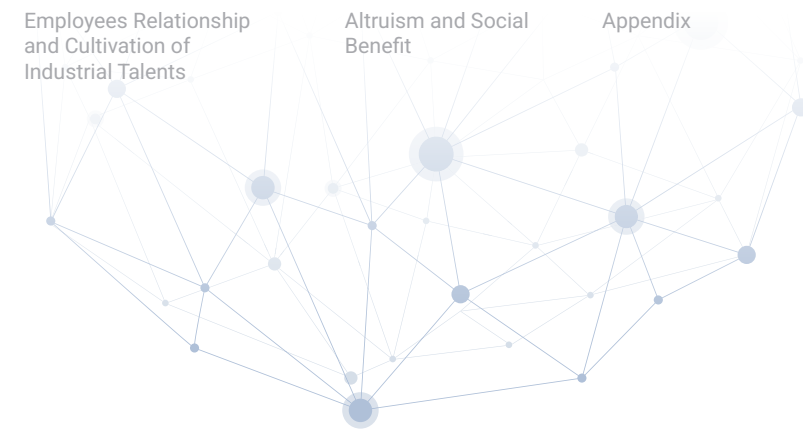
Country	Revenue	Net profit before tax	Income tax paid	Income tax accrued (current year)	Number of employees
Taiwan	51,806,906	12,951,914	556,579	1,966,386	3,488
China	31,993,329	1,084,079	155,313	45,244	3,718
Japan	3,604,033	282,522	51,296	97,888	231
Korea	2,552,792	161,403	57,386	37,100	128
Europe	12,754,951	611,113	78,955	163,182	490
USA	21,094,389	1,437,182	299,659	291,908	512
Other	3,249,322	702,719	56,181	98,593	360
Total	127,055,721	17,230,932	1,255,369	2,700,301	8,927

Effective Tax Rate

The Group's effective tax rate and cash tax rate for 2021 and 2022 are as follows:

Table 2.1.3 Effective Tax Rate (Unit: NT\$ thousand; %)

Item	Effective tax rate		Cash tax rate	
	2021	2022	2021	2022
Net profit before tax	10,255,342	13,442,860	10,255,342	13,442,860
Income tax expense / income tax paid	1,947,979	2,700,301	2,027,449	1,255,369
Add: R&D tax incentives	453,194	556,935	453,194	556,935
Add: COVID-19 tax relief	-	-	707,231	1,099,948
Income tax expense / income tax paid (with adjustments)	2,401,173	3,257,236	3,187,874	2,912,252
Effective tax rate	18.99%	20.09%	19.77%	9.34%
Effective tax rate (with adjustments)	23.41%	24.23%	31.09%	21.66%



***Note:**

1. Revenue, net profit before tax and tax information in this table are aggregated amounts from local entity statutory financial statements. Related-party transactions are not excluded.
2. Net profit before tax for Taiwan includes the income (loss) from the equity method investments.
3. For names of all the resident entities, please refer to the appendix on page 50.

Source: FY2022 Advantech Co., Ltd. Consolidated Financial Statements (page 11-12); for income tax paid, please refer to Consolidated Statements of Cash Flows (page14).

***Note:**

1. Effective tax rate = income tax expense ÷ net profit before tax
2. Cash tax rate = income tax paid ÷ net profit before tax
3. The discrepancy in effective tax rate is explained as follows:
 - The effective tax rate in 2021 and 2022 were 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. Excluding these factors and the influence, adjusted effective tax rate were close to the industry group average.
 - Apart from the factors mentioned above, Cash tax rate were 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) Excluding these factors and the influence, adjusted cash tax rate were close to the industry group average.
 - FY2022 R&D tax incentives amount was estimated.

Appendix: Basic Information of Affiliated Companies

Country/ Region	Name of enterprise	Main operation activities
Taiwan	Advantech Co., Ltd.	Manufacturing, processing, and trading of embedded boards, industrial control products, application computers, industrial computers, and hardware and software equipment for the Internet of Things
	Advantech Intelligent Healthcare Co., Ltd. (AIH)	Service of software
	Advantech Corporation Investment. (ACI)	Investment in markable securities
	Cermate Technologies Inc. (Cermate Taiwan)	Electronic Components manufacturing Industry
	Advantech Intelligent City Services Co., Ltd. (AiCs)	Marketing and trade of industrial computers
	LNC Technology Co., Ltd. (LNC)	Manufacturing and sale of controllers
	NANOMAC Co., Ltd.	System integration and application, intelligent design, production and sales of system furniture
	Advanixs Corporation (Advanixs)	Manufacturing, marketing and trading of industrial computers
	Huan Yan Water Solution Co., Ltd.	Combination of water treatment related technologies and Internet of Things of applications
	Yan Xu Green Electricity Co., Ltd.	Green energy power plant development
China	Beijing Yan Hua Xing Ye Electronic Science & Technology Co., Ltd. (ACN)	Marketing and trade of industrial computers
	Shanghai Advantech Intelligent Services Co., Ltd. (ACI CN)	Manufacturing, marketing and trade of industrial computers
	Shanghai Yanle Co., Ltd. (AYL)	Application and retail of intelligent technology
	Xi'an Advantech Software Ltd. (AXA)	Development and manufacturing of software products
	Advantech Service-IoT (Shanghai) Co., Ltd.	Technology development, consulting and services in the field of intelligent technology
	Advantech Technology (China) Co., Ltd. (AKMC)	Manufacturing and trade of interface cards and PC cases, plastic cases and accessories
	Cermate Technologies (Shanghai) Inc. (Cermate Shanghai)	Networking electronic equipments for industrial use
	Shenzhen Cermate Technologies Inc.	Production of LCD touch screens, USB data cables and industrial computers
	LNC Dong Guan Co., Ltd.	Manufacturing and trade of controllers
Japan	Advantech Japan Co., Ltd. (AJP)	Marketing and trade of industrial computers
Korea	Advantech KR Co., Ltd. (AKR)	Marketing and trade of industrial computers
Europe	Advantech Czech s.r.o. (ACZ)	Manufacturing of automation control
	Advantech Technology Limited (AIE)	Trading of industrial network communication systems
	Advantech Europe Holding B.V. (AEUH)	Overseas investment in manufacturing and services industries

Country/ Region	Name of enterprise	Main operation activities
Europe	Advantech Europe B.V. (AEU)	Assembly, marketing and trade of industrial computers
	Advantech Poland Sp z o.o. (APL)	Assembly, marketing and trade of industrial computers
USA	Advantech Corp. (ANA)	Marketing, trade and assembly of industrial computers
Other	Advantech Co., Singapore Pte, Ltd. (ASG)	Marketing and trade of industrial computers
	Advantech Corporation (Thailand) Co., Ltd. (ATH)	Marketing and trade of industrial computers
	Advantech International, PT. (AID)	Marketing and trade of industrial computers
	Advantech Co., Malaysia Sdn. Bhd (AMY)	Marketing and trade of industrial computers
	Advantech Industrial Computing India Private Limited (AIN)	Marketing and trade of industrial computers
	Advantech Raiser India Private Limited (ARI)	Marketing and trade of industrial computers
	Advantech Australia Pty Ltd. (AAU)	Marketing and trade of industrial computers
	Advantech Vietnam Technology Company Limited (AVN)	Marketing and trade of industrial computers
	Advantech Automation Corp. (HK) [AAC (HK)]	Overseas investment in manufacturing and services industries
	HK Advantech Technology Co., Ltd. (ATC HK)	Overseas investment in manufacturing and services industries
	Cermate Software Inc. (CSI)	Software development
	Advantech Brazil Ltd (ABR)	Marketing and trade of industrial computers
	Advantech Electronics, S.A.P.I. de C.V. (AMX)	Marketing and trade of industrial computers
	Advantech Technology DMCC (ADB)	Trading of industrial network communication systems
	Advantech Turkey Teknoloji A.S. (ATR)	Wholesale of computers and peripheral devices
	ADVANTECH IOT ISRAEL LTD. (AIL)	Trading of industrial network communication systems
	Advantech Technology Limited Liability Company (ARU)	Marketing and trade of industrial computers
	Advantech Automation Corp. (BVI) [AAC (BVI)]	Overseas investment in manufacturing and services industries
	Advantech Technology Co., Ltd. (ATC)	Overseas investment in manufacturing and services industries
	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, research, development and trade of system services for the intelligent Internet of Things	
BEST MACHINE LTD. (BEST MACHINE)	holding company	
BEST AUTOMATION LTD. (BEST AUTOMATION)	holding company	

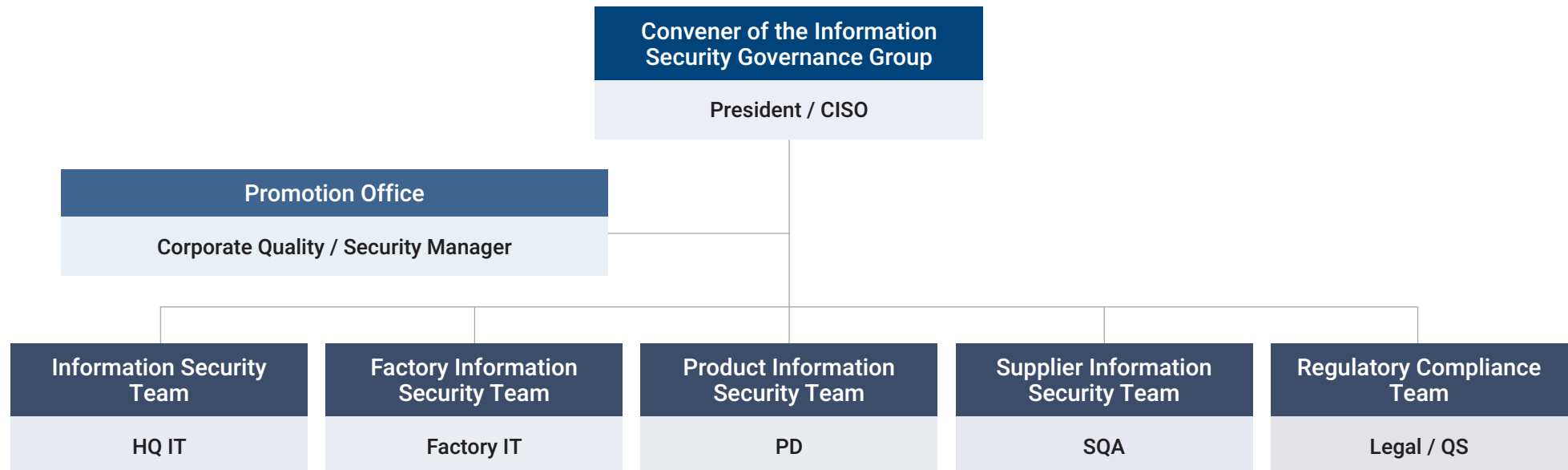
2.2 Information Security Management

Information Security Policy and Organization

Information security forms an integral part of business operations and risk management. The implementation of information security requires management's awareness and adequate support. Advantech's President approves the information security policy and sets information security goals. Also, the confidentiality, integrity and availability of key systems and important equipment are considered. Moreover, each indicator item is regularly measured and reviewed at least once a year to ensure the effectiveness of the implementation of performance indicators.

Advantech's President Eric Chen, concurrently served as Chief Information Security Officer in order to demonstrate the Company's commitment to information security. Also, a cross-departmental information security governance group was established. The Quality Control and Information Security Team is responsible for promoting and coordinating information security-oriented issues, including computer information, physical environment, product information security, supply chain and regulatory compliance, etc. Also, the implementation status is reported regularly to the Risk Management Committee. Information security is integrated into the organization's operation management.

Figure 2.2.1 Organization Structure of Information Security Team



Information Security Management Policy

Advantech has obtained the certification of "Information Security Management System (ISMS) ISO/IEC 27001:2013". External verification units conduct an annual audit. The three-year re-examination is completed in July 2022, and the certificate continues to be valid. It is originally applicable to manufacturing-related information security management activities provided by MTD Engineering Department and IT Information Department, including embedded computer products, industrial-grade flat computer products, industrial-grade computer products, network computer products, medical computer platform products and industrial control products. Besides, it expanded the scope of application in 2022 to the management of the computer room of the information department of the head office and the backbone network. In the same year, Advantech's information operations in Europe and the United States also passed the ISO/IEC 27001:2013 certification.

Advantech continues to improve and expand the scope of application of the information security management system. The standardization of the system is established in four aspects: strategy, management, technology and cognition. The depth and breadth of information security governance have been continuously improved. The rapid changes in the business are effectively responded through the refinement of the system. The verification results of ISO/IEC 27001 in the past three years are as follows.

Table 2.2.1 Statistical chart of ISO/IEC 27001 audit results in the past three years

Year	Minor non-conformity	Observation	Subtotal	Note
2020	4	12	16	
2021	1	8	9	
2022	3	16	19	Implementation scope is extended this year.

Countries and industries widely adopt the concepts, methods and models in IEC 62443 when formulating policies. In order to ensure the safety of industrial automation and control systems (Industrial Automation and Control System, IACS). IEC 62443-4-1 and IEC 62443-4-2 thereof represent that the components of the system meet the safety requirements. Products are guaranteed to comply with safety regulations from the development stage to the mass production stage, whether it is process or product verification. In 2022, the company invites information security vendors to review the operation of the RMA product maintenance department with IEC 62443-4-2. Also, the found results are reviewed and improved in order to reduce possible information security risks.



Information Security Protection Mechanism and Detection

In terms of security protection measures, Advantech adopts a multi-level defense-in-depth architecture. Protection mechanisms such as firewalls, antivirus, endpoint protection, privileged account management, and two-factor authentication have been deployed. In addition, high-quality information security vendors were commissioned to conduct multiple inspections and evaluations, including system vulnerability scanning, penetration testing, and website security. The effectiveness of the current information security defense mechanism is examined. Security loopholes and weaknesses are discovered and patched. In this way, potential information security risks are reduced.

This year, Advantech also held red team drill for cyber attack. On the premise of not affecting the operation, information security vendors were commissioned to verify the effectiveness of the plant's information security protection mechanism to simulate hacker attacks. Meanwhile, the information security awareness of IT personnel is improved. In addition, relevant knowledge and skills are enhanced through drills to understand hacker attack methods and coping methods. Moreover, the confidence of customers and cooperative manufacturers in the company is strengthened, and the Company's emphasis on information security is demonstrated through practical drills.

Information Security Intelligence and Event Monitoring

To strengthen internal endpoint and network security monitoring, Advantech has introduced the MDR threat detection and response service. The weaknesses and abnormal conditions of more than 8,700 computers and mainframes in the Company are continuously monitored 24/7. Professional information security vendors combine global threat intelligence with AI technology. Information security event alarm monitoring, threat tracking, incident investigation, repair plan, regular report, and 24/7 monitoring are provided. It assists the Company to accurately and quickly determine the infection path of malicious behaviors when facing information security incidents. Correct actions are then taken to enhance and speed up the detection and response mechanisms.

Enhancement of Information Security Awareness of Personnel

Personnel security awareness is an extremely important part of information security protection. The Company has incorporated information security publicity courses into annual compulsory courses. It is conducted for general employees through online courses or face-to-face. The main content of the course is case sharing of information security, basic principles of information security, information security regulations that employees should abide by, etc. In 2022, the Company, including overseas RBUs, completed information security publicity courses for 6,825 employees.

In addition, social engineering drills that simulate hackers' phishing emails can test our employees' awareness of information security risks. Our colleagues' awareness and vigilance of information security are enhanced. In 2022, the rate of employees passing the test has increased significantly compared to the test results in 2021.

Item	Direct Labor	Indirect Labor
Completion rate of employee information security publicity in 2022	100%	91%

Item	2021	2022
Percentage of Employees Passing Social Engineering Tests	61.5%	79%

*Note: This is the global statistics of Advantech.

*Note: It only includes the statistics of Advantech Taiwan.

System Redundancy and Disaster Recovery

Critical information systems need to be protected from service interruptions due to major catastrophic events. The continuity of company operations and essential business needs to be ensured. Therefore, Advantech has established a system remote backup mechanism at the Linkou factory in 2022. Neihu computer room and Linkou are mutually backed up in different places and data backup in different places is established through the Nutanix virtual mechanism. The Company's key information systems are guaranteed to quickly return to normal or acceptable operating levels after a disaster. In this way, the Company's operations are guaranteed to be uninterrupted. For the maintenance of data availability, Advantech promoted a 3-2-1 data backup mechanism at its headquarters and overseas RBUs in 2022. Important system data is taken for backup as follows:

- At least 3 data backups: when the original file is damaged or lost, the file can be restored.
- Stored in 2 different storage media: Different types of hazards are prevented using complementary advantages and disadvantages of the different storage media.
- At least 1 off-site backup: The risk of all stored devices being destroyed or stolen at the same time is reduced in case of any natural disaster, fire, theft, etc.

In addition, the Information Office conducts disaster recovery drills targeting critical Information systems at least once a year. Taking the PLM system as an example, the data in 2022 was drilled and backed up with snapshots. Before and after restoring the backup, all the current data in the DB are first exported to confirm that the data of the drill result is not damaged. After Linkou's off-site backup mechanism which is going to be completed in 2023, a rehearsal for the complete transfer of control over Neihu-Linkou PLM DR will be conducted.

Information Security Investment

Advantech continues to invest in resources related to information security. In 2021 and 2022, more than NT\$30 million was invested in information security software and hardware. In addition to human resources, investment in information security includes strengthening defense equipment for information security, intelligence monitoring and analysis, system backup, education and training, etc. Therefore, the information security capability has been comprehensively improved and the information security protection has been improved.



Project Highlights 1

It has been three years since the international information security management standard ISO/IEC 27001 was introduced into Advantech. Minor non-conformity/Observation show a decreasing trend each year. It means that the PDCA of ISO/IEC 27001 has been continuously implemented. The Company's overall information security framework is also becoming more and more stable.

In 2022, the head office expanded the implementation scope of ISO/IEC 27001 to the computer room management and backbone network of the IT department of the head office. Together with the Kunshan factory in mainland China that was first introduced, The information security management system has been implemented for the IT operations of North America and Europe. Since then, Taiwan and major overseas regions have obtained ISO/IEC 27001 certification.



Project Highlights 2

"If you don't know how to attack, how can you know the way to defense." Under the premise of not affecting the operation of the enterprise and within a limited time, the red team drills are conducted to simulate cyber attacks to find out the weaknesses of the enterprise's information security. In 2022, Advantech focused on the IT and OT environment of the Linkou factory area. A professional information security vendor, Onward Security, was commissioned to conduct the red team drill. It simulates the authority of a hacker to sneak into the internal network and try to control the operation of the system.

Benefits of this exercise include: The effectiveness of existing information security defenses has been verified to be close to actual combat. It allows insiders to understand hackers' attack methods and learn how to respond. Potential security weaknesses are discovered and patched. In this way, it can avoid being used by hackers, and the results of the drill can also be used as a reference for subsequent improvement of the information security structure.

Improvement Plans

In 2022, the Company did not cause losses to the Company and customers due to information security incidents. During the period, the Company had a total of 1 information security incident *. It affects the Company's information of a small number of employees, such as names, departments, and email accounts, which are exposed in search engines. The main reason is that after the personnel analyzed the cause of the incident. All improvements have been completed in addition to the emergency response handling in the gap verification mechanism in the development program.

Table 2.2.2 List of Information Security Events

Types of Informational Security Incidents	Number of incidents	Improvement method	Improvement results
Human error	1	The website program was immediately modified to add an authentication mechanism. After testing, this security hole was confirmed to be improved.	In response to this incident, program development safety procedures have been strengthened to publicize and check. Therefore, similar incidents have not occurred again

***Note:**

Information security incidents refer to the definition of CSA 2023 - DJSI Eligible P.92.

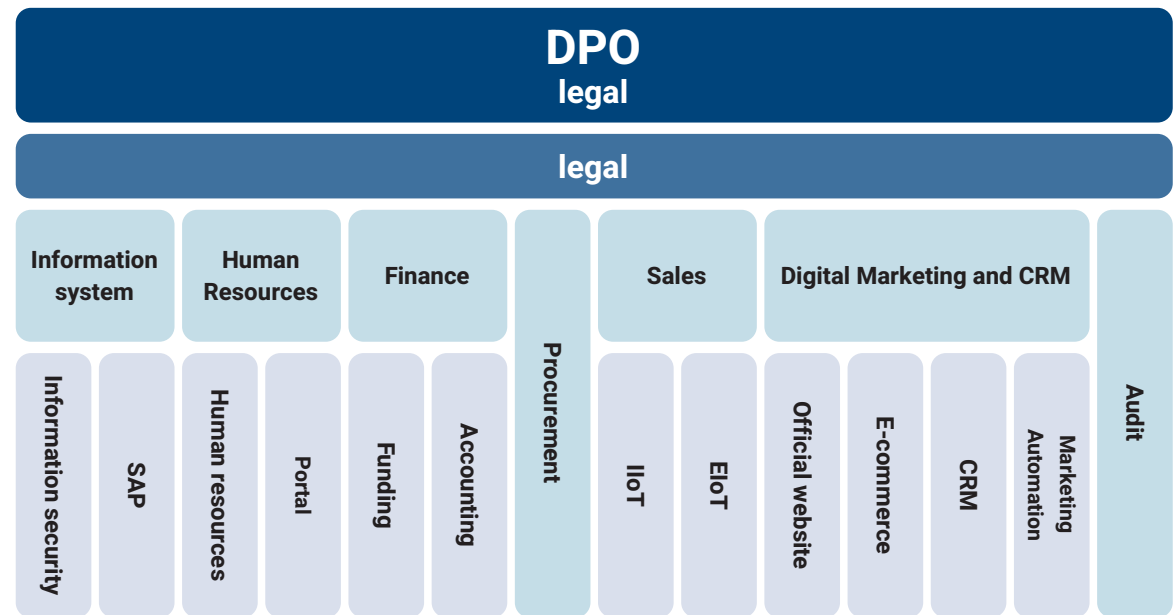
Information security breaches: These are defined as unauthorized access to computer data, applications, networks, devices, protected systems and data. Cybercriminals or malicious applications bypass security mechanisms to reach restricted areas.



Figure 2.2.2 Structure of Personal Data Protection Team


Protection of Customer's Privacy Right

In order to allow everyone to use Advantech's various services with peace of mind, Advantech has formulated a privacy protection policy. It complies with Personal Data Protection Act and the General Data Protection Regulation (GDPR). It has explained how to collect and use personal data, and further protects related rights and interests. In 2022, PwC Taiwan was entrusted to conduct a compliance assessment of personal data protection. After that, the personal data protection team was formally established, which is expected to further establish more detailed internal procedural rules for personal data protection.



Advantech's privacy policy covers the following: Advantech's privacy policy covers, but is not limited to, employees, customers, suppliers, and any third parties who use other services on the website. Please click on the link to view the related policy:

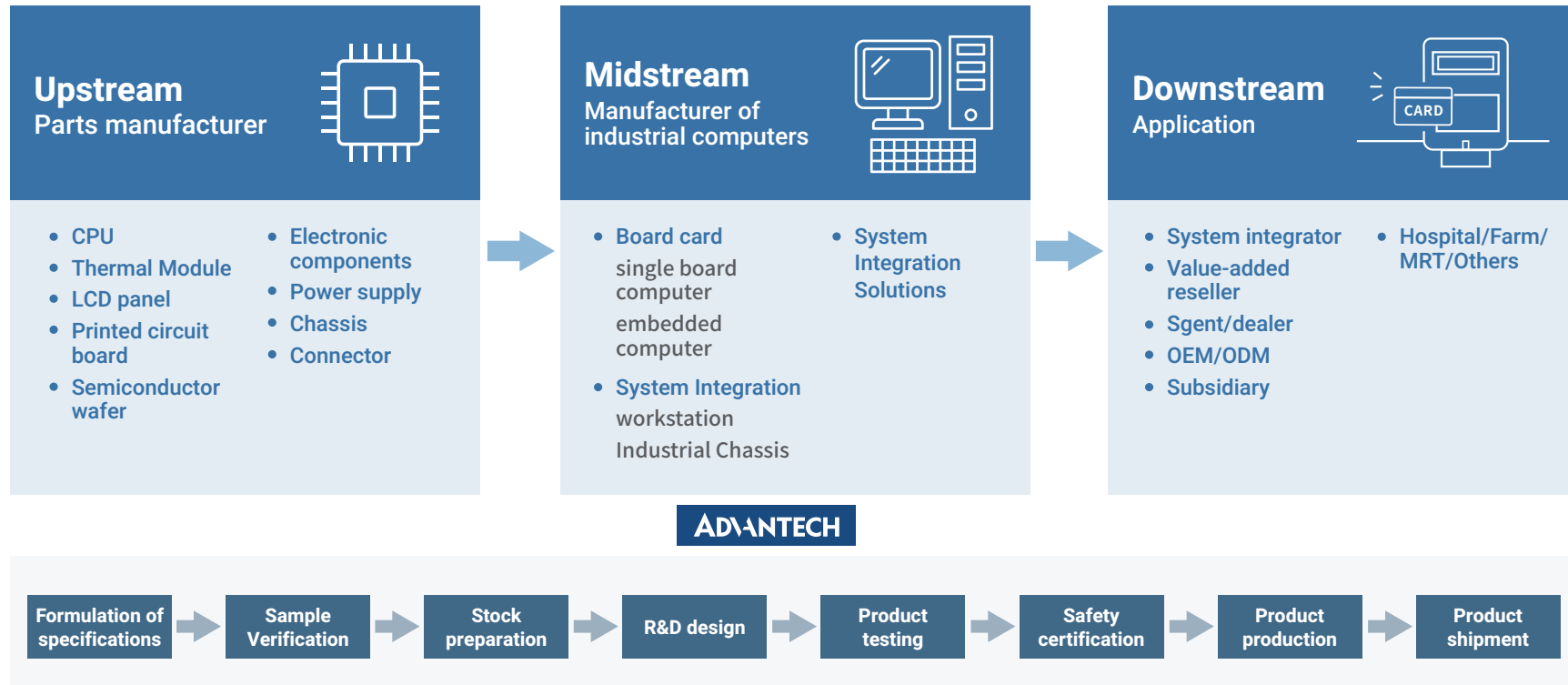
- | | | |
|--|---|---|
| 1 Personal Data Collection | 5 Lawful Basis For Processing Personal Data | 9 Rights of the Parties |
| 2 Use of Personal Data | 6 Storage Period of Personal Data | 10 Contact Method |
| 3 Personal Data Sharing | 7 Personal Data and other Countries | |
| 4 Personal Data Access and Control | 8 Privacy Protection | |

 About Advantech's privacy policy, please visit the website to learn more:
 Website in Chinese: <https://www.advantech.com/zh-tw/legal/privacy>
 Website in English: <https://www.advantech.com/en/legal/privacy>

2.3 Sustainable Management of the Supply Chain

Advantech's business philosophy is to create a win-win situation with suppliers and customers by establishing a sustainable IoT supply chain ecosystem and always ensuring ethical and environmentally compliant supply chain and production principles. The Company belongs to the industrial Internet of Things industry service category, mainly involving the process of purchasing components from upstream component manufacturers, assembling and manufacturing them in the Company, and then delivering them to customers. Due to the characteristics of the industry, the Company purchases a wide variety of items that are highly customized. At present, supply materials in the supplier database number in the tens of thousands or more. Advantech regularly conducts supplier assessments through our procurement and quality assurance units to ensure the stability of the supply chain and supply quality. In addition to regularly evaluating suppliers for their product quality, on-time delivery rates, cooperation, industrial safety management, business conditions, ESG management, and so on, we also engage in instant communications with them as we strive to impart the concepts of Corporate Social Responsibility and Supply Chain Sustainability Management into supply chain assessment standards. In this way, we cooperate with suppliers to create high-quality products and services and create sustainable value. In addition, Advantech's Chief Operating Officer regularly reviews the procurement practices and management performance of the supply chain at the Meeting of Corporate Operations (MCO). The goal of sustainable supply chain management is expected to be achieved.

Figure 2.3.1 Advantech's Industrial Value Chain



Goal of Sustainable Supplier Relationship Management

Optimization of Core Competitiveness of Supply Chain

Suppliers are required to act according to Advantech's Supplier Code of Conduct. It improves labor rights, safety and health, environmental protection, business ethics and management system performance. Suppliers' refined core competencies are actively coached to reduce the risk of operational disruption.

Strengthening the Sustainability Resilience of the Supply Chain

Supplier risk assessment is carried out through the Supplier ESG Sustainability Risk Assessment Form. All stakeholders in the supply chain are ensured to have visibility into the processes and product lifecycle in the supply chain. Monitoring and evaluation of supply chain performance is continued to identify potential risks and opportunities.

Table 2.3.1 Short- and Medium-Term Goals of Supply Chain Sustainability Management

Item	2022 Results	2023 Goals	2025 Goals
	100% achieve the target set in 2022		
Requirement to sign Advantech's Supplier Code of Conduct	100% of significant suppliers comply with Advantech's Supplier Code of Conduct	First-tier suppliers (including significant suppliers) are 100% in compliance with Advantech's Supplier Code of Conduct	First-tier suppliers (including significant suppliers) are 100% in compliance with Advantech's Supplier Code of Conduct
The execution of due diligence on conflict minerals complies with OECD's third-party mechanism	Significant suppliers 100% do not use conflict minerals	Significant suppliers 100% do not use conflict minerals	Significant suppliers 100% do not use conflict minerals
Audit and counseling for non-conforming improvement work	100% complete the improvement of deficiencies of significant suppliers*	100% complete the improvement of deficiencies of significant suppliers	100% complete the improvement of deficiencies of significant suppliers

*Note: Significant suppliers are defined as the following two types of suppliers. One is a key supplier with high annual purchase amount, key raw materials and irreplaceable. The second is the supplier group with high sustainability risk identified through ESG assessment.

Project Highlights/Performance

100% 100% of significant suppliers have completed signing the "Consent Form for Supplier Code of Conduct"

100% New suppliers are 100% compliant with environmental guidelines

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

100% 100% of significant suppliers complete the counseling and improvement of deficiencies

2.3.1 Supplier Management

Supplier Composition

Advantech's product portfolio is diverse and flexible. Such products are widely used in IoT embedded computing, industrial computers and their peripherals, cloud computing and industrial automation, communication systems and other fields. Therefore, the supply chain is also flexible, diverse and closely related. The raw materials in the supply chain include ICs, 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, as well as contractors for maintenance, cleaning, engineering, and so on. Raw material suppliers thereof have a clear impact on operations and production. Therefore, Advantech further divides raw material suppliers into two categories according to their attributes, encompassing suppliers of direct materials (materials directly related to production) and packaging materials (materials or packaging materials not directly related to production).

In order to effectively manage raw material suppliers and resource allocation, Advantech screens suppliers with high annual purchase amounts, key raw materials, and irreplaceable suppliers to make up the Preferred Vendor List. Also, we also identify supplier groups with high sustainability risks through ESG assessment. These two types of suppliers are significant suppliers defined by Advantech. Advantech currently identifies 271 significant suppliers. Its purchase amount accounted for 71.4%.

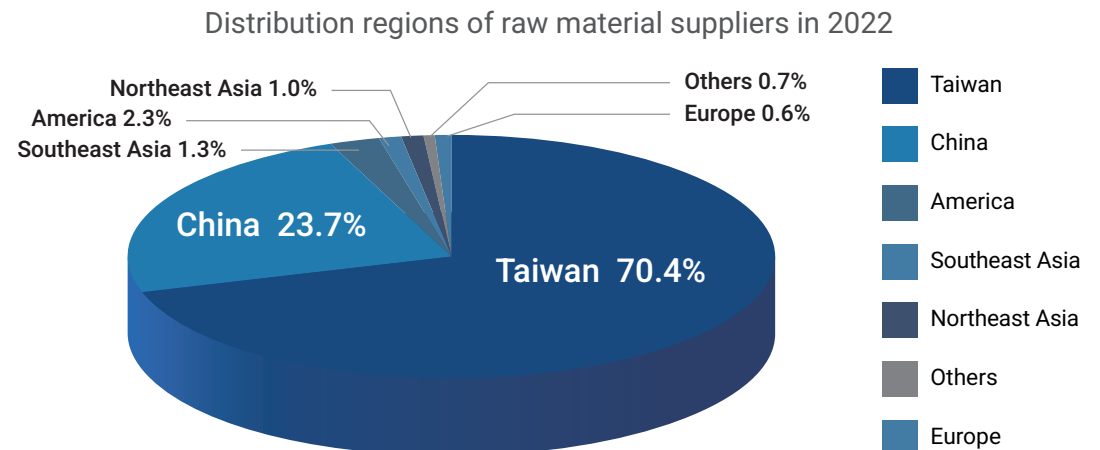


Definition of Tier 1 suppliers
Suppliers who directly supply the Company with direct or indirect materials

Definition of Significant Suppliers
There are two types of suppliers. One is a key supplier with high include annual purchase amount, key raw materials and the second is the supplier group with high sustainability risk identified through ESG assessment.

Supplier Procurement Distribution in 2022

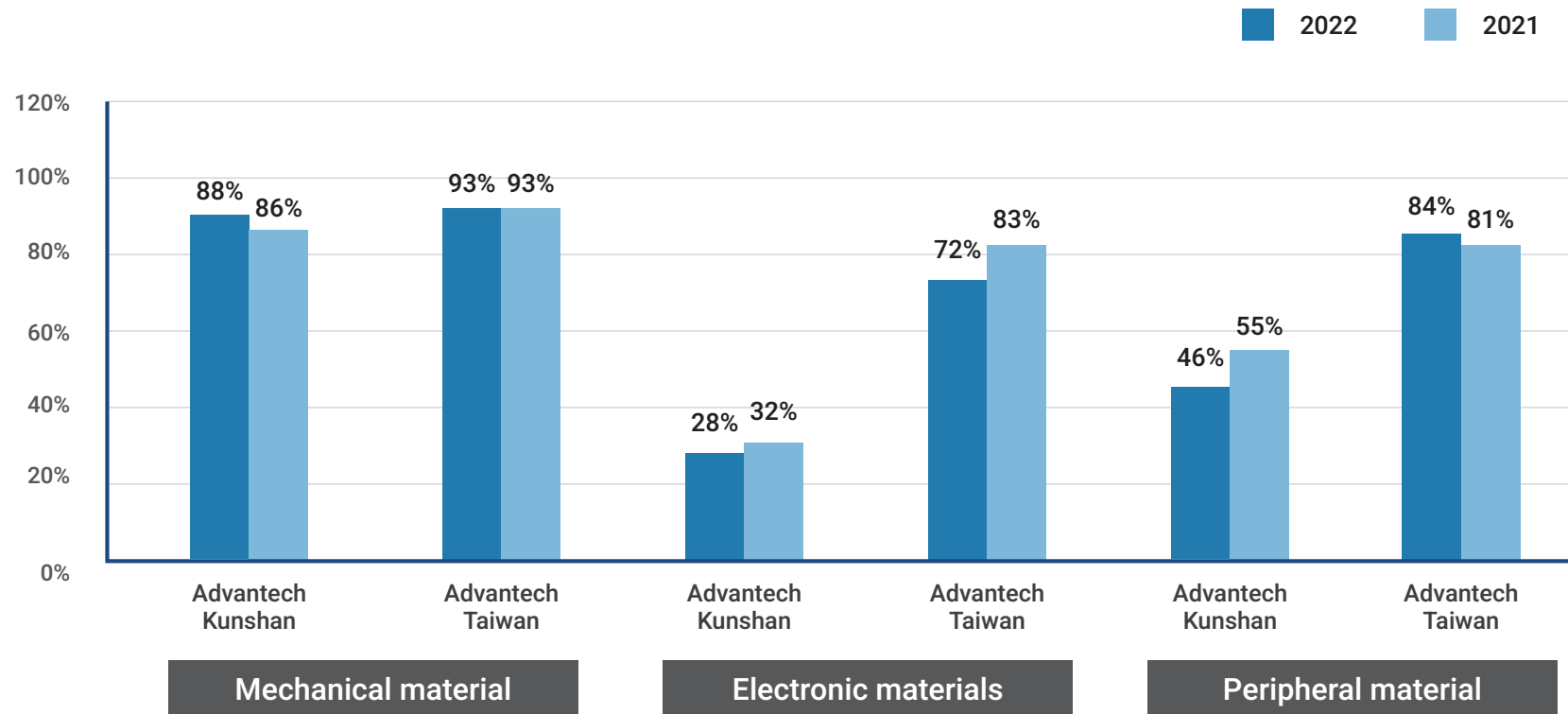
Category		Number of companies		Proportion of purchase amount	
Tier 1 suppliers		1,156		54.6%	
Significant suppliers	Significant tier 1 suppliers	271	212	71.4%	26%
	Significant non-tier 1 suppliers	59		45.4%	



Support for Local Suppliers

Advantech continues to use localized procurement strategies in order to establish close relationships with local partners and create local employment opportunities while also reducing carbon dioxide emissions to the environment during manufacturing and transportation. Over the years, our procurement has always been based on local suppliers and products comply with RoHS/HSF specifications. Overall, Advantech Taiwan's local procurement amounted to NT\$16.38 billion with a ratio of about 81% in 2022. Local procurement at Advantech Kunshan Manufacturing Center reflected the fact that some electronic and peripheral raw materials were purchased by Advantech Taiwan. The local procurement ratio only accounted for about 46% of the total amount*, and the overall local procurement ratio was 69%. Figure 2.3.2 shows the proportions of the Company's local purchase amounts in recent years.

Figure 2.3.2 Proportions of Local Procurement for Advantech Taiwan and AKMC in 2021-2022



***Note:**

1. Local procurement definitions: 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. The decrease in the proportion of local procurement of electronic materials in Kunshan is mainly due to the switch to a self-purchasing strategy in 2020. However, most of the self-purchasing suppliers are agents registered in Taiwan.

Supply Chain Risk Strategies and Countermeasures

Supply chain disruptions (including those for raw materials and machinery equipment) would affect the Company's operations and our commitments to customers. Therefore, in terms of sustainable risk control, we require our suppliers to take the Advantech Supplier Code of Conduct as the basis for action to labor rights, safety and hygiene, environmental protection, business ethics, and management system performance, while continuously reducing the risk of operational interruptions. Furthermore, Advantech has formulated risk response plans to ensure that there are measures in place when risks do occur. Please refer to Figure 2.3.3 for details.

Figure 2.3.3 Advantech's Supply Chain Risk Response Plan



Supplier Management Strategy

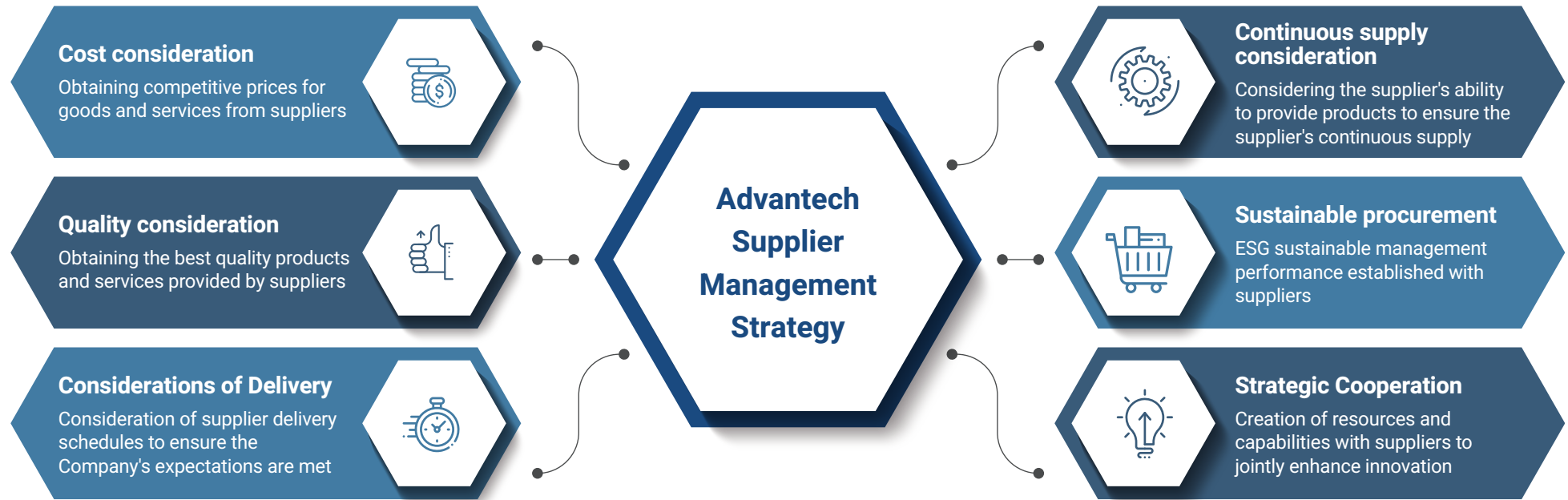
Advantech starts from the new supplier recognition stage; that is, we require suppliers to sign a purchase contract to ensure their delivery, quality, and warranty specifications. Suppliers are therefore required to make immediate notifications on the delivery delays caused by natural and man-made disasters.

The Company's procurement strategy adopts an approach of sourcing supplies from over two suppliers, in order that they can be replaced and compete with one another so as to diversify procurement risks and reduce costs. For electronic parts with high commonality, Advantech has established a second source management mechanism. Safety stocks are also established for primary materials to avoid risks caused by material shortages or quality problems.

Advantech differentiates by material grades in assigning dedicated procurement colleagues to analyze market information and regularly review market dynamics through weekly and monthly meetings. Furthermore, we adopt a centralized procurement strategy, establish a Preferred Vendor List, improve cooperation efficiency through convergence and concentration, and then obtain high-quality materials and stable delivery.

In addition to paying attention to suppliers in terms of cost, quality, delivery, continuous supply, and so on, we have formulated the Advantech's Supplier Code of Conduct and require that suppliers comply with it. Advantech requires suppliers to sign a Supplier Code of Conduct Acceptance Form. In addition to requiring full compliance with the laws and regulations of the countries in which we operate, we also put forward regulations on business conduct in terms of labor rights, health and safety, environment, corporate ethics, management systems, and other aspects. Meanwhile, suppliers are also required to communicate these requirements to their next-tier suppliers and monitor the compliance of these next-tier suppliers.

In addition, from 2021, Advantech stipulated that materials suppliers should complete an ESG sustainability risk assessment survey that covered legal compliance, sustainability management, supplier management, conflict mineral management, environmental protection, health and safety, labor rights, human rights, and so on. In order to grasp the sustainability risks of suppliers, on-site audits shall be conducted when necessary to ensure that the sustainability of suppliers meets our standards. Therefore, the key suppliers selected by Advantech as the main procurement targets must be manufacturers with a score of 80 or more (accounting for 26.67%) through ESG in addition to basic cost, quality, delivery time, and continuous supply. Meanwhile, Advantech expects suppliers to continuously improve their sustainable performances. Therefore, we require and encourage existing suppliers and new suppliers to obtain relevant international certification standards such as ISO 9001, ISO 14001, ISO 45001, ISO 14064-1, QC 080000, IATF 16949, and ISO13485.



Sustainable Supplier Relationship Management Platform

Through the platform of Supplier Relationship Management (SRM), Advantech manages the life cycle of suppliers. Also, the integration of the supplier's communication channel is carried out. Platform functions include contract establishment, price/quality management, new supplier audit, existing supplier audit management, information release, etc. Online data is controlled to drive offline improvement, so sustainable supply chains are practiced.

Supplier Relationship Management



Supplier Management

In addition to the strict incorporation of environmental protection principles into the supplier management mechanism, since 2010 we have introduced the management system of the Responsible Business Alliance (RBA) (previously known as the Electronic Industry Citizenship Coalition, EICC). This expands our call for suppliers to pay attention to and promote corporate social responsibility (such as the regulations of conflict minerals). Currently, the Company's management of all supplier selection indicators includes important indicators such as RoHS (HSF) QC 080000, ISO 14001, ISO 45001 and even the localization of suppliers within RBA as well as other important corporate social responsibility indicators. Advantech requires suppliers to safeguard basic human rights and abide by labor standards. The aforementioned indicators are also included among new supplier audit items in our Supplier Audit Form.

In addition, in order to ensure that suppliers can adhere to the principle of equality of the Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy of the International Labor Organization, the relevant management of suppliers and contractors (including security companies) has been carried out through the purchasing unit and the general affairs unit. The overall management overview is shown in Table 2.3.2. In the future, the company will gradually increase the proportion of suppliers that meet the relevant requirements of corporate social responsibility.

For new suppliers screening, the products produced by the manufacturers have been widely used in the industry in the market. Moreover, its quality system must be verified by international standards. In addition, after the evaluation team approves the certification documents and passes them, they are listed as qualified manufacturers. The rest are subject to on-site inspection. The audit focuses on areas such as quality, procurement, and ESG sustainability management. According to statistics, a total of 220 new suppliers were implemented and 194 new suppliers were approved in 2022.

Table 2.3.2 Overview of Supplier and Contractor Management

Type	Management Principles	Implementation Ratio	Future Management Priorities
All significant suppliers A total of 271 companies, 271 companies have completed the execution of the 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 assessment ratio
New Suppliers of 2022 Out of a total of 200, 194 have undergone audits	Conduct supplier profile review by signing the Supplier Code of Conduct Acceptance Form	100%	Include the clauses of the Supplier Code of Conduct in contract
	New suppliers that adopt ESG sustainability risk assessment (including labor, environment, safety and health, ethics, etc.)	100%	Maintain assessment ratio
	Through the Supplier Audit Form evaluation (assessment requirements for quality system, design control, procurement services, etc.)	97.0%	Maintain assessment ratio
Audits of existing suppliers in 2022 The total number of planned implementations is 88, of which 77 are audited.	Conduct supplier profile review by signing the Supplier Code of Conduct Acceptance Form	100%	Include the clauses of the Supplier Code of Conduct in contract
	Through the Supplier Audit Form evaluation (assessment requirements for quality system, design control, procurement services, etc.)	87.5%	Increase the proportion of on-site evaluations
Maintenance, Cleaning and Engineering Contractors	Sign the Contractor Environmental Safety and Health and Supplier Code of Conduct Acceptance Form	100% (Does not include data for the Kunshan factory)	Include human rights clauses in contract

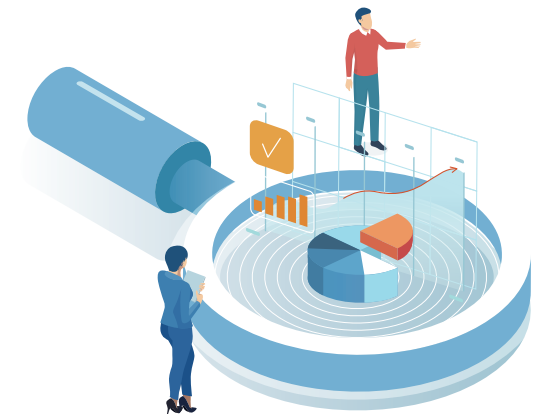
*Note: The audit of existing suppliers in 2022 did not reach 100% of the plan. This is mainly due to the COVID-19 pandemic in China, and it is impossible to go to some suppliers for on-site audits.

Substance Management Related to Product Environment

Advantech's main factories have introduced the IECQ QC 080000 system and implemented the Green Product Management (GPM) system to implement incoming material management according to material risk levels. Regarding the selection of suppliers of raw materials and packaging materials, both Advantech Taiwan and the Kunshan factory have established Hazardous Substance Free Management Workflows for them to follow. All raw materials must comply with international environmental protection directives/regulations such as RoHS and the EU's new chemicals policy (REACH), as well as those for substances of very high concern (SVHC) and for persistent organic pollutants (POPs).

Since 2010, the Company has established a Green Supply Chain management system that uses our green product information management system as a supply chain environmental information sharing platform. Advantech simultaneously sends the latest international environmental protection requirements to its supplier partners as a reference for regulatory compliance and construction of material supply system management. On this supply chain platform, suppliers must promise and guarantee that their products do not contain hazardous substances listed by the Company, and they must provide the following information:

- Collection of toxicity and prohibition information for related chemicals (MSDS/MCD)
- Presentation of audit results of green product management systems among suppliers



2.3.2 Sustainable Supplier Relationship Management

Advantech expects to deepen the relationship with global customers and partners through a consistent global brand, and we are committed to creating sustainable corporate value. In addition to the own compliance with the RBA Code of Conduct to assess the labor, environmental, and ethical management of our operations, we also actively require sustainable management of the supply chain and promotion of the sustainable development of the supply chain. For example, suppliers are not allowed to use forced labor or child labor. If circumstances are serious, the relationship will be terminated. In 2022, no supplier terminated a partnership due to forced labor or child labor.

Sustainable Risk Evaluations

Advantech also incorporates supplier ESG performance into the evaluation, and conducts ESG sustainable risk evaluations of annual key suppliers from three aspects: economic, environmental, and social. Evaluation risk factors accounted for 26.67% which includes:

Governance

- Business ethics
- Integrity management
- Information disclosure
- Intellectual property management
- Identity protection
- Conflict minerals management

Environment aspect

- Environmental regulation compliance
- Environmental management system
- Energy resource management
- Waste and air pollution management
- Carbon management
- Hazardous substance management

Social aspect

- Labor law compliance
- Occupational health and safety management system
- Employee health and safety
- Human rights
- Labor practices
- Emergency response procedures

Auditing of suppliers' ESG sustainability risks

In order to implement the procurement and supply chain policy, Advantech has established a four-stage supply chain sustainable management process. Through continuous rolling improvement and cycling every year, we ensure that our suppliers meet our standards and thereby improve the sustainable performance of our suppliers.



In addition, we need to understand the sustainable development of the supply chain and grasp the sustainability risks of the supply chain. In addition to the original supplier evaluation, Advantech has improved its sustainable supplier relationship management in 2021. A new supplier ESG sustainability risk assessment form was planned and developed. This audit form is designed as Advantech's supplier ESG sustainability risk assessment form. It refers to the latest RBA7.0, plus the requirements of other customers for sustainable supply chain, and the items that Advantech should investigate to improve the core spirit of sustainable supply chain management. Also, it is planned to be evaluated every two years. In 2021, Advantech conducted a comprehensive written sustainability risk survey on 271 significant suppliers. Suppliers with potentially high risks are identified in terms of governance, environmental and social aspects. In addition, in 2022, significant suppliers with high sustainability risks were actually audited and counseled. Its risks are ensured to be effectively controlled and reduced to meet Advantech's sustainability standards.

Sustainability Risk Audit Results

After summarization, a total of 271 significant suppliers were audited in this ESG sustainability risk assessment survey, with a total response rate of 100%. Advantech sets that the supplier shall be required to put forward countermeasures for deficiencies, if the audit result score is lower than 80 points or there is a high sustainable risk of critical items. Also, missing improvements were completed and responded within three months. If it is still not resolved, its supplier qualification shall be cancelled. In the results of this audit and investigation, it was found that those with high sustainable risk accounted for 4.0%. There are 11 companies with less than 80 points (out of 100 points) or critical projects. Therefore, Advantech listed it as a supplier with high sustainability risk in 2022, giving priority to on-site audit and counseling to be completed. Meanwhile, deficiencies are ensured to complete improvements and their risk levels are reduced through formulation of improvement measures and continuous tracking. Finally, in 2022, no suppliers were listed as unqualified suppliers in the ESG sustainability risk assessment audit due to violation of major sustainability project specifications.

The performance of each sustainability dimension risk management is analyzed as follows. The average missing ratio of the moral aspect is higher, accounting for 62%. The topics covered are mainly procedures or requirements that have not established ethical related issues. The average missing ratio for health and safety is low at 5%. However, there are still some high-sustainability-risk issues on the labor side, and 19% of the manufacturers lose points in this aspect. The issue is primarily the lack of labor-related requirements prohibiting mandatory indentured bondage. To follow-up, audits, counseling will be conducted, and remedial plans will be required. A total of 21 deficiencies were audited, and the completion rate of the average deficiencies improvement was 100%.

Audit items and proportion	Actual/Goal (Number of companies)	Actual/Goal (Proportion)
Percentage of suppliers performing ESG audits	271 / 271	100%/100%
Percentage of significant suppliers performing ESG audits	271 / 271	100.0% / 100%
Percentage of significant suppliers with a total score of less than 80 points (or with critical items) among significant suppliers	11 / <15	4.0% / < 10%
Implementation of improvement plans for high-risk significant suppliers	11 / <15	100.0% / 100%
Termination of Cooperation for Serious Violations by Suppliers	0 / 0	0.0% / 0.0%
Assistant in high-risk important suppliers to complete ESG coaching and improvement	11 / all	100.0% / 100%

Priority non-conformities and other non-conforming items have all been

100% proposed corrective actions.

Table 2.3.3: Supplier Audit Deficiencies and Improvement Actions in 2022

Classification	Primary Deficiency Uncovered	Improvement Action	Resource provided
Labor	There are no provisions prohibiting the use of coercion, bondage (including debt bondage), or binding labor with compulsory indenture, and prohibiting the use of involuntary or exploitative prison labor, slavery, or human trafficking requirements.	Suppliers are required to formulate relevant policies or measures, and to strengthen their implementation.	Suppliers are provided with relevant labor policies or methods and suggestions for reference and implementation
Health and safety	There was no compliance and implemented on the Article 15-5 of the "Enforcement Rules of Fire Services Act" stating that drill of fire fighting, communication and evacuation leading: shall be carried out at least once half a year, with each session not less than four (4) hours and a prior notice of the drill shall be served to the local fire department.	Suppliers are required to strengthen the publicity of the Environmental Safety and Health Management Measures and related regulatory requirements, and strengthen their implementation.	Suppliers are provided with fire protection work project advocacy and management suggestions for reference and implementation
Environment	Standards for the management of hazardous substances and management measures have not been formulated (need to comply with RoHS, REACH and other environmental regulations).	Suppliers are required to set standards for the management of hazardous substances and conduct regular inspections to ensure the classification and storage of hazardous substances.	Suppliers are provided with recommendations on Standards for Hazardous Substance Management for reference and implementation
Ethics	There are no relevant procedures or requirements not to promise, offer, authorize, give or accept bribes, illegal or improper benefits and other forms of benefits.	Suppliers are required to formulate relevant policies or measures, and to strengthen their implementation.	Suppliers are provided with relevant policy or method recommendations for reference and implementation
	There was no related procedures or requirements that whether the information required to be disclosed by laws and regulations is properly managed and disclosed to ensure that there is no false or wrong content.	Suppliers are required to formulate relevant policies or measures, and to strengthen their implementation.	
	There was no program or requirement to prevent infringement of intellectual property rights or illegal copying, including information from customers.	Suppliers are required to formulate relevant policies or measures, and to strengthen their implementation.	
	No procedures or requirements have been established to ensure that the company's information complies with regulatory requirements and that its public statements are not false or misleading.	Suppliers are required to formulate relevant policies or measures, and to strengthen their implementation.	

Supplier Improvement Program

In terms of improvement plans for suppliers, Advantech plans supplier coaching and training as well as innovative cooperation with suppliers. Preliminary results have been achieved in 2022, including on-site visits to some suppliers with higher carbon emissions (6 suppliers including PCB, Power Supply, and Panel / accounting for 2.2% of material suppliers). Advantech's carbon management experience sharing is illustrated. Also, its industry benchmark carbon management cases are provided for reference as educational training. Also, it is required to formulate the company's future carbon management plan. Moreover, sustainable carbon management trends and education training courses for all first-tier suppliers are provided. In addition, Advantech and power supply suppliers evaluate the use of new power supplies to improve energy efficiency. Also, the internal product department is coordinated to introduce higher-efficiency power supplies and replace lower-level power supplies according to project requirements and international standards, so as to comprehensively improve product power efficiency.

After 2023, we will continue to cultivate and train suppliers. Suppliers are provided with resources and work together to incubate new technologies and apply new materials. The following is the planning of the projected project plan:

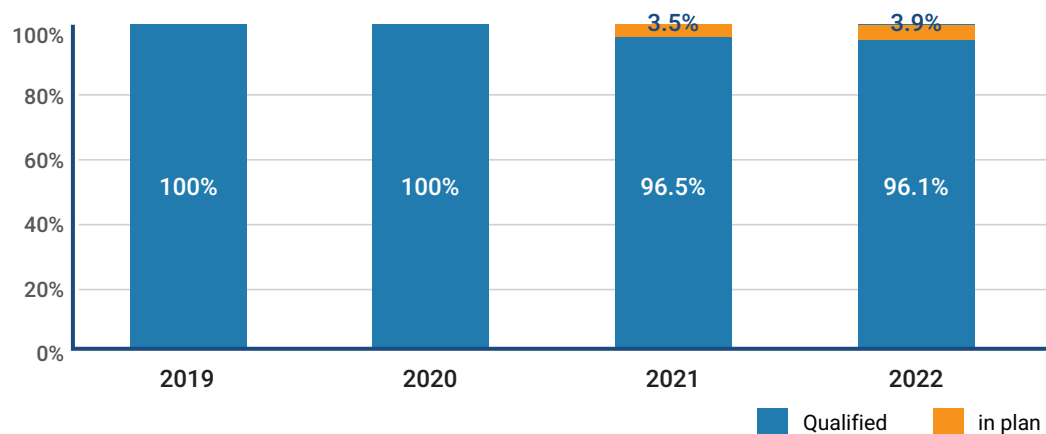
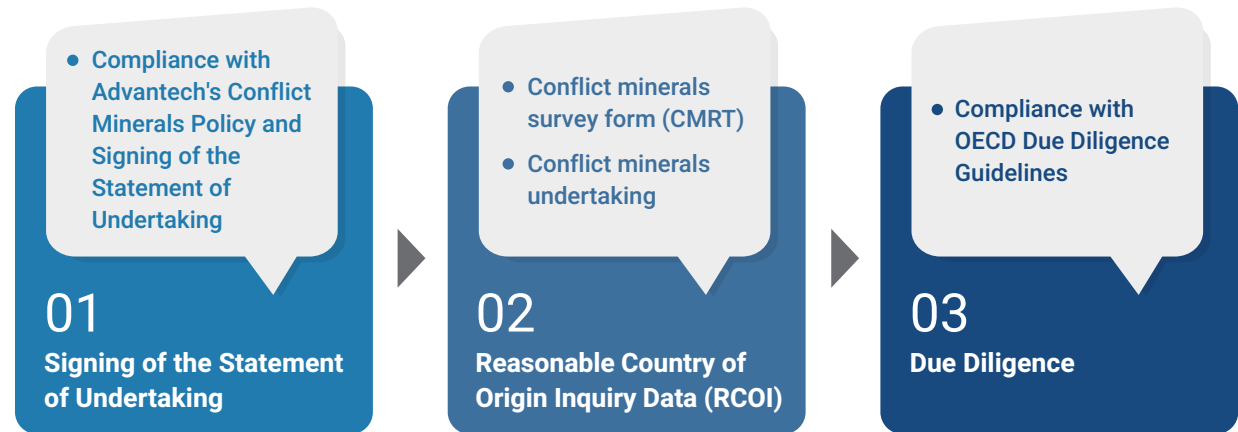
Annual	Planned Execution Project
2023	Completion of carbon emission survey of high-carbon emission suppliers
2024	Completion of energy-saving and carbon-reduction counseling for 20% of high carbon emission suppliers
2025	Evaluation and completion of ISO 14064 inventory and certification of 20% high carbon emission suppliers

Sourcing Strategy of Conflict Minerals

Advantech follows the Responsible Business Alliance (RBA) Code of Conduct to implement the policy of not using conflict minerals. In addition to our own declaration and commitment not to accept the use of metals from conflict mining areas, we also require Advantech's suppliers to abide by and make commitments to ensure that Advantech's supply chain respects human rights and does not have involvement in conflict activities. As of 2022, 100% of Advantech's significant suppliers had signed the Declaration of Non-Use of Conflict Minerals. In addition, none of Advantech's own products use conflict minerals.

Advantech communicates its policies and requirements for not using conflict minerals to suppliers through the Company's green procurement website, requiring those on the Preferred Vendor List to comply with and communicate to their next-level suppliers. In addition, we require suppliers to conduct a reasonable degree of mineral source country investigation (RCOI) to identify and confirm the source of conflict minerals in manufacturing and service products (3TG*) to determine whether they come from conflict areas. RCOI investigation consists of the following steps:

1. Signing of pledge: Members of the Preferred Vendor List have signed a letter of commitment to confirm compliance with Advantech's conflict minerals policy, guaranteeing correct and complete disclosure of their smelter sources.
2. Investigate: Through the Conflict Minerals Reporting Template (CMRT), conduct an investigation on the source of minerals used by suppliers and identify the source of the 3TG smelter.
3. Due diligence: Advantech's supplier risk identification and evaluations are carried out in accordance with the due diligence guidelines procedures formulated by the Organization for Economic Cooperation and Development (OECD).



According to the 2022 conflict minerals due diligence results, we have identified 259 smelters in our supply chain. Among them, a total of 249 smelters are eligible-compliant per the standards of the Responsible Minerals Assurance Process (RMAP) (or equivalent cross-accreditation assessment) and a total of 10 are participating in the plan, and the qualified smelter ratio is 96.14%.

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

2.4 Risk Foresight and Crisis Management

Advantech defines each risk according to the overall operation direction of the Company. Also, the enterprise risk management system (ERM) is introduced to establish and identify, accurately measure, effectively supervise and strictly control the risk management mechanism. Possible losses are prevented within the acceptable risk range. Also, best risk management practices are continuously adjusted based on changes in the internal and external environment. Advantech's risk management process identifies major risks that fully cover economic, environmental, and social issues. Key topics on the economic side include business inheritance, domestic and overseas governance structures, sustainable supply chains, information security, taxation strategies, etc. Environmental topics include low-carbon and green products, climate risks, etc. The social aspect includes talent cultivation and retention, social welfare, customer management, labor relations, personal data protection, etc. The survey results of the annual major suitability issues are also used as one of the basis for the identification and measurement of the annual major risk issues. Taking 2022 as an example, major sustainability issues are also regarded as major strategic or operational risk issues in corporate risk management, accounting for 70% of the total.

Advantech reduces or avoids the impact of risks on the Company's possible income, costs, and goodwill through risk management mechanisms. Meanwhile, the opportunities that risks may bring will also be actively explored, such as investing in related applications in the solar energy, wind power, and electric vehicle industries, and being developed as an energy management platform applicable to different industries.

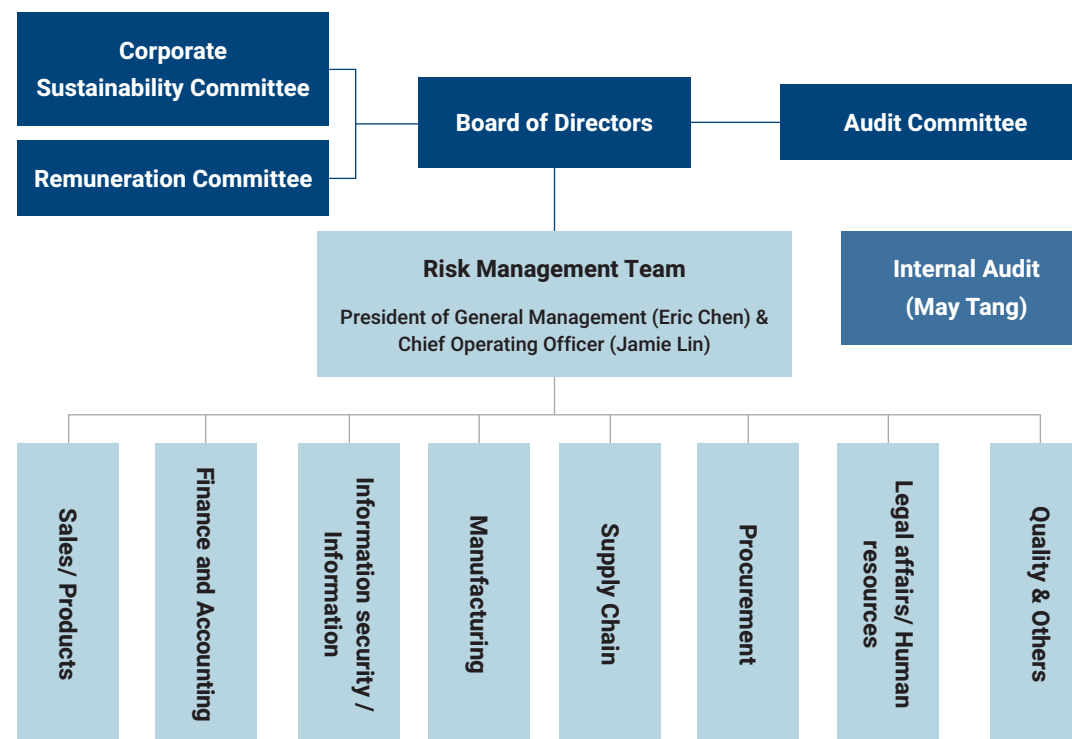
Risk Management Organization

The Board of Directors is the highest governance entity for risk management, and it supervises the update of the overall risk management mechanism and approves policies. Pan-strategic risks are mainly reported and tracked to the Board of Directors, Sustainable Development Committee and Compensation Committee. Pan-operational risks are primarily overseen by the Audit Committee.

The risk management team is the highest management unit for risk management. It is responsible for the implementation of the risk management process. Also, it reviews the performance of risk mitigation on a quarterly basis. The responsible manager is responsible for setting up response measures. Internal auditors shall closely monitor or even assist in driving all risk management processes. It shall also provide opinions and conduct audits on various risk topics as needed. Basically, if there is any major risks with unclear results, they shall be included in the project audit of the current year. The proposal for the evolution of the risk management mechanism is also discussed by the risk management team and internal audit before putting forward.

Due to the rapid changes in the business environment, the risk management team and management authorities will often observe and propose various risk changes that need attention. Relevant response plans have been added or adjusted, and included in the discussion and tracking of quarterly risk management meetings or routine management meetings.

Figure 2.4.1 Risk management organization



the following information can be referenced from the risk management page of the Company's website ([Chinese/English](#))

- Risk Governance Structure and Major Risk Subjects
- Risk Management Policy and Procedures
- Risk Management Mechanism and Processes
- Emerging Risks and Mitigation Actions
- Sensitivity Analyses for Major Risks

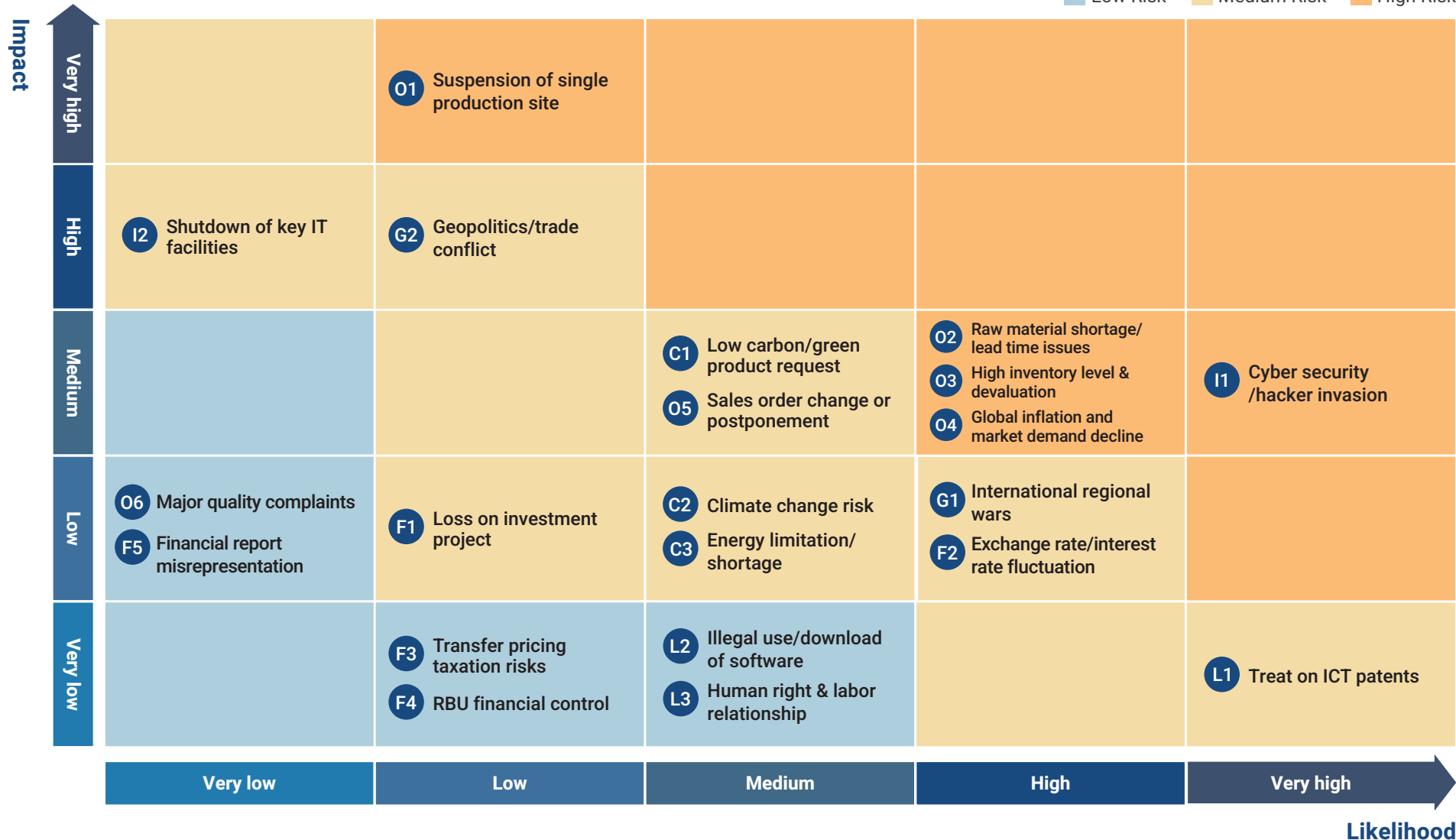
Advantech's Risk Map and Response Actions for Projects with Major Risks

Figure 2.4.2 2022 Pan-Operational Risk Map

Pan-operational risks are summarized and labeled into six categories:

- I** Information security
- O** Operation
- F** Finance
- L** Compliance and litigation
- C** Climate risk
- G** Geopolitics

 Low Risk
 Medium Risk
 High Risk



The high-risk areas marked in orange in the risk map represent that the risk appetite of the Company has been exceeded. Risk adaptation strategies and response measures need to be adopted to reduce the probability of occurrence or potential magnitude of impact, and the effectiveness of improvement is closely monitored.

Figure 2.4.3 Items of material risks and the response actions taken

<p>1 Operation suspension of a single production site</p>	<ul style="list-style-type: none"> ● Transfer of production in Linkou/Kunshan ● Production support collaboration with external partners 	<ul style="list-style-type: none"> ● Establishment of a sound safety management system ● Strengthening of self-owned or outsourced bases in third places
<p>2 Raw material shortage/delivery issues</p>	<ul style="list-style-type: none"> ● Establishment of a direct strategic supply relationship with key vendors ● Proactive use of alternative materials and suppliers with low sustainability risks 	<ul style="list-style-type: none"> ● Market trend and industry analysis of key raw materials ● Communication and management of global customers, and negotiation of necessary price increases
<p>3 High inventory and risk of falling prices</p>	<ul style="list-style-type: none"> ● The work order allocation of factories on both sides of the strait has been greatly rationalized ● Commonly used materials are changed to use the leveled basis to place orders 	<ul style="list-style-type: none"> ● The owner and monthly KPI of each material item are clearly defined ● Enhancement of inventory forecast and monitoring mechanism
<p>4 The slowdown in demand amid global inflation concerns</p>	<ul style="list-style-type: none"> ● Enhanced software and integration services to increase customer loyalty ● Sales team to enhance customer order and demand management 	<ul style="list-style-type: none"> ● Close tracking of unshipped orders, including custom and standard products ● Strict control of the number of headcount and operating expenses in each region
<p>5 Information security or hacking incidents</p>	<ul style="list-style-type: none"> ● The SAP server was moved to an external IDC to promote Linkou's remote backup mechanism ● The promotion of diagnosis tools for firewall policies 	<ul style="list-style-type: none"> ● 3-2-1 Data backup mechanism has been extended to major overseas regions ● Strengthening of cyber security education and training, and engineering drills of social letters



Project Highlights 1

Number of trainees for internal control and risk management courses: about 1,600 trainees in 2021; more than 4,000 trainees in 2022.



Highlight Case 2

Expansion of Recipients of the 2022 Risk Management Opinion Survey

The directors/managers/assistant managers in the Greater China Region were targeted for the first time for investigation, and a total of 988 copies were sent. The response rate was about 34%.

Opinion survey of executives above the vice president level and stakeholders: A total of 37 people was sent in the fourth quarter of 2022 with a return rate of 57%. A total of 25 people was sent in the fourth quarter of 2021 with a recovery rate of 48%.

3

Innovation and Service

- 3.1 Sustainable intelligent solutions
- 3.2 Innovative mechanism
- 3.3 Application advocacy and education of IoT
- 3.4 Co-creation of customers and partners



3.1 Sustainable Intelligent Solutions

With the vision of "Enable an Intelligent and Sustainable Planet", Advantech is committed to the sustainable development of the world. IoT technology and complete product solutions are utilized to improve customer resource utilization and production efficiency. Both energy waste and carbon emissions are reduced, thereby promoting sustainable development. IoT software and hardware products and services are developed in scopes such as energy management, transportation and logistics management, smart agriculture, smart factories, telemedicine, education, and operation and maintenance services.

Advantech is also committed to gradually expanding the revenue share of sustainable intelligent solutions. Although Advantech is not within the framework of the EU Taxonomy report, Advantech will still refer to the framework of the EU Taxonomy report and make relevant information disclosure. Advantech's current application fields of sustainable products and the corresponding EU Taxonomy are classified as follows:

Table 3.1.1 Solutions of Sustainable Intelligence Introduced into the EU Taxonomy Reporting Framework Disclosure

Applications invested into sustainable products	Connotation	Refer to corresponding EU Taxonomy	Refer to corresponding levels of detailed activities
Energy Efficiency Management	1. Products and solutions applicable to the power and energy automation industry are provided, including energy computers, energy controllers, energy data acquisition modules, iEMS, etc. Products are used to assist customers in energy management, energy monitoring and energy efficiency improvement. 2. Applications include EV Charger, renewable energy storage and energy creation.	Climate Change Adaptation	<ul style="list-style-type: none"> • Technological Manufacturing of Renewable Energy • Manufacture of energy-saving equipment for buildings • Installation, maintenance and repair of energy-saving equipment • Data-Driven Solutions for Greenhouse Gas Emissions Reduction • Professional services related to energy performance of buildings
Smart transportation	AI smart traffic planning and design solutions are provided, and traffic jams or idling are resolved. Traffic obstacles are detected and data is collected to ensure traffic safety.	Climate Change Mitigation	<ul style="list-style-type: none"> • Manufacture of low-carbon technologies for transport • Manufacture of other low-carbon technologies • Low-carbon road transport and public transport infrastructure support
Smart manufacturing	For example, the improvement of equipment utilization efficiency, the improvement of production efficiency, and the improvement of quality yield (AOI). The promotion that lesser equipment operation or manpower hours for lesser material waste or rework can achieve energy saving or carbon emission reduction.	Climate Change Mitigation	Manufacture of other low-carbon technologies
Environmental monitoring	Including: 1. Water treatment (including water supply treatment, sewage and rainwater treatment, etc.) is a process of changing the composition of its contents through man-made or natural phenomena. It can be divided into treating natural water for human use, and treating waste water after human use and then discharging it into nature. 2. It is useful for pollution prevention and control (pollution prevention and control such as: air pollution, noise pollution, water pollution, soil and groundwater pollution and extensive pollution description) 3. Waste monitoring, smart power plants, smart agriculture and other fields.	Protection of water and marine resources Pollution precautions Climate Change Mitigation Biodiversity and Ecosystem Restoration	<ul style="list-style-type: none"> • Manufacture of other low-carbon technologies • Renewal of water collection, treatment and supply systems • Renewal of waste water collection and treatment
Health medical	The medical data platform is assisted in the establishment, including medical computers, medical screens, bedside care information systems, medical tablet computers, mobile nursing workstations, telemedicine solutions, multi-functional medical computers, smart hospital solutions, operating room video streams streaming solutions. The aforementioned products or solutions are used to improve medical quality, doctor-patient satisfaction, quality of care, medication safety, etc.	Protection of social human rights	<ul style="list-style-type: none"> • Manufacture of other low-carbon technologies • Residential care activities
Smart logistics	Smart logistics and warehousing can effectively manage inventory and optimize the distribution network, thereby reducing related costs and labor and increasing its competitiveness.	Climate Change Mitigation	Operation of personal mobile devices, circular logistics

The relevant disclosures are shown in the table below, and three cases in this chapter are provided for reference.

Table 3.1.2 Advantech's sustainable intelligent solutions correspond to the financial disclosure of the European Union's sustainability classification report

	Operating revenue		Capital expenditures		Operating expense	
Total (Currency: New Taiwan Dollar)	Total amount (Currency: New Taiwan Dollar) 68,744,701K	100%	1,320,449K	100%	13,580,926K	100%
Economic Activities Related to Sustainability Classification	Amount (Currency: New Taiwan Dollar) 12,717,770K	18.5%	244,280K	18.5%	2,512,470K	18.5%
Economic Activities Irrelevant to the Perpetual Classification	Amount (Currency: New Taiwan Dollar) 56,026,931K	81.5%	1,076,169K	81.5%	11,068,456K	81.5%

The survey method for 18.5% of revenue from sales of products or solutions for sustainable use is: classification and judgment are performed based on customer business items and sectors. There is also possibility for refinement of this taxonomy. In particular, it is not yet possible to accurately count the use of end customers for those which sell through channels. The application and connotation of Advantech's own products and solutions are classified with reference to the reporting framework of the EU's sustainability classification and the levels of related activities. The survey methodology is expected to be strengthened in the coming year in order to present more complete results.



Highlight Case 1

Advantech's High-Efficiency, Intelligent and Energy-Saving E-paper Solutions

In the promotion of smart electronic paper, Advantech is actively deploying environmental protection and energy-saving solutions in smart factories, smart hospitals, smart buildings, smart buildings, and interactive information board systems for public transportation. It can display and access information in unlimited places, and connect more external developers and ecological partners.

In terms of quantitative performance, e-paper shipments reached 20,000 units in 2022. The application of intelligent warehousing and production lines has reduced by about 1,350 kg. Carbon emissions and smart buildings has reduced about 720 kg of carbon emissions. The aforementioned saved a total of 2,070 kg of carbon emissions from paper. It creates the equivalent of 1.96 times the annual carbon emission absorbed by Daan Forest Park.

Year	Goal
2023	Smart factories/buildings/transportation/Estimated shipments of 0.5 million units are equivalent to 49.11 times the amount of carbon absorbed by Daan Forest Park.
2025	Smart factories/buildings/transportation/Estimated shipments of 1 million units create equivalent to 98.22 times the carbon emissions absorbed by Daan Forest Park.

* Note: A Daan Forest Park (25.8 hectares) can absorb 384.6 metric tons of carbon per year, based on the conversion of 15 metric tons of carbon per hectare of forest per year by the Council of Agriculture.

The sustainable intelligent solutions of electronic paper has its positive influence. The levels it affects are environmental aspect, social aspect and consumer aspect. In terms of environmental aspect, unnecessary energy consumption can be saved and the service life of products can be extended. In terms of society aspect, consumers and users can be assisted to manage information more efficiently, so as to achieve the purpose of improving the efficiency of seeing a doctor in a medical institution.



Application 1: It is used in the low power consumption mode of the bed card in the medical institution, and the use period can be as long as eight months. The hospital bed card data is updated in a non-disruptive mode through Advantech's DeviceOn/ePaper excellent device management and image processing platform. An easier-to-operate maintenance platform is provided, breaking away from the difficulty of managing and compiling traditional electronic paper. Detail of the case can be viewed at: [View Online](#)

Application 2: The case field of the building leasing management company uses it in the smart bulletin board application, saving manpower and providing real-time tenant information announcements. Tenant satisfaction and willingness to renew the lease have been greatly improved.



Highlight Case 2

Advantech Charging Piles Help South Korea's Cities Save Energy

Advantech assists charging pile operators to quickly integrate the architecture of these applications and deploy them in the market to accelerate the popularization of electric vehicles. The number of electric vehicle charging piles built in South Korea is currently ranked fourth in the world. The motherboard in the charging pile is even more critical. In South Korea, more than 70% of the computer motherboards in the charging pile are manufactured by Advantech. We provide packages and services such as climate-resistant products, software information security, and remote control management. In terms of major annual performance, the mass production of 3 projects was achieved in 2022 with a total shipment of 2,087 sets.

For more case information, please refer to: [The arsenal behind South Korea's leading charging pile, Hyundai Motor, is hidden in Taiwan - BusinessToday \(businesstoday.com.tw\)](https://www.businesstoday.com.tw)

Advantech's sustainable smart energy-saving solution can also improve the awareness of green energy construction and environmental protection. For example, household charging piles can be combined with the construction of household solar photovoltaic and energy storage systems to assist in the transformation of urban energy.



Highlight Case 3

Pingtung Veterans General Hospital's Smart Medication Solution



Pingtung Wing took the lead in Taiwan's hospitals, and the entire hospital was introduced to Advantech's smart medication solutions, including smart pill box setting stations, smart pill box transport vehicles, lightweight smart medicine cabinets, mobile smart medicine carts and Smart medication management system. The closed loop of medication management has been successfully built, and the Internet of Things technology has been used to improve and optimize the process of medical operations. Medication safety is improved and manual errors are reduced.

Major Performance in 2022

- Assisted in building the first hospital in Taiwan to construct a closed-loop medication administration (CLMA) system.
- Nursing carts of 150 medical computers were introduced.

Year	Goal
2023	<ul style="list-style-type: none"> ● The AMiS smart medication solution and the nursing trolley with a target of 400 medical computers have been promoted to all medical centers in Taiwan. ● Other smart medical solutions have been promoted and penetrated into Pingtung Veterans General Hospital. The goal is to introduce solutions such as smart emergency and war situation center in 2023.

The positive impact on economy, environment and human rights (crowd) is as follows: In terms of environmental aspect, the electronic paper label of the hospital bed can be updated with the latest patient information in real time to practice paperless ward. In terms of benefiting the population (human rights), the operating unit of the hospital improves the satisfaction of the public with medical treatment, reduces the burden on manpower, and ensures the safety of patients through the introduction of intelligent solutions. In the aspect of medical staff, the chip of the pill box is paired with the barcode information of the patient's wristband, which can reduce the nursing staff's medication errors. Advantech's smart medication management system integrates information about patients' medication orders. Omissions caused by traditional single-sheet operations are avoided to ensure the safety and correctness of medication for patients.

This project combines the "medical computing" and "mobile medical" products of Advantech's smart medical business unit, as well as the cross-unit "electronic paper" product, with the software of "smart ward (emergency)" to help Pingtung Veterans General Hospital to introduce a large-scale closed-loop medication management system. In the future, these plans will be introduced, such as cold chain solutions, medical management centers...etc. Advantech will continue to promote them to more hospitals in Taiwan and around the world. Taiwan's goal of becoming a model of smart medical care in the world has been promoted, and the efficiency and quality of global medical services have been further improved. More information can be obtained through watching the [online video](#).

3.2 Innovative Mechanism

Advantech's innovation mechanism includes product, technology, business, academic cooperation, etc., which are all led by the chairman and senior executives to practice, including three categories and six projects:

Business Innovations are Linked to Emerging Business Opportunities.

IMAX-C: Including innovation strategies and practical plans of business units, such as breakthroughs in product, business, and organizational reforms.

EBO: With regard to the emerging opportunities observed, Advantech's global colleagues draw up a business plans for Advantech's new growth curve through rigorous analysis and planning.

Innovative Products and Technologies

A+X: The chairman and senior executives of the product department directly empower product innovation to guide resources to accelerate new product development.

MCT/TSU: The technical committee composed of R&D supervisors centralizes and horizontally manages the core technologies of each business unit, and makes the TSU-Technical Sharing Unit modular.

Industry-University Research and Co-Creation

University co-creation: We conduct in-depth research and field verification with domestic and foreign universities to jointly create breakthroughs in new technologies and applications.

InnoWorks: We provide software, computing resources, online teaching, etc. to universities and colleges around the world to encourage the new generation of students to develop creativity and practice.

Advantech's blueprint for innovative development brings innovation and business development ideas to existing business units through the IMAX-C mechanism. It includes the cultivation of new organizations, the connection with external partners, the development of new products and new services, and the integration of internal resources. The other end of EBO is to explore new business opportunities, new markets, new technologies, and new businesses with low market maturity or beyond the scope of the original business. Also, these new opportunities are nurtured in the development of Advantech. Among these two endpoints, A+X is a new product strategy that extends existing business groups from the perspective of market development. Meanwhile, it expands its business territory and uses high-level empowerment and cross-unit integration to achieve its goals. However, MCT/TSU plays the role of core technology integration management under the footsteps of new products and new business innovations of these business units. In the direction of industry-university co-creation and Innoworks blueprint development, new ideas are stimulated through university-research cooperation, including the new generation's ideas for the future Internet of Things and product concepts. It is beneficial for Advantech to enter AIoT integrated applications and services, and to do early thinking and exploration.

This innovative mechanism fosters new business units and launches new products every year. In addition to winning awards, it has also created outstanding business achievements, allowing Advantech's core business to grow rapidly through mainstream trends and innovations in leading R&D technologies. Through internal innovation projects, the effects and trends of innovation are examined, innovative product development is stimulated, and product strategies are adjusted at any time.

Innovation Effectiveness Management

When the innovative mechanism is promoted, different effectiveness indicators are given according to the attributes of the issues that each mechanism focuses on in order to ensure that the innovative measures and mechanisms can exert their maximum benefits. Each innovation mechanism has a way of defining goals (KPIs), conditions for achieving goals, and follow-up actions. For example, the number of research projects of industry-university research conferences and the results also set a certain proportion for technology transfer or continuation of cooperation with public institutions. Also, for example, extra awards for product innovation and industrial design are given with the International Industrial Design Award. In addition, the revenue benefits generated by new products after they are commercialized and launched are tracked. For the EBO mechanism of business innovation, the Executive Committee is composed of senior executives. For the planning or results of innovative business and business models, substantial support is given, and the business development results of institutions are tracked.

3.2.1 Business Innovation and Emerging Business Opportunities

IMAX-C

Goal

Advantech works together to promote the operation of business management and construct the organization in the form of Business Unit, including SBU (Strategic Business Unit) focusing on strategy and product development, and RBU (Regional Business Unit) focusing on sales and regional development. Among them, the concept of innovation and business development was brought to SBU through the IMAX-C mechanism. I stands for incubation which is the cultivation of new organizations. M and A stand for M&A and Alliance, respectively, which are links with external partners. X stands for X-Product which is the development of new products and new services. -C stands for Convergence & Consolidation which is a product or unit that integrates internal resources to avoid duplication.

Measures

Each SBU product unit proposes IMAX-C proposals based on business levels and focus on market bottom-up. In addition, each single product line, product division that gathers multiple product divisions, and business group composed of multiple product divisions are converged and integrated hierarchically, to become the overall innovation and management of SBU strategic policy.

After the product unit proposed the IMAX-C innovation action, multiple units within Advantech were linked. Research analysis and discussions are jointly conducted for product service innovation, business model innovation, and organizational innovation. After the decision is finalized, it become the cornerstone of SBU's continuous growth and development to continue to launch the annual business promotion plan of SBU's ABP (Annual Business Plan).

Results

In 2022, a total of 70 plans for the IMAX-C strategic guidelines of business units have been produced.

EBO

Goal

Advantech follows the growth model of "Niche Division Clustering", promotes core business goals and vision, focuses on industries and concentrates on business strategies. Advantech introduced EBO (Emerging Business Opportunity) proposal management mechanism for emerging business opportunities. The goal is to discover opportunities for innovative businesses other than Advantech's core business, verify the feasibility of emerging business models and technologies to expand the business territory and increase the source of turnover.

Measures

Topics on emerging business opportunities are raised twice a year at home and abroad. Also, the Top 5 topics with the most commercial potential and innovation were selected by senior executives at home and abroad. After a detailed new business business plan, resources are invested in the establishment of new business units.

Results

28 EBO Topics were recruited twice in 2022, and a total of 10 Top 5 Topics were selected to develop the EBO BP (Business Plan).

Table 3.2.1 2022 EBO achievements over the years

Quarter	EBO Topic Call for Proposals	Phase 1 Screening	Results of Final selection
2022Q2	13	8	5
2022Q4	15	12	5

3.2.2 Innovative Products and Technologies

A+X

Goal

A+X is the mechanism for strategic development of innovative products. In innovation and management mechanisms such as IMAX-C, KOM (Kick-off meeting), EBO, and BLM (Business Leadership Model), SBU proposes new product strategy proposals for specific markets, technologies, or industries. In addition, the A+ product plan is developed in the A+X mechanism, and goals such as target market, product positioning, industrial design, business development, and cross-departmental cooperation are determined.

Measures

The topic of A+ new products is regularly collected with aspects such as market development, technology trends and so on. The product department was invited to conduct a commercial and technical feasibility analysis. Also, market demand and opportunity points are aimed at to formulate strategic guidelines and new product goals. Some discussions are carried out on product conceptual design, functional application planning, business promotion, and resource allocation. After the planning of the A+ new product is completed, the strategy of the A+ product is set and communicated and discussed through the decision-making meeting. Then it was delivered to the SBU for implementation and development.

Results

In 2022, a total of 21 strategic plans for new products or product integration was completed.

Figure 3.2.1 2022 A+X Case

「iContainer LEO-L50 Asset Management Devices & Solutions」

ADVANTECH

LEO-L50 Asset Management Devices

iContainer tracking solutions

Rugged Design
IP67, UV-Cut, Salt Spray

Long Power Design
Battery life up to 5 years*
*Depends on user scenario

Zero Maintenance

Modular Design
Battery Module, Solar Module

Global Operation

Compact Design

dcsa
GPS
LTE-M
NB-IoT
Bluetooth 5.3

MCT/TSU

Goal

The senior executives of R&D set up the new technical committee MCT – Meeting of Corp. Technology and Engineering to horizontally manage the core technologies of each business unit. Advantech's forward-looking technology sharing modularization (TSU-Technical Sharing Unit) was deployed in advance. Three major points are focused: R&D digital transformation, sharing IP (Intellectual Property) across SBG technologies, and the management and collaboration platform for core technologies.

Measures

The Share TSU sharing and intercommunication mechanism was established, and the R&D teams belonging to each business group are connected in series with their respective core technologies to exert synergistic effects through horizontal series connection and intercommunication. The topic is divided into "Engineering" focusing on the expansion and breakthrough of TSU R&D, including IP Sharing module sharing. Also, "Innovation" focuses on advanced technology research and develops forward-looking issues. Each business group creates a complete design together, shortens the R&D timeline, and empowers innovation to products.

Results

Through improvement and innovation in 2022, Advantech launch 523 new product projects such as industrial computers, computing modules, edge computing equipment, network equipment, sensing devices, and industry software and hardware integration solutions.

At present, the MCT R&D Technical Committee is held every two months and chaired by senior R&D executives, aiming at the long-term implementation of three major technical strategy issues. Please refer to Table 3.2.1 for details.

Table 3.2.2 MCT/TSU Technology Strategy Issues

R&D Interoperability Mechanism	Blueprint for intelligent material selection & parts development	Product Development Platform
<ul style="list-style-type: none"> ● Complete digitalized and comprehensive IP digital platforms to provide solutions for the overall services required by various industries ● Intelligent automatic generation of design blueprints, development of circuits completed by intelligent IP ● Data transparency platforms sharing the same resources 	<ul style="list-style-type: none"> ● Precise recommendation of mainstream materials to allow products to be mass-produced precisely and accurately and win the trust of customers ● Concentrated materials are shortened to achieve economical scale usage to make material purchase costs drop rapidly 	<ul style="list-style-type: none"> ● The real-time data transparency of the full amount of R&D data and all elements, PM/R&D/manufacturing does not hinder communication but saves time and is efficient ● Digital design of building blocks, link processes to accelerate product development

3.3

Application Advocacy and Education of IoT

Bridging the Gap: Advantech's Leadership in IoT Drives Industry-Academia Collaboration

Through the implementation of an industry-university cooperation mechanism, Advantech has developed "three main axes and five programs" to cultivate IoT talents and shorten the gap between industry and academia by leveraging industrial resources. This collaborative effort connects academia, Advantech's internal employees, and partners within the industrial ecosystem, enabling them to create applications and solutions jointly by operating the "Co-Creation" value chain by aligning strategic thinking with Advantech's core capabilities and resources to contribute to society and drive the growth of the IoT industry. Additionally, this approach facilitates integrating academic research into industrial development to create more job opportunities.

IoT education combined with the advantages of Advantech's core business

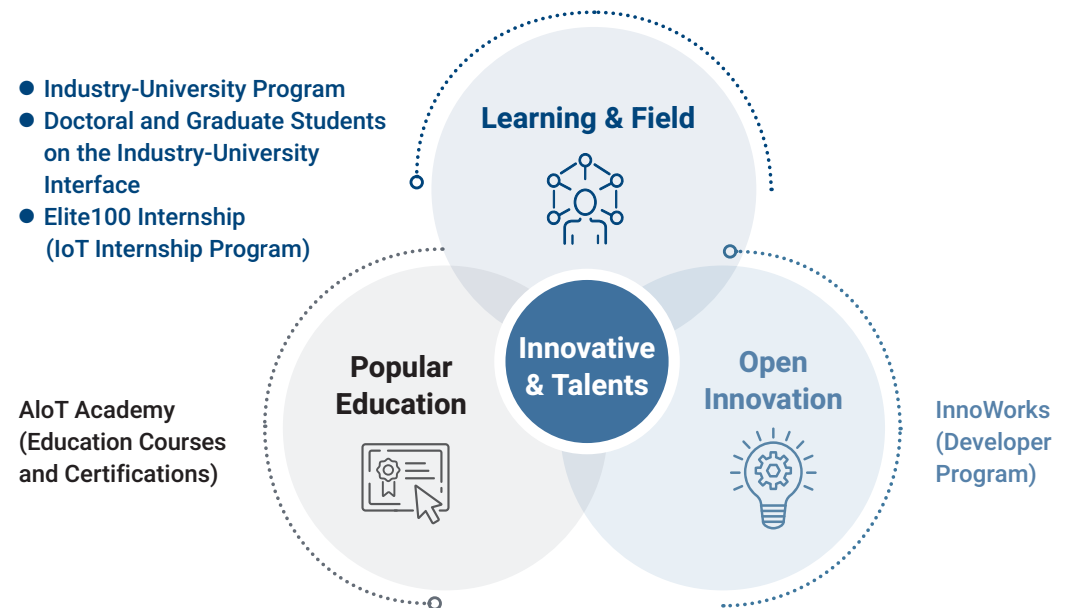
The WISE-IoTSuite platform is provided to flexibly carry leading technologies based on device intelligence, digital twins, industrial big data analysis, and artificial intelligence to meet the needs of different fields and industries. We join hands with partners to create new value in the IoT industry and build an open and inclusive ecosystem.

Advantech's Co-Creation Business Model

Advantech is committed to driving the three-stage growth momentum of AIoT IoT development through the concept of co-creation. The company has progressed from the first stage of hardware innovation to actively promoting IoT platform operations in the second stage. By integrating various technologies such as IT, OT, Cloud, and AI, Advantech has built the "WISE-IoTSuite," a comprehensive IoT cloud platform. Advantech is advancing toward the third stage of AIoT, focusing on solution development and ecosystem expansion. This involves connecting with diverse industry demands and providing integrated AIoT solutions. To achieve this, Advantech invites internal teams: "WISE-IoTSuite platform development and technology support team and product department" to join the industry-university co-creation (Co-Creation) to create high-quality application services. In this way, Advantech's ecosystem for the Industrial Internet of Things is constructed.

Promoting practices: Three main axes and five programs to promote industry-university co-creation and incubate IoT innovations and talents

Figure 3.3.1 Three main axes and five programs



1 Integration of learning and application: The Co-Creation ecosystem is promoted, and the R&D energy of the school and the technological development needs of the industry are linked. Innovation and talents are further incubated through "industry-university project cooperation" and then "industry-university master and doctoral students combined with enterprise internships" to "transfer to the industry".

● Industry-University Program

Advantech conducts themed cooperation with major universities every year to understand the key development trends of the Internet of Things. It is used to link the practical needs of the industry with the energy of academic research, and to promote the implementation of innovation. Also, a virtuous circle of industry-university collaboration is created through two modes of Inside-out & Outside-in.

- Inside-out: The internal technology development roadmap corresponds to the school's AIoT R&D plan. The demand and the research and development energy of the school are deeply linked to the model market of the enterprise. In addition, Advantech's internal and external (clients and partners) actual fields are combined to carry out the pre-development verification (Proof of Concept, POC) of the innovative application of the Internet of Things. In this way, the results of the industry-university collaboration can be commercialized.
- Outside-In: The research and development plans and energy of university laboratories with potential for commercialization are reviewed. Therefore, the topic of external innovation and the energy of internal productization are linked. External innovation can stimulate the internal roadmap of new product and new technology development planning, or further become an important source of innovation for new business units developed by enterprises.

Figure 3.2.2 The virtuous infinite cycle of Advantech's industry-university cooperation plan

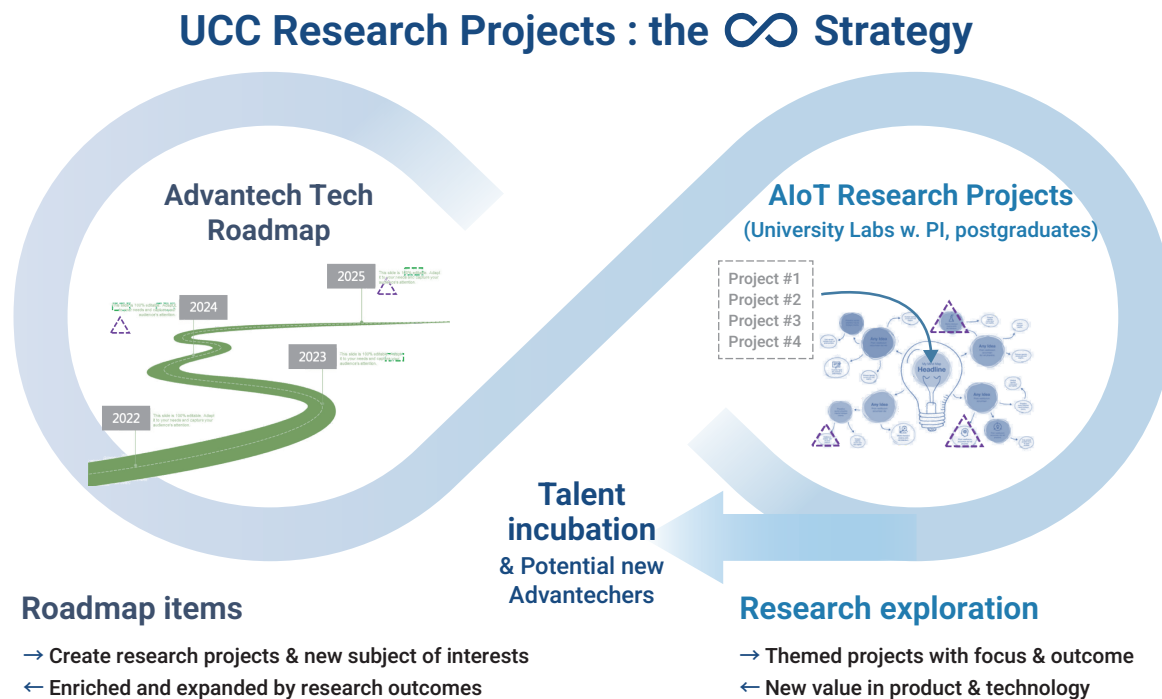
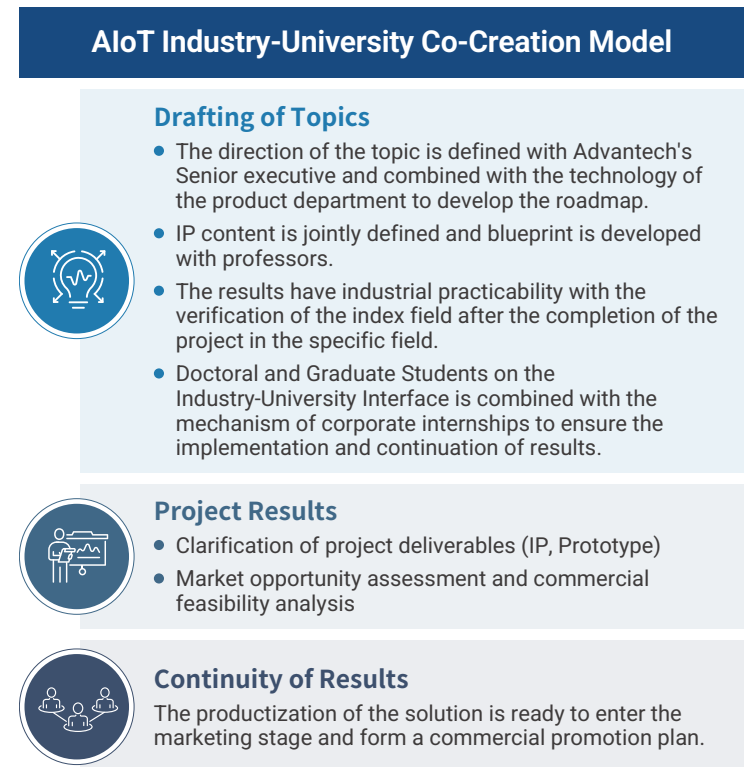


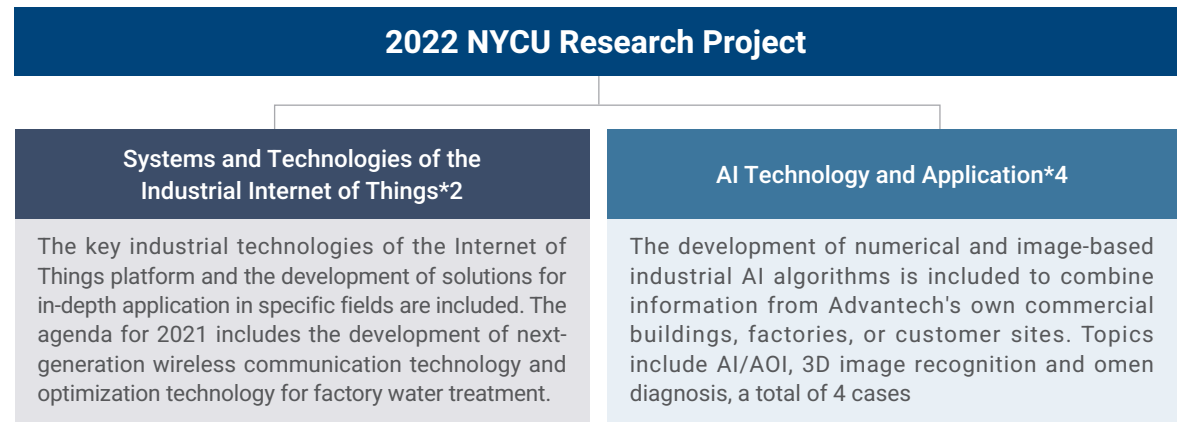
Figure 3.3.3 Advantech's Industry-University Co-creation Mechanism



● **The establishment of the enterprise R&D center - IoT System Research Center of National Yang Ming Chiao Tung University**

Since its launch in 2015, Advantech's IoT System Research Center at National Yang Ming Chiao Tung University has cooperated and accumulated 44 projects by 2022 to establish the actual application of the industrial AIoT. The R&D themes mainly include Intelligent video analytics, Industrial 4.0, IoT embedded PaaS, AIoT domain applications, etc. In response to the trend of the Internet of Things industry, the research axis of the center has been adjusted to two major directions: "System and Technology of Industrial Internet of Things" and "Technology and Application of AI", and six new cooperation projects have been produced.

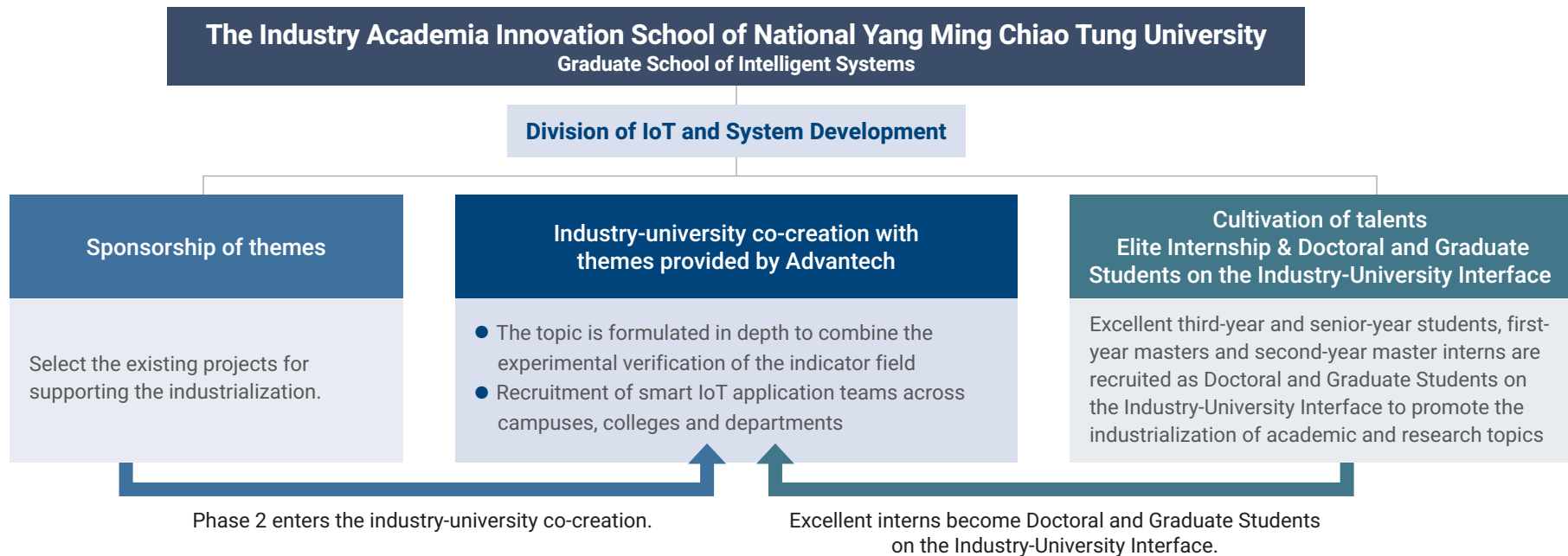
Figure 3.3.4 Advantech's research plan at the IoT System Research Center of National Yang Ming Chiao Tung University in 2022



● **Doctoral and Graduate Students on the Industry-University Interface**

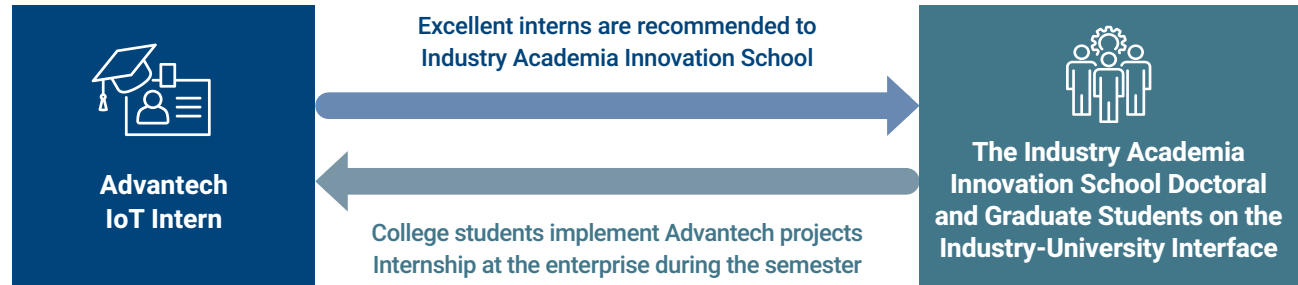
Advantech joined with National Yang Ming Chiao Tung University in 2022 to establish the first industry academia innovation school in Taiwan. Talents in the Internet of Things industry are deeply cultivated through mechanisms such as courses offered by corporate teachers, corporate thesis, and graduate students on the industry-university. Also, there is a commitment that sponsors 10 industry-university cooperation master students every year. The goal is to become the cradle of industry-university programs, allowing academia and industry to jointly develop and innovate.

Figure 3.3.5 The structure of Advantech's participation in The Industry Academia Innovation School of National Yang Ming Chiao Tung University



One of the characteristics of the industry academia innovation school is the doctoral and graduate students on the industry-university interface. The application talents of AIoT are jointly cultivated by us and the school, and the benefits of industrialization of the research and development results are guaranteed. Master and doctoral students contribute into enterprise projects, and jointly select the research and development topics needed by the industry with the thesis advisors as the co-creation of the thesis theme. Also it is combined with the internship system and campus promotion to promote substantial benefits.

Figure 3.3.6 Internship Mechanism of Doctoral and Graduate Students on School of Industry and Innovation



- Elite 100 IoT Internship Program (Please see [Chapter 6](#))

2 Open innovation: Students' cross-field co-creation is guided to drive industrial innovation (Please see [Chapter 6](#))

- InnoWorks Developer Project Competition

3 Popular Education: shortening the gap between industry and academia in higher education (Please see [Chapter 6](#))

- Online Learning Platform for IoT [IoT Higher Education Courses & Certification of AIoT Academy]



Highlight Case

Advantech participated in the establishment of the industry academia innovation school of National Yang Ming Chiao Tung University

National Yang Ming Chiao Tung University established the first industry academia innovation school in Taiwan by the end of 2021. Advantech is mainly involved in the planning of the Intelligent System Research Institute, and its key cooperation results are as follows:

- Six industry-university collaboration projects: Advantech's Internet of Things Center and the energy of the college are combined, and six projects including industrial technology and AI applications in cooperation with teachers in the field of electricity and resources.
- Industry mentors lecture on the topic of "Introduction to Digital Transformation and Cloud Collaboration Platform - Case Sharing of Smart Healthcare and Smart Manufacturing".

For related information, please see [Press Release](#).



3.4

Co-Creation of Customers and Partners

3.4.1 Trends, Strategy Sharing and Co-Creation

In 2022, Advantech is committed to deepening customer connection experience, expanding ecosystem partner management, and institutionalizing distribution authorization management. In terms of customer management and partner co-creation, Advantech aims at "altruistic cooperation for mutual benefit" and "digital service upgrade". Meanwhile, digital platforms such as the customer relationship management system and online technical services have been optimized to improve operational and service efficiency.

Figure 3.4.1: Advantech 2022 Key Contents of Customer Management and Partner Co-creation

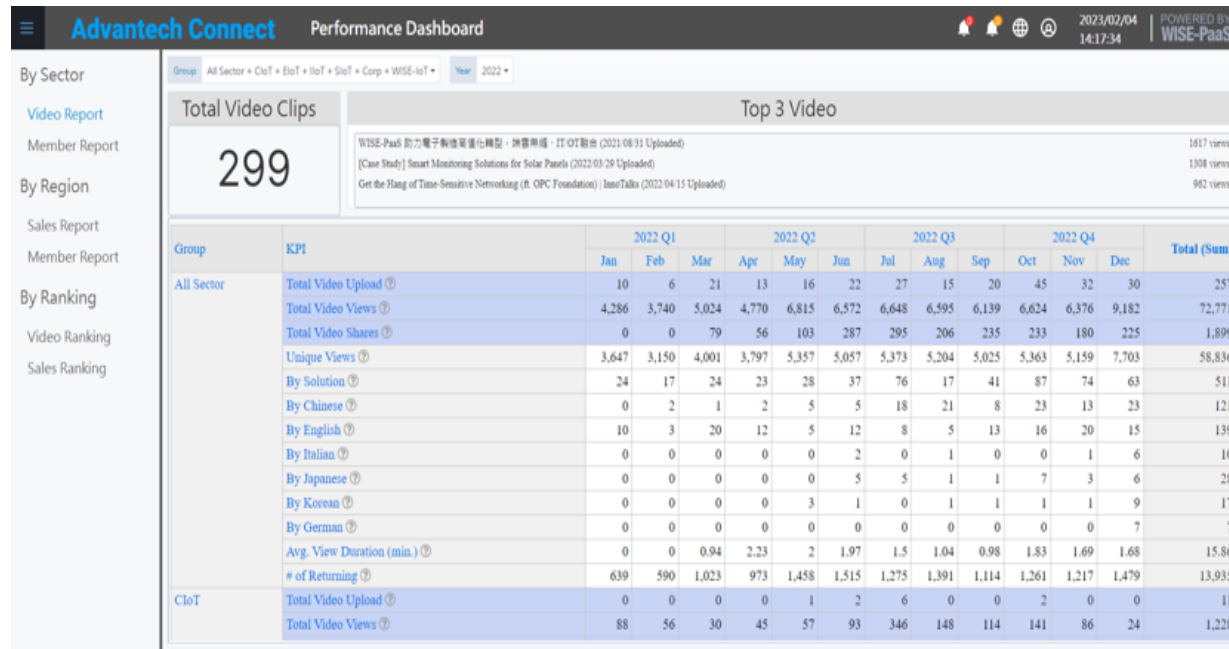


Customer Connection Experience

A Connect

Advantech headquarters holds a large World Partner Summit every two years. Branches in various countries also hold large-scale customer forums and dealer conferences every year. We share the latest development strategies and products with our customers through these events. In 2022, Advantech Connect adopts Go-to-Webinar's platform. Each event can accommodate 500 people online simultaneously. In 2022, a total of 76 forums was held around the world. A-Connect Dashboard is built to gain a deeper understanding of the effectiveness of customers watching On-demand Video. It provides information including the number of videos watched, customer member information and video ranking information, etc. Below is a schematic diagram of A-Connect Dashboard's 2022 annual video report. A total of 299 playback videos were uploaded with 72,771 views and 1,899 video shares.

Figure 3.4.2 Schematic diagram of A-Connect Dashboard's 2022 annual film report



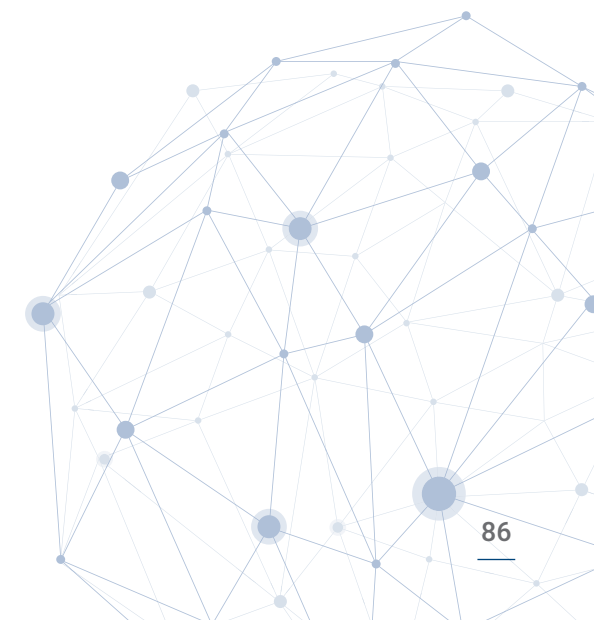
Advantech's digital transformation is accelerated through the Advantech Connect events. Also, stakeholders are encouraged to understand Advantech's development goals and growth strategies. More information as below:

- [Advantech Connect Website](#)
- [Advantech Connect On-demand Video](#)
- [Advantech Connect Dashboard](#)

IoTMart

Advantech satisfies the purchase needs of direct sales customers through eStore and IoTMart. Information localization flexibility and customization online shopping functions are provided to meet the needs of various regions.

The main axis of the project in 2022 is to optimize the customer shopping experience and shorten the manual steps, including the optimization of the checkout process, the recommendation of AI products, and the optimization of the shelves of assembled products. At present, Commerce Cloud is adopted to gradually migrate to the cloud. Existing small and medium-sized sites are consolidated into new sites to streamline repetitive maintenance work. In addition, the information required by customers is accurately provided through data connection and exchange between different clouds to accelerate Advantech's digital transformation.



Ecosystem Partner Management

The Internet of Things is a market where multiple industries are integrated. Advantech upholds the concept of creating and co-prosperity with partners. Industry ecological partners are built with IoT platforms and core products. It enables small system integrators, traditional automation system integrators, cloud platform system service providers or industry experts... etc. to enter the IoT industry through this platform. Ecological partners and Advantech work together to expand the market.

Partner Co-Creation

Advantech proposed the concept of "co-creation" in 2017. While meeting customer needs and providing customer service, we also regard customers as partners and invite them to join us in actively creating value through cooperation in terms of technology, products, business models, business marketing, channels, and so on. From 2021, start-ups in Taiwan, China, Europe, the United States, etc. are supported by investing in external funds. We expect these key areas to form a complete ecosystem of the Internet of Things. Relevant contents are shown in Table 3.4.1.



Table 3.4.1 Advantech's 2022 list of activities supporting AIoT innovation

Ecosystem Fund Investment		
Region	Fund size	Field of investment company
European and American	USD 30 million	Smart Manufacturing, Smart Energy Management, Edge Computing, AI, Information Security, Smart Positioning
China	RMB 100 million	Industrial control security, IoT security, smart 5G mine, integrated energy service integrator
Global	USD 50 million	Internet of things, new energy
Sponsorship of events for incubators, accelerators and IoT innovations		
Region	Number of sponsors	Sponsorship fund
Taiwan	3	NT\$3.9 million
Support for start-ups		
Region	Content supported	
Malaysia	Sponsoring partners US\$60,000 to develop smart hospital solutions	
Taiwan	We and AAMA (Asia America Multi-Technology Association) launched the AIoT co-learning and co-creation project. Advantech's product department and 10 Internet of Things start-up companies were deeply connected through entrepreneurship, business model and industry workshops. Product and business development experiences were exchanged, and potential innovative IoT solutions and market cooperation opportunities were expanded.	
Taiwan	We and IndustrialAI jointly create a smart water testing solution. The start-up company's AI analysis technology, Advantech's IoT platform and market resources are combined. Therefore, market opportunities for sustainable water treatment solutions are co-created.	

WISE-PaaS

Advantech's IoT platform is a platform based on cloud-native platform services. It includes five core services: equipment management, asset management, visualization, data integration and analysis, and AI services. Eco-partners are developed based on these five major services. Equipment preventive maintenance is a typical application of IoT. Advantech combines its partners' equipment to analyze expertise, and jointly develops equipment health status estimates and early warnings. The energy application of smart city Internet of Things is also one of Advantech's key development directions. The WISE-IoT platform provides a cloud device management service platform, which is applied to large field management. There are multiple solar management case sites in Asia. Local operation and maintenance management is integrated with energy analysis applications to efficiently provide overall power generation and reduce operation and maintenance costs.

WISE-Marketplace

WISE-Marketplace is an end-to-cloud solution platform for the industrial IoT industry. It provides a rich introduction of solution content, a simple purchase transaction process, hybrid cloud remote deployment compatible with connection scenarios, and open and flexible expansion functions. It focuses on smart factories, smart energy management, smart devices, smart medical care, and smart retail vertical industries, including more than 100 selected industrial apps, as well as related education and training courses, certification and engineering support. In order to assist customers in accelerating digital transformation, WISE-Marketplace also assists system integrators and channel partners in different fields in the joint marketing, as well as the software developer's shelf mechanism, so as to jointly create a prosperous industrial ecological system.

WISE-IoT Solutions

The IoT cloud platform business group which WISE-IoT newly established for Advantech represents Advantech's first step in digital transformation. Various domain-type situational applications are developed by using the upgraded version of WISE-IoT Core Services of WISE-PaaS. The five areas of focus include WISE-iMachine, WISE-iFactory, WISE-iEMS, WISE-iService, and WISE-iHospital.

In 2022, the territory expanded to Europe, and the diversity of partners was gradually completed. It includes CP (Channel Partner), VAD (Value Added Sales Partner) and DFSI (Domain SI Partner). Moreover, it strengthens the cooperative relationship, such as customers served together, products jointly developed, industries in specific fields entered, and strategic investments carried out. Consultant partners who are more based on the development of the field have entered the global energy-saving field market. In 2022, about 160 partners continued to carry out in-depth cooperation with WISE-IoT to establish a more consolidated and strong business ecosystem for WISE-IoT.



3.4.2 Management of Customer Relationship, Distributors and Channels

Global Customer Relationship Management System and Dealer Management Platform - MyAdvantech

Advantech has gradually converted the branch CRM system from Oracle Siebel to Salesforce CRM since 2014. So far, about 52% of the global business has been converted, covering the United States, Europe, Taiwan, the Middle East, Africa, and Latin America. In 2023, the introduction of Salesforce in the Japanese and Korean offices will be completed.

The CRM system is the starting point for business to serve customers, so Salesforce will accelerate the cross-system integration of important customer information into CRM. Advantech's internal systems are also committed to shortening the process time from demand to response to improve service efficiency and quality. In addition, Advantech attaches great importance to the security of customer data, so it has fully enabled Multi-Factor Authentication. It protects against challenging cyber-attacks such as phishing, credential stuffing, account compromise, and more. The legitimacy of system users is also ensured.

MyAdvantech is a customer and order platform that supports key global partners. It provides users with one-stop service and avoids additional time-consuming internal and external confirmation. Strong brand trust and reputation are built through an intuitive interface experience. In 2022, the Chinese channel management project was introduced and the European project registration system was upgraded. Customer management efficiency was improved to track quotes and orders.

3.4.3 Customer Satisfaction Survey and Customer Audit

Customer Satisfaction Survey

In respect to Advantech's customer satisfaction survey method, the headquarters regularly sends out questionnaires to a portion of those customers who have purchased Advantech products. This is aimed at understanding customer satisfaction levels in five aspects, including "sales services and pricing," "delivery efficiency," "product quality," "technical services," and "after-sales services." We take the customer satisfaction survey results as one of the performance measurement indicators of relevant units. For items with poor performance, relevant units are requested to propose improvement plans. Improvements are tracked by business units with a view to completing them within a time frame.

Regarding 2022 customer satisfaction survey methods, A total of 748 customers were sampled, including 325 customers in Taiwan, 102 customers in mainland China, 134 customers in North America, and 187 customers in Europe for customers whose accumulated sales in each region accounted for top 80%. The average coverage of this survey was 60.76%, the average recovery rate was 32.89%, and the average customer satisfaction score was 92.66. Set the goal for 2023: the average score is not less than 90 points on the basis of expanding customer coverage.

Lowest average of the top five surveyed items: Delivery quality. The main reason is the lack of cores and stock and the epidemic, which has led to delays in the output time of products and needs to be continuously improved. Satisfaction with "Delivery Quality" was improved compared to the previous year. In addition, the other four items all scored lower than the previous year. It is understood that the increase in surveys and coverage in regions (such as Taiwan, etc.) help to collect customer opinions more comprehensively. The results are expected to be surveyed to feed back the continuous review and improvement of relevant internal units. The future goal is to increase the coverage of customer satisfaction surveys year by year and maintain an average satisfaction rate of over 90 points.



Table 3.4.3.1 Score and Coverage of Customer Satisfaction Survey in 2018-2022

Annual	2018	2019	2020	2021	2022
Satisfaction (score)	94.94	94.59	95.16	94.83	92.66
Ratio of operating revenue of sampled customers to total revenue (%)	17.36	16.80	16.98	17.45	60.76

Table 3.4.3.2 Sub-item scores of customer satisfaction survey in 2022

Annual	Sales service and pricing	Delivery efficiency	Product quality	Technical Services	After-sales service
Score (out of 5 points)	4.68	4.52	4.66	4.69	4.65
Satisfaction (score)	93.60	90.40	93.25	93.70	93.05

Figure 3.4.3 Schematic diagram of a survey of ingress endpoint satisfaction

How would you rate this content?

★★★★☆

Do you need further assistance? *

Yes No

我不是機器人

reCAPTCHA
隱私權 - 條款

Submit

Satisfaction with Website and Customer Entry Endpoints

Advantech's customer satisfaction survey method for digital entry endpoints is to design satisfaction surveys at customer journey nodes on the official website and e-commerce site respectively. Surveys and collections were conducted on a satisfaction five-point scale. For satisfaction below 3 points, the customer shall be asked to leave suggestions for improvement or matters that need assistance. Also, the improvement plan needs to be put forward and the improvement situation is tracked by the business unit in order to complete the improvement within the time frame.

In the 2022 customer satisfaction survey on digital entry points, the official website collected a total of 51,580 customer feedbacks. The average satisfaction rate was 3.71 points, and about 93% were satisfied with more than three points. A total of 112 customer feedbacks were collected for the e-commerce site. The average satisfaction rate was 4.03 points, and about 90% of them were above three points. The digital entry point experience will be continuously optimized in order to provide customers with a better online experience.

3.4.4 Customer Service

Global Online Technical Services Platform

In 2022, the online technical service teams in Europe and North America and the headquarters RMA team have completed the introduction of the cloud technical service management platform Zendesk to accelerate Advantech's response to customers. Customer requests from different channels will be automatically created and assigned, ensuring continuous service. In 2022, a total of 88,116 technical service requests was closed, an increase of 47% over last year, and the closing rate is 98%. In 2023, Advantech will expand this automated process to Japan and South Korea's online technology services and headquarters on-site service teams.

Advantech has also introduced chatbots to serve North America and emerging markets, such as Central Asia and Africa. Customers are directed to self-help support, allowing our service to continue throughout the day. Advantech looks forward to the future that AI technology will be continuously researched to provide a realistic and natural AI response assistant. In 2023, in addition to chatbots being introduced to more regions, the one-stop online customer service center will be improved. Advantech Knowledge Center provides in-depth solution technical support and is integrated to create a closer cooperation framework.

Figure 3.4.4.1 Advantech's online technical support process

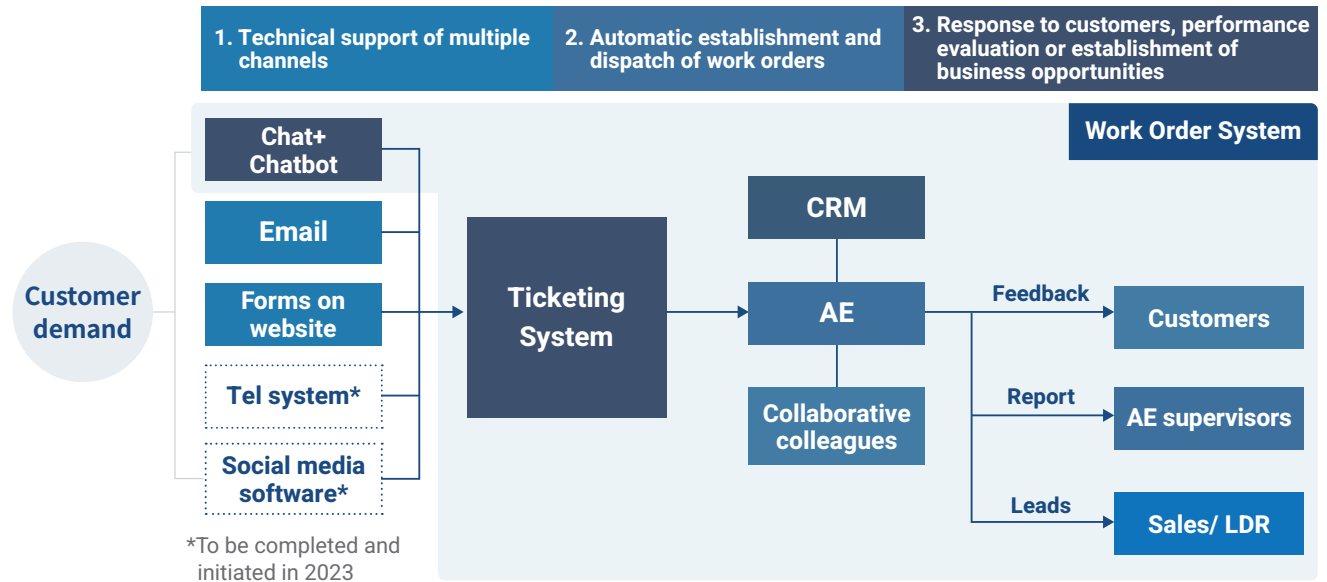
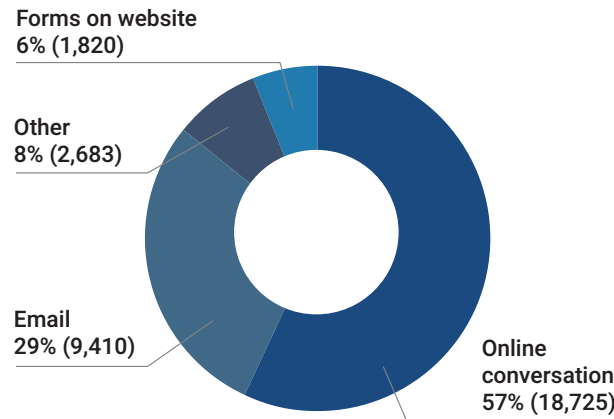


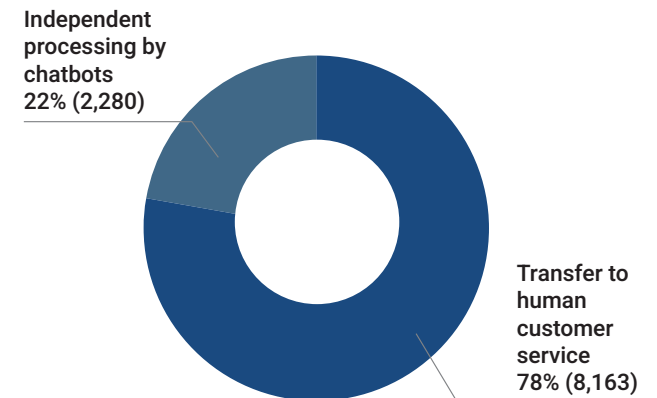
Figure 3.4.4.2. Analysis of Technical Support

Source of Technical Support Analysis



*Source analysis of all technical needs in the regions that have introduced automated processes (online technical teams in North America, Europe, and the Taipei headquarters) in 2022.

22% of our customer needs can be handled independently by chatbots



*Regions where Chatbots have been introduced: 2022 Analysis of Line pairs in North America and Emerging Markets Region.

4

Green Operations

- 4.1 Eco Design and Sustainability
Liability of Product
- 4.2 Climate change strategy and
management
- 4.3 Greenhouse Gas Inventory Energy
Resource Management
- 4.4 Environmental Management

4.1

Eco Design and Sustainability Liability of Product

Vision and Commitment

In respect to the global Sustainable Development Goals, Advantech is responding to SDG 9 (Industry Innovation and Infrastructure) and SDG 12 (Responsible Consumption and Production). Starting from raw materials, product design and extending into manufacturing and environmental management, we are gradually setting goals and introducing each item of the standards. We thus are willing to do our best to improve the environment, reduce environmental impact, and produce environmentally friendly products.

Phased Achievements and Future Goals of Eco Design

Direction of Goals | In 2023, More than 50% of the eco design products achieved silver medals of internal self-announced label.

The energy-saving part of the eco design products self-announced by Advantech has all been required to comply with the ErP international standard requirements starting in 2022. Starting from this aspect, it includes other aspects of internal inspection with high standards in 2023 to expand the scope of eco design products in addition to energy saving of products. The green competitiveness of enterprises is then enhanced through the research and development of green products.

Phase of Goals

From the aspect of products' energy saving, all aspects of inspection are comprehensively introduced from voluntary standardization to inclusion in norms in the new product development process in order to increase the proportion of green product revenue.

The expansion of the applicable product range and the continuous introduction of new material research and development are expected to improve green product design to be 100% introduced in the research and development stage..

	Strategy	KPI	2022 Goals	Status of Achievement	2023 Goals	2025 Goals
Eco Design and Sustainability Liability of Product	The scope of eco design inspection of new products has been expanded to enhance the green competitiveness of enterprises through green product research and development.	In line with proportion of the International Environmental Protection Regulations (Management of Hazardous Substances)	100% of raw materials continue to achieve the compliance with environmental protection international regulations and Advantech's standards for regulated substances.	100% of raw materials continue to achieve the compliance with environmental protection international regulations and Advantech's standards for regulated substances.	100% of raw materials continue to achieve the compliance with environmental protection international regulations and Advantech's standards for regulated substances.	100% of raw materials continue to achieve the compliance with environmental protection international regulations and Advantech's standards for regulated substances.
		Number of products meeting internal eco design standards	20% (Advantech's newly developed standard products meet the requirements of four aspects of eco design standard guidelines)	The achieved quantity of newly developed standard products is 3 products (silver medal). Besides, there are 21 Mass-produced products which are the next generation existing products, reaching 20% of the target set last year. (Several models among the newly developed products are currently under design and development)	<ul style="list-style-type: none"> Overall goals: More than 50% of eco design new products achieved silver medals. The mass-produced IPC system products are implemented with green eco design and contributes 10% of overall revenue. 	<ul style="list-style-type: none"> Overall goals: More than 80% of eco design new products achieved silver medals. The mass-produced IPC system products are implemented with green eco design and contributes 15% of overall revenue.
		The number/ratio of products that meet energy-saving product design	Expanded the introduction of low energy design to 15 new products.	A total of 41 products complying with energy-saving design have reached the target set last year.	<ul style="list-style-type: none"> The newly developed standard products must meet the specifications of energy-saving design. The mass-produced IPC system products are strategically implemented power-saving gold power supply and contributes 10% of total revenue. 	<ul style="list-style-type: none"> New products of specific product lines (suitable field) meet the requirements of Energy Star / obtain the internal energy-saving gold medal up to 20%. The mass-produced IPC system products are strategically implemented with power-saving gold power supply and contributes 15% of total revenue.

Highlighted Projects or Performance Figures



In addition, Internal product energy-saving classification labels are established by Advantech in 2022. It is divided into three levels based on energy efficiency performance to assist customers in identification. Also, internal green design products and silver medals are consistent to assist customers in recognition.

4.1.1 Eco Design

Eco-Product following the LCA life cycle

Advantech has always adhered to the concept that products shall follow a life cycle. We anticipate using life cycle assessment (LCA) and product carbon footprints to quantify the impact of Advantech's products on the environment. The assessed projects include the carbon emissions from the selection, manufacturing, distribution, use and final disposal of upstream raw materials. Also, carbon reduction targets will be further set and taken actions to implement the reduction, which will be incorporated into the Company's operational management goals.

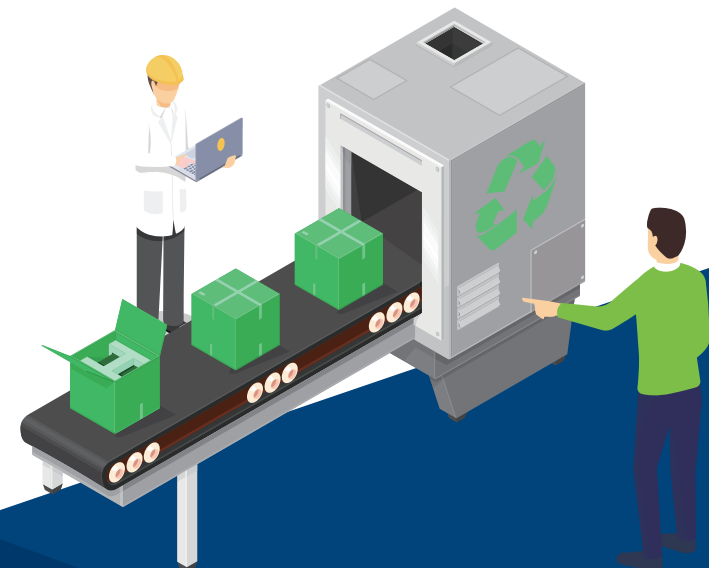
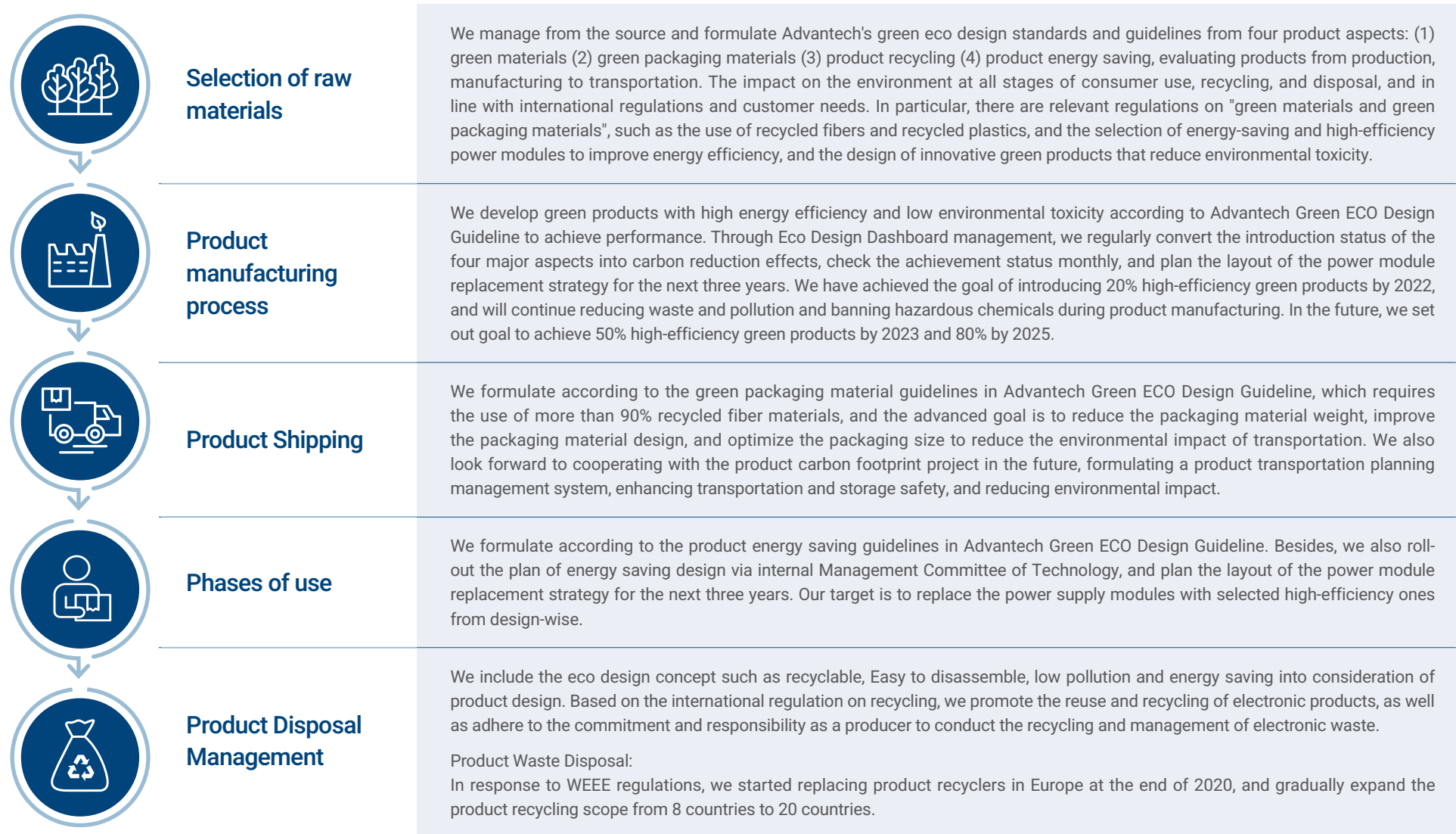


Figure 4.1.1 Eco Product LCA Life Cycle



Advantech has planned to obtain the first product carbon footprint certification in the second quarter of 2023. The material selection depth of the product is evaluated through the product life cycle (LCA) to identify the top 5 key carbon footprint materials. Moreover, the establishment of Advantech product carbon footprint inventory methodology will be completed in Q2. The basis for an internally developed product life cycle assessment (LCA) will be established as well. In the future, we will gradually complete the carbon footprint inventory of representative products of each business group as a material selection mechanism for the development of low-carbon products. The SPC-815 series products were selected as the first carbon footprint products.

Eco-Product Target setting

In the second half of 2020, Advantech formulated an eco-product innovation design project to promote Green eco design standards and guidelines to R&D units. Since then, the Company has been committed to encourage the adoption of eco design innovation processes and invited product department proposals to participate in the internal selection.

We introduced the innovative design process of eco-products in stages while setting short-, medium- and long-term goals. In 2021, we completed our formulation of four product standpoints (material/packaging/recycling/energy saving) and established an inspection system. In 2023, our target is that 50% of newly developed standard products should comply with eco design with full implementation, and 80% of new products should meet the requirements in 2025.

Eco Product Design Management Mechanism

From the four product standpoints of (1) green materials, (2) green package materials, (3) product recycling, and (4) product energy saving, we design innovative eco products by formulating standards to evaluate environmental impact of products from the selection of raw materials, production and manufacturing to transportation, consumer use, recycling, disposal, and so on in compliance with international regulations as well as our customers' needs.

Figure 4.1.2 Eco Product Design Management Mechanism



Figure 4.1.3 Four Aspects of Eco Product Design



Interdepartmental Committee

We set up an Eco Design Management Committee, with Advantech's Project Management Optimization (PMO) convening relevant departments to formulate standards and to oversee their implementation, management, and inspection.



Setting of Standards

Based on international environmental regulations or international assessment tools (such as the US Electronic Product Environmental Assessment Tool (EPEAT)) as well as our experience in serving brand customers, we have formulated and promoted Advantech's Green ECO Design Standard Guidelines for energy efficiency, eco-design, and reduction of environmental toxic hazards. Furthermore, we provide tools for inspection standards that will offer gold medal and silver medal labels when passed.

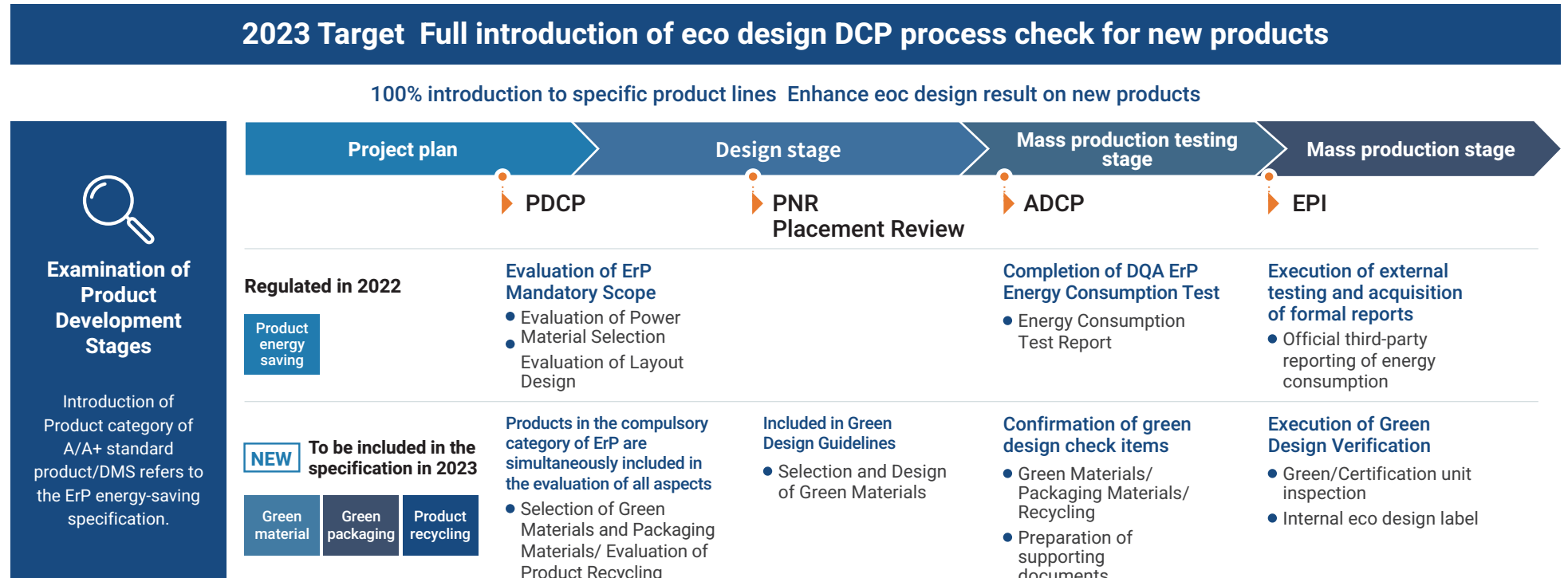
Table 4.1.1 Examples of Eco Product Design Content Planning

Product Category	Environmental design focus	Design content
Selection of product: Panel PC (Industrial computer equipment with screen), Server, Industrial computer (IPC), Board	Improve energy efficiency, Eco design, Reduce environmental toxicity	Compliance with EU RoHS Directive, China RoHS, Taiwan BSMI RoHS, and IEC62474 regulations
		Compliance with the requirements of substance restriction of EU Battery Directive
		Reduction of Bromine and Chlorine content in plastic (>25g) parts
		Compliance with EU REACH regulations for requirements of supply chain communication
		Elimination of heavy metals that are added to packaging
		Restriction on the use of elemental chlorine as a bleaching agent in paper-based packaging material
		Enhancing the recyclability of packaging materials
		Recycled fiber for corrugated packaging
		Design for repair, reuse and recycling
		Design for plastics recycling (plastic parts weighing>100g)
		Product recyclability calculation and minimum 90% recyclability rate (IECTR62635)
		Information and reports for reuse and recycling
		Replacement components availability
Energy efficiency		

Examination of Product Development Stages

With management from the source, system products such as IPC, Server, and Display will be fully included in the internal inspection of the four aspects of green eco design in 2023. We set up relevant departments in the design and development stage to ensure quality and adherence to eco design goals.

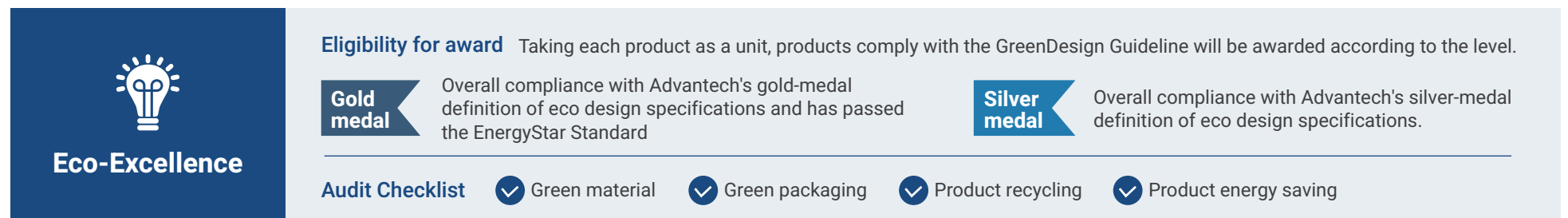
Figure 4.1.5 Decision Check Points in Development Stages of Eco Product Innovation Design Projects



Eco Design Award System

We continue to offer rewards to encourage colleagues within the company to design environmentally friendly eco products and to achieve eco benchmark products of Advantech in 2022.

Figure 4.1.6 Outstanding Eco Product Awards



Action Plan

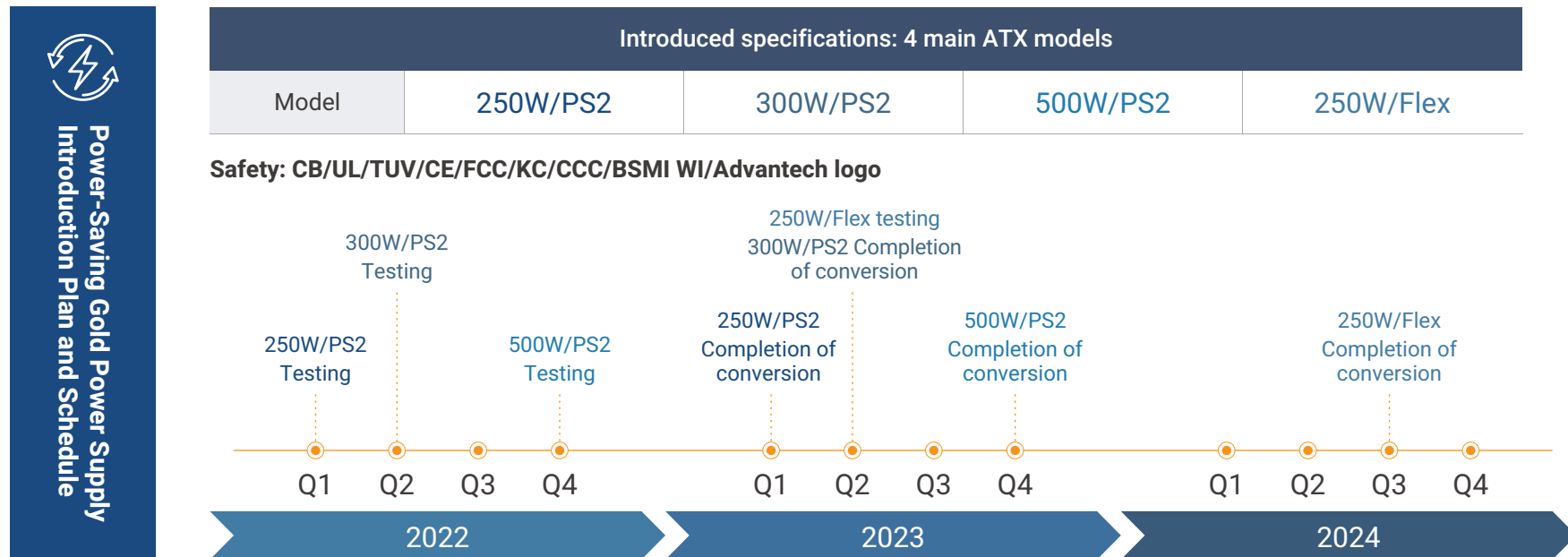
- Starting from IPC, Server, Display type of system products, to assist relevant product lines to meet the four aspects of green eco design products, the guidelines and requirements are enacted and announced publicly throughout the company.

Figure 4.1.7 2023 Green Product Overall Goals and Sub-goals Setting



- Implementation of the design of high-efficiency and energy-saving products across different business groups: With the selection of power modules with energy saving and high conversion efficiency, Advantech plans to improve the replacement strategy for power modules in the next three years, which was simultaneously introduced into mass-produced hot-selling products. After a whole year of supplier selection, inquiry, cost analysis and verification test last year, we are currently continuing to optimize the costs. Some mass-produced products are expected to be introduced with power supplies with a power-saving function this year to gradually increase the efficiency of 250W/300W/500W.

Figure 4.1.8 Power-Saving Gold Power Supply Introduction Plan and Schedule



3. Specific product lines selected are required to retrieve Energy Star certification by top-down decision and the installation of energy-saving management software to improve carbon reduction performance: Display / Panel PC / Portable Products are prioritized to be introduced in the scope. And software modules for energy-saving management are developed and designed to be quickly deployed on Advantech products to improve carbon reduction performance. (This refers to the Erp & Energy Star international regulations on energy efficiency optimization to accelerate the standardization of energy-saving design.)

Figure 4.1.8 Design and Continuous R&D for Product standardization of Energy-Saving Product





4. Re-optimization of eco design products: The standards of the silver medal for eco design products continue to be standardized into the mandatory requirements of Advantech's new product development. The implementation is evolved from voluntary to mandatory on specific type of products. Besides, the introduction of recycled materials is under evaluation, such as the use of recycled metal for shell of mechanical products, the conversion from EPE foam plastic material to paper, etc. The design of reduced packaging materials for the first and second generation models is currently being planned for evaluation and introduction.

Performance Presentation




A list of Advantech's 2022 eco design product silver medal/Advantech energy saving label product is as follows. After many years of hard work, our policy is to design energy efficient, energy saving, carbon reduction, low environmental toxicity hazard, easy assembly and disassembly, and recyclable products. These policies are implemented in the eco design thinking of each phase in the product life cycle, and the performance of circular economy is concretely presented. In addition, USA Energy Star/ the revenue of Advantech's green design products with silver medal, energy-saving label products was account for 3.10 % in 2022. It has grown more than 6 times compared to 0.46% in 2021, and the target for 2023 is set at 10%. Advantech encourages our employees to design products which can improve energy efficiency, save energy and reduce carbon emissions, reduce environmental toxicity and hazards, be easy to assemble and disassemble, and easy to recycle material resources. Also, an internal bonus reward mechanism was set up, and honor certificates were awarded. Guidelines are set for incentive mechanisms for internal green design. The evaluation includes four aspects of green eco design products: green materials, green packaging materials, product recycling, and product energy saving. After the annual settlement in 2022, award-winning employees will be awarded with certificates and bonuses.

Advantech's internally announced eco design label

Green eco design internal labels

Eco design product label announced internally	Description
	The required and optional items of the four standpoints all conform to Advantech's Eco-Ecological Design Standard Guidelines and have passed the inspection, so they are given gold medal label.
	The required items of the four standpoints all conform to Advantech's Eco-Ecological Design Standard Guidelines and have passed the inspection, so they are given silver medal label.

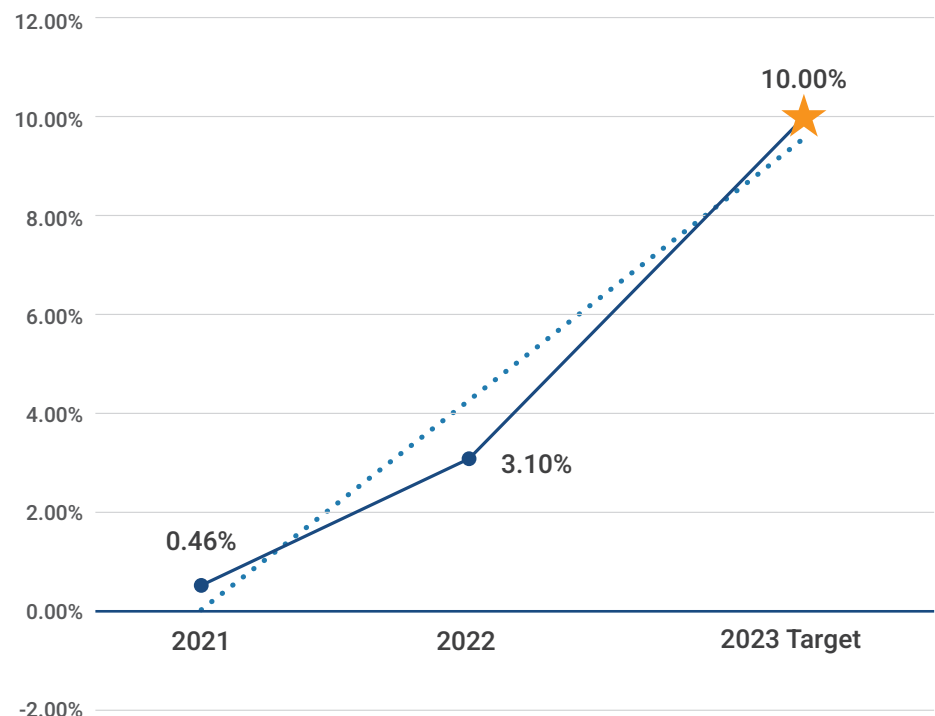
Energy saving classification labels

Energy consumption label announced internally	Description
	The energy efficiency of the product can reach more than 90%, and the color is consistent with internal gold label certification.
	The energy efficiency of the product can reach more than 87%~90%.
	The energy efficiency of the product can reach more than 82%~87%, and the color is consistent with internal silver label certification.

The proportion of revenue of products that achieve the Silver Medal of Green Products/Advantech Energy Saving Label in 2022: 3.10%

Table 4.1.2 Revenue Contribution Rate of Advantech's Green Products in 2022

Eco Product operating revenue share (%)



4.1.2 Product Liability

Advantech reviews the current status of hazardous substances management every year in accordance with international regulations, customer requirements, and trends in environmental protection in order to reduce environmental and ecological impact, fulfill corporate responsibility for environmental sustainability, meet the expectations of stakeholders, and continue to adhere to the requirements of international regulations. We have thus formulated Advantech's Green Policy (Hazardous Substance Reduction Program), and we regularly update Advantech's eco product rules for the management of hazardous substances. These in turn are managed through an green supply chain management platform.

Figure 4.1.10 Advantech's Green Policy - Hazardous Substance Reduction Program

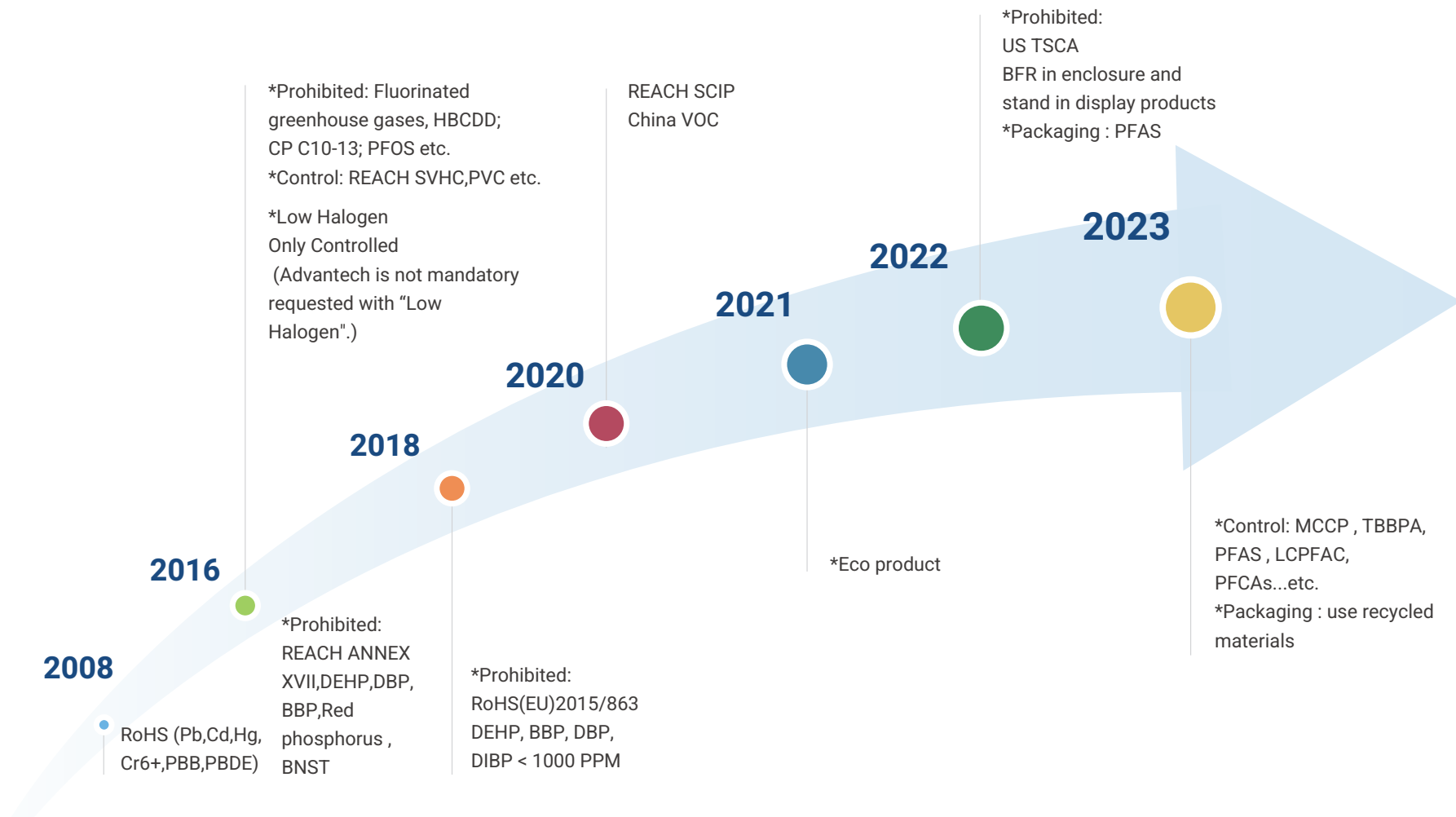


Figure 4.1.11 Green Supply Chain Management Platform GPMS



Information docking

- ✓ Green Mark (On going)

Material or component risk assessment

- ✓ Asses the usage of substances at Advantech
- ✓ Ensure components comply with new regulations (Ex. RoHS Exemption)

Generate product reports for clients

- ✓ Assess announcements of Advantech meeting RoHS & REACH
- ✓ Assess other regulations

Green data survey operations

- ✓ Establishment of Advantech's regulations
- ✓ Release, review, and confirm Kunshan Green
- ✓ Upload supply chain green data

Information delivery to the supply chain

- ✓ Announcement of Advantech information
- ✓ Update critical regulations or announcements regarding client regulations

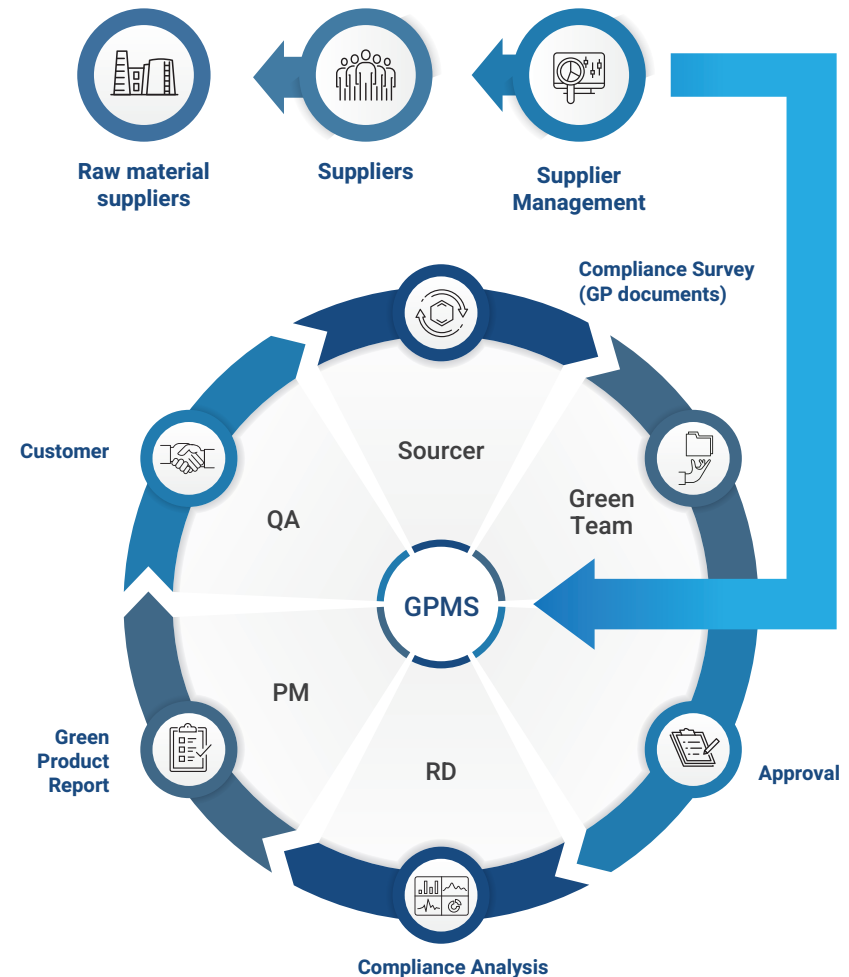
Conflict minerals survey (expansion)

- ✓ Report conflict minerals in line with Responsible Business Alliance
- ✓ Update list of smelters timely Perform surveys and product qualification reporting quickly

Advantech established Green Supply Chain management in 2010. On this supply chain platform, suppliers must promise and guarantee that their products do not contain harmful substances listed by the Company, and supporting documents shall be provide for future reference. We optimize this platform every year, activate the database, and form an effective green supply chain. Advantech has introduced its hazardous substance management system since 2010. We uphold the spirit of strict quality management, continuously controlling every aspect of product responsibility. The products of Advantech are all in compliance with relevant regulations.

Figure 4.1.12 Green Supply Chain Management Process

Green Management





Case Focus: Sony Green Partner

Beginning in 2012, Advantech has become a Sony Green Partner. From component partners to OEM partners, we have challenged many levels of stages. In recent years, only document review is required, and certificates can be directly extended. Becoming a Sony Green Partner shows that Advantech's green management performance is highly recognized by our customers.

***Note:** Sony Green Partner certification ensures that all phases of the product life cycle, such as procurement, production, and delivery are systematically controlled in the green product management system. It minimizes the risk of introducing any kind of non-environmentally friendly substance into products while enhancing our customers' products to continuously meet the requirements of environmental protection substance standards. It serves as the best partnership to maintain Advantech's environmental requirements and commitments to products, and to meet the most updated environmental concerns.

Responsibility for Product End-of-Life : Product Recycling

The design consideration of "recyclable, easy to disassemble, low pollution, and energy saving" for easy recycling is injected into the early stage of product design. Reuse and recycling of electronic products is facilitated through legally required recycle programs. We uphold the spirit of producer responsibility to commit to the recycling and management of electronic waste.

Europe

In response to the specifications of WEEE and sustainable product design and development, we re-examined our cooperative product recyclers and start to replace those located in Europe at the end of 2020. In 2022, the inspection of product shipments and recycling was expanded (recycling countries were expanded from 8 countries to 20 countries). We retroactively revised the 2019-2022 data, and calculated the tonnage of product recycling based on the annual effective recycling data of countries provided by the recyclers. According to the calculation of the following methodology, a total of electronic products with a total weight of about 1005 metric tons was recycled in Europe in 2022, as shown in the table below with retroactive revision of the 2019-2022 data. Advantech's products are equivalent to the customer's WEEE electronic products of the same category. Therefore, the client's WEEE calculation tool was used to make the estimate.

The detailed data of other regions have not been checked this year, and it is expected that the retrospective data will be presented when the inventory plan is added in the future.

Recycling volumes in Europe region
Unit: Metric tons

	The total weight of the product that can be recycled globally (tons) (2019~2021 WEEE recycling rate is 80%) (The recycling rate of Advantech eco-design products is 90% in 2022)	The total weight of the product actually recycled (tons) (The average recovery rate in European countries is 84%)	Percentage of actual (European) product recycling world-wide (%)
2019	8112	794	9.8
2020	7738	767	9.9
2021	9596	903	9.4
2022	10041	1005	10

Taiwan

The recycling of electronic waste in Taiwan is a public operation. Also, recycling can be done through cleaning teams and resource recovery agencies. Business operators pay the resource recycling management fund based on the annual business volume and the rate of recycling and disposal fees. The fund is managed by the Environmental Protection Administration of the Executive Yuan, R.O.C (Taiwan).

In the future, the planned inventory and interrogation will be expanded to cover other countries, and the main sales markets include China, Japan, and the United States.

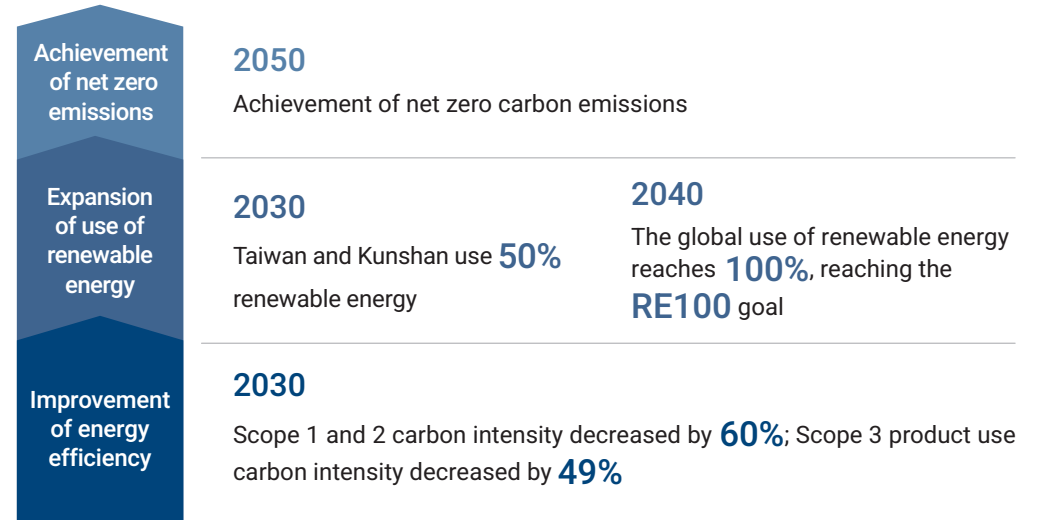
4.2

Climate Change Strategy and Management

As the world's largest provider of industrial computer and Internet of Things technologies and services, Advantech understands its responsibility to the global environment. The Company's policy statement on climate change is aligned with the Paris Agreement's goal of keeping warming below 1.5°C. The Science Based Target (SBT) was adopted and committed in 2021. Since then, we have further committed to join the RE100 initiative and set a net zero carbon emission target in 2023. Renewable energy is regarded as an important strategy towards net zero emissions, and it is planned to achieve 50% renewable energy use in Taiwan and Kunshan, China by 2030. Also, we will achieve 100% global renewable energy use by 2040 to achieve the goal of RE100, and achieve the goal of net zero carbon emissions by 2050.

Advantech has included climate change as one of the material risk projects of corporate sustainable management, and has managed it according to the two standpoints of "mitigation" and "adaptation." Meanwhile, we are also actively identifying risks, building adaptation capabilities, further researching and analyzing opportunities for climate change, and accumulating and deepening R&D momentum. We continue to invest in eco energy and in energy-saving products and solutions, and we are integrating them with the core business of energy management to promote energy saving and sustainability.

Advantech's Net Zero Vision



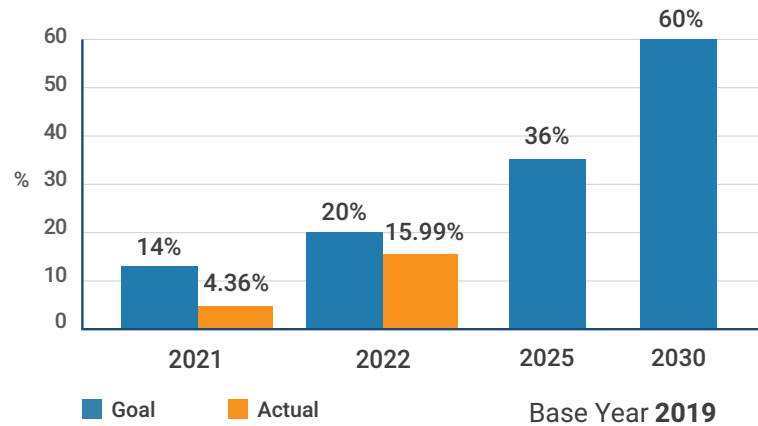
Advantech's Climate Change Development History



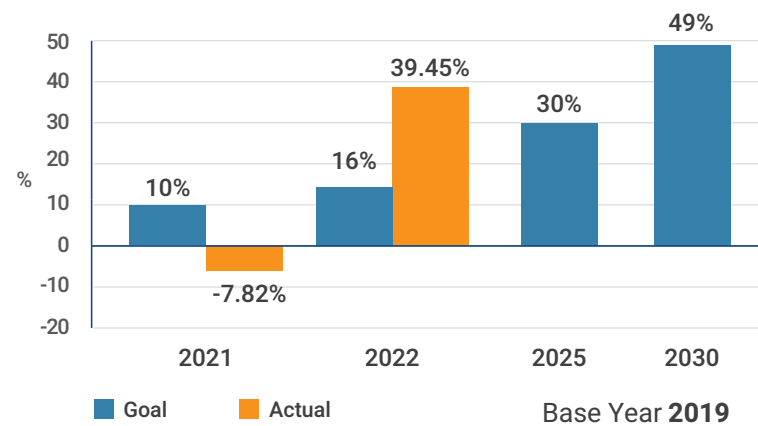
Advantech set a Science-Based Target (SBT) for carbon reduction in 2021. Using 2019 as the base year, we proposed targets of reducing the carbon intensity of Scope 1 and Scope 2 products by 60% by 2030, and reducing that of Scope 3 products by 49%. Furthermore, we passed a compliance review organized by the Science-Based Targets Initiative (SBTi). This makes us the third technology industry company in Taiwan to pass such a review, and we continue to move forward in pursuit of these goals.

Figure 4.2.1 Advantech's SBT Targets

SBT Scope 1 and 2 Carbon Intensity (tCO₂e/M NTD) Targets



SBT Scope 3 Product Use Carbon Intensity (tCO₂e/M NTD) Targets




*Note:


1. Having set 2019 as the base year, Advantech applied for SBT targets in 2021. The period in which the relevant carbon reduction plans were drawn up. Therefore, relevant results was only available from 2022. For the relevant product carbon reduction plan, please refer to [4.1.1 Action Plan](#).
2. In 2021, products in Scope 3 were updated with carbon intensity figures, the original figure is -34.77%, and the corrected figure is -7.82%.





4.2.1 TCFD Governance Structure and Climate Management Strategy

Businesses face potential operational impact from the extreme climate events; from the low-carbon transition pressure brought about by the aggressive carbon reduction targets among a range of countries; and from the carbon reduction requirements imposed upon the upstream and downstream of the value chain. Under the impetus of our ESG Corporate Sustainability Committee ("the ESG Committee"), Advantech responded to this trend by having the ESG Office integrate cross-departmental resources and introduce the Task Force on Climate-related Financial Disclosures ("the TCFD") in responding to the increasing global need to identify the linkage between climate risk and financial impact. According to the TCFD guidelines, we have taken a systematic approach in measuring the climate risks and opportunities faced by the company. We have also thoroughly evaluated the climate change risks that the existing risk management procedures on which the Pan-Operational Risk Map focuses. Evaluation results and response plans have also been reported to the senior management of the SDC Corporate Sustainable Development Committee. Furthermore, the SDC Committee regularly reports the progress of climate management to the Board of Directors, so as to enhance the resilience in dealing with climate risks.

Advantech's Climate Governance Framework			
 <p>Governance</p>	Board of Directors	<ul style="list-style-type: none"> ● The highest supervisory unit for risk management (including climate risk) ● Review major goals and implement of budgets related to climate issues 	<ul style="list-style-type: none"> ● Oversee climate risk management and strategies to drive results
	Chairman	<ul style="list-style-type: none"> ● Chair the SDC Committee and leading the management mechanism for climate issues 	<ul style="list-style-type: none"> ● Confirm climate-related KPI targets and action plans
	SDC Corporate Sustainability Development Committee	<ul style="list-style-type: none"> ● The main authority and decision-making unit of climate risk management ● Regular reporting to the Board on climate management progress ● Review climate-related risk, opportunity, result, and response strategies 	<ul style="list-style-type: none"> ● Approve TCFD report ● Monitor the implementation of climate issues and review KPIs
	ESG Office	<ul style="list-style-type: none"> ● Coordinate the execution of climate-related risk and opportunity analyses and integrated disclosure report ● Promote climate-related action plans and report progress to SDC Committee quarterly 	<ul style="list-style-type: none"> ● Research and analyze climate policy and scientific research development trends; regularly monitor climate risk events
	Board Oversight	<ul style="list-style-type: none"> ● The SDC Committee regularly reports climate-related management plans and results to the Board of Directors while the Board of Directors reviews relevant major goals and budgets ● In 2021, the Board of Directors decided to approve Advantech Taiwan's renewable power target and renewable energy PPA procurement budget, and a solar power plant project 	<ul style="list-style-type: none"> ● In 2022, consulting companies and external experts were assigned to attend the training for the Board of Directors. The topics included: how the ICT industry can help to fight climate change, international sustainable trends, new trends in risk management and response
	High-Level Management Mechanism	<ul style="list-style-type: none"> ● Led by the Chairperson, the SDC Committee holds meetings each quarter. The ESG Office reports on trends in climate-related issues, strategic planning, and implementation progress. Meanwhile, the SDC Committee monitors the performance of its goals and reviews climate-related risks and opportunities assessment results and response strategies 	

Disclosed Aspects		Advantech's Implementation Status
 Strategy	Short-, medium-, and long-term risks and opportunities	<ul style="list-style-type: none"> Advantech has identified six risks and five opportunities that are of materiality to the Company in view of their impact levels. We have made these identifications with reference to the TCFD guidelines on risk and opportunity issues and their financial impacts, combined with operational bases and industry analysis. "Short-," "medium-," and "long-term" are respectively defined as three years, three to five years, and more than five years, respectively, in assessing when each issue is likely to occur.
	Potential impacts and financial planning	<ul style="list-style-type: none"> We qualitatively assess the possible financial impact of each significant risk and opportunity. Based on this, we develop preventive and improvement measures and formulate KPI.
	Scenario Analysis	<ul style="list-style-type: none"> We analyze carbon reduction amounts and the financial impact on the Company based on Beyond 2°C Scenario (B2DS) and the 1.5°C Scenario (1.5DS) of the International Energy Agency (IEA). In addition, we also use the RCP4.5 BAU scenario and the RCP8.5 high-warming scenario to analyze physical impacts on operations so that we might include them in the assessment of the resilience of the adaptation strategy.

Disclosed Aspects		Advantech's Implementation Status
 Risk Management	Evaluation and Management Process	<ul style="list-style-type: none"> Every year, the ESG Office convenes its members across departments to collect and review the Company's climate risk and opportunity factors. Through their levels of impact and likelihood, it assesses major climate issues, monitors changes in risk levels, reviews and develops response strategies, and reports them to the ESG Committee for resolution. As well as reviewing relevant disclosures, the ESG Committee makes regular reports allowing the Board of Directors to monitor the progress of climate risk management and review major relevant decisions.
	Overall Risk System Integration	<ul style="list-style-type: none"> At the beginning of each year, the Risk Management Task Force evaluates the Company's overall operational risks according to risk management procedures, and it draws a pan-operational risk map in reporting the risk management process and planning to the Board of Directors. Climate change risk has been included in the assessment process since 2021. We identify its risk level in line with the main investigation of the Audit Office and cooperate with the ESG Office to evaluate and identify its risk level In 2022, the complete evaluation process of TCFD was introduced. The assessment practices and results was applied to the climate change risk analysis in the above risk map, integrating it into the overall risk management process

Disclosed Aspects		Advantech's Implementation Status
 Metrics and Targets	Greenhouse Gas Scope 1, 2 and 3 Emissions and Targets	<ul style="list-style-type: none"> Passed SBT Science-Based Target Carbon Reduction Review Each year, Advantech Taiwan and Advantech Kunshan both complete ISO 14064-1 greenhouse gas inventory, verification, and target tracking other climate-related management indicators and targets.
	Other climate-related management indicators and targets	<ul style="list-style-type: none"> We committed to join the RE100 initiative and the 2050 net zero carbon emission target was set. We have set targets for power saving, use of renewable energy, water saving, and eco products as percentages of revenue as well as energy efficiency improvement of product power supplies. We are planning to introduce the ISO 50001 energy management system and LCA life cycle carbon footprint assessment of main products. In the future, management indicators and goals will be set for related strategies.

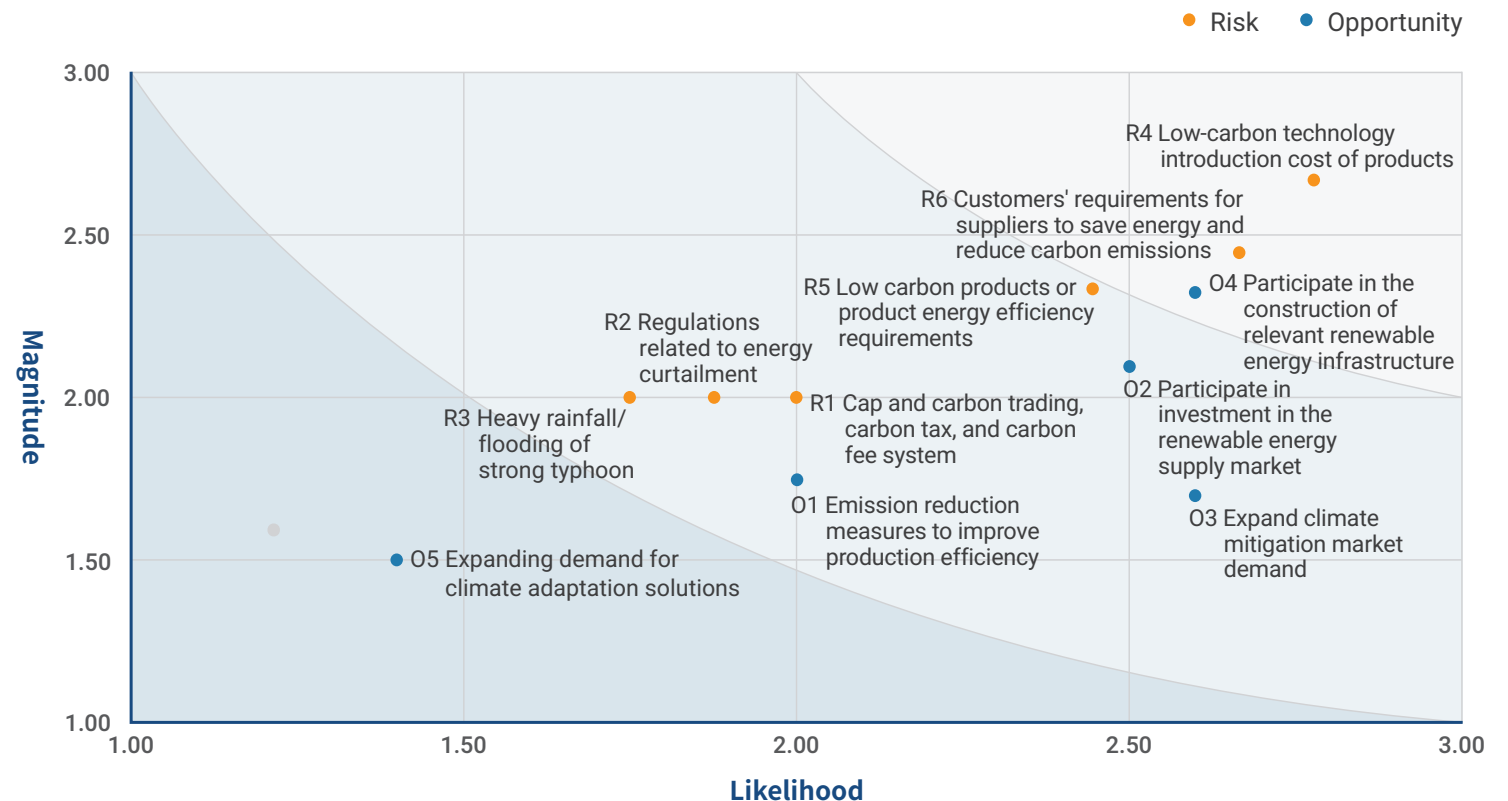
*Note: The scope names of greenhouse gas under the ISO14064-1:2006 in responding to ISO14064-1 are divided into: Scope 1, corresponding to Category 1; Scope 2, corresponding to Category 2; and Scope 3, corresponding to Categories 3 to 6.

4.2.2 Identification of Climate-Related Risks and Opportunities, and Financial Implications

ESG Office convenes members across departments to define risks and opportunities in accordance with the TCFD guidelines. In addition, it undertakes multi-faceted topic collection, cross-departmental discussions, and external consultation to specifically identify Advantech’s major risks and opportunities and the corresponding potential scenarios of occurrence and impact levels, and to analyze the possible financial impacts. Furthermore, we focus on industry characteristics and international contexts in three major aspects: operations (reductions and natural disasters), product and supply chains, and markets. We do so in order to facilitate the inventory of climate risks and opportunities at the Company’s overall level, and to accurately propose relevant strategic countermeasures. Therefore, the Company’s climate risk management covers the entire value chain (upstream, downstream, and our 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 (Scenario of SBT Voluntary Emission Reduction)	In 2030, the voluntary emission reduction of the overall operation is evaluated to the financial impact of offsetting carbon reduction through the full purchase of renewable energy, regardless of the cost of purchasing carbon rights.	Increase in cost of renewable Power Purchase Agreement (PPA) or I-REC procurement amounted to NT\$57,706,595
1.5DS (Scenario of Net Zero)	In 2030, the voluntary emission reduction of the overall operation is evaluated to the financial impact of offsetting carbon reduction through the full purchase of renewable energy, regardless of the cost of purchasing carbon rights.	Increase in cost of renewable Power Purchase Agreement (PPA) or I-REC procurement amounted to NT\$58,764,963
Implementation of Controls Scenarios (Refer to Historical Scenarios)	The evaluation of China's energy transition 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 and reduction in revenue due to operational production interruption.	Increase in cost due to operational production interruption amounted to NT\$315,557,546
STEPS Implementation of Stated Policies Scenario	The evaluation of impact on Advantech by government regulations in Taiwan in the future during 2025–2030, including the tightening of regulations for large power consumers requiring a certain proportion of renewable energy and the revision of the Climate Change Response Act. The Company's operating costs will increase due to payment of monetary substitution or carbon fees if it fails to meet the regulations.	Increase in operation cost due to renewable energy monetary substitution paid and carbon fee imposed amounted to NT\$8,868,638

Results of a scenario analysis of physical risks

Scenario	Impact Assessment	Financial impact
RCP8.5 (Worst-Case Scenario for Warming)	The financial impact from operational production caused by extreme weather events (flooding due to heavy rainfall) incurred in overall Taiwan until mid-century (2050) / every 5 or 10 years are evaluated, regardless of the impact of other physical risks (such as temperature rise and drought)	Increase in operation cost due to equipment damage in the factory area and personnel could not go or delayed start to work amounted to NT\$379,400
RCP4.5 (BAU Scenario)	The financial impact from operational production caused by extreme weather events (flooding due to heavy rainfall) incurred in overall Taiwan until mid-century (2050) / every 5 or 10 years are evaluated, regardless of the impact of other physical risks (such as temperature rise and drought)	Increase in operation cost due to equipment damage in the factory area and personnel could not go or delayed start to work amounted to NT\$379,400

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
	Transition Risk 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 	<ul style="list-style-type: none"> 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.
	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"> Short-term 	<ul style="list-style-type: none"> Carbon reduction KPI were set up for each department Plan to introduce the ISO 50001 energy management system
Product/ Supply Chain	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.
	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
Product/ Supply Chain	Transition Risk 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 	<ul style="list-style-type: none"> 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.

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	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	Medium	Short-term	<ul style="list-style-type: none"> · Increase operating revenue 	
		Participate in the construction of relevant renewable energy infrastructure	High	Short-term	<ul style="list-style-type: none"> · Increase operating revenue 	
		Expanding demand for climate adaptation solutions	Low	Mid-term	<ul style="list-style-type: none"> · Increase operating revenue 	

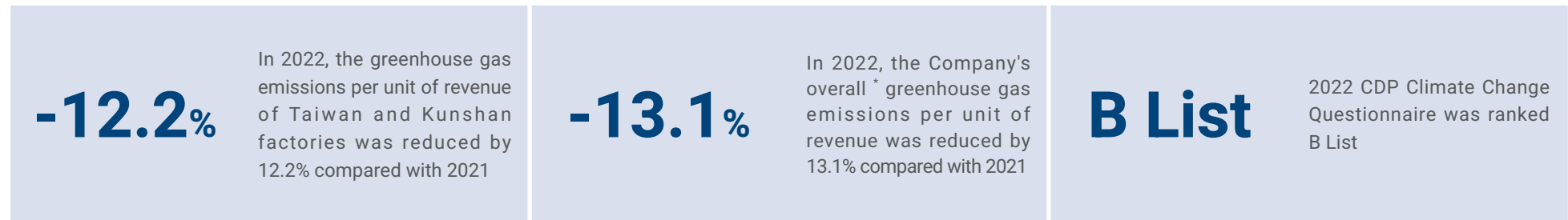
***Note:**

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

Highlighted Projects



*Note: Main operating bases and manufacturing factories.

Advantech adheres to the original devotion to the idea of being a global citizen, and to the corporate purpose of living a happy life. We are thus willing to contribute to environmental improvement and labor safety maintenance. Advantech has gone beyond introducing the ISO 14001 environmental management system in 1996 and the OHSAS 18001 occupational safety and health management system in 2005 (revised in 2020 to ISO 45001). In addition to complying with the relevant government environmental protection and regulations of the Occupational Safety and Health Act, we are also committed to reducing the impact on overall environmental safety and health in the greenhouse gas management, product design, product use, and disposal stages. And through the participation and commitment of all employees, we can achieve the goal of environmental protection and sustainable development of the business. This chapter's writing scope covers Advantech's main global operations and production factories, together accounting for 92.3% of total consolidated revenue.

Phased Achievements and Future Goals of Greenhouse Gas Management

Item	2022 Results	2023 Goals	2025 Goals
Energy Management	<ul style="list-style-type: none"> In 2022, the greenhouse gas emissions per unit of revenue of the Company's Taiwan and Kunshan factories was reduced by 12.2% compared with 2021 iEMS (Intelligent Energy Management System) introduced into Linkou and Kunshan and greatly evolved 	<ul style="list-style-type: none"> Initiation of the electricity consumption of the main business bases collected by iEMS (Intelligence energy management system) in Taiwan and Kunshan Initiation of the subsidiary's greenhouse gas inventory and verification plan Obtained ISO 50001 certification of Taiwan and Kunshan operating bases 	<p>Advantech's overall greenhouse gas emission intensity per unit of revenue has decreased by 36% compared to 2019</p>
Development of renewable energy	<p>Completion of the construction of power generation facilities in the renewable energy field of investment</p>	<ul style="list-style-type: none"> Initiation of use of renewable energy Commitment to join RE100 targets and process active low-carbon investment 	<p>Advantech Taiwan's use of renewable energy accounts for 25% of total electricity consumption</p>

4.3.1 Greenhouse Gas Inventory and Management

Advantech is creating a low-carbon business environment. Based on Taiwan's Climate Change Response Act, and on the quantification, monitoring, reporting and verification procedures for greenhouse gas inventory provided by the ISO 14064-1 standard, we established a Greenhouse Gas Inventory Promotion Committee in order to promote various tasks connected to greenhouse gas inventory and reduction. We have done so with a view of reducing direct and indirect greenhouse gas emissions year by year. In 2011, we also joined the Carbon Disclosure Project (CDP) and have disclosed the Company's carbon reduction plans and performance annually.

Greenhouse Gas Inventory

In recent years, Advantech has carried out greenhouse gas inventory, and the main operating bases and production factories that have been verified are Taiwan and Kunshan, China. In the future, major overseas operating bases and manufacturing areas will be gradually included.

Advantech's Taiwan factories make reference to ISO 14064-1 and to the GHG Protocol Evaluator Tool in addition to requiring self-inspections. Furthermore, third party on-site inspections have been carried out by Taiwan SGS Limited starting from 2019. Organizational boundaries are drawn in reference to the requirements given by the ISO 14064-1:2018 standard. Organizational boundaries are set with operational control rights; furthermore, we establish the Company's greenhouse gas inventory management procedures and inventory reports, and we redefine the emission source inventories. Organizational boundaries include Rueiguang

Headquarters, Taipei Sunny Building, the Donghu Factory, and the Linkou Campus. In addition to the qualitative and quantitative inspections of Scope 1 (Category 1 direct GHG emissions) and Scope 2 (Category 2 indirect GHG emissions associated with energy production), the scope of inventory inspections also involves conducting inventory of emission source in Scope 3 (Categories 3, 4 and 5 indirect greenhouse gas emissions). In Scope 1, Advantech's Taiwan factories emitted a total of 643.8407 metric tons of CO₂e.

Advantech's Kunshan factories conducted their first 2014 annual ISO14064-1 greenhouse gas emission inventory in 2015, and a third-party on-site inspection was conducted by the China Quality Certification Center (CQC). As a result of the 2022 inventory, it was found that Advantech's Kunshan region produced a total of 2,826.57 metric tons of CO₂e in Scope 1. Emissions by region are shown in Table 4.3.1.

Table 4.3.1 Greenhouse Gas Scope 1 Emissions of Advantech's Main Global Operations and Production Factories in 2022

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)
Taiwan ACL		31.3875	0.0168	0	612.4364	0	0	0	643.8407
China AKMC		1757.0678	25.3093	3.5908	1040.6047	0	0	0	2826.5725
Japan AJP		No statistics	No statistics	No statistics	No statistics	No statistics	No statistics	No statistics	No statistics
Korea AKR		No statistics	No statistics	No statistics	No statistics	No statistics	No statistics	No statistics	No statistics
USA ANA		No statistics	No statistics	No statistics	No statistics	No statistics	No statistics	No statistics	No statistics
European AEU		No statistics	No statistics	No statistics	No statistics	No statistics	No statistics	No statistics	No statistics
Total		1788.4553	25.3261	3.5908	1653.0411	-	-	-	3470.4132

*Note: Scope 1 greenhouse gas inventories of factories in Japan, South Korea, the United States and Europe have not yet been counted.

Among Advantech's Taiwan factories, Scope 2 only involve the use of purchased electricity. Carbon emissions are calculated based on the 2021 electricity factor of 0.509 kg CO₂e announced by the Bureau of Energy of the Ministry of Economic Affairs, for a total of 9,872.1888 metric tons of CO₂e. For Advantech's Kunshan factories, Scope 2 included the use of purchased electricity and purchased steam for a total of 20,035.73 metric tons of CO₂e. Carbon emission calculation of electricity refers to the grid emission factor in "the average carbon dioxide emission factor of China's regional power grid in 2011 and 2012." The emission factor of East China regional power grid in 2012 is 0.7035 kgCO₂e. Carbon emissions calculations for steam refer to an emission factor of 110 kg CO₂/GJ for steam given in "Guidelines for Accounting Methods and Reporting of Greenhouse Gas Emissions of Enterprises in Other Industries." Among Advantech's Japan factories, Scope 2 emissions only involved the use of purchased electricity. Carbon emissions are calculated based on the electricity factor of 0.365 kg CO₂e announced by Japan, for a total of 1,056.9904 metric tons of CO₂e. Among Advantech's factories in Korea, America and Europe, Scope 2 emissions only also involved the use of purchased electricity. Carbon emissions are calculated based on the electricity factor of 0.4208 kg Co₂e, 0.3641 kg Co₂e, and 0.3665 kg CO₂e by searching on the public website (Low Carbon Power), respectively.

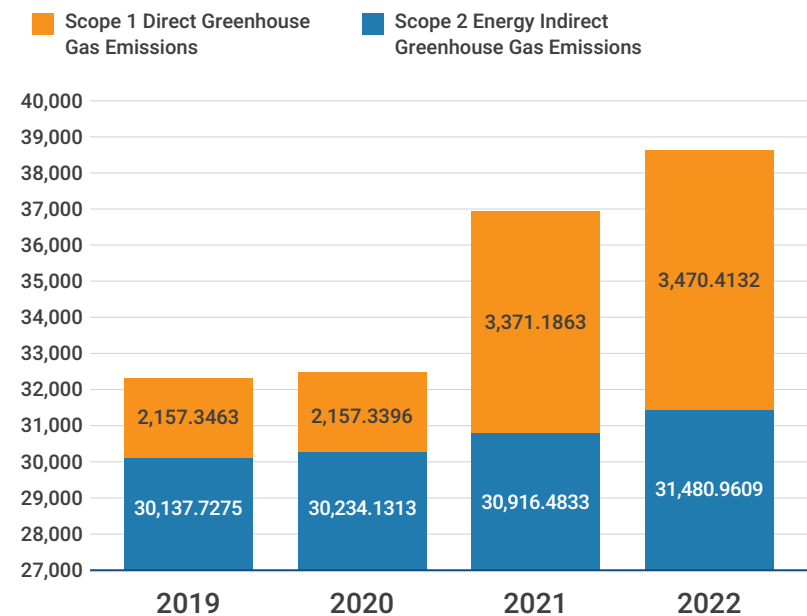
The greenhouse gas scope 1 and scope 2 emissions of Advantech's main global operations and production factories are shown in Table 4.3.2. The total emissions of Scope 1 and Scope 2 in 2022 was 34,951.3741 metric tons of CO₂e. The greenhouse gas scope 1 and scope 2 emissions of Advantech's main global operations and production factories in recent years are shown in Figure 4.3.1.

Table 4.3.2 Greenhouse Gas Scope 1 and Scope 2 Emissions of Advantech's Main Global Operations and Production Factories in 2022

Region	Scope 1 Direct Greenhouse Gas Emissions	Scope 2 Energy Indirect Greenhouse Gas Emissions	Total (metric tons CO ₂ e)
Taiwan ACL	643.8407	9,872.1888	10,516.0295
China AKMC	2,826.5725	20,035.7314	22,862.3040
Japan AJP	No statistics	1,056.9904	1,056.9904
Korea AKR	No statistics	102.6239	102.6239
USA ANA	No statistics	327.7951	327.7951
European AEU	No statistics	85.6313	85.6313
Total of Scope 1 and Scope 2 emissions			34,951.3741

*Note: Greenhouse gas inventories of factories in Japan, South Korea, the United States and Europe have not yet been verified by third party.

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: No statistics on GHG emissions from electricity consumption in 2019 and 2020 for Korea; No statistics on GHG emissions from electricity and other energy sources in 2019 and 2020 for the United States.

The average GHG emission per unit of turnover of Advantech's main operating bases and manufacturing factories in 2022 (Scope 1 and Scope 2) was 0.508 tons of CO₂e per NT\$1 million, which is 13.1% lower than the average GHG emission per unit of turnover in 2021 of 0.585 tons of CO₂e per NT\$1 million. The main reason is that Advantech achieved overall reduction in electricity consumption by integrating manufacturing systems in Linkou and Donghu factories, improving manufacturing efficiency and making good use of Linkou's energy-saving systems. Meanwhile, the Advantech Kunshan Manufacturing Center has launched various energy-saving projects since 2019, including the establishment of an energy-saving efficiency evaluation mechanism for each unit, energy-saving evaluation and verification of electrical machinery and equipment, and reduction of domestic electricity costs. In the future, we will continue to set an annual goal of reducing greenhouse gases per unit of turnover. 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.

In order to discover the key factors for climate change mitigation, Advantech Taiwan has also initiated inventories of other sources of GHG emissions in addition to emissions from its own operations. In 2019, the ISO14064-1 greenhouse gas emissions inventory was adopted to identify other types of GHGs along with relevant inventory methodologies being established. This was done with a view to identifying emission hotspots, setting reduction targets, and gradually implementing reduction measures. Please refer to Table 4.3.3 for identification and emissions in Scope 3 for Advantech Taiwan and China-Kunshan in 2022.

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

Category Item	Description of the scope of verification	Emissions of the Taiwan plant (tons CO ₂ e)	Emissions of China Kunshan plant (tons CO ₂ e)
C1/ Category 4	Procurement of goods and services	192486.5544	26025.0725
C2/ Category 4	Capital goods	4849.4574	3998.1958
C3/ Category 4	Fuels and energy of upstream	1719.3008	8540.1316
C4/ Category 3	Transportation of raw materials	39.7529	328.3105
C5/ Category 4	Operational waste	1.9453	38.0556
C6/ Category 3	Business travel	53.0899	7.9636
C7/ Category 3	Commuting of employees	476.0058	266.5393
C8/ Category 4	Leased assets of upstream	75.9764	105.2401
C9/ Category 3	Shipping of products	1.9270	433.4036
C10/ Category 5	Product processing	0	0
C11/ Category 5	Use of product	890322.6918	Included in the Taiwan headquarter office
C12/ Category 5	Product end handling	18.9547	Included in the Taiwan headquarter office
C13/ Category 5	Leased assets of downstream	0	470.8849
C14/ Category 5	Franchise	0	0
C15/ Category 5	Investment	8508.0214	Included in the Taiwan headquarter office

*Note:

1. ISO14064-1 -1:2006 Scope 3 C1~C15 corresponds to ISO14064-1:2018 Category 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

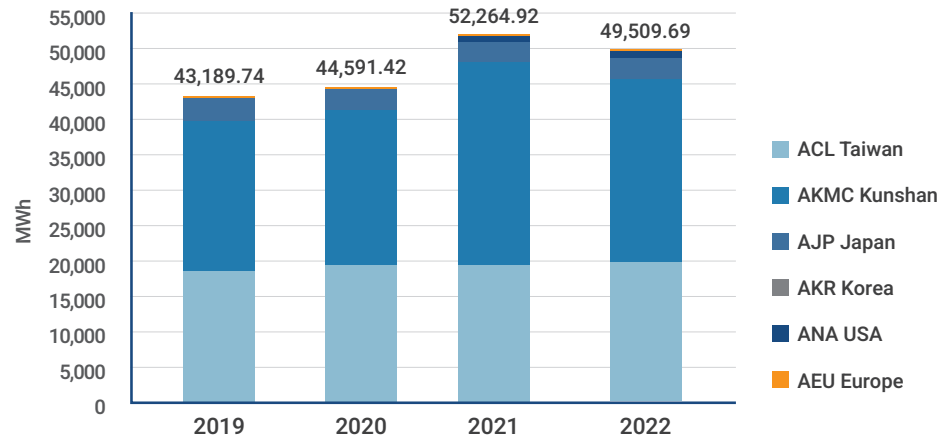
Since 2015, Advantech has cooperated with customers to participate in the evaluations of the international Carbon Disclosure Project (CDP). The CDP currently maintains the world's largest database related to climate change, and questionnaires are sent out every year to investigate companies' responses to climate change and greenhouse gas emissions and reductions. This is done so as to assess risks and opportunities for these companies arising from climate change. Through the annual regular CDP information disclosure, Advantech reviews areas including climate regulations, climate disasters, and other climate-related issues one by one to uncover hidden risks in our operations and management. In this way, we undertake effective reduction and elimination measures to meet the requirements of international customers for greenhouse gas management. In 2022, Advantech was selected as Level B.



Energy Data Management

The main source of greenhouse gas emissions from Advantech's factories was carbon dioxide generated during the power generation process of the externally purchased electricity required for the Company's operations. This emission source accounted for more than 80% of the Company's overall emissions in 2022. In 2022, the total energy consumption (electricity, steam, gasoline, diesel, natural gas) in Advantech's main operating bases and manufacturing factories came to 223,340.35 GJ.

Figure 4.3.2 Electricity Consumption among Advantech's Main Operations and Production Factories in Recent Years

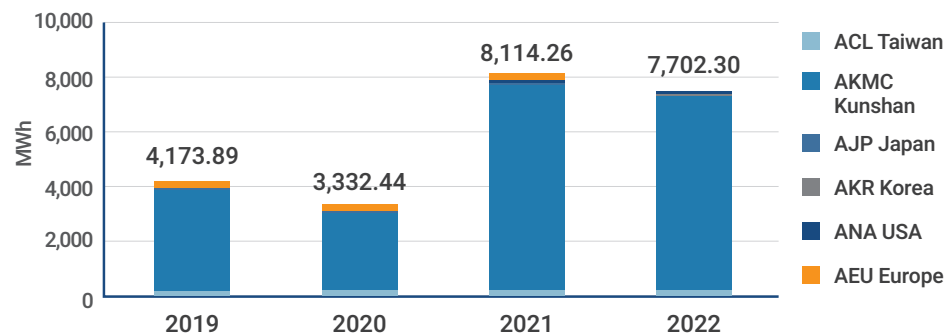


*Note: No statistics on consumption in 2019 and 2020 for Korea and the United States.



Figure 4.3.3 Non-renewable Fuels Consumption among Advantech's Main Operations and Production Factories in Recent Years

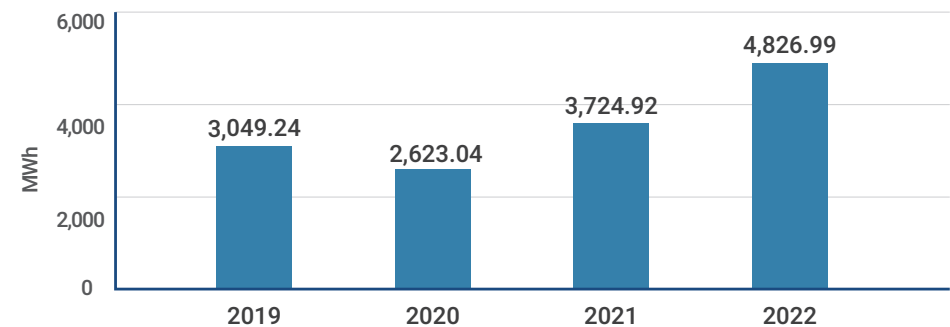
Energy consumption of non-renewable fuels in the Advantech plant (gasoline, diesel, natural gas, LPG)



*Note: No statistics on consumption in 2019 and 2020 for the United States.

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

Steam (Non-renewable) Energy Consumption of Advantech



*Note: The scope covers Advantech's main global operations and production factories, but only the Kunshan (China) factory uses steam..

4.3.2 Energy Management Action

Taiwan Linkou Manufacturing Park

The smart energy saving strategy of the Linkou Campus can be explained in terms of the two major systems of manufacturing and office facilities. The energy-saving facilities in the Linkou office area mainly achieve daily energy saving through intelligent parking, human-like energy-saving offices, and intelligent meeting rooms.

Intelligence is mainly implemented in the manufacturing system by means of an Intelligent Factory Situation Room: Advantech's manufacturing centers have been actively undergoing digital transformation in recent years. Through sensors deployed on the job site, information can be collected in real time and uploaded to the cloud for analysis. All plant information is displayed in realtime in the Situation Room, and management members can keep track of the latest production line statuses anytime and anywhere. Advantech's Intelligent Factory Situation Room monitors manufacturing, equipment yield and preventive maintenance, ambient temperature and humidity, and air quality. It also incorporates an energy management system.

Neihu Headquarters, Taiwan

Advantech's Neihu Headquarters replaced its water chiller and LED lamps in 2020. Among them, the replacement of LED lamps reduced lighting energy usage by 65%. Together, we continued to replace office LED lamps for electricity savings. In the future, old and inefficient equipment will continue to be replaced to improve energy efficiency.

Kunshan Manufacturing Park, China

AKMC's energy-saving facilities mainly save energy by promoting the optimization of energy management systems, automatic control renovation of air-conditioning systems, air compressor upgrades, replacement of energy-saving lamps, process improvement (such as line speed increase to reduce energy consumption, baking paint and liquid baking instead of roasted) and human-sensing systems.

Overseas Operation Bases (Japan, South Korea, the United States, Europe)

The energy-saving facilities of Advantech's overseas main operating bases and manufacturing factories are energy-saving mainly by promoting the replacement of energy-saving lamps, self-control transformation of air-conditioning systems, and changes in office usage behaviors.

Overall Energy Management Strategies and Actions

In addition to the energy-saving facilities in each area described above, Advantech's overall energy management strategy includes: daily energy savings, development of an iEMS smart energy management system, and a clean energy strategy.





1. Daily Energy Savings

- Try to replace in-person meetings with video conferencing
- Prioritize the procurement of office equipment and information electronic products with energy-saving labels
- Control indoor air temperatures
- Encourage employees to turn off the lights
- Energy-saving facilities in the office area
- LED lamp replacement
- Upgrades or replacement of air compressors, water chillers, and other equipment

2. Development of iEMS Building Energy Management System

Advantech is committed to developing an Intelligent Energy Management System (iEMS). We carry out energy-saving management in the two dimensions of management and operations, doing so through energy consumption information capture, data uploads to the cloud, AI analysis, information presentation, and realtime alarms; and via cooperation with scheduling adjustments, equipment cleaning, and maintenance, and the replacement of high-energy-consuming equipment. Advantech's iEMS was upgraded in mid-2020, and the platform was migrated to Advantech's WISE-Stack private cloud by the end of 2020. Officially launched in Linkou in the first quarter of 2021, the first wave of functions included an overview of energy saving performance used by top decision makers, real-time energy consumption monitoring, and abnormal energy consumption analysis for the use of managers, and so on. Furthermore, it was launched in the Kunshan Campus in the second half of 2021. In 2023, Xi'an, AESC (Eindhoven), ACL (Linkou, Ruiguang, Taipei Sunny) will be launched; in 2024, the second phase of iEMS Global Roll Out will be deployed in areas of AKR, ACN (ABJ), ACN (ASH), ACN (AKDC), ANA (Milpitas, Irvine, Ottawa), and AJP (Tokyo, Nogata) to expect the system layout to be used to check the carbon reduction. In addition, we make energy consumption information transparent and compare the use of energy consumption. Therefore, the energy saving management function is generated from top to bottom through Advantech's monthly energy consumption information in Linkou, Neihu, Kunshan, Shanghai, Xi'an, and Beijing through the eManager management system.

3. Renewable Energy Strategy

- Solar power generation: The Linkou Campus is equipped with solar power panels, which have been in use since June 2019. In 2021, they generated about 48,489 kWh of electricity per month on average for use in parallel with Taipower. In addition, the new building in Linkou Phase 3 is also expected to be fully equipped with solar panels, with an estimated power generation capacity of 8,000 kWh per month. The Newcastle (Gaming Team) office in the UK has installed solar photovoltaic panels on the roof, which can generate up to 27,021 kWh/year, which is expected to start recording data in 2023. The New HQ phase-I facility (AASC-II) in the United States is also expected to set up solar power generation, which is estimated to generate 912,000 kWh/year.
- Electricity purchases: The Company announced we would invest in renewable energy plants in 2021. First of all, 10 MW of our low-carbon investment solar power plant in southern Taiwan was supplied to the Taiwan factory, and it is expected to gradually start supplying power in 2024. The goal is that Taiwan and Kunshan, China will reach the goal of using 50% renewable energy by 2030, and Advantech's global renewable energy use will reach 100% by 2040. From 2023 onwards, the Kunshan Manufacturing Park in China will gradually achieve the RE100 goal through the procurement of green electricity.

Future Plans

Looking to the future, Advantech integrated the Taiwan factory and concentrated production in the Linkou Phase 2 Intelligent Factory. Furthermore, through the energy management system and production line optimization management mechanism, we will achieve energy consumption reduction targets and reduce electricity consumption to realize energy saving benefits. The Intelligent Energy Management System (iEMS) is also expected to complete the Global Roll Out project by 2024. Important overseas operating bases such as the United States, Europe, and Japan are also gradually planning solar power generation installations or suitable local renewable energy solutions.

4.4 Environmental Management

Highlighted Performance

0%

In 2022, there was no fine imposed for violating environmental laws and regulations.

NEW

Expanded the collection of environmental data (adding Japan, Korea, the US and Europe factories information)

NEW

The Linkou factory in Taiwan obtained the Green Factory Label certification from the Industrial Development Bureau, Ministry of Economic Affairs. (No. GF0091)

4.4.1 Environmental Responsibility

In terms of environmental management, Advantech not only implements environmental protection work related to sewage and waste in accordance with relevant laws and regulations, but has also formulated an Environmental Safety and Health Management System Manual as a guiding principle for the operation of the management system, and regularly inspects and implements management. All sewage meets discharge standards and is reported as required. Business waste is also entrusted to be disposed of and processed by qualified removal companies.

The Company's environmental declaration and environmental policy are as follows:

1. In our design and production of products and services to our customers, we are committed to the concept of green to reduce and prevent the generation of waste and pollution through the 3R (Reuse, Recycle, Reduce) as far as possible. Also, we are committed to energy conservation, waste reduction, emission reduction, and circular economy to reduce the impact of products and production activities on the environment.
2. Evaluate the risk and opportunity to establish management program to promote energy conservation and reduce waste of resources in accordance with global climate change, environmental issues and international regulations and standards related to environmental protection, energy and resource efficiency.
3. Establish a sustainable supply chain from design, production, delivery and service through the cooperation with customers, suppliers and outsourcing parties.
4. Ensure that all our activities comply with requirements of environmental, health, safety & HSF regulations and customers' designation. Promote relevant environmental, health, safety & HSF protection knowledge and activities through education and training, so that all personnel may participate in achieving the objective of continuous improvement and zero disasters, occupational diseases and pollution.
5. Continuously promote improvement through the management system, deeply construct the corporate risk management culture for environment, safety, and health, strengthen the important responsibility and awareness of sustainable development with all employees, joint ventures and stakeholders. Also, follow this policy due diligence when merging and acquiring related businesses. This policy is followed to conduct due diligence.

Environmental Promotion Procedures and Actions



Promotional Procedures	Management Action
Environmental protection related management operational rules, Environmental Management System (ISO 14001), Greenhouse Gas Inventory (ISO 14064), Energy Management System (ISO 50001)	<ul style="list-style-type: none"> ● Pollution precautions and prevention ● Environmental education training ● Environmental management system maintenance ● Greenhouse gas management ● Energy performance is monitored for improvement.

In order to achieve the promise of eco operation and sustainable development, the Company has established an environmental management system since 1996. We have done so in order to better implement the planning of environmental protection issues and to achieve the effectiveness of resource use. Meanwhile, through our Environmental Safety and Health Committee, we have established Advantech's environmental safety and health conceptual framework, advocated energy conservation, improved energy efficiency, and listed energy cost reduction as an annual key audit item. Furthermore, we regularly review performance through our environmental management system and GHG inventory. Table 4.4.1 shows the environmental management system and greenhouse gas inspection and certification of each factory region of Advantech. This chapter's writing scope covers Advantech's main global operations and production factories, together accounting for 92.3% of total consolidated revenue.

There was no environmental violations in 2022. The environmental violations at Advantech's main global operations and production factories in the past four years are summarized in Table 4.4.2.

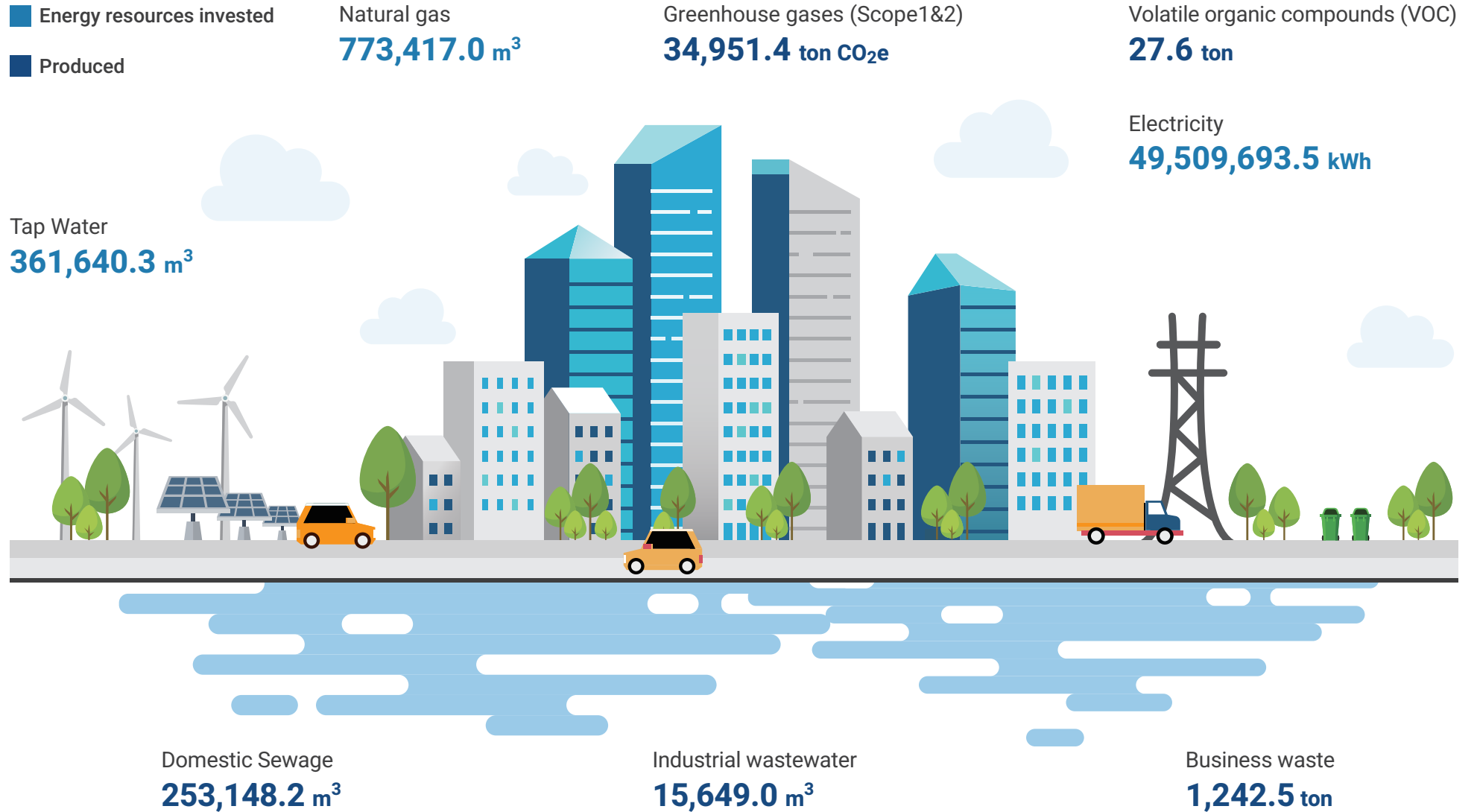
Table 4.4.1 Environment-related certification of Advantech's main global operations and production factories

Factory Environmental Certification Items	Taiwan ACL	Kunshan, China AKMC	Japan AJP	Korea AKR	USA ANA	Europe AEU
ISO 14001:2015	✓	✓	✓	-	✓	-
ISO 14064-1:2018	✓	✓	-	-	-	-
ISO 50001:2018	✓	✓	-	-	-	-

Table 4.4.2 Statistics on Environmental Violations at Advantech's main global operations and production factories

Annual Factory	Taiwan ACL	Kunshan, China AKMC	Japan AJP	Korea AKR	USA ANA	Europe AEU
2022	0	0	0	0	0	0
2021	0	0	0	0	0	0
2020	0	0	0	0	0	0
2019	0	0	0	0	0	0

Advantech's Environmental Energy Resources Inputs and Outputs (Scopes for Factories in Taiwan, Kunshan (China), Japan, Korea, USA, and Europe)



4.4.2 Energy Resource Use and Waste Management

Water Use and Management

Advantech's factories use water-saving faucets and toilets and promote water-saving measures in order to find ways to reduce water consumption per person. All factories are located in developed industrial areas or campuses in metropolitan areas. In terms of tap water supply, there is no extraction of groundwater or well water. The total water consumption of Advantech's global main operating locations and production factories in the past four years is shown in Figure 4.4.1. To further analyze of the increase in total water consumption of revenue in 2021 and 2022, it is because of the expansion of the scope of disclosure to include information on overseas factories in addition to the expansion and operation of the Kunshan Factory (Phase 5).

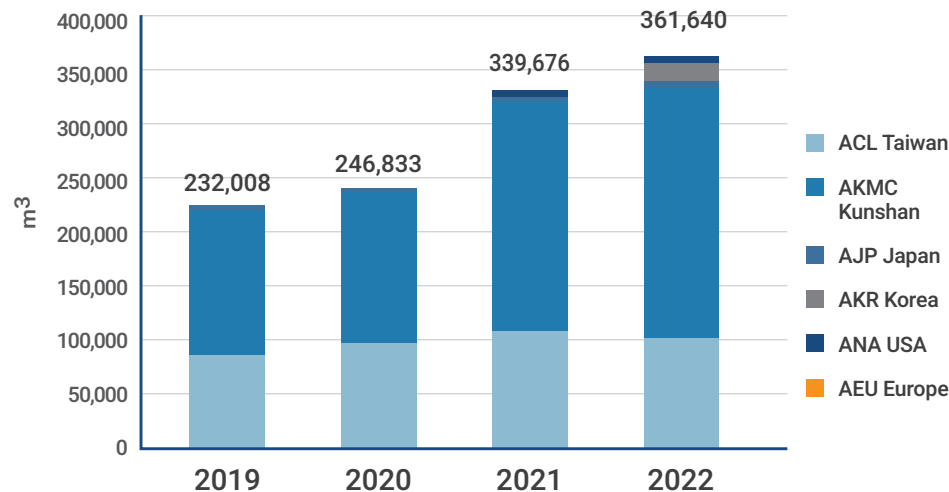
Advantech has successively implemented water-saving improvement plans in recent years. In Taiwan, water-saving solutions such as rainwater recycling and reuse are mainly used for domestic water, intelligent irrigation water saving, and intelligent air-conditioning cooling water and chilled water system monitoring and control. In 2022, the water consumption was saved for about 9,800 tons of water compared with 2021. The Kunshan factory area has installed water meters in the production workshops of

each factory and conducted water metering management. This distinguishes water used for Phase 1, Phase 2, Phase 3, 4, and 5, dormitories, kitchens, and equipment, analyzing reasonable water consumption. In addition, water quality has been improved in the manufacturing process, and a total of 6,900 tons of water was saved in 2022. The main water-saving measures in the US factory are the installation of low-flow toilets and faucets, and leak detection and maintenance programs are carried out on a regular basis.

In the future, more improvement plans will be planned to save water resources.

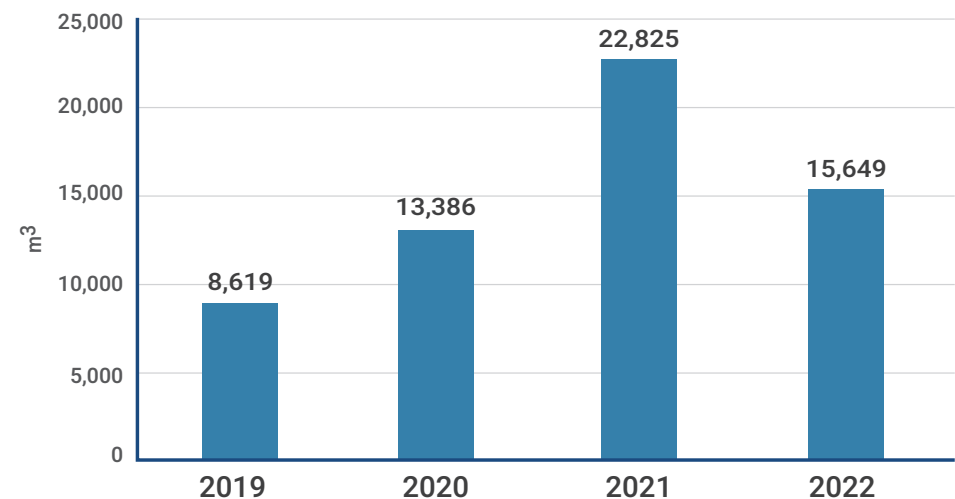
Except for Kunshan, China, which contains industrial wastewater discharge, Advantech's other factories do not discharge industrial wastewater. The amount of water discharged by the Kunshan factory in the past four years is shown in Figure 4.4.2. The Kunshan factory has been introduced reclaimed water reuse and overflow water reuse plans since 2022. The waste water in the process is recycled and reused to reduce the discharge of waste water. As a result, waste water consumption was reduced by 31% compared to 2021.

Figure 4.4.1 Water Consumption among Advantech's Main Global Operations and Production Factories in Recent Years



*Note: No statistics on water consumption in 2019, 2020, and 2021 for Korea; No statistics on water consumption in 2019 and 2020 for the United States.

Figure 4.4.2 Advantech's global industrial wastewater discharge volume in major operating locations and production plants in recent years



*Note: Only the factory in Kunshan, China, contains industrial wastewater discharged among Advantech's main operations and production factories.

Waste Management and Resource Recovery Management

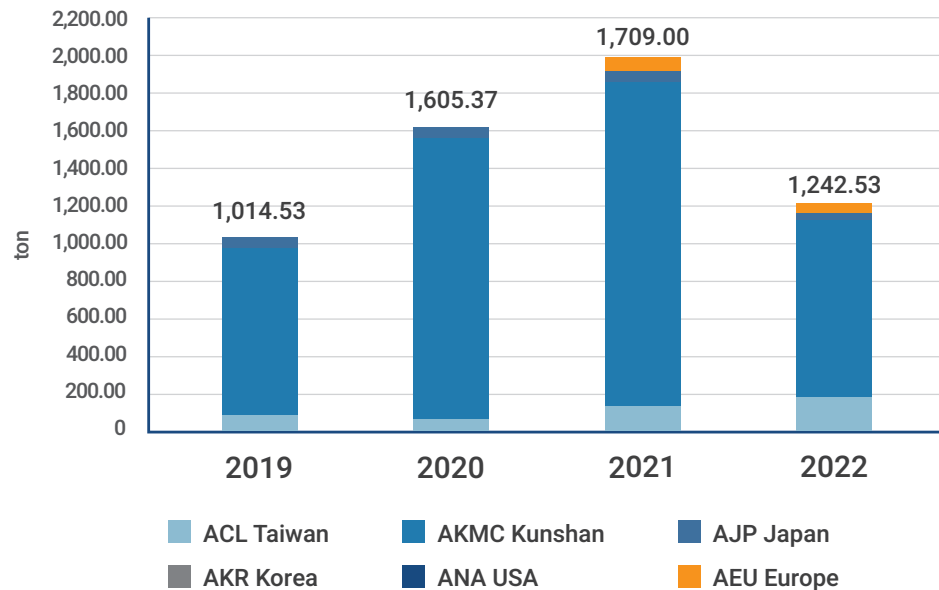
Zero waste is the ultimate goal of Advantech's waste management. We take total waste reduction and waste recycling as a strategy in addition to reducing waste output and achieving waste reduction through source management measures such as reduction of raw materials. Advantech also actively promotes the recycling of waste, such as reusing packaging materials to replace the existing end-of-pipe treatment model, and turning waste into useful resources. This not only truly achieves resource recycling, but also reduces energy consumption and waste disposal costs. Advantech devotes attention to its waste contractors every year. If a contractor breaches the contract or violates government regulations, it will undertake corresponding disposal or guidance or replacement. In 2022, Advantech did not have any major breach of contract or violation of laws by waste contractors. The Company's waste management model is shown in Table 4.4.3.

Table 4.4.3 Advantech Waste Management Model

Type of waste		Content description	Action taken	Ultimate disposal method
General household waste	Bottles	PET bottles/steel or aluminum cans, etc.	Dedicated recycling	Reuse
	Paper	Newspapers/magazines/photocopying paper/printing paper/cartons/boxes, etc.	Dedicated recycling	Reuse
	General-use glass	Beverage bottles, etc.	Dedicated recycling	Cyclical use
	General-use plastic	Beverage bottles/waste containers, etc.	Dedicated recycling	Cyclical use
	Other recyclable resources	Batteries/toner clips/lights, etc.	Headquarters/photocopier manufacturers	Cyclical use
	Food waste recycling	Compost food waste/pig food waste, etc.	Management Committee	Fertilizer use
	Domestic waste	Office household waste, etc.	Management Committee	Incineration (Taiwan) / Sanitary burial (Kunshan)
Business waste	General business waste	PCB scrap/waste electronic parts/waste sponges/waste tape, etc.	Dedicated recycling	Incineration/Landfill/Reuse
	Hazardous business waste	Waste tin slag/chemical waste liquid, etc.	Outsource the processing to a qualified removal processing company	Solidification and landfill/incineration/reuse

Regarding the final disposal weights of waste at Advantech's main global operations and production factories, because the weight of domestic waste is an approximate estimate of the contracted clearance, weight information for further disposal classifications is not yet available. Therefore, only information waste is disclosed. Please see this as shown in Table 4.4.3 and Figure 4.4.3.

Figure 4.4.3 Disposal Volume of Business Waste among Advantech's Main Global Operations and Production Factories in Recent Years



***Note:**

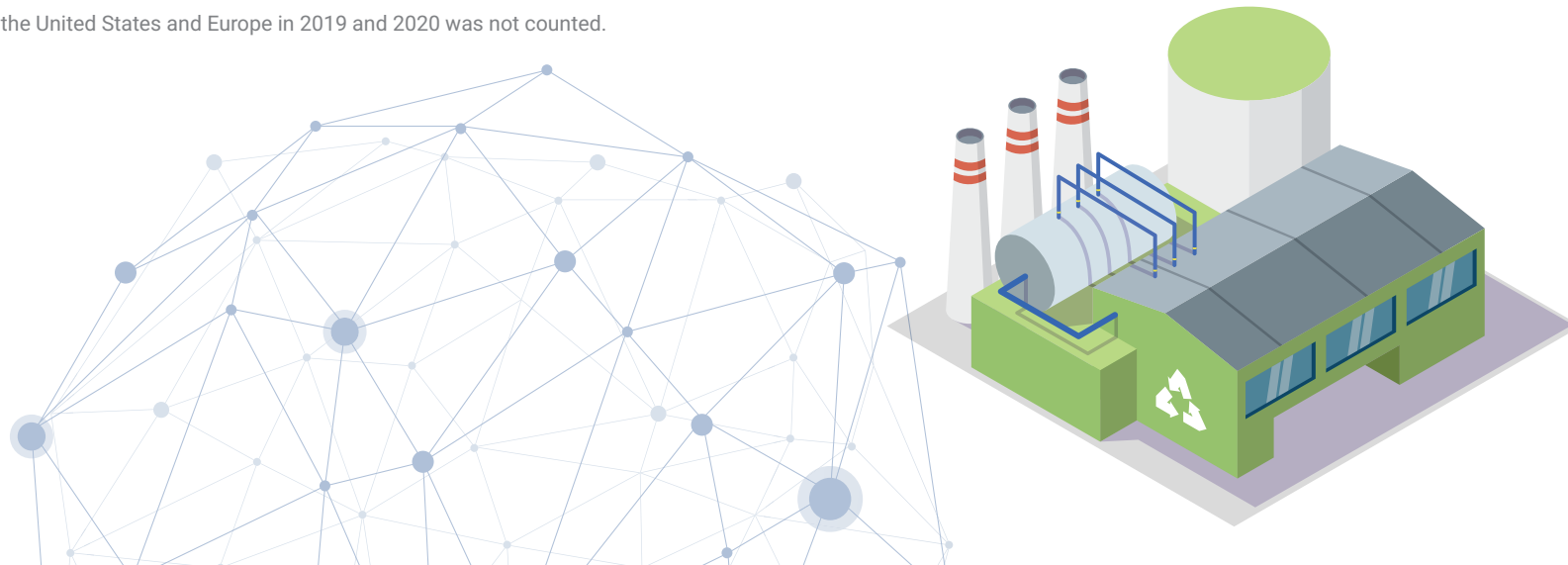
1. The source of statistics on the weight of waste in the Taiwan and Kunshan factories is the data reported by each factory to the competent authorities. The source of waste statistics in Japan, the United States, and European factories is the data of outsourced processing.
2. No statistics on the production volume from 2019 to 2022 for Korea.
3. The production volume for the United States and Europe in 2019 and 2020 was not counted.



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.



According to the statistics, the total waste disposal volume of Advantech's main operating bases and production regions in 2022 was 1,242.53 metric tons. Out of this, there was 1,000.48 metric tons (80.5%) of non-hazardous waste and 242.05 metric tons (19.5%) of hazardous waste. Please refer to see Table 4.4.4 and Figure 4.4.5 for waste disposal.

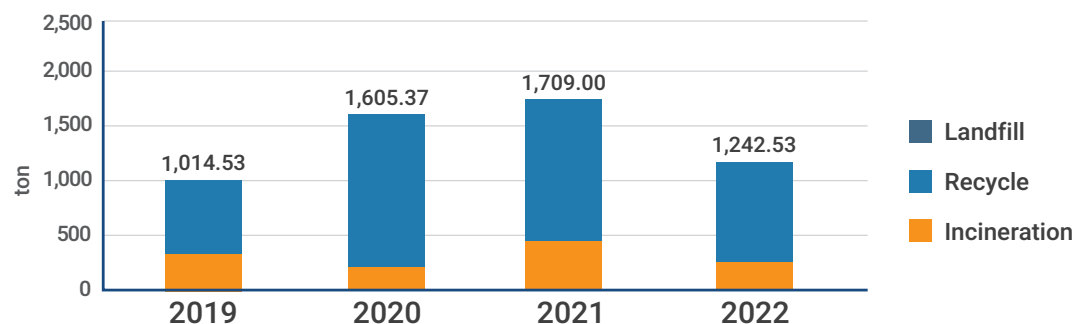
Table 4.4.4 Waste Disposal Methods of Advantech's Main Global Operations and Production Factories in 2022

	Incineration	Landfill	Recycle/Reuse
Hazardous business waste (metric tons)	211.17	3.60	27.28
Non-hazardous business waste (metric tons)	20.09	0	980.39

***Note:**

1. The source of statistics on the weight of waste in the Taiwan and Kunshan factories is the data reported by each factory to the competent authorities. The source of waste statistics in Japan, the United States, and European factories is the data of outsourced processing.
2. The production volume of Korea in 2022 was not counted.

Figure 4.4.5 Business Waste Disposal Status among Advantech's Main Global Operations and Production Factories in Recent Years



***Note:**

1. The source of statistics on the weight of waste in the Taiwan and Kunshan factories is the data reported by each factory to the competent authorities. The source of waste statistics in Japan, the United States, and European factories is the data of outsourced processing.
2. No statistics on the production volume from 2019 to 2022 for Korea.
3. The production volume for the United States and Europe in 2019 and 2020 was not counted.

Air Pollutant Management

Air pollutants have become one of the important environmental issues of global concern. In 2017, the International Agency for Research on Cancer (IARC) listed air pollutants as known primary human carcinogens. Volatile organic compounds (VOCs) are one of the most important portions of air pollutants that are harmful to ecology and health. Advantech also cares about the effectiveness of air pollution controls and about atmospheric air quality. Volatile organic compounds is one of the important sources of contribution to the formation of PM2.5 and so fine that it penetrates into the lungs very easily; thus, the impact of VOCs on human health cannot be ignored. Regarding air pollution data and information disclosures, Advantech has put together three key points:

- Advantech's production process does not generate ozone-depleting substances (ODS) and hence there are no ODS emissions.
- Advantech Taiwan and Advantech Japan mainly utilize assembly processes with low air pollution load, so there is no emission of nitrogen oxides, sulfur oxides, or volatile organic compounds (VOCs).
- Advantech's Kunshan (China) Campus utilizes liquid coating and powder coating processes, and the volatile organic compounds (VOCs) emitted are all in compliance with local regulations

Please refer to Table 4.4.5 for volatile organic compounds (VOCs) emitted by Advantech’s manufacturing factories in recent years. The substantial increase in VOCs in 2021 was due to increased production capacity.

Table 4.4.5 Volatile Organic Compounds (VOCs) Emitted by Advantech’s Main Global Operations and Production Factories in Recent Years (Unit: mt)

Annual	Factory	Taiwan ACL	Kunshan, China AKMC	Japan AJP	Korea AKR	USA ANA	Europe AEU
2022		-	27.57	-	-	-	-
2021		-	31.42	-	-	-	-
2020		-	8.94	-	-	-	-
2019		-	5.52	-	-	-	-

*Note: The scope covers Advantech’s main global operations and production factories, but only the Kunshan (China) factory produces VOCs.



In order to implement environmental reduction targets, Advantech Kunshan (China) has adopted effective control of volatile organic compounds (VOCs). This has been accomplished through online real-time continuous monitoring and outsourced monitoring and management of emissions, and improvements in equipment processing efficiency to reduce environmental emissions. Improvement projects have been implemented successively in recent years, for example, the transformation of process technology, changing the liquid baking varnish to powder baking varnish waste gas and improving the equipment treatment efficiency of the production line, effectively reducing the generation of energy, waste gas and VOCs. In 2022, the production of VOCs was reduced by 12% compared with 2021.

4.4.3 Biodiversity and Conservation of Forests

Advantech started to focus on the topics of biodiversity and conservation of forests in 2022. Moreover, we joined the Taiwan Nature Positive Initiative (TNPI) initiated by the Taiwan Business Council for Sustainable Development (BCSD-Taiwan). We take more active actions on this issue to increase Advantech’s corporate resilience. Moreover, Advantech’s IoT expertise is being applied to empower nature conservation.

Progress in 2022

In 2022, Advantech handled the following activities related to biodiversity and conservation of forests

Activity name	Activity theme	Achievement of participation
“International Coastal Cleanup Day” beach cleanups activities at Jinshan beach		A total of 55 employees participated, and more than 70 kilograms of marine waste were removed.
Ecological Conservation Action of the Guandu Wetlands		A total of 43 employees participated to learn wetland ecology, recycling knowledge and field operations, and lotus root pond conservation work was also carried out.

Advantech’s headquarter and major overseas business units have jointly promoted and implemented the green office plan. It emphasizes and encourages the paperless work, the use of double-sided printing of office paper, the paper recycling and reuse, and the promotion of office paper and household paper to choose FSC (Forest Stewardship Council) certified sustainable forest paper or other papers made through recycling.

Plans for 2023

AIoT for Biodiversity

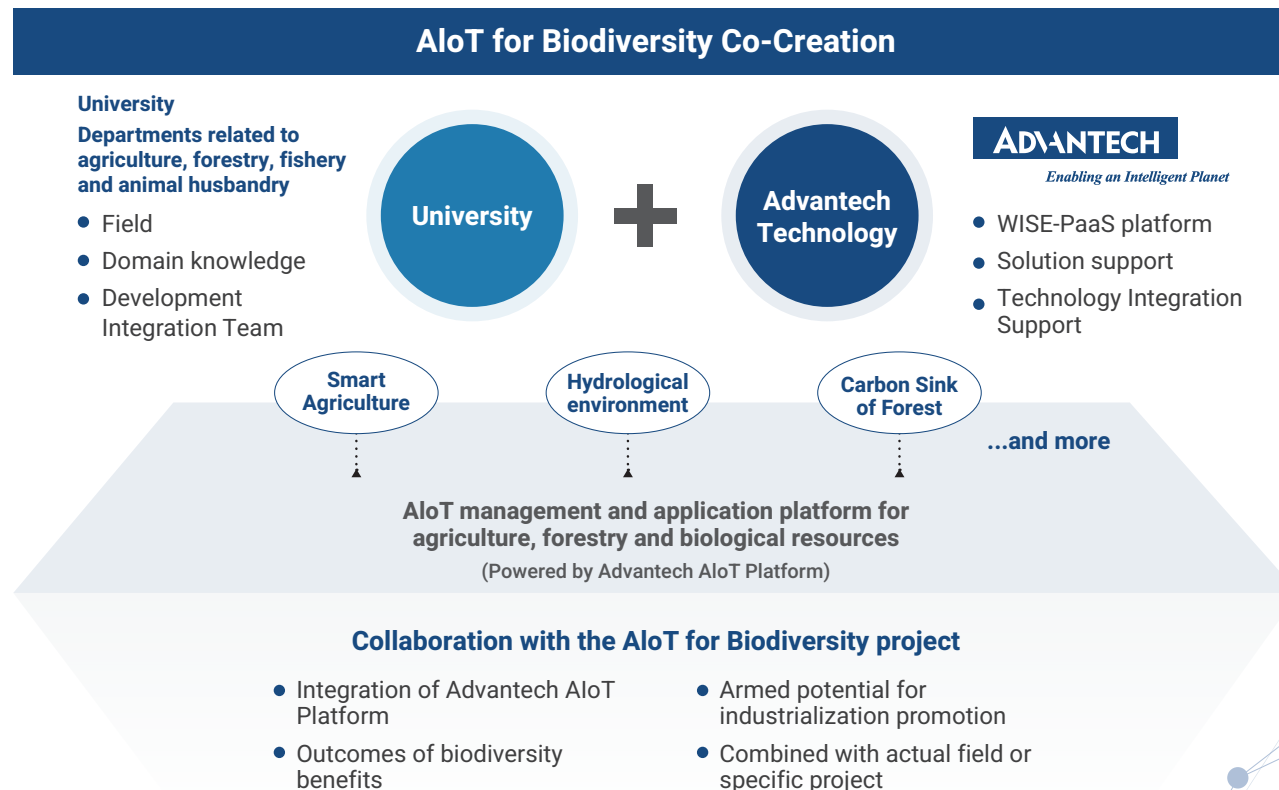
For 2023, Advantech has drawn up plans related to biodiversity and conservation of forests as follows: In 2023, it is estimated that NT\$3 million will be invested in co-creating AIoT for Biodiversity innovative solutions in the form of industry-university cooperation. One of the main axes of the project will be real-time monitoring of biodiversity and identification of species assisted by artificial intelligence. The AIoT platform is used to integrate technologies such as image and audio recognition. Databases of herbivores and birds of the forest are created for specific fields. There are also observation of the impact of human activities (newly planted forest roads and tourist activities) on it. Under the long-term large-scale introduction, this AIoT platform and data will help the Forestry Administration to grasp the ecosystem and changes of forest land. AIoT observation data is applied to plan and make decisions that minimize ecological impact. We apply our own core competence - the energy of the AIoT platform, and jointly develop innovative solutions with external experts and partners to establish a demonstration field. The biodiversity benefits of this plan have been verified in the field in the short term, and it is expected to be replicated and promoted in the industry in the future.

Coastal Forest Restoration

In cooperation with Tse-Xin Organic Agriculture Foundation, we adopted 102 trees in the afforestation site in Shalun, Taoyuan, and maintained them for three consecutive years. The damage caused by the strong northeast monsoon, flying sand, sea tide, and salinity to the vegetation in this area has been slowed down through the afforestation of the first-line coastal forests. In this way, the coastline can be protected and intact habitats for native organisms are provided.

Wetland Conservation

In cooperation with Guandu Natural Park, 5 hectares of paddy fields and wetlands in the Guandu Plain were adopted. The environment and biodiversity are maintained through the cleaning and dredging of irrigation and drainage ditches, the waterways are guaranteed to be unobstructed, siltation is reduced, flood water storage space is provided, and the pressure of wetland terrestrialization is reduced.



Please refer to the full text of the official announcement for Commitment related to Advantech Biodiversity and No Deforestation.

[Biodiversity Commitment](#)

[No Deforestation Commitment](#)

5

Employees Relationship and Cultivation of Industrial Talents

- 5.1 Industry Talent Cultivation and Development
- 5.2 Employees Communication and Benefits
- 5.3 Employer-employee Relationship and Diverse and Inclusive Workplaces
- 5.4 Human Rights Protection
- 5.5 Occupational Health & Safety
- 5.6 Appendix: Employee Structure



5.1 Industry Talent Cultivation and Development

5.1.1 Talent Attraction and Retention

Talent Attraction

Under the challenges of the post-pandemic era and the transformation of talents from the new generation, Advantech has gradually adjusted and developed diverse and flexible recruitment methods to cope with changes in the talent market. We take "Right People on the Bus" as the core concept of recruiting talents, and emphasize the trait of "Altruism". We adopt the strategy of "we first find the right person and then decide what he or she should do", and let the right key talents work with Advantech to create a vision together. Also, professionals who possess innovative potential across a range of fields and functions by means of diversified recruitment channels and flexible recruitment projects are attracted to join the Advantech family. Advantech's goal is to attract, cultivate and retain altruistic and enthusiastic talents by providing outstanding talents with unlimited development space and diverse possibilities.

Advantech Featured Recruitment Program - Elite Series

With the core idea of "Right People on the Bus," Advantech utilizes the Elite Program to foster a deeper mutual understanding between the company and talented individuals. The Elite Program aims to identify critical talents (A Talents) and offers tailored recruitment activities based on different talent backgrounds. These activities range from industry-academic internships and entry-level positions to experienced industry professionals. Through a diverse range of Elite Program recruitment activities, Advantech invites targeted key talents to join the company.

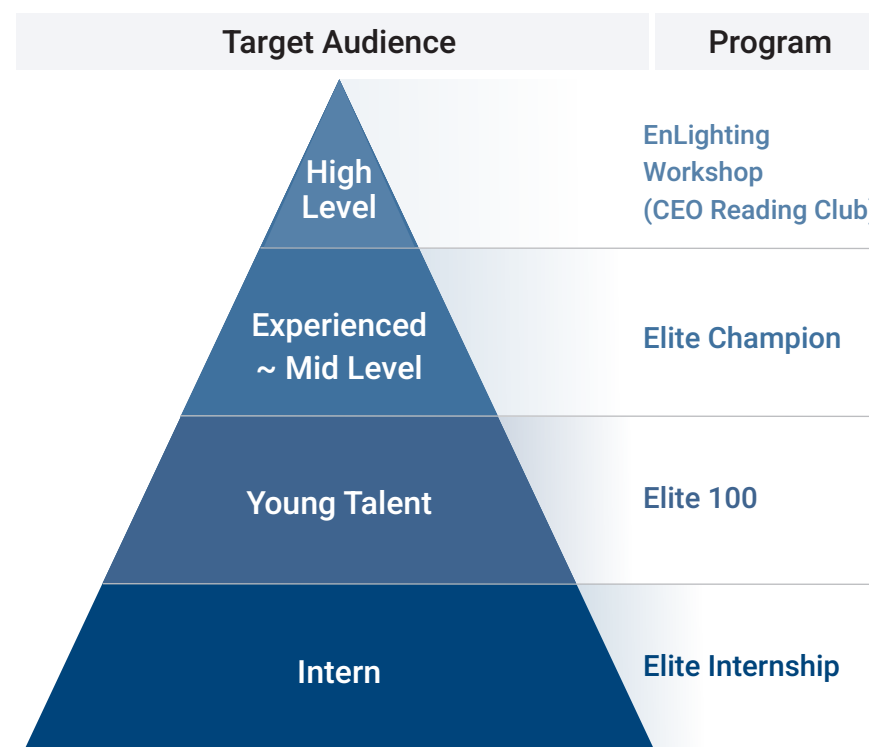
Elite program

- Elite Champion - Recruiting high-potential talents for more than 3 years
- Elite100 - Reserve young talents with work experience of under 3 years
- Elite Internship - Internship for third-year university students and above as well as graduate students
- EnLighting Workshop - Connect with high-level strategic talents

Results of Elite Series Recruitment Campaigns

Results of Elite Series Recruitment Program (data of headquarters only)	2021	2022	2023	2024	2025
	Actual	Actual	Target	Target	Target
Elite Champion	22%	13%	20%	20%	20%
Elite 100	10%	8%	10%	10%	10%
Elite Internship	17%	22%	25%	25%	25%
Overall Results of Elite Activities	16%	17%	20%	20%	20%

Figure 5.1.1 Elite program



Employee Referrals

By virtue of the high recognition enjoyed by Advantech's industrial development and corporate culture among current employees, experts and talented individuals from a variety of fields can be spontaneously invited to join Advantech's open development platform. The talent recruitment strategy improvement plan encounters several challenges, including the post-pandemic era, the evolving preferences of the new generation of talents, and the difficulties in recruitment. Analysis of recruits in the pipeline and their subsequent performance reveals that candidates recommended by internal employees tend to exhibit more excellent stability compared to other recruitment channels. Consequently, an enhanced version of the internal employee recommendation reward mechanism was introduced in 2022. In that year, 28% of new hires joined Advantech through internal recommendations, reflecting a 24% growth rate compared to 2021.

New Employees

2022 New Employees

Region	Item	Number and percentage (% of male)		Number and percentage (% of female)		Total number of new employees	Total number of Region Employees	Region New Employee Ratio(%)	New Employee Ratio(%)
		Number	Percentage	Number	Percentage				
Taiwan	Below 30 years	134	19%	176	25%	713	3488	20%	19%
	31 - 49 years old	190	27%	199	28%				
	50 years old and over	9	1%	5	1%				
China	Below 30 years	178	27%	140	21%	669	3718	18%	
	31 - 49 years old	171	26%	173	26%				
	50 years old and over	2	0%	5	1%				
Japan	Below 30 years	5	22%	1	4%	23	231	10%	
	31 - 49 years old	10	43%	2	9%				
	50 years old and over	5	22%	0	0%				
Korea	Below 30 years	17	36%	13	28%	47	128	37%	
	31 - 49 years old	10	21%	5	11%				
	50 years old and over	2	4%	0	0%				
Europe	Below 30 years	20	18%	12	11%	113	490	23%	
	31 - 49 years old	41	36%	28	25%				
	50 years old and over	10	9%	2	2%				
USA	Below 30 years	25	22%	13	12%	105	512	21%	
	31 - 49 years old	31	27%	22	19%				
	50 years old and over	12	11%	2	2%				

* **Note:** New employee ratio by region = Number of new employees in the region in the current year / total number of employees in the region; Overall new employee ratio = Number of new employees in the current year / total number of employees.

Ratio of Internal Employee Referrals

Ratio of Employee Referrals (data of headquarters only)	2021	2022	2023	2024	2025
	Actual	Actual	Target	Target	Target
Direct employees	NA	22%	25%	28%	30%
Indirect employee	24%	34%	35%	35%	35%
All employees	24%	28%	30%	30%	30%

* **Note:** Ratio of Internal Employee Referrals = Number of new employees recommended by internal employees / total number of new employees.

New Recruits in the Past Four Years

Region	2019		2020		2021		2022		
	New Recruits	Proportion of New Hires	New Recruits	Proportion of New Hires	New Recruits	Proportion of New Hires	New Recruits	Total number of employees of regions	Proportion of New Hires
Taiwan	412	13%	383	12%	487	15%	713	3488	20%
China	826	25%	549	17%	1010	28%	669	3718	18%
Japan	32	14%	26	11%	14	6%	23	231	10%
Korea	21	21%	14	13%	44	37%	47	128	37%
Europe	91	20%	45	12%	63	17%	113	490	23%
USA	-	-	-	-	-	-	105	512	21%
Total of Six Major Regions	1382	19%	1017	14%	1618	21%	1670	8567	19%

Average Recruiting Cost per New Employee

Region	2019		2020		2021		2022	
	Local Currency	NTD	Local Currency	NTD	Local Currency	NTD	Local Currency	NTD
Taiwan	1450	1450	971	971	1126	1126	1912	1912
China	333	1483	650	2900	676	3013	838	3736
Japan	231469	53238	380231	87453	309643	71218	1012304	232830
Korea	710957	16352	433547	9972	614898	14143	346618	7972
Europe	3170	104610	3556	117348	4165	137445	2725	89925
USA	-	-	-	-	-	-	1257	37710
Total average cost (NTD)	9778		9458		8572		13568	

***Note:**

- Unit: NTD/person, Formula: Average Recruiting Cost per New Employee = Annual recruitment expense / number of new recruits
- Recruitment fees include advertising, recruitment bonuses, and recruitment activities.

Talent Retention

Advantech products are available in small quantities and are diverse, emphasizing the industrial characteristics of innovation and flexibility. In addition, we have global operations to provide cross-field transfers, cross-border cooperation, and overseas work opportunities. Therefore, our employees are provided with multiple choices in their career path. Also, mechanisms such as promotion, performance appraisal, and employee development plans are continuously optimized to provide a stage for career development. Advantech launches a comprehensive of education and training courses to cultivate and cultivate outstanding talents. Also, we participate in market salary surveys to provide market competitive salaries. The selection of outstanding employees is held every year to affirm the outstanding performance of employees and enhance their sense of belonging. Moreover, Advantech is also committed to supporting employees' lives. Our colleagues are encouraged to learn with innovation, experience life, and give back to the society after working (please refer to Section 5.2 Employee Communication and Benefits) through Advantech's Happy Life ABLE Club. Employees are supported to meet the needs of long-term development and growth through rich and diverse programs.

Diversified career development opportunities

● Multinational Cooperation/Overseas Job Opportunities

Advantech's operations around the world can support the international development of our employees, and encourage our employees to post job vacancies at locations around the world. In addition, our employees at the headquarters can also cooperate with colleagues from different countries around the world to connect with international standards. Employees are provided with opportunities to broaden their international horizons and accumulate international perspectives in terms of working environment and development. Besides colliding with the perspectives of international teams, talents who embrace diversity and open their minds are cultivated to become more creative problem solvers and value creators. Advantech also encourages the conduct of cross-border projects so that participating employees can gain valuable experience.

● Internal Transfers – My Career +

Advantech supports the long-term career development of our colleagues internally within the Company. Senior management leads and shapes a corporate culture that encourages internal transfers. In May 2022, an upgraded version of the internal transfer mechanism, "My Career +," was launched. The pipeline for our employees' functional growth and expansion is provided with a more open and transparent mechanism. Our employees are helped to expand their personal horizons and enhance diverse experiences to be cultivated as cross-departmental talents. My Career+ makes the transition process smoother. In addition to promoting the flow of internal talents and cultivating comprehensively excellent talents, it further achieves the goal of cherishing and retaining talents.

Number of Employee Transfers and Promotion

Transfer or Promotion	2019			2020			2021			2022		
	Number of Employee Transfers and Promotion	Total Number of Indirect employee	Ratio (%)	Number of Employee Transfers and Promotion	Total Number of Indirect employee	Ratio (%)	Number of Employee Transfers and Promotion	Total Number of Indirect employee	Ratio (%)	Number of Employee Transfers and Promotion	Total Number of Indirect employee	Ratio (%)
Taiwan	344	2262	15%	412	2276	18%	296	2282	13%	824	3488	24%
China	317	1602	20%	389	1648	24%	410	1675	24%	361	1784	20%
Japan	22	229	10%	29	238	12%	12	231	5%	13	231	6%
Korea	7	83	8%	18	86	21%	22	95	23%	5	99	5%
USA	-	-	-	-	-	-	-	-	-	58	512	11%
Total	690	4176	17%	848	4248	20%	740	4283	17%	1261	6114	21%

*Note: Unit: Person, Formula: Number of Individuals Transferred and Promoted in the Year / Number of Employees in the Current Year.

Performance Incentive System

Advantech participates in market salary surveys to provide employees competitive compensation aligned with the market standards. The compensation framework includes year-end bonuses, individual performance bonuses, team profit-sharing bonuses, sales performance bonuses, and rewards such as stock options or cash dividends for outstanding talents. By developing diverse reward mechanisms, Advantech aims to motivate employees from different groups, attract, cultivate, and retain talents, and effectively reward individuals who consistently contribute to creating value alongside Advantech. Advantech regularly reviews salary and reward indicators across regions, job categories, and worldwide positions to ensure a diverse and equitable work environment.

Gender Pay Gap Analysis

Advantech's Compensation Policy is based on employees' job responsibilities. It complies with local labor laws and regulations, such as the "Labor Standards Act of the R.O.C," "Gender Equality in Employment Act," and "Employment Service Act." The company ensures that there is an equal gender pay gap. The table below shows the gender pay gap at Advantech for each job level, with the average male wage set the ratio as one as the benchmark for comparison.

1. In the headquarters (Taiwan), the gender pay gap is small, with female executives earning higher wages than their male counterparts.
2. Generally, the executive level has a higher representation of males in revenue-generating functions. Since performance bonuses are factored into total compensation, the average total compensation for males is higher than that of females.
3. Within the category of general employees (indirect employees), there is a higher proportion of males in R&D engineering roles, while females predominantly hold administrative support roles. This concentration of gender in specific job roles contributes to a slightly more significant gender pay gap.
4. In Europe, the gender pay gap primarily arises from the diverse composition of employees from different countries and is not primarily caused by gender disparities.

Region	Taiwan		China		Kunshan factory, China		Japan		Korea		Europe		Average of Six Major Regions	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Executive level (base salary only)	1.02	1	1	1	-	-	1.01	1	0.82	1	0.61	1	0.90	1
Executive level (base salary + other cash incentives)	1.07	1	0.89	1	-	-	0.96	1	0.84	1	0.52	1	0.85	1
Management level (base salary only)	0.94	1	1.01	1	0.93	1	-	1	0.88	1	0.74	1	0.84	1
Management level (base salary + other cash incentives)	0.98	1	0.87	1	0.93	1	-	1	0.85	1	0.69	1	0.84	1
General employees (base salary)	0.88	1	0.73	1	0.92	1	0.8	1	0.92	1	0.81	1	0.83	1
General employees (base salary + bonus/ allowance)	0.87	1	0.92	1	0.92	1	0.77	1	0.9	1	0.75	1	0.83	1
Direct labor employees (base salary)	0.93	1	-	1	0.88	1	0.86	1	1.33	1	0.94	1	0.85	1
Direct labor employees (base salary + bonus/ allowance)	0.91	1	-	1	0.88	1	0.75	1	1.33	1	0.97	1	0.83	1

- *Note:**
1. Advantech has calibrated the Global Job Band in 2022. Job grades are graded globally from A to H. management level (manager level) are grade E, while senior management (including director and above) are grade F (inclusive) or above.
 2. Due to the Privacy Act, salary information in the United States cannot be provided. Therefore, the average pay difference between men and women does not include the United States.
 3. Due to the different composition of employees and different salary structure, the Kunshan factory in China is listed separately.

Improvement Plans

Advantech's recruitment strategy is adjusted according to the changing market. Also, Advantech continues to optimize various mechanisms, including promotion, internal transfer, performance evaluation, employee development, education and training, commendation of outstanding employees, salary and benefits, employee care, etc. More agile and fast-response digital tools are required to cope with the rapid changes in the talent market and industry. In addition, the importance and urgency of establishing a complete global talent pool has been gradually increased with the continuous expansion of global operations. We focus on investing in the digital transformation of human resources. In September 2022, the introduction of the global human capital management system (Human Capital Management) was launched, with a view to realizing Advantech's global talent visualization needs in 2024 Q4.

Employee Turnover Rate

2022 Turnover Rate

Region	Classification	Item	Number and Percentage of Turnover (% of male) (excluding involuntary resignation)		Number and Percentage of Turnover (% of female) (excluding involuntary resignation)		Total Number of Turnover	Total Number of Employees	Voluntary Turnover Rate by Region (%)	Overall Turnover Rate (%)
Taiwan	Employee age	Below 30 years	111	3.18%	68	1.95%	585	3488	17%	22%
		31 - 49 years old	211	6.05%	165	4.73%				
		50 years old and over	12	0.34%	18	0.52%				
	Job ranking	Senior executive	4	0.11%	2	0.06%	585			
		Management level supervisor	20	0.57%	4	0.11%				
China	Employee age	Below 30 years	291	7.83%	160	4.30%	1101	3718	30%	
		31 - 49 years old	394	10.60%	247	6.64%				
		50 years old and over	9	0.24%	0	0.00%				
	Job ranking	Senior executive	0	0.00%	0	0.00%	1101			
		Management level supervisor	0	0.00%	1	0.03%				
General staff	694	18.67%	406	10.92%						
Japan	Employee age	Below 30 years	0	0.00%	2	0.87%	25	231	11%	
		31 - 49 years old	3	1.30%	9	3.90%				
		50 years old and over	0	0.00%	11	4.76%				
	Job ranking	Senior executive	0	0.00%	1	0.43%	25			
		Management level supervisor	0	0.00%	0	0.00%				
General staff	3	1.30%	21	9.09%						
Korea	Employee age	Below 30 years	5	3.91%	2	1.56%	18	128	14%	
		31 - 49 years old	5	3.91%	5	3.91%				
		50 years old and over	1	0.78%	0	0.00%				
	Job ranking	Senior executive	0	0.00%	0	0.00%	18			
		Management level supervisor	3	2.34%	2	1.56%				
General staff	8	6.25%	5	3.91%						
Europe	Employee age	Below 30 years	10	2.00%	7	1.40%	87	490	18%	
		31 - 49 years old	30	6.10%	25	5.10%				
		50 years old and over	11	2.20%	4	0.80%				
	Job ranking	Senior executive	1	0.20%	0	0.00%	87			
		Management level supervisor	18	3.70%	13	2.60%				
General staff	38	7.70%	17	3.50%						
USA	Employee age	Below 30 years	15	2.00%	11	1.40%	106	512	21%	
		31 - 49 years old	33	6.10%	22	5.10%				
		50 years old and over	19	2.20%	6	0.80%				
	Job ranking	Senior executive	4	0.20%	1	0.00%	106			
		Management level supervisor	4	3.70%	1	2.60%				
General staff	59	7.70%	37	3.50%						

*Note:
 1. 1. Advantech has calibrated the Global Job Band in 2022. Job grades are graded globally from A to H. management level (manager level) are grade E, while senior management (including director and above) are grade F (inclusive) or above.
 2. Number of turnover in region / total number of employees in region (differentiated by age and seniority)

Employee Turnover Rate in the past four years

Region	2019		2020		2021		2022	
	Total Number of Resigned Employees (excluding involuntary turnover)	Voluntary Turnover Rate	Total Number of Resigned Employees (excluding involuntary turnover)	Voluntary Turnover Rate	Total Number of Resigned Employees (excluding involuntary turnover)	Voluntary Turnover Rate	Total Number of Resigned Employees (excluding involuntary turnover)	Voluntary Turnover Rate
Taiwan	435	13.80%	405	12.80%	434	13.60%	585	16.77%
China	155	14.10%	127	11.30%	1597	43.60%	1101	29.61%
Japan	31	14.40%	15	6.60%	21	8.90%	25	10.82%
Korea	8	7.80%	3	2.90%	2	1.70%	18	14.06%
Europe	NA						87	18.00%
USA	NA						106	20.70%
Total	629	13.80%	550	11.90%	2054	26.80%	1922	22.43%

*Note: Turnover rate (including involuntary turnover) is an estimate. It was 14.5% in 2019, 12.5% in 2020, 28.2% in 2021, and 23.6% in 2022.

5.1.2 Development Program

Talent is the key dynamic of enterprise growth. Advantech regards employee cultivation and development as an important development project. We are committed to creating a working environment which can stimulate the enthusiasm of colleagues, develop the potential of individuals and teams to encourage employees to actively explore their potential and create an environment for continuous self-learning. The physical training program includes LEAP Camp, Elite LEAP Workout, reading club, and other physical training and development activities. In addition, Advantech continues to improve its comprehensive digital learning platform "Advantech Academy". In order to strive for excellence, the courses on the digital platform are diversified. It includes training courses for various levels of functions, inheritance and sharing of business philosophy, and training for middle and high-level management personnel. Advantech's staff create exclusive learning lists to be able to study anytime and anywhere according to individual needs.

2022 Employee training List

Item	Content overview	Participants	Coverage rate
Talent Radar Review(Global 50)	Annual development plans are established for executives with high development potential in the Company. HR regularly tracks the status and effectiveness of its implementation.	Executives above the manager level	100% coverage of high-potential executives above the manager level
Elite Mentoring Program	Advantech's first-level executives and mid-to-high-level potential talent are matched via the mentoring system to help mid- and high-level talent improve their management and leadership skills and accelerate their career development. The innovative thinking of talents is stimulated through half-year interdisciplinary and inter-unit mentor-mentee exchanges and interaction.	Executives above the manager level	28% coverage of high-potential executives above the manager level
e-Learning Advantech Institute Online Learning Platform	Global employees can learn about Advantech's business philosophy and corporate culture through online learning. Meanwhile, they may learn according to their own needs. The latest study information is also available. Therefore, learning is not limited by region and time, and colleagues from all over the world can learn and communicate with each other simultaneously.	General employees (indirect employees)	75.10% of global indirect employees are covered
LEAP Workout/DX project	Under the Executive Coach system, senior executives are directly involved in the company's development and highly relevant cross-departmental issues. It has become an important project for Advantech to raise talents and put it into practice. In 2022, we focused more on issues in the field of digital transformation. Talents are accelerated and promoted through customized personal development plans. Therefore, the practice of promote within has assisted Advantech in its growth in digital transformation. Also, we look forward to promoting high potential executives to the next management position.	High-potential executives above the manager level	18.2% coverage of high-potential executives above the manager level

Item	Content overview	Participants	Coverage rate
ART(Advantech Reading Together) 100 Club	In 2022, the Commonwealth Leader Campus was introduced. Executives interested in using the platform are invited to join the learning program. A physical reading club was held every quarter. Reading sessions are held prior to assigned reading units. In the reading club, participants and interdepartmental supervisors exchanged and shared experiences. After the reading session, participants can apply the discussion to management work.	Colleagues above executive level	Covering 13.1% of the users of Commonwealth Leader Campus (CWLC)
Education training for Code of Integrity Management	Advantech's concept of integrity management and relevant regulations are provided to employees in the form of online courses.	General employees (indirect employees)	Online courses cover 96.8% of global indirect employees (excluding direct employees)
Educational training for occupational safety and health	Employees regularly take online courses for training every year, including the concept of occupational safety and health, rules and knowledge of safety and health work, emergency response, common sense and drills of firefighting and first aid, etc.	All employees (direct and indirect employees)	Covering 99.8% of employees in Taiwan (including direct employees and indirect employees)
Information Security Advocacy Course	Employees regularly take online courses for training every year, including common information security risks and cases, basic principles of information security, information security regulations that employees should abide by, and other information security-related content.	General employees (indirect employees)	Covering 99.8% of indirect employees in Taiwan (excluding direct employees)

Global 50

In order to continuously develop high-potential talents, Advantech's HR selects 50 high-potential talents from various business units around the world through the talent nine-square grid and related inventory mechanisms. Every year, high-potential talents are assisted to improve their personal capabilities through IDP (Individual Development Plan), Elite LEAP Workout, Mentoring Program and other special projects. In this way, career development is accelerated to strengthen Advantech's corporate identity.

Elite LEAP Workout

Outstanding high-potential talents are assigned to participate in cross-functional, cross-departmental projects that are highly relevant to company strategy with the support of senior executives and mentors. The Elite LEAP Workout program accelerates the individual performance of high potentials and supports the competencies these high potentials need to advance to their positions. Meanwhile, the concept of promotion within the Company was implemented to nurture the next generation of leaders who will lead Advantech in the future. A total of 11 high-potential talents participated in 2022, and a total of 4 individuals were promoted with a promotion rate of 36.4% (4/11 = 36.36%). We expect to expand the capabilities of high-potential senior talents through the LEAP Workout program, so that the growth of enterprises is further promoted. The improvement of the Company's management level includes the development of new products and applications to promote the deep cultivation of vertical industries, the evolution of sales and service models, the innovation of R&D processes, and the improvement of internal digital system functions.

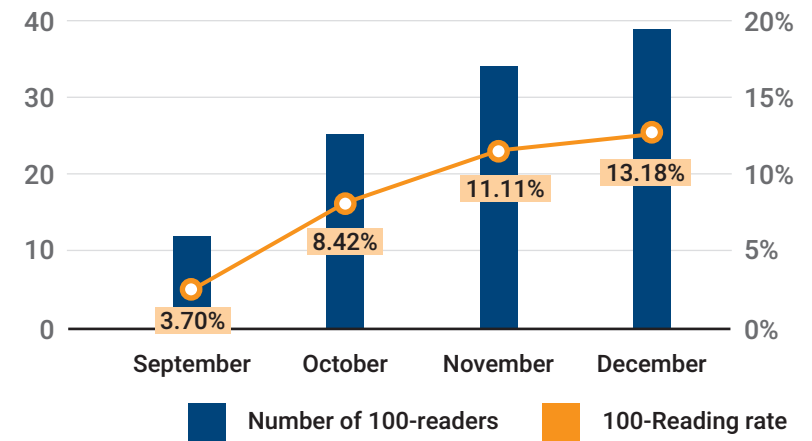
Mentoring Program

Advantech's Mentoring Program is one of the important talent development strategies. Directors and senior executives are invited to serve as mentors. Also, high potential talents are selected from Global 50. Through the matching process, talents are assisted to build self-confidence, improve job satisfaction, loyalty and management leadership, and their career development is therefore accelerated. The innovative thinking of talents is stimulated through half-year interdisciplinary and inter-unit mentor-student exchanges and interaction. In 2022, a total of 14 high-potential talents participated in the project.

Advantech Read Together 100 plan (ART-100 Plan)

Advantech hopes to strengthen the eight core competencies (digital competence, strategic competence, leadership competence, management competence, international vision, market competence, management competence, and innovation competence) of grassroots and mid-level executives. Therefore, the Commonwealth Leader Campus was officially introduced in September 2022. The platform provides more than 2,000 learning units, including articles, audio files, videos and other content. It also provides website and app versions, so that supervisors are not limited by time and place, and can improve their abilities anytime and anywhere. Advantech launched a one-year ART-100 Plan to encourage supervisors to read. We expect our supervisors to complete the goal of reading 100 articles within a year by making full use of this platform. By the end of December, more than 40 supervisors had completed the goal of ART-100 Plan. The number of active users is 238 individuals (2.78% of FTEs). In 2023, supervisors are expected to regard ART-100 Plan as a goal, and then improve the management capabilities of Advantech executive-level colleagues through different activities.

Figure 5.1.2 100-reading achievement indicators



Average training hours for employees

Region	Gender	Total hours of e-Learning training	Total number of employees*	Average number of e-Learning training hours per employee
Taiwan	Male	150176	1942	77.3
	Female	100300	1546	64.9
	Total	250475	3488	71.8
China	Male	82015	2063	39.8
	Female	67318	1655	40.7
	Total	149333	3718	40.2
Japan	Male	1749	160	10.9
	Female	431	71	6.1
	Total	2180	231	9.4
Korea	Male	1540	91	16.9
	Female	1111	37	30.0
	Total	2651	128	20.7

Region	Gender	Total hours of e-Learning training	Total number of employees*	Average number of e-Learning training hours per employee
Europe	Male	4587	325	14.1
	Female	1448	165	8.8
	Total	6035	490	12.3
USA	Male	2090	331	6.3
	Female	885	181	4.9
	Total	2975	512	5.8
Total	Male	242157	4912	49.3
	Female	171493	3655	46.9
	Total	413649	8567	48.3
Data Coverage	Throughout the whole year of 2022, and covering more than 80% of employees in Advantech Headquarters (including headquarters business units, office units and Advantech Taiwan), China, Japan, South Korea, Europe and North America, total training expenses were NT\$ 8,355,024; average training expense per person was NT\$ 975; total online training time amounted to 413,649 hours, and the average online training time per person was 48.3 hours.			

*Note: As of 2022/12/31, the total number of employees can be expressed in headcount or full-time equivalent (FTE).

Average Education and Training Hours by Job Category

Region	Duty	Total hours of e-Learning training	Total number of employees*	Average number of e-Learning training hours per employee
Taiwan	R&D employees	123300	1398	88.2
	Marketing business	22027	257	85.7
	Administrative employees	38101	362	105.3
	Manufacturing employees	67047	1471	45.6
	Total	250475	3488	71.8
China	R&D employees	8589	630	13.6
	Marketing business	6074	469	13.0
	Administrative employees	2367	439	5.4
	Manufacturing employees	132303	2180	60.7
	Total	149333	3718	40.2
Japan	R&D employees	919	10	91.9
	Marketing business	529	93	5.7
	Administrative employees	242	25	9.7
	Manufacturing employees	490	103	4.8
	Total	2180	231	9.4
Korea	R&D employees	356	5	71.2
	Marketing business	1014	50	20.3
	Administrative employees	849	30	28.3
	Manufacturing employees	432	43	10.0
	Total	2651	128	20.7

Region	Duty	Total hours of e-Learning training	Total number of employees*	Average number of e-Learning training hours per employee
Europe	R&D employees	1130	54	20.9
	Marketing business	2680	370	7.2
	Administrative employees	2225	66	33.7
	Manufacturing employees	0	0	0
	Total	6035	490	12.3
North America	R&D employees	900	119	7.6
	Marketing business	1174	135	8.7
	Administrative employees	638	141	4.5
	Manufacturing employees	263	117	2.2
	Total	2975	512	5.8
Total	R&D employees	135194	2216	61.0
	Marketing business	33498	1374	24.4
	Administrative employees	44422	1063	41.8
	Manufacturing employees	200535	3914	51.2
	Total	413649	8567	48.3
Data Coverage	Throughout the whole year of 2022, and covering more than 80% of employees in Advantech Headquarters (including headquarters business units, office units and Advantech Taiwan), China, Japan, South Korea, Europe and North America, total training expenses were NT\$ 8,355,024; average training expense per person was NT\$ 975; total online training time amounted to 413,649 hours, and the average online training time per person was 48.3 hours.			

*Note: As of 2022/12/31, the total number of employees can be expressed in headcount or full-time equivalent (FTE).

Average Education and Training Hours by age range

Region	Age	Total hours of e-Learning training	Total number of employees *	Average number of e-Learning training hours per employee
Taiwan	Below 30 years	48731	552	88.3
	31 - 49 years old	174790	2421	72.2
	50 years old and over	26955	515	52.3
	Total	250475	3488	71.8
China	Below 30 years	23469	740	31.7
	31 - 49 years old	121877	2886	42.2
	50 years old and over	3987	92	43.3
	Total	149333	3718	40.2
Japan	Below 30 years	337	16	21.1
	31 - 49 years old	506	108	4.7
	50 years old and over	1337	107	12.5
	Total	2180	231	9.4
Korea	Below 30 years	626	47	13.3
	31 - 49 years old	1493	65	23.0
	50 years old and over	532	16	33.3
	Total	2651	128	20.7

Region	Age	Total hours of e-Learning training	Total number of employees *	Average number of e-Learning training hours per employee
Europe	Below 30 years	1039	50	20.8
	31 - 49 years old	3288	308	10.7
	50 years old and over	1708	132	12.9
	Total	6035	490	12.3
North America	Below 30 years	1368	79	17.3
	31 - 49 years old	504	235	2.1
	50 years old and over	1103	198	5.6
	Total	2975	512	5.8
Total	Below 30 years	75570	1484	50.9
	31 - 49 years old	302457	6023	50.2
	50 years old and over	35622	1060	33.6
	Total	413649	8567	48.3
Data Coverage	Throughout the whole year of 2022, and covering more than 80% of employees in Advantech Headquarters (including headquarters business units, office units and Advantech Taiwan), China, Japan, South Korea, Europe and North America, total training expenses were NT\$ 8,355,024; average training expense per person was NT\$ 975; total online training time amounted to 413,649 hours, and the average online training time per person was 48.3 hours.			

*Note: As of 2022/12//31, the total number of employees can be expressed in headcount or full-time equivalent (FTE).

Improvement Plans

In order to further promote internal talent flow, the transfer, rotation, and secondment mechanisms will be optimized in 2023 to increase employees' career horizontal development opportunities and enhance their horizontal development experience for the sake of cultivating composite talent.

In 2022, the usage rates of our digital e-Learning The platform increased steadily. Moreover,) Advantech College is expected to be transformed to enhance the user experience, and the external learning management system (LMS) are evaluated and imported simultaneously to enhance the utilization rate of the digital learning platform in 2023.

5.2 Employee Communication and Benefits

5.2.1 Employee Relations

ABLE Club teams up with Advantech Beautiful LiFE to create an Altruistic Happy Enterprise

"Talent Invigoration" stands as Advantech's core value, and "Working & Learning Toward a Beautiful Life" fuels Advantech's growth momentum. Through Advantech's "ABLE Club", which combines employee relations ES&R, the Foundation, and the Welfare Committee, we encourage colleagues to pursue innovative learning opportunities, experience life, and contribute to society in their spare time. Through different aspects such as sports, LOHAS, health, art, education, public welfare, and so on, we hope to deepen the emotional communication between colleagues, their family members, and society, and thereby boost our team spirit! In addition, we also support colleagues from the workplace to society, caring for the community and promoting public welfare. Through sharing and mutual assistance, we can tangibly practice the concept of altruism and create a happy life together!

Employee Relations and Communication

Advantech has set up multiple two-way communication channels in order to maintain smooth and harmonious employee relations. In addition to disseminating information, we also immediately listen and respond to the voices of colleagues. Through our colleagues' suggestions, we improve and optimize employee service content and workplace harmony and thereby ensure employees' rights.

Means of employee communication

<p>1 Website</p>	<ul style="list-style-type: none"> Employee Zone: We have "Corporate News," "Office Bulletin," and "Regional News" sections to promptly announce and communicate important Company information with colleagues. The website also provides detailed listings of the Company's rules, regulations, and management measures for convenient employee reference. ABLE Club website: Set up eight thematic areas, covering employee support, Welfare Committee and Foundation activity information, club information, appointed stores, ABLE news and tidbits, serving as a comprehensive digital platform for the happy life of employees.
<p>2 Videos</p>	<p>We publish Executive Talk videos on internal platforms, featuring 5-10 minute presentations by senior executives in Chinese and English. Topics covered include annual strategy, finance, sustainability, innovation, and new market strategies. This enables effective and transparent communication of corporate strategy to Advantechers.</p>
<p>3 Email announcements</p>	<ul style="list-style-type: none"> HR: Important company information, courses, pay and leave related information ER Team: Benefits related to activities; issuance of weekly ABLE Club e-newsletter and monthly health reports

<p>4 In-person meetings</p>	<ul style="list-style-type: none"> Twice a year, we hold a Kick-Off Meeting for employees to announce the Company's development strategies and vision. This helps colleagues understand the Company's prospects and foster growth with Advantech. Each division holds internal communication meetings to discuss division direction, work progress, and knowledge exchange. This promotes smooth communication and interaction within the department.
<p>5 Domestic and overseas periodical publications</p>	<p>Edited and issued by the PR unit, content includes the vision of the Company's senior executives and focuses on thematic business examples, and so on.</p>
<p>6 Social Media</p>	<ul style="list-style-type: none"> ABLE events promotion, video and albums for activities highlights. LINE Community: We use this platform for event announcements, key information sharing, immediate support for colleagues, and communication of emergency contact information during the pandemic prevention period.
<p>7 Others</p>	<ul style="list-style-type: none"> Internal digital signage to convey spirit and informational announcements concerning the Company's culture In addition to learning courses on our e-Learning website, we also recorded many videos to convey the Company's core values and culture.

Employee complaints

Complaint channels: Complaint hotline, email, suggestion box (EZ) with HR department for different business groups; see 5.4.1 Reporting and Complaint Mechanisms for details.

Employee Care and Welfare

We prioritize the well-being of our employees and their families, recognizing that life extends beyond work. Therefore, we provide a range of benefits, including marriage, maternity, hospital, and bereavement condolence allowances, emergency relief funds, and festival and holiday benefits (Dragon Boat Festival, Mid-Autumn Festival, birthdays). Additionally, the Company offers insurance benefits in compliance with the law, including pensions and group insurance, to ensure the security of colleagues' work and personal lives. We also promote activities related to sports, LOHAS, health, art, education, and public welfare.

List of Benefits by Region

	Taiwan	China	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 	There is no employee group insurance (the government provides labor insurance), but health insurance benefits are provided	Group insurance is provided
Health benefits	<ul style="list-style-type: none"> • Annual employee health check • A subsidized health check for executives at the manager level or above every two years 	<ul style="list-style-type: none"> • Annual employee health check • AKMC: Employees at the assistant manager level and above are entitled to additional items for physical examination of health check 	Annual employee health check	Health check benefits that comply with local regulations and needs are provided to all employees to use according to the location of Advantech subsidiaries.
Marriage allowances	✓	✓	✓	✓
Childbirth allowances	✓	✓	✓	✓
Hospital condolence allowances	✓	✓	✓	✓
Bereavement condolence subsidies	✓	✓	✓	✓
Emergency relief funding	Emergency relief funding is provided with the support of the Foundation (within NT\$200,000)	<ul style="list-style-type: none"> • ACN: Support with Assistance Funds (RMB 2000-20000) for official employees and direct family members are provided. • AKMC: In the event of serious injury, illness, or emergencies among employees, their children, or spouses, the Foundation will provide support for emergency relief funding (within RMB10,000) 	-	<ul style="list-style-type: none"> • The emergency relief fund will be established through cross-department collaboration within Advantech, with volunteer donation campaigns initiated. • Advantech's local subsidiaries and HR department provide emergency relief funds for affected employees in natural disasters.
New Year's festival and holiday benefits(Dragon Boat Festival/ MidAutumn Festival/Birthdays)	✓	✓	-	✓

Marriage and Childbirth Allowance

In addition to the policies mentioned above, Advantech offers marriage and childbirth allowances that exceed legal requirements. All Advantech employees are eligible to apply. Employees must submit a wedding invitation or marriage certificate, including same-sex marriages, to apply for the marriage allowance. Each person will receive a subsidy of NT\$10,000. In 2022, the headquarters received 72 applications for the marriage allowance, totaling NT\$720,000.

For the childbirth allowance, employees need to submit a birth certificate. Since September 26, 2022, the childbirth allowance has been increased from NT\$3,600 to NT\$10,000 per child. In 2022, the headquarters received 85 applications for the childbirth allowance, totaling NT\$498,800.

Parental Leave

According to Article 16 of the Act of Gender Equality in Employment in Taiwan, Advantech provides parental leave to its employees in Taiwan. After completing six months of employment, staff members are eligible to apply for parental leave until each of their children reaches the age of three. The maximum duration of the leave period is two years. However, there are no specific regulations regarding parental leave in China besides statutory maternity and paternity leave. In Japan, labor laws allow for parental leave applications for children under one year old, with salary subsidies provided by the Japanese government during the leave period.

At Advantech Headquarters (Taiwan), the parental leave application rate for all employees (including both male and female employees) in 2022 was 10.46%, with a reinstatement rate of 41.18%. In 2021, the retention rate of employees who continued to work for more than one year after returning from childcare leave was 73%. Both the application rate and the rate of employees continuing to work for more than one year after reinstatement have increased compared to 2021*. Female employees' application and reinstatement rates are significantly higher than male employees.

At Advantech Japan (including the Japanese factory), six employees applied for parental leave in 2022, all of which were reinstated upon their return.

*Note: In 2021, the parental leave application rate of all employees was 7.85% and the reinstatement rate was 53.85%. Those who continued to work for more than one year after reinstatement from childcare leave in 2020 (retention rate) was 71.43%.



Table 5.2.1 Overview of parental leave of Advantech headquarters (Taiwan)

Advantech Headquarters (Taiwan)	Male	Female	Total
(a) 2022 Eligibility for parental leave (2021-2022 maternity/paternity leave)	200	125	325
(b) 2022 actual number of individuals applying parental leave	5	29	34
(c) Expected number of individuals reinstated from parental leave in 2022	2	22	24
(d) Actual number of individuals reinstated from parental leave in 2022	0	14	14
(e) Actual number of individuals reinstated from parental leave in 2021	0	15	15
(f) Number of individuals who have continued to work for one year after reinstated from parental leave in 2021	0	11	11
Parental leave application rate (b/a)	2.50%	23.20%	10.46%
Parental leave reinstatement rate (d/c)	0%	63.64%	58.33%
Parental leave rate (f/e)	0%	73.33%	73.33%

Table 5.2.2 Overview of parental leave of Advantech Japan

Advantech Japan	Male	Female	Total
(a) 2022 Eligibility for parental leave (2021-2022 maternity/paternity leave)	2	2	4
(b) 2022 actual number of individuals applying parental leave	0	2	2
(c) Expected number of individuals reinstated from parental leave in 2022	0	2	2
(d) Actual number of individuals reinstated from parental leave in 2022	0	2	2
(e) Actual number of individuals reinstated from parental leave in 2021	0	2	2
(f) Number of individuals who have continued to work for one year after reinstated from parental leave in 2021	0	2	2
Parental leave application rate (b/a)	0%	100%	50%
Parental leave reinstatement rate (d/c)	0%	100%	100%
Parental leave rate (f/e)	0%	100%	100%

Family Care Leave/ Working-from-home Arrangements

Taiwan has been affected by a local pandemic outbreak in the past two years. Many employees have had to bear the dual responsibility of work and family caregiving, resulting in significant pressure. To assist our colleagues in managing the demands of family caregiving and work within the social framework, Advantech has actively supported employees in applying for family care leave and work-from-home arrangements to adapt to the new work models during the pandemic. In 2022, which marked the pandemic's peak in Taiwan, the proportion of Advantech employees applying for family care leave also increased.

Table 5.2.3 Overview of Advantech's family care leave by region

Region	Annual	2021	2022
Advantech Headquarters	Proportion of employees applying for family care leave (%)	2.71%	15.95%
	Proportion of employees applying for work from home (%)	4.76%	76.31%
Advantech Japan	Proportion of employees applying for family care leave (%)	0%	0%
	Proportion of employees applying for work from home (%)	0%	0%
Advantech Europe	Proportion of employees applying for family care leave (%)	NA	3.87%
	Proportion of employees applying for work from home (%)	NA	55.19%
Advantech America	Proportion of employees applying for family care leave (%)	NA	3%
	Proportion of employees applying for work from home (%)	NA	14%

***Note:** Advantech China and the Advantech China Kunshan factory do not have mechanisms for family care leave or work-from-home applications. Work from home was mandatorily implemented only in response to the pandemic in accordance with local government regulations.

Retirement Policy

Headquarters: The pension system is divided into two categories. We comply with the legal requirement for monthly contributions and ensure full allocation.

(Taiwan)

1. Those retirement reserves allocated monthly in accordance with the provisions of the old pensions system are managed by the Labor Retirement Reserve Supervision Committee and deposited into a particular bank account in Taiwan in the name of the Committee.
2. The new system of pensions allocates 6% of employees' monthly salaries to their pension accounts. Employees also have the flexibility to allocate between 0% to 6% of their salaries to their pension accounts based on personal preferences. The company deducts the allocated amount from employees' salaries each month.

Advantech China: In accordance with the relevant laws and regulations for retirement in mainland China. Employees who have paid into the statutory social insurance for 15 years can receive monthly pensions after retirement. Retirement age according to labor law: the retirement age for male employees is 60. The retirement age for female executives is 55, while the retirement age for female employees is 50 years old.

Advantech Japan: In accordance with the law, 9.15% is allocated to the government annuity account on a monthly basis. In addition, 1.73~2% of total monthly salaries are paid to the bank pension accounts.

Other Advantech overseas operations: The labor retirement policy is implemented in accordance with local laws and regulations.

Employee Stock Ownership

In order to attract and retain outstanding talent to the Company, and to enhance employee motivation and commitment to the Company, so as to jointly create benefit for the Company and its shareholders, pursuant to Article 28-3 of the Securities and Exchange Act and of the Regulations Governing the Offering and Issuance of Securities by Securities Issuers issued by the Financial Supervisory Commission and other relevant regulations, we have formulated the Company's procedures for issuance of employee stock option certificates and for stock subscription. For relevant information, please refer to the Annual Report.

Employee Assistance Programs (EAPs)

Recently, "Employee Assistance Programs (EAPs)" plays a very important role for companies on assisting employees with their work, life and health issue through systematic services and resource integration.

Advantech had imported EAP services since December 2021, providing 24-7 free and unlimited telephone and email consultation services with complete confidentiality.

Therefore, Advantechers can obtain consultation and assistance regardless of difficulties from mentality, health, legality, finance, etc.

Employee Health Initiatives

- Advantech provides colleagues with free health checks every year (exceeding regulatory requirements by providing extraordinary checks such as fecal occult blood, cancer screenings, etc.). The number of people in each examination round was reduced in 2022 in consideration of the need for pandemic prevention to ensure that medical examiners maintain a social distance. Furthermore, clean-up operations are strictly implemented so that colleagues can undergo examinations with peace of mind. A total of 16 health checks were performed in 2022 for a total of 3,698 individuals (including dependents).
- We recognize the need to minimize the risk of infection for colleagues entering and leaving medical institutions, and consider the fact that that many colleagues are busy with their work and are unable to take time to go to the pharmacy to collect chronic prescription medications. Starting from January 2021, Advantech has therefore specially cooperated with the "Call a Pharmacist" drug delivery platform to provide in-company drug delivery and drug collection services every month (including collections on behalf of dependents), so that colleagues can receive their medications quickly and conveniently. About 20 colleagues benefit from this service every year to reduce the risk of entering and leaving the hospital.
- In 2022, the weight loss competition of the health initiatives activity "Gorgeous Appearance in Hot Summer" was held. A total of 515 people participated, and a total of 845.5 kg was lost. Good eating concepts and regular exercise habits of colleagues were cultivated during the promotion period of the event.
- In 2022, a total of two health lectures were held (onsite and online) to care about the brain health of colleagues, as well as self-care and coping issues under the pandemic.

Table 5.2.4 Advantech's Health Lectures in 2022

Lecture Date	Activity name	Number of participants
2022/03/30 (Wed.) 12:00	<u>"Save Brain Health! Do this to prevent degradation"</u>	128
2022/12/26 (Mon.) 12:00	<u>"Using Positive Power to Make Life More Powerful ~ Self-Care and Coping During the Pandemic"</u>	102

Diverse and Enriching Community Activities

Advantech has encouraged colleagues to set up and develop diverse community activities to promote more interaction among colleagues and achieve work-life balance. In 2022, a total of 21 associations were established in Taiwan including those encompassing sports, LOHAS, arts and culture, and charities with more than 1,000 participants. In the mainland China region (including all offices), there are 75 associations with more than 1,900 participants; 7 associations have been established in Advantech Kunshan Factory with 229 participants.

2022 Blood Donation Activities of Charity Club



Sporting Club Activities



Corporate volunteers in 4 Areas

"Taking from the society, giving back to the society." Advantech encourages our colleagues to participate in volunteer activities and contribute to others. Meanwhile, we hope that our colleagues can obtain experiences and skills that cannot be accumulated in the general working environment from volunteer activities. In 2022, Advantech has accumulated a total of 326 hours of volunteer service. Advantech and Eden Volunteer in Cloud thereof contributed a total of 29 hours to accompany the people with disabilities from all over Taiwan. ACT Dreamers is an important project of Advantech to practice sustainable education. ACT Education Program implemented by Advantech Foundation to promote sustainable education. In 2022, we accumulated 18 hours of educational volunteering. Collaborating with high-quality educational partners, we jointly create ACT Education Action, which introduces children to the United Nations Sustainable Development Goals (SDGs) and fosters their care for the environment from an early age. Through practical actions, we aim to cultivate the global citizenship competencies that children should possess.

2022 Beach Cleanup Activities



In order to encourage more employees to participate in volunteer services, Advantech formulated “voluntary leave” system by the end of 2022. It provides 2 days of paid volunteer leave per person per year (16 hours in total). Also, there are four volunteer topics: Energy Conservation, Public Welfare (including environment), Education, Arts and Culture. Our employees can participate these four topics accordingly. The above policy has been formally implemented since January 2023.

2022 Volunteer service at Guandu Wetland



COVID-19 Response

Each item of Advantech's pandemic prevention actions are not only guided by the Central Epidemic Command Center but also adjusted at any time by a rolling response mechanism according to the Company's circumstances. In 2022, the Company sought to sustain the physical and mental health of colleagues through the following pandemic prevention measures:

1. Establishment of Advantech Epidemic Prevention Response Team
2. Pandemic prevention information is immediately announced on the Employee Zone bulletin board and [the Covid-19 employee zone](#).
3. Establishment of the WFH (Work from Home) system provided for colleagues in need to apply
4. Colleagues took out pandemic prevention insurance and vaccine insurance
5. The registration and implementation methods of rapid screening reagents are established on a weekly basis. It provides colleagues to register and distribute home-based rapid screening reagents with a total of 25,734 doses distributed.
6. Report forms and reporting channels for internal confirmed cases and close contacts have been established. Also, the floor pandemic prevention commander is set in units of floors to instantly grasp the development trend of the pandemic within the Company.
7. In order to let colleagues know information quickly, we also used the LINE community as a channel for instant messaging. We used this channel to remind colleagues of various pandemic prevention measures and update colleagues' health statuses and other information.



5.2.2 Living Wages

Advantech recognizes the importance of a living wage in improving the living conditions of workers and ensuring fair compensation for their basic needs. Workers can meet the necessary expenses for food, clothing, and housing by providing a fair wage, promoting economic growth and sustainability. Advantech adheres to the living wage code and actively participates in related alliances to uphold this principle. Advantech is committed to respecting human rights and continues to engage in discussions and explore opportunities related to implementing a living wage. In 2022, we introduced a methodology to establish a living wage across 6 significant regions, including Advantech Headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech America, and Advantech Europe. Through internal cross-functional living wage workshops, we develop promotional plans aligned with national living standards. Continuous training on living wage setting and implementation is provided to our internal staff.

Advantech defines the living wage as the minimum wage our employees earn for basic working hours, excluding bonuses and overtime pay. It ensures that workers and their families can meet their basic needs, including essential expenses for food, clothing, housing, and other necessary living costs. The living wage standards at Advantech are formulated using relevant data from competent authorities, such as the Household Income and Expenditure Survey Report of the Directorate-General of Budget, Accounting, and Statistics, Executive Yuan, R.O.C.(Taiwan). By comparing the company-specific living wage with prevailing wages, we determine that our employees receive sufficient compensation to support the local standard of living.

At Advantech, we take pride in leading the industry by surpassing living wage assessments and making commitments beyond industry standards. In 2022, we covered 6,064 employees under the living wage trial, with 99% of our businesses included. We have committed to providing all our employees with a living wage. Furthermore, we aim to gradually extend this practice to include Advantech's internal full-time contractors, major suppliers, and service providers.

Living Wage Methodology

We leveraged the calculation formula agreed by the Directorate-General of Budget, Accounting and Statistics 2021, Executive Yuan, R.O.C.(Taiwan) to promote knowledge and information regarding living levels.

The average monthly consumption expenditure per person X average monthly food, clothing and housing consumption per person X (1 + average number of people who are borne by the household)

Process of Living Wage Application

1. Advantech introduced the calculation of living wages in October 2022, which is now included in the Company's salary and annual salary adjustment for new recruits. Based on the basic monthly consumption expenses of families residing in each employee's location, a specific living wage is determined for that respective market area.
2. The determined living wage is then compared to prevailing wages to ensure that employee salaries are sufficient to support the local standards of living. The current salary includes fixed salary, but does not include variable rewards (such as overtime pay, production incentives, etc.).
3. In Taiwan, the calculation considers the annual household income and expenditure survey conducted by the Directorate-General of Budget, Accounting, and Statistics, Executive Yuan. It involves calculating the average monthly consumption expenditure per person and multiplying it by the average monthly consumption of food, clothing, and housing per person, along with the average number of dependents in the household. For other countries or regions, we refer to relevant information released by local governments or conduct employee income and expenditure surveys.
4. The living wage calculation primarily considers essential expenses such as food, clothing, and housing. However, including other expenses such as health, transportation, and education depends on the specific circumstances of each location.
5. In the yearly salary adjustments are made to ensure that the wages of employees are sufficient to support the local living standard. The Living Wage is established to ensure that both new and existing Advantech employees enjoy a standard of living wage with their region.

Table 5.2.5 Overview of Advantech's Living Wage by Region

Region	Amount (NTD)	Exchange rate of each region	Number of employees	Coverage rate of business scope	Coverage rate of assessment of living wage
Taiwan	29054	1	3459	100%	100%
China	14602	4.46	1260	100%	100%
Japan	42502	0.23	225	100%	100%
Korea	52086	0.23	123	100%	100%
Europe	50474	32.67	480	100%	98%
America	79140	30.74	517	100%	84%



***Note:**

1. The living wage of Advantech Europe includes Netherlands, Germany, Poland, France, Italy, Spain, the United Kingdom, Austria, Belgium, Jack, Ireland and the five Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden).
2. Living wages of Advantech USA include Milpitas, Irvine, Illinois, Ohio.

Mid and long-term plans to promote living wages

Advantech's commitment to our employees' living wages includes the following:

1. As a result of extensive discussions on the method and framework for living wages in 2021, we have progressively extended the principle of living wages to the 6 significant regions in 2022. The following commitments are made:
 - Employees were paid for a basic salary that meets or exceeds the legal minimum wage in their country. We are also committed to ensure that all employees are paid a living wage standard. This will ensure that our employees in the top six regions apply the living wage standard by 2025.
 - The internal salary management team will be actively engaged in discussions to formulate the salary structure for direct employees, including technical and manufacturing staff. Furthermore, we are dedicated to promoting a 100% achievement rate of the living wage in Europe and America.
2. The concept of living wages has been introduced across all of Advantech's overseas and domestic country/region, ensuring its application to all our employees. By 2030, we will have all Advantech employees (including direct employees and indirect employees) will enjoy the guarantee of living wages in the country/region where they are located.
3. Through collaborative efforts with business partners, consultants, and private organizations, Advantech has spearheaded a comprehensive promotional campaign for implementing a minimum living wage in various operations. We actively advocate for the development of a living wage that benefits individuals and societies and contributes to the growth of businesses and the overall economy.

5.3

Employer-employee Relationship and Diverse and Inclusive Workplaces

Advantech Global Diversity and Equality Policy

Advantech has been actively promoting gender equality in the global workplace for a long time to promote diversity in the workplace and equality at work. It includes: a salary system without gender differences, a fair and just performance appraisal and promotion system, flexible working hours to support women in management positions, and family care for women, etc.

When hiring, we ensure that gender, race, religion, political affiliation, marital status do not affect the employment conditions, or have differential treatment in terms of salary. Advantech has established a clear recruitment strategy around the world to strengthen the diversity of employees. Also, internal multiple training and talent development channels are used to gradually eliminate the impact of employees' basic differences resulting from physical or psychological conditions. Moreover, the relevant indicators of salaries and rewards between districts, types of work and ranks are regularly reviewed to ensure that a diverse and equal workplace environment is implemented and created.

Employee composition

Advantech Global

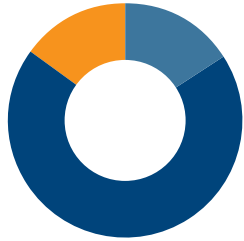
Country	Number of employees	Proportion of number of employees	Number of supervisors (above the assistant manager level)	Proportion of number of supervisors (above the assistant manager level)
Australian	28	0.31%	4	0.42%
Brazil	62	0.69%	3	0.32%
Burkina Faso	2	0.02%	-	-
China	3676	41.18%	143	15.07%
Colombia	1	0.01%	-	-
Hong Kong	3	0.03%	-	-
India	59	0.66%	18	1.90%
Indonesia	14	0.16%	1	0.11%
Ireland	1	0.01%	-	-
Israel (ISR)	6	0.07%	2	0.21%
Japan	205	2.30%	35	3.69%
Korea	128	1.43%	12	1.26%
Macau	1	0.01%	-	-
Malaysia	45	0.50%	8	0.84%

Country	Number of employees	Proportion of number of employees	Number of supervisors (above the assistant manager level)	Proportion of number of supervisors (above the assistant manager level)
Mexico	17	0.19%	3	0.32%
Nicaragua	1	0.01%	-	-
Philippines	299	3.35%	1	0.11%
Russia	7	0.08%	2	0.21%
Singapore	29	0.32%	7	0.74%
Taiwan	3257	36.48%	549	57.85%
Thailand	30	0.34%	14	1.48%
Turkey	25	0.28%	8	0.84%
United Kingdom	3	0.03%	1	0.11%
United States of America	494	5.53%	68	-
Vietnam	40	0.45%	7	0.74%
Others	494	5.53%	63	6.64%
Total	8927	100%	949	10.63%

Diversity Hiring

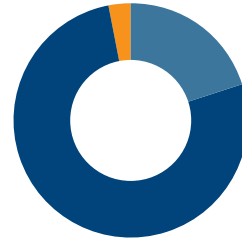
■ Youth workforce under 30 years old
 ■ Prime-of-life workforce 30-50 years old
 ■ Senior workforce over 50 years old

Headquarters (Taiwan)



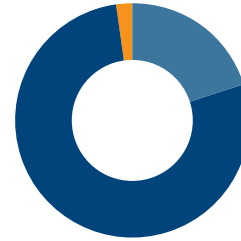
Age distribution	Number of employees	Proportion of number of employees
Below 30 years old	552	15.83%
30~ 50 years old	2421	69.41%
50 years old and over	515	14.76%
Staff with disabilities	23	0.66%

Advantech China



Age distribution	Number of employees	Proportion of number of employees
Below 30 years old	246	19.81%
30~ 50 years old	960	77.29%
50 years old and over	36	2.90%
Staff with disabilities	0	0.00%

Advantech Kunshan factory



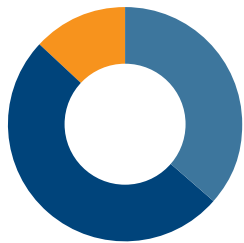
Age distribution	Number of employees	Proportion of number of employees
Below 30 years old	494	19.95%
30~ 50 years old	1926	77.79%
50 years old and over	56	2.26%
Staff with disabilities	0	0.00%

Advantech Japan



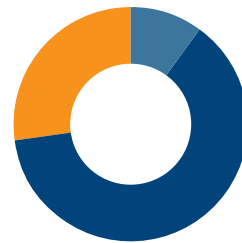
Age distribution	Number of employees	Proportion of number of employees
Below 30 years old	16	6.93%
30~ 50 years old	108	46.75%
50 years old and over	107	46.32%
Staff with disabilities	3	1.30%

Advantech Korea



Age distribution	Number of employees	Proportion of number of employees
Below 30 years old	47	36.72%
30~ 50 years old	65	50.78%
50 years old and over	16	12.50%
Staff with disabilities	2	1.56%

Advantech Europe

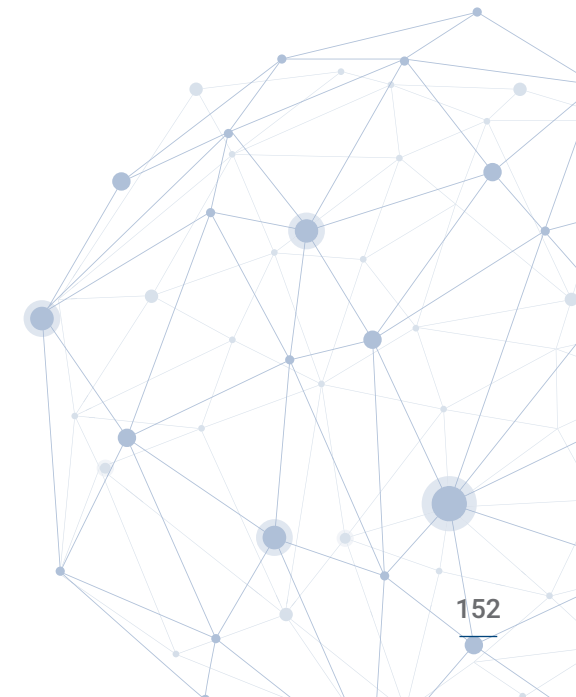


Age distribution	Number of employees	Proportion of number of employees
Below 30 years old	50	10.20%
30~ 50 years old	308	62.86%
50 years old and over	132	26.94%
Staff with disabilities	-	-

Advantech America



Age distribution	Number of employees	Proportion of number of employees
Below 30 years old	79	15.43%
30~ 50 years old	235	45.90%
50 years old and over	198	38.67%
Staff with disabilities	-	-



*Note: No investigation and disclosure on physical and mental disabilities is available due to EU [GDPR](#) Regulations.

Employment of People with Disabilities

According to Taiwan's People with Disabilities Rights Protection Act, the number of persons with disabilities employed by an enterprise shall not be less than 1% of the total number of employees. If the weighted total value does not meet the standard, the Company is required to make regular "difference subsidy" payments into the employment fund for people with disabilities overseen by the competent labor authority.

Advantech applied for employment of 35 persons with disabilities according to law, and by the end of 2022 employed 29 persons with disabilities. The employment weighted ratio has not yet reached 1% of the total headcount ratio. The main reason for undertaking a manpower policy review is that resume conditions do not meet vacancy requirements, and the difference subsidy has been paid according to law. Furthermore, we will continue to actively pay attention to the resumes of people with disabilities through government employment counseling agencies, and expected that the required number will be filled in the first half of 2023.

In addition, all employees with disabilities are employees who actually participate in the Company's work and business. Before onboarding, Advantech focuses on an individual's physical or mental disabilities to assist colleagues in understanding actual conditions such as commuting lines, work flow, and so on. Furthermore, we provide appropriate personnel, equipment, and working environment assistance after their onboarding so that these colleagues may work with peace of mind.



Proportion of Female Employees/Female Management

Advantech is a manufacturer in an industry dominated by high tech. In the past 2 years, the proportion of female employees in Advantech headquarters has increased slightly. The regions counted in 2022 have been expanded to Advantech's six major regions, where the proportion of female senior executives has grown to 13%. There are two main reasons for the decrease in the proportion of female executives in 2022 and the proportion of female executives in profit-oriented units. In addition to the fact that the disclosed regions have been expanded from the three regions of headquarters, China, and Japan to the six regions (Korea, Europe, and the United States have been additionally included), the definition of supervisors was also stricter than in 2021 due to grass-roots/manager-level supervisors were adjusted from grade D (division supervisor/assistant manager) to E (manager-level) or above. It is estimated that in 2025, the proportion of female employees in Advantech Taiwan will remain between 40% and 45%; and the proportion of female supervisors will remain between 20% and 26%.

More than one-fifth of Advantech's global headquarters management team is made up of female executives ([Executive Team - Advantech](#)). In 2017, Ms. Linda Tsai was promoted to President of Industrial-IoT Group, becoming the top female executive among the three co-governing presidents. This reflects the generational heritage and gender equality among our professional managers.

Region	Item	2022
Advantech	Proportion of female employees	43%
	Proportion of female supervisors	21%
	Proportion of female basic/management level supervisors	24%
	Proportion of female senior executives	13%
	Proportion of female supervisors in profit center units (excluding HR, IT, legal and other support units)	16%
	Proportion of female employees with STEM positions (science/technology/engineering/ mathematics)	25%

***Note:**

1. Advantech has calibrated the Global Job Band in 2022. Job grades are graded globally from A to H. basic/management level supervisors (manager level) are grade E, while senior management (including director level and above) are grade F (inclusive) or above.
2. Advantech has disclosed the three major regions of headquarters, China, and Japan in 2021, and has expanded the disclosure to the six major regions additionally including Korea, Europe, and the United States in 2022.

Performance Appraisal System

- Management by objectives: The goal of Advantech's annual performance evaluation is the organizational strategy. Performance evaluations are held twice a year at the middle and end of the year.
- Multidimensional performance appraisal: The performance evaluation system includes multiple feedback questionnaires, which are used in supervisor performance evaluation. Feedback from multiple parties was included as a reference for the immediate (evaluation) supervisor. Through the integrate opinions from multiple parties, more objective and fair assessment results is obtained.
- Agile conversations: Supervisors conduct performance evaluation with employees at least once a year. At the end of the year, employees and supervisors conduct performance talks and formulate personal development plans after self-assessment. In this way, our colleagues are ensured to receive appropriate performance feedback. Also, performance evaluation results and personal development plans are properly recorded in the system. The performance review cycle throughout the year encourages our supervisors to communicate with our employees at any time. The focusing of the direction is performed periodically. Employee feedback is processed. Timely support is given. The purpose of sufficient two-way communication and mutual understanding of the assessment results is achieved.
- Team-based performance appraisal:
 - Annual type: Advantech's performance evaluation not only focuses on individual work performance, but also emphasizes teamwork. The key performance indicators and incentive system that the team is jointly responsible for are set up to implement the core values of the ability to fully demonstrate and teamwork. Advantech's group goals are set to apply to all employees. Also, incentive bonuses are offered. Benchmarks for group goals are set through affiliated business units and back office units. Colleagues belonging to the business unit are given corresponding rewards based on the achievement rate of final assessment. In this way, our colleagues are motivated to achieve the team's common goals.
 - Project type: The project plans of the Company's material issues include ESG projects, digital transformation projects, etc. In addition to the individual responsibility goals of the task force members, common group goals are set, and corresponding rewards are provided. In addition to the goals of their respective business units and back office units, senior executives at the management level have common key performance indicators. They also have to be responsible for key performance indicators at the corporate strategic level.

Performance Appraisal Acceptance Rates among Employees in Four Major Professional Categories

Region	Four major professional categories	Males, performance appraisal acceptance rates(%)	Females, performance appraisal acceptance rates(%)
Taiwan	R&D	92.9%	89.8%
	Marketing business	87.8%	90.1%
	Administrative	85.5%	88.3%
	Manufacturing	90.7%	90.0%
	Total Ratio	91.4%	89.7%
China (ACN)	R&D	92.7%	95.0%
	Marketing business	94.6%	94.2%
	Administrative	58.6%	93.9%
	Total Ratio	92.2%	94.5%
Kunshan (AKMC)	Administrative	75.8%	68.5%
	Manufacturing	98.4%	99.8%
	Total Ratio	96.2%	95.3%
Japan	R&D	90.2%	100.0%
	Marketing business	92.2%	89.5%
	Administrative	100.0%	92.9%
	Manufacturing	100.0%	100.0%
	Total Ratio	95.1%	95.7%
Korea	R&D	83.3%	100.0%
	Marketing business	93.1%	100.0%
	Administrative	84.6%	85.7%
	Manufacturing	90.9%	-
	Total Ratio	89.2%	95.0%

***Note:**

1. The above performance appraisal acceptance rates are calculated based on the total number of individuals actually participating in the appraisals (excluding those who do not complete the three-month probationary period or the numbers of individuals who resigned and did not complete the assessment during the assessment period), divided by the total number of individuals in 2021.
2. Advantech's Japan and Advantech Korea comprise mostly direct labor employees, who are not included in the evaluation statistics.
3. No disclosure on the data of Advantech USA and Advantech Europe due to personal data protection.

Performance Appraisal Acceptance Rates among Employees in Two Major Occupational Functions

Region	Job categories	Males, performance appraisal acceptance rates(%)	Females, performance appraisal acceptance rates(%)
Taiwan	Senior executive	97.33%	97.00%
	General employees	89.80%	89.21%
	Total Ratio	91.40%	89.72%
China (ACN)	Senior executive	94.67%	88.89%
	General employees	91.89%	94.92%
	Total Ratio	92.16%	94.48%
Kunshan (AKMC)	Senior executive	94.44%	100.00%
	General employees	96.21%	95.25%
	Total Ratio	96.18%	95.28%
Japan	Senior executive	100.00%	100.00%
	General employees	94.29%	95.52%
	Total Ratio	95.06%	95.65%
Korea	Senior executive	83.33%	100.00%
	General employees	91.49%	94.74%
	Total Ratio	89.23%	95.00%

***Note:**

1. The above performance appraisal acceptance rates are calculated based on the total number of individuals actually participating in the appraisals (excluding those who do not complete the three-month probationary period or the numbers of individuals who resigned and did not complete the assessment during the assessment period), divided by the total number of individuals in 2021.
2. Advantech has calibrated the Global Job Band in 2022. Job grades are graded globally from A to H. Management level supervisor are grade E, while senior executive are grade F (inclusive) or above.
3. Advantech's Japan and Advantech Korea comprise mostly direct labor employees, who are not included in the evaluation statistics.
4. No disclosure on the data of Advantech USA and Advantech Europe due to personal data protection.

Employee Satisfaction Survey

Advantech adheres to the business philosophy of actively caring for our employees, and values our employees' thoughts and opinions. The goal is to provide an open, inclusive, safe and healthy working environment for all employees. We actively start from our core values. Based on the four aspects of human-oriented environment, honesty, excellence and innovation, and altruistic contribution, we look forward to enhancing mutual understanding between the Company and employees through the annual employee satisfaction survey, and creating an environment that values our employees. Therefore, a more comprehensive welfare system is provided.

Since 2018, Advantech has taken the lead in promoting an annual Employee Engagement Survey of all employees in China. Furthermore, we expanded the survey area in 2021 to add Advantech Headquarters (with 50 people sampled for the survey) and the European region (a full survey of non-management colleagues). Since the survey began, the annual satisfaction rate has exceeded 90%. Furthermore, we plan to continue to expand the survey region; by 2021, the global survey coverage was about 72.1%. This was taken as a reference for Advantech to continuously improve and strengthen employee relations.

In 2022, the Employee Satisfaction Survey of each district was integrated. Its content is to design seven main axes with a total of 30 questions (Figure 5.3.2) for the following purposes (Figure 5.3.1). The main axes are company image and quality, working environment, communication, teamwork, management and supervision, training and development, and content of works. The scope of the investigation was extended to the whole world. The first global "Employee Satisfaction Survey" is available in 4 languages. The scope of the survey covers 20 countries/regions, including Advantech's 6 major operations (Advantech Headquarters, Advantech China, Advantech Japan, Advantech Korea, Advantech Europe, and Advantech America). In the future, the annual survey frequency and the scope covering the six major operations will also be maintained. The opinions and feedback of our employees in all factories/units around the world were surveyed. Also, the goals and results of relevant investigation and analysis will be disclosed publicly.



Figure 5.3.1 Purpose of Employee Satisfaction Survey

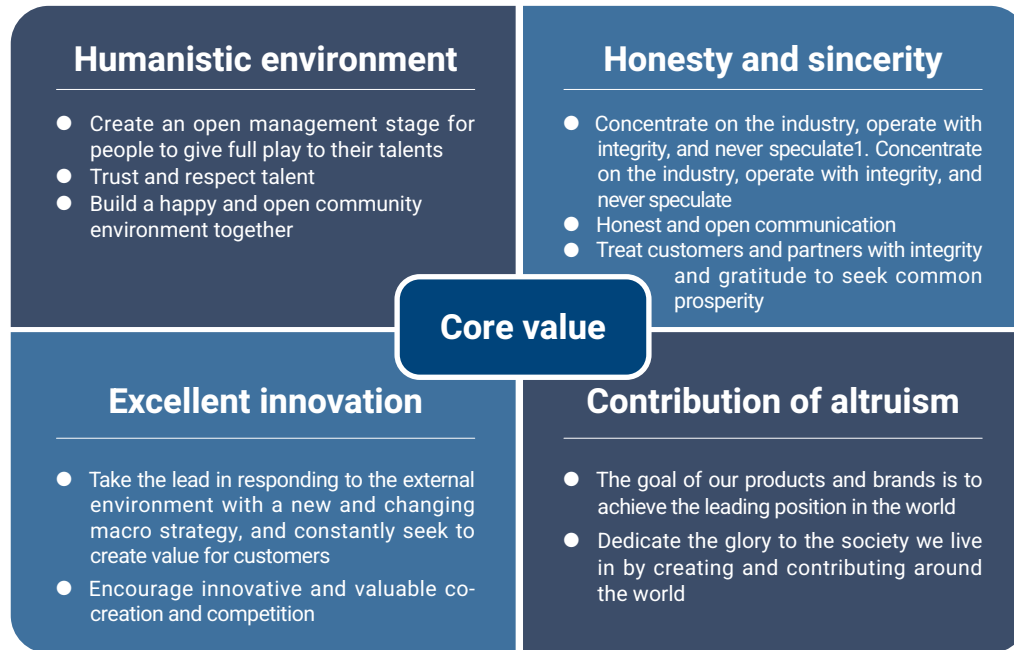


Figure 5.3.2 Seven Axis of Employee Satisfaction Survey



In 2022, the regional coverage rate of the employee satisfaction survey reached 100%. The number of participants was 8584 individuals and the number of respondents was 7085 individuals. The response rate was 83%, and the satisfaction statistics were 89%^{*1}.

Regarding the improvement plan for employee satisfaction, the Company conducts review and tracking in the form of cross-department/factory project meetings. In this way, it demonstrates the Company's emphasis on our employees' opinions and its determination to create a high-quality working environment. Please refer to Table 5.3.1 and 5.3.2 for the answers of each region. Please refer to Table 5.3.3 for the total survey score and follow-up feedback.

Table 5.3.1 Responses to Employee Satisfaction Survey of Each Region: by Gender

Region	Number of people who should respond ^{*2}	Number of people responding	Male	Female	Non-disclosure on gender	Response rate	Satisfaction
Taiwan	3138	2477	1380	1097	-	79%	82%
China(ACN)	1195	977	587	390	-	80%	93%
Kunshan(AKMC)	2500	2380	1259	1121	-	95%	99%
Japan	225	188	119	48	21	84%	69%
Korea	123	103	71	23	9	84%	79%
USA	508	307	180	85	42	60%	81%
Europe	549	345	214	104	27	63%	79%
Other Regions	346	308	178	102	28	85%	81%

***Note:**

1. The statistics of the overall satisfaction is the result of weighted calculation: sum of (satisfaction in each region * number of people responding in each region) /total number of people responding.
2. Number of people who should respond refers to full-time employees, excluding foreign migrant workers, interns, and student participants in the cooperative education program.

Table 5.3.1 Responses to Employee Satisfaction Survey of Each Region: by Age

Region	Number of people who should respond	Number of people responding	Below 30 years old	31 - 49 years old	50 years old and over	Non-disclosure on age
Headquarters	3138	2477	398	1717	362	-
Advantech China(ACN)	1195	977	214	743	20	-
Advantech Kunshan(AKMC)	2500	2380	481	1848	51	-
Advantech Japan	225	188	10	80	81	17
Advantech Korea	123	103	28	63	6	6
Advantech America	508	307	36	119	95	57
Advantech Europe	549	345	45	199	68	33
Other Regions	346	308	86	177	17	28



Table 5.3.3 Total Score of Employee Satisfaction Survey and Follow-up Feedback

Region	Total score of the survey	Topics tracked
Headquarters	4.08	The score of the staff training and development question group is 3.86 points. In the future, an annual training plan will be drawn up to strengthen the proportion of employee training and fully plan the development path of employees.
Advantech China(ACN)	4.65	The score of employee training and development question group is 4.52 points. In the future, the content of training will be increased: the increase of professional training, such as cutting-edge technology, product knowledge, training of the company's various system software, job professional skills, and personal skills. Diversification of training forms: Appropriate increase in external training opportunities, offline training, factory visit arrangements for outstanding employees or other employees in need of on-site communication and learning.
Advantech Kunshan(AKMC)	4.95	The score of the task group of work content and communication is 4.93 points. Subsequently, the smoothness of the communication channel between supervisors and employees must be strengthened.
Overseas business group (Including Advantech Japan, Advantech Korea, Advantech America, Advantech Europe and other regions)	3.95	The employee training and development subgroup scored the lowest overall. To minimize employee turnover and strengthen people development strategies, we recommend providing employees with a 7-2-1 (70% on-the-job training, 20% through feedback and coaching, and 10% coursework) training plan for our employees.

The findings revealed that our employees lack clarity about "growth opportunities" in the current development environment. Also, collaboration and communication between business units is challenging. These are important indicators (risks) that our employees face in their career development. Therefore, Advantech makes the following commitments to the talent development of our employees:

- Continuous performance evaluation methods, clear communication channels and career development paths need to be established to improve employee satisfaction and retention.
- Advantech transformational development programs need to be promoted, such as Career+/TCAP, to coordinate development and growth opportunities.
- Comprehensive development programs need to be designed and initiated to meet the individual needs of our employees and their needs for career development.
- A new development program for global first-time talent leaders needs to be expanded to enhance human resource management skills.
- A comprehensive newcomer training workshop needs to be designed and launched, including systematic learning and communication training.
- Advantech's self-learning and development platform needs to be designed and launched to realize the full potential of employees.

5.4 Human Rights Protection

5.4.1 Employee Human Rights and Employee Rights Protection

Human Rights Management and Commitment

Advantech has formulated the "Advantech Human Rights Policy and Commitment", which was reviewed and approved by top management, to protect the fundamental human rights of all employees, suppliers, customers and stakeholders. We consider the international human rights framework, corporate development strategies and external trends, including "Universal Declaration of Human Rights," the "United Nations Global Compact," and the International Labour Organization's "Declaration on Fundamental Principles and Rights at Work." We comply with the laws and regulations of the locations in which the Company operates, and we formulate human rights policies in accordance with the "United Nations Guiding Principles on Business and Human Rights."

Advantech also has a human rights risk investigation process, which involves regular assessments and management improvements for identified areas of concern. The process entails the selection of relevant risk topics (including "Human Rights Risks") by Audit Committees. Risk ratings are reviewed for each issue, and high-risk groups are identified for appropriate management. No cases of discrimination or harassment complaints were reported in 2022. Additionally, Advantech employees must adhere to the "Advantech Business Conduct," which encompasses labor standards, humane treatment, prohibition of child labor, and non-discrimination against employees. It strictly prohibits any form of discrimination or violation of human rights. To ensure employees' understanding and compliance with these policies, the company conducts annual education and training on the Code of Integrity Management and legal compliance. This training includes providing employees with proper channels for reporting and disciplinary actions while ensuring the confidentiality of whistleblowers' identities and reported content. In 2022, the education and training coverage rate for the ["Advantech Code of Ethics and Business Conduct"](#) was 100% for indirect employees, with a training completion rate of 96.8% (5,627 indirect global employees). In cases where employees still need to complete the training, the system notifies them and their line managers at the beginning of each month, prompting the managers to ensure their direct reports complete the training promptly. Additionally, the Advantech Taiwan Manufacturing Center (factory) conducts mandatory education and training sessions on the "Advantech Business Conduct," which covers non-discrimination and anti-harassment topics, with a coverage rate of 100% for direct employees.

Freedom of Association

We support various employee self-organized associations and trade union activities at different levels in each region. (For example, Advantech's branches in Germany, the Netherlands, and Japan all have labor unions, and our branch in Japan and France also has labor representatives) promoting equal rights and interests of employees everywhere. In 2022, Advantech's global coverage of freedom of association has reached 88.8%.

- In Europe, Advantech Germany (Advantech Europe B.V. and Advantech GmbH.) and Advantech Netherlands have worker councils initiated by employees. These councils, consisting of elected representatives, engage in regular labor-management meetings with the company to discuss employee-related matters. Similarly, Advantech France regularly elects labor representatives who voice employee concerns and participate in labor-management meetings.
- In Asia, all Advantech employees in Japan have the freedom to form voluntary associations. Advantech Technologies Japan Corp. has established a union organization, and Advantech Japan Co., Ltd. regularly elects labor representatives who advocate for employee-related issues and participate in labor-management meetings. In China (including the manufacturing facilities), employee welfare committees serve as representatives to discuss and decide on employee welfare matters. Advantech Headquarters also has organized and operates an Employee Welfare Committee. In addition, the areas where the Headquarters locates (Ruiguang headquarter, Taipei Sunny Building, Donghu and Linkou factories) hold regular labor-management meetings on a quarterly basis to communicate issues of labor rights and interests (including salaries, attendance and benefits, etc.), listen to the voices of colleagues, and discuss and make decisions on key issues.

Advantech hopes to minimize human rights conflicts. Therefore, the following management measures are implemented among employees, suppliers and customers; we publicly disclose the relevant methods. After investigation, Advantech currently has no operation or suppliers face the risk of freedom of association and group negotiation.

Whistle-blowing and Grievance Mechanisms

Since 2015, Advantech has formulated the "Prevention Plan for Prevention of Unlawful Acts against Executing Duties" based on the Occupational Safety and Health Administration guidelines of the Ministry of Labor. This plan aims to prevent employees from experiencing unlawful acts by employers, supervisors, colleagues, or service recipients in the workplace or during work-related activities (including commuting), which may result in physical or mental harm, such as workplace violence, including physical, verbal, psychological, or sexual harassment.

- **Complaint Mechanism:** When employees encounter incidents of physical or mental unlawful acts while executing their duties, they should complete the "Workplace Unlawful Acts Reporting and Handling Form" and report it to their respective supervisors (or the HR department). Alternatively, they can use the complaint channels established on the company's internal website's policy page (phone, fax, email) for reporting, and dedicated personnel will handle the complaints.
- **Handling of Reports:** Handling complaints or reports must ensure objectivity, fairness, and impartiality while safeguarding the rights and privacy of victims, complainants, and reporters. Upon receiving a report, supervisors, HR personnel, and occupational safety personnel must complete the "Workplace Unlawful Acts Reporting and Handling Form" within 24 hours. The process follows the procedures outlined in the "Handling Process for Incidents of Physical or Mental Unlawful Acts against Executing Duties" (refer to Figure 5.4.2 Whistle-blowing and Complaint Process).

Figure 5.4.1 Process and mechanism of human rights management

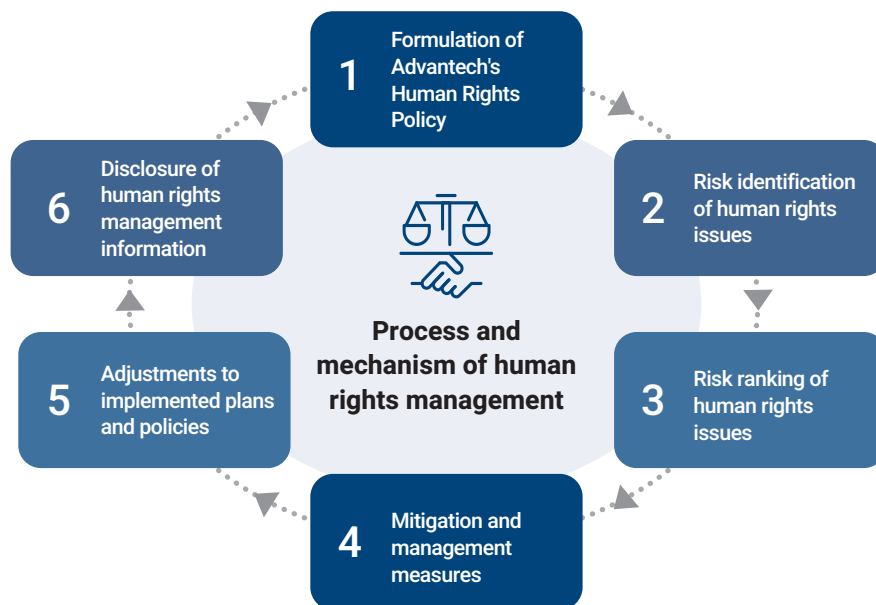
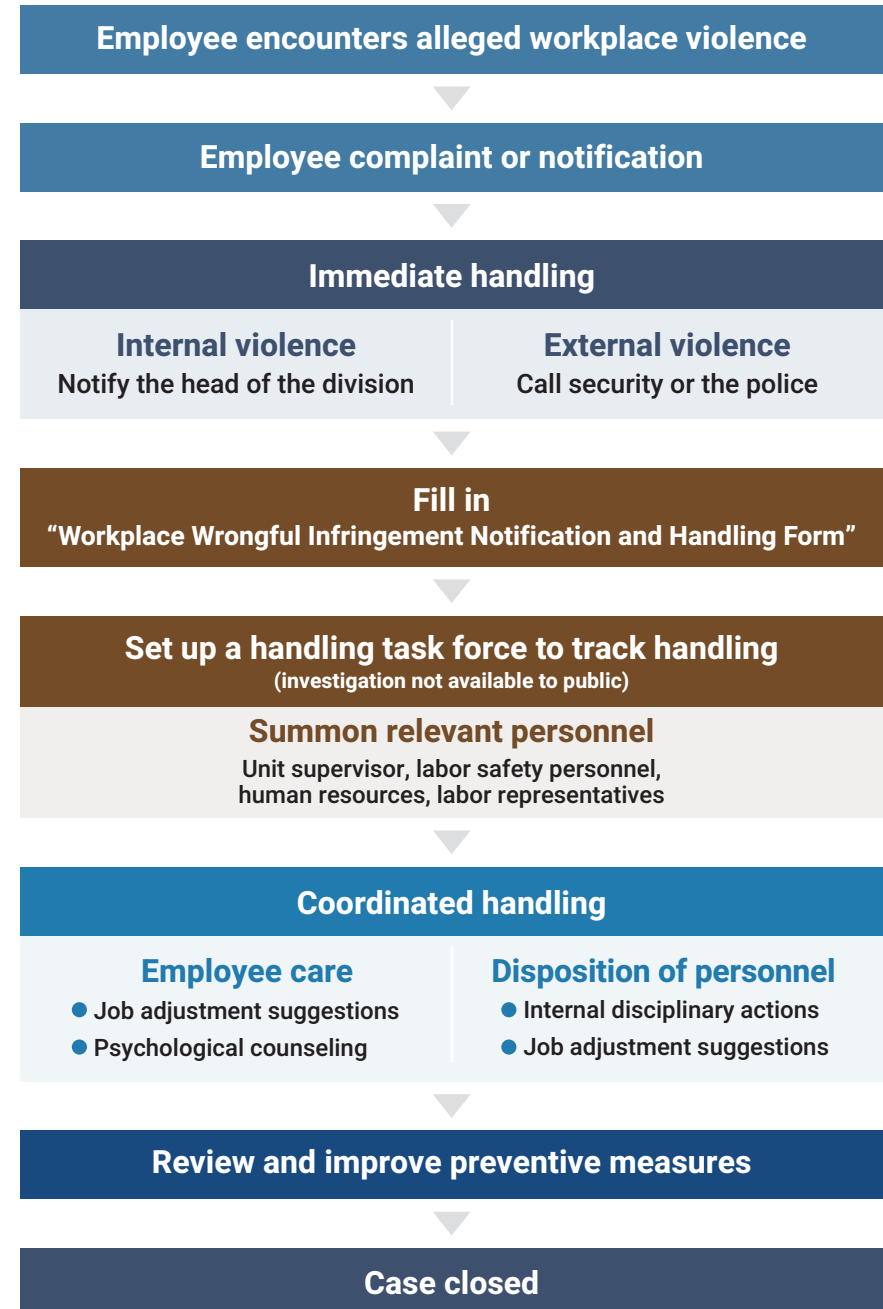


Figure 5.4.2 Reporting and Appealing Mechanism



5.4.2 Human Rights Due Diligence

Human Rights Due Diligence: Employees

Investigation Method

First, Advantech identified the list of human rights risk issues related to stakeholders with reference to the United Nations and international related human rights issues. The 11 risks are as follows:

- | | | |
|--------------------------|--|---|
| 1 Forced labor | 5 Equal remuneration | 9 Privacy right |
| 2 Human trafficking | 6 Non-Discrimination and Diversity Inclusion | 10 Freedom of speech (Right to collective bargaining) |
| 3 Child labor | 7 Guarantee of working conditions | 11 Personal liberty and security |
| 4 Freedom of Association | 8 Health right | |

Investigation Frequency

- We comply with international human rights conventions, including the "Universal Declaration of Human Rights," "The UN Global Compact," "UN Guiding Principles on Business and Human Rights," International Labor Organization's "Declaration on Fundamental Principles and Rights at Work" to avoid any infringement and violations of human rights.
- Based on the above documents, we conduct regular reviews of our human rights management every three years as part of our due diligence investigation. This includes examining human rights management issues, developing and implementing mitigation plans, and issuing human rights impact assessments. (In 2022, we conducted our first human rights due diligence investigation.)

Questionnaire Design

We collaborate with the Sustainability Advisory team to design the questionnaire, which consists of the following two parts. In addition, Advantech conducts human rights risk assessment and identifies issues of high-risk human rights.

- Occurrence probability and severity of human rights risks: Executives of each department identify the occurrence probability of the above 11 issues of human rights and the severity of the impact.

***Note:** The probability of occurrence is graded (1 = will not happen, 2 = low probability (1% - 30%), 3 = certain probability (31% - 60%), 4 = high probability (above 61%)). Severity is graded (1 = no impact, 2 = not serious, 3 = serious, 4 = very serious).

Respondents/Coverage

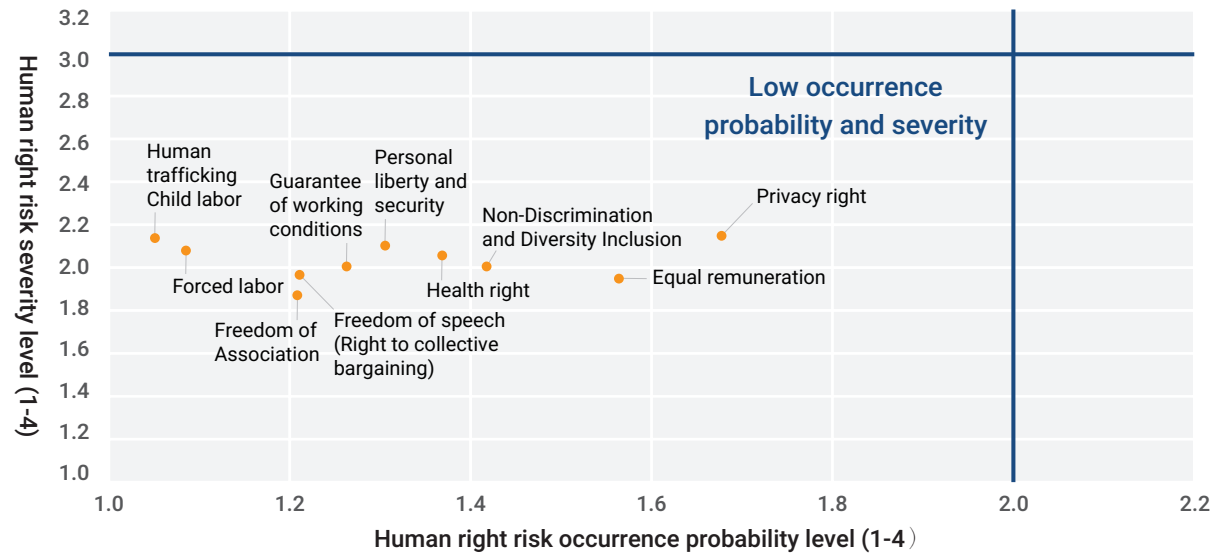
- The survey was conducted among senior executives at Advantech headquarters and HR representatives from subsidiary companies, serving as representatives of all employees. A total of 31 executive representatives were selected for the survey, and 24 responses were collected, resulting in a response rate of 77%.
- The survey achieved a global coverage rate of 94.8%.

Identification of Risk Issues (Possibilities and Impacts)

According to the results of the questionnaire, the probability and severity of human rights risks to employees are low.

Figure 5.4.3 Human rights due diligence

*Note: Points in the high-risk quadrant with a probability of 2 (inclusive) or above represent a possible probability of occurrence. The severity of occurrence is 3 points (inclusive) or above, which means it has a certain degree of severity.



Statistics & Survey Results

The occurrence probabilities of various human rights risks are summed up and then averaged as numbers on the X-axis. The severity of human rights risks is summed up and averaged as a number on the Y-axis. The intersection of the two conditions can locate the relative position of each human rights risk in the risk matrix.

The human rights risks of Advantech's employees are relatively low (on average below level 2 of the probability of occurrence) and not serious (on average below the level of severity 3). However, the ranking of the top three according to the risk ratio is as follows:

- Top three human rights high-risk cognitive projects (scenarios):
 1. Right to Privacy: Leakage of our employees' personal information due to system loopholes, security lapses, or failure to fulfill disclosure obligations.
 2. Equal remuneration: Differential treatment by employers based on gender, age, ethnicity, or region, resulting in different remuneration for employees with similar technical skills and job proficiency, despite performing the same type of work.
 3. Non-discrimination and Diversity & Inclusion: Unfair in employee recruitment, promotion, and compensation based on factors unrelated to job performance. This includes unfair treatment based on nationality, race, gender, age, political affiliation, physical disabilities, or other criteria.

- To achieve the purpose of mitigating and managing human rights risks, Advantech has established complete policy and procedures for handling human rights incidents. It covers Advantech's value chain and all operating locations.
- In 2022, there was no relevant human rights disputes or violations of relevant laws and regulations, and therefore no compensation actions was taken.

Meanwhile, Advantech found in the 2022 Global Employee Satisfaction Survey that our employees' positive feedback is higher than the average score in an anti-discrimination and anti-sexual harassment work environment. This is basically higher than the overall average which is consistent with the feedback from the questionnaires of senior executives and human resources units in various places (please see the table below for details).

	Work Environment Free from Discrimination and Sexual Harassment	Overall Employee Satisfaction
Taiwan	4.23	4.08
China	4.72	4.65
Overseas branches	3.96	3.93

Human Rights Due Diligence: Suppliers

Investigation Method

- The procurement department identified a list of human rights risk issues relevant to the supply chain, based on references from the United Nations and international human rights topics (Advantech ESG Risk Assessment Audit Form).
 - A0. Commitment, management system and regulatory compliance
 - A1. Freedom of career choice
 - A2. Young labors
 - A3. Working hours
 - A4. Wages and Benefits
 - A5. Humane treatment and non-discrimination.
- The risk of potential human rights issues has been integrated in the supplier's ESG self-evaluation form. The management methods and improvement actions taken by suppliers on human rights issues have been further grasped.

Investigation Frequency

Advantech needs to re-evaluate suppliers' human rights risks every three years. (In 2022, we conducted our first human rights due diligence investigation.)

We developed an online questionnaire that includes the following:

- Self-assessment by PVL (Preferred Vendor List) suppliers on their preventive measures and mitigation actions for high-risk issues.
- Self-assessment by PVL suppliers on their human rights-related measures, accompanied by supporting document names.
- Advantech Corporate Quality ESG Team conducts individual audits and reviews.

Respondents/Coverage

In 2022, 270 preferred vendor list (PVL) suppliers underwent evaluation, accounting for 100% of the total number of PVL suppliers in that year.

Survey Results and Improvements

- Among the surveyed suppliers, two were identified as high human rights risk factories, representing 0.74% of the sample. The main reasons for this classification are as follows:
 - A1.1 There are no provisions prohibiting the use of coercion, bondage (including debt bondage), or binding labor with compulsory indenture, and prohibiting the use of involuntary or exploitative prison labor, slavery, or human trafficking requirements.
 - A2.1 The work rules do not fully propose the relevant requirements for prohibiting child labor.
 - A2.2 The work regulations do not fully address the relevant requirements for the protection of young workers.
- All non-compliances mentioned above have been effectively addressed and closed through improvement actions.
- In the future, Advantech will continue to conduct on-site audits for high-risk suppliers to ensure the implementation of human rights risk improvement measures.



Human Rights Due Diligence: Contractors

Investigation Method

- First, Advantech's quality management department identified a list of human rights risks related to contractors with reference to human rights issues related to the United Nations and the world.

A0. Commitment, management system and regulatory compliance

A1. Freedom of career choice

A2. Young labors

A3. Working hours

A4. Wages and Benefits

A5. Humane treatment and non-discrimination.

- Risks of potential human rights issues have been integrated in the contractor's ESG self-evaluation form. The management methods and improvement actions taken by contractors on human rights issues have been further grasped.

Investigation Frequency

Advantech needs to re-evaluate contractors' human rights risks every three years. (2022 is the first due diligence)

Human Rights Due Diligence - Joint Venture (JV)

Investigation method

- First, the quality management department of Advantech identified the list of human rights risk issues related to joint ventures with reference to the United Nations and international related human rights issues

A0. Commitment, management system and regulatory compliance

A1. Freedom of career choice

A2. Young labors

A3. Working hours

A4. Wages and Benefits

A5. Humane treatment and non-discrimination.

Investigation Frequency

Advantech needs to re-evaluate joint venture' human rights risks every three years. (In 2022, we conducted our first human rights due diligence investigation.)

We developed an online questionnaire that includes the following:

- Self-assessment by contractors regarding their preventive measures and mitigation actions for high-risk issues.
- Self-assessment by contractors regarding their human rights-related measures, accompanied by the names of supporting documents.
- Advantech Corporate Quality ESG Team conducts individual audits and reviews.

Respondents/Coverage

In 2022, 17 contractors were evaluated, which accounted for 8.9% (17 companies / 192 companies) of the number of contractors in 2022.

Survey Results and Improvements

All contractors had no risks related to human rights.

We developed an online questionnaire that includes the following:

- Self-assessment by joint ventures regarding their preventive measures and mitigation actions for high-risk issues.
- Self-assessment by joint ventures regarding their human rights-related measures, accompanied by the names of supporting documents.
- Advantech Corporate Quality ESG Team conducts individual audits and reviews.

Respondents/Coverage

In 2022, Advantech's investment department chooses these targets by first selecting 10 joint ventures with a certain shareholding ratio (10%) and a certain investment amount (over 10 million NTD). These VJs were accepted for evaluation, accounting for 37% of the number of joint ventures in 2022.



Survey Results and Improvements






All joint ventures had no risks related to human rights.

Management of Human Rights Risk (Mitigation & Remediation)

The scope covers the whole world, where the supplementary notes are specific to the region

Table 5.4.1 Management of Human Rights Risk (Mitigation & Remediation)

Groups of Concern	Identification of Issues	Status of Human rights issue	Mitigation/Management Actions (Mitigation Actions)	Target management	Actively Disclosure of Location
 Employees	Right of Privacy	Applicable Worldwide Advantech Business Conduct (Protection of Identity and Prevention of Retaliation & Confidentiality of Information)	Applicable Worldwide <ul style="list-style-type: none"> Online education and training of annual information security In order to enhance the security of VPN connection, please install Forescout information security software. 	Applicable Worldwide The private information of employees and customers is not leaked.	Applicable Worldwide <ul style="list-style-type: none"> Advantech's Official Website Human Rights Commitment Advantech Business Conduct Personal Data Protection Management Policy
	Equal Remuneration	Applicable Worldwide Advantech's remuneration policy is based on the duties and responsibilities of colleagues and adheres to labor laws stipulated by local governments. Salary rates do not differ by gender. In Taiwan, for example, this includes the Labor Standards Act of the Republic of China, the Gender Equality in Employment Act, and the Employment Service Act	Applicable Worldwide <ul style="list-style-type: none"> When formulating the position grades and reviewing salaries of new recruits with work experience, the existing staff of the Company who have similar education background and work experience can be referred. Annual Salary Adjustment & Bonus: Human Resources Department formulates the annual salary budget and operating principles. After the approval of the general manager, it is handed over to the heads of various departments to adjust the salary fairly and evaluate it according to individual performance. 	Applicable Worldwide The salary rank system is to match the Company's long-term strategy. It also provides a larger space for supervisors to give full play to performance and ability when paying salary. This system is an evaluation of work rather than people. Equal remuneration is achieved by considering seven factors	Applicable to Taiwan <ul style="list-style-type: none"> Advantech Sustainability Report Advantech's announcement on recruitment website (104 website, etc.) Management and implementation of salary and bonus Recruitment and Appointment Management Measures Performance management and evaluation (ranking) measures
	Non-Discrimination and Diversity & Inclusion	Applicable Worldwide In the Global Employee Satisfaction Survey, colleagues gave higher than average scores in the anti-discrimination and anti-sexual harassment work environment. Applicable to Taiwan The HR Dashboard monitors job diversity and workforce distribution data (such as:ratio of males and females, age distribution of labor force, distribution of job types, etc.)	Applicable Worldwide <ul style="list-style-type: none"> In accordance with the provisions of nondiscrimination in human rights standards, public recruitment and internal transfers are to be carried out on the basis of equal opportunity Advantech respects employees' equal opportunities for appointment and career development, and these will not be subject to differential treatment based on factors such as personal gender, race, religion, political affiliation, sexual orientation, job ranking, nationality, age, nor will any form of discrimination affect hiring opportunities 	Applicable Worldwide Hiring appointments are to be based on the applicant's academic experience and ability, and not affected by differences in gender, race, religious belief, party affiliation, sexual orientation, rank, nationality, or age.	Applicable Worldwide <ul style="list-style-type: none"> Advantech's Official Website Human Rights Commitment Advantech Co., Ltd.'s anti-discrimination and anti-harassment policy Global Employee Satisfaction Survey RBA Validated Assessment Program (VAP) operation manual Applicable to Taiwan <ul style="list-style-type: none"> Act of Gender Equality in Employment Labor Standards Act
 Female	Prevention of Sexual Harassment & Zero Discrimination in the Workplace	Applicable Worldwide Advantech complies with the instructions of the RBA Validated Assessment Program (VAP) operation manual, carrying out regular internal and external audits of the Company as well as supplier audits Applicable to Taiwan Annual Employee Workplace Health Questionnaire- This includes questions related to the "Workplace Violence Hazard and Risk Survey" to monitor the risk of workplace sexual harassment and workplace discrimination violence	Applicable to Taiwan <ul style="list-style-type: none"> There is a Gender Work Equality Committee organized under "the Act of Gender Equality" in Employment; and we have formulated Guidelines for Handling Complaint and Punishment of Workplace Sexual Harassment for Handling Complaints and Disciplinary Measures; and we have promoted these initiatives through assemblies, e-mail, and so on. Through labor (occupational) safety and security as well as occupational care personnel organizations, in order to ensure the implementation of "Occupational Safety and Health" norms and the implementation of the Wrongful Infringement Prevention Plan 	Applicable Worldwide No complaints of discrimination and harassment occurred in 2022.	Applicable Worldwide Employee Code of Conduct Applicable to Taiwan <ul style="list-style-type: none"> Guidelines for Handling Complaint and Punishment of Workplace Sexual Harassment Wrongful Infringement Prevention Plan and Workplace Wrongful Infringement Notification and Handling Form

Groups of Concern	Identification of Issues	Status of Human rights issue	Mitigation/Management Actions (Mitigation Actions)	Target management	Actively Disclosure of Location
 Indigenous peoples	Non-Discrimination and Diversity & Inclusion	Applicable to Taiwan Advantech's remuneration policy is based on the duties and responsibilities of colleagues and adheres to labor laws stipulated by local governments. Salary rates do not differ by gender	Applicable to Taiwan In accordance with the Labor Standards Act, Advantech provides employees of indigenous peoples with the opportunity to apply for official leave for the harvest festival of indigenous peoples	Applicable to Taiwan No cases of complaints such as discrimination by indigenous peoples occurred	Applicable to Taiwan Labor Standards Act
 Children & Forced Labor	Prohibition of Child Labor & No Forced Labor/Trafficking in Persons	Applicable Worldwide Advantech complies with the instructions of the RBA Validated Assessment Program (VAP) operation manual, carrying out regular internal and external audits of the Company as well as supplier audits	Applicable Worldwide <ul style="list-style-type: none"> Advantech internally checks resumes and actual ages before recruitment. If a person is under the age of 18, he or she will not be accepted All members of Advantech's Preferred Vendor List and new suppliers are required to sign the "Advantech Supplier Code of Conduct" which includes required commitments for suppliers to safeguard labor rights in accordance with internationally recognized standards 	Applicable Worldwide <ul style="list-style-type: none"> In 2022, Advantech and Advantech's suppliers achieved zero child labor and zero forced labor In 2022 all members of Advantech's Preferred Vendor List and new suppliers were required to sign the "Advantech Supplier Code of Conduct" In 2022, the Company conducted internal and external audits, and existing suppliers passed the audits 	Applicable Worldwide <ul style="list-style-type: none"> Advantech's Official Website Human Rights Commitment Advantech's Supplier Code of Conduct RBA Validated Assessment Program (VAP) operation manual
 People with Disabilities	Employment of People with Disabilities	Applicable to Taiwan We regularly track the number of employees with disabilities every month in accordance with labor laws and regulations	Applicable Worldwide Advantech respects employees' equal opportunities for appointment and career development, and these will not be subject to differential treatment based on factors such as personal gender, race, religion, political affiliation, sexual orientation, job ranking, nationality, age, nor will any form of discrimination affect hiring opportunities	Applicable Worldwide According to Taiwan's People with Disabilities Rights Protection Act, the number of persons with disabilities employed by an enterprise shall not be less than 1% of the total number of employees. If the weighted total value does not meet the standard, the Company is required to make regular "difference subsidy" payments into the employment fund for people with disabilities overseen by the competent labor authority.	Applicable Worldwide Advantech's Official Website Human Rights Commitment
 Migrant workers	1. Non-Discriminatory Hiring 2. Compliance with Legal Requirements	Applicable Worldwide Advantech complies with the instructions of the RBA Validated Assessment Program (VAP) operation manual, carrying out regular internal and external audits of the Company as well as supplier audits	Applicable Worldwide Advantech's recruitment of foreign migrant workers is evaluated according to standards of individual ability. It is not subject differential treatment, or any form of discrimination that affects employment opportunities, including those involving personal gender, race, religious belief, political affiliation, sexual orientation, rank, nationality, or age.	Applicable Worldwide <ul style="list-style-type: none"> Recruiting foreign migrant workers with zero discrimination Externally audited by RBA 	Applicable Worldwide Advantech's Official Website Human Rights Commitment
 Third-party employees (contractors)	Compliance with Advantech Supplier Code of Conduct	Applicable Worldwide Advantech complies with the instructions of the RBA Validated Assessment Program (VAP) operation manual, carrying out regular internal and external audits of the Company as well as supplier audits	Applicable Worldwide <ul style="list-style-type: none"> Comply with different social responsibility standards and with regulations of local authorities Prohibit of child labor and forced labor Provide a healthy and safe working environment Promote labor-management cooperation Do not accept metals (Au, Ta, Sn, W, Co) from conflict mining countries, and trace metal sources and smelters used in components Reject any form of corruption, extortion, blackmail, and bribery 	Applicable Worldwide Sign the supplier code of conduct supplier letter with third-party contractors	Applicable Worldwide Advantech's Supplier Code of Conduct

5.5 Occupational Health & Safety

Implementation of workplace safety management policy

Internal Organization and Environmental, Health, and Safety Principles

Advantech strictly adheres to occupational safety and health regulations and other relevant laws. In addition to meeting legal requirements, we aim to foster a growth-oriented environment for all employees. To achieve this, we have established an occupational safety and health management system, comply with occupational safety and health regulations, and embrace a spirit of continuous improvement, pollution prevention, and disaster prevention. We conduct OHS education and training to increase awareness and reduce the risk of accidents. Following the guiding principles of our OHS policy, we strive to create a "Zero-Accident Workplace" environment.

Verification of Occupational Health and Safety Management System (ISO 45001:2018)

Advantech is committed to global occupational health and safety issues. At our headquarters and Advantech China and Advantech USA, we follow the Plan-Do-Check-Act (PDCA) approach of the Occupational Health and Safety Management System to implement occupational health and safety practices. We have obtained ISO 45001 certification. To safeguard the well-being of our employees, we have established an Occupational Health and Safety Policy. We require strict compliance with the Occupational Health and Safety Management System in all regions to ensure our employees are not exposed to hazardous working environments. We also emphasize the importance of self-protection among employees. In the event of immediate danger in the workplace, employees are encouraged to retreat to a safe place and report to their immediate supervisors.

Occupational health and safety personnel in each region plan, promote, monitor, and audit the Occupational Health and Safety Management System. Advantech China organizes monthly safety meetings with factory managers, supervisors, and environmental and safety management personnel from various departments. At the headquarters, high-level executives, factory managers, occupational health and safety personnel, and labor representatives form the Occupational Health and Safety Committee, which meets quarterly to review, coordinate, and provide recommendations on safety management matters.

Occupational Health and Safety Education and Training

The concept of sustainable business operation and compliance with occupational safety and health laws and regulations are implemented to ensure the validity of the certificates of the executive personnel of the occupational safety and health management system. Regarding internal occupational safety and health education and training for new recruits and incumbents, each factory plans to conduct annual safety education training courses. The content of the courses includes organic solvent operations, operation of mechanical equipment, 6S, fire drills, explosion-proof and other related courses.



Safety and Health Performance Indicators

To effectively drive the implementation of safety and health initiatives, we have established safety and health performance indicators to track the progress and performance of our programs. The headquarters reports the progress of safety and health implementation and performance management to senior executives, factory managers, occupational safety and health personnel, and labor representatives through the Occupational Safety and Health Committee, facilitating cross-functional communication.

Through annual internal audits, procedural documents control, and regular monitoring, we continuously review and strengthen our environmental, health, and safety system, promoting a culture of employee safety and prioritizing the value of life. We are committed to achieving sustainable OHS management and expect our suppliers and contractors to fulfill their rights and obligations regarding environmental, health, and safety. They are required to comply with occupational safety and health laws, environmental protection laws, and relevant regulations and are asked to sign the Supplier Code of Conduct. Regular supplier evaluations are conducted to ensure compliance with OHS standards, safeguarding all individuals' safety within the work environment.

Table 5.5.1 Management of safety and health performance

Items of performance management	Performed behavior
Regulatory Compliance	Regular quarterly assessments are conducted to ensure compliance with applicable regulations, track improvements, and confirm compliance.
Occupational Accident Prevention	Monthly reporting of occupational accidents, conducting investigations and records for incidents occurring within the month, reviewing assessments, and confirming relevant protective measures.
Regulatory Authority Audits	Periodic audits by supervisory authorities to confirm improvements and timelines and continuous monitoring of requirements from supervisory authorities.
Internal and External Audits	During this year, internal audits identified a total of 10 deficiencies and 30 observations, while external audits identified 3 deficiencies and 21 observations. Responsible units continue to promote and complete improvement actions.
Risk and Hazard Identification	Based on the risk identification process for all products, activities, and services conducted by headquarters, regular checks are conducted yearly to assess and identify risks. A total of 630 risk identifications and assessments were carried out.
Change Management	This year, 12 change management processes were implemented for changes in occupational health and safety personnel and production machinery. No accidents or false alarms occurred due to change management.
Operational Environmental Monitoring	In accordance with regulations, the headquarters conducts semi-annual assessments of the actual working environment and the exposure status of workers. This includes monitoring chemical factors such as carbon dioxide, isopropanol, acetone, xylene, and n-heptane, as well as physical factors such as noise and illumination.
Contractor Management	Contractors must comply with the company's contractor health and safety management regulations during the pre-and post-construction phases. Audit items related to occupational health and safety management systems are incorporated.
Occupational Health & Safety Training	Confirm the validity of certifications for supervisors and professionals at all levels (including occupational safety managers, waste management personnel, healthcare providers, first aiders, supervisors for organic solvent operations, fire prevention and control managers, and forklift operators). Headquarters provides training for new hires and ongoing training for employees (courses include organic solvent handling, machinery operation, 6S, fire drills, explosion prevention, etc.), with a total of 6,448 training participants and 7,546 training hours.
Fire Prevention Management	Adhere to relevant fire safety regulations, establish fire management systems, regularly review protection plans, conduct self-defense fire drills, and continuously promote fire management measures.
Chemical Management	Regularly verify the inventory, addition, and changes of chemicals, conduct PPE management inspections based on relevant changes, as well as conduct voluntary inspections of organic solvent operations at work sites.
Regular Equipment Inspection	Periodic inspections, prioritized inspections, and machinery and equipment operational checks must be conducted. By implementing periodic inspections to detect deficiencies early and taking preventive measures, occupational accidents can be prevented, ensuring worker safety and health.
Health Care	Regularly conduct employee health checks, on-site physicians consult for colleagues monthly, offering health guidance to high-risk individuals, and continuously caring for employee health.

Occupational Hazard Identification and Risk Assessment

Regarding the safety and health of employees in their work environment, we conduct hazard identification and risk assessment. A designated team performs safety and health hazard identification and risk assessment, analyzing environmental and occupational health impacts based on identification parameters. After calculating the risk factors and categorizing the risk assessment values, we set monitoring, control, and improvement targets. When conducting risk identification and assessment, we follow the "Environmental aspects, health and safety risk identification SOP" to analyze environmental and occupational health impacts. In 2022, we carried out 630 environmental considerations and occupational health and safety risk items related to acquiring new equipment, process changes, regulatory updates, and operational activities associated with our products, services, and workplace. The risk assessment values for these items were all 0, indicating a low level of risk. Advantech strives to optimize a friendly workplace by classifying risk assessment values to ensure that equipment functions and other environmental, safety, and health aspects meet company requirements and standards.

Chemical Management

Hazardous chemicals used in various plant processes are stored in designated areas. Safety Data Sheets (SDS) are prominently displayed for immediate access by on-site personnel. A chemical inventory is established, and risk assessments are conducted to implement necessary control measures. Storage areas and containers are labeled in both Chinese and English, following the "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals" and the "Globally Harmonized System of Classification and Labeling of Chemicals, GHS". Management follows the Hazardous Chemicals Safety Management Regulations for personnel requiring access to the organic solvent room, and organic solvent operation supervisors are notified for on-site supervision.

Regarding the general education training on hazardous chemicals, new recruits are provided with the necessary general education training on the operation of handling hazardous chemicals when they report for duty. The education and training of hazardous chemicals is conducted annually for our employees on the job to strengthen their awareness of safety. In addition, the necessary special physical examination and special health examination shall be carried out regarding operation content particularly hazardous to health in accordance with the provisions of the "Regulations of the Labor Health Protection". If the health of the operating staff is diagnosed as abnormal, the assessment of the suitability for operation shall be carried out immediately. When necessary, the worker's exposure time needs to be reduced or the worker shall be relocated to other tasks. The health status of operating workers should be monitored at all times.

Operational Environmental Monitoring

We strictly abide by the relevant regulations on occupational safety and health to implement the periodic inspections plan for machines, equipment and the environment of various operations. Periodic repairs and maintenance of machinery are carried out, and related education and training are provided to maintain safe and health conditions of the working environment. Thus, the occurrence of accidents is expected to be eliminated. When purchasing new production machinery or equipment, we strictly adhere to ISO 45001, related contractor access control procedures, and occupational safety and health modification management measures in addition to following the acceptance process. Together with occupational safety and health personnel, we rigorously enforce these measures to ensure that the equipment functions in line with the company's production needs and to ensure the occupational safety and health of our workers.

In addition to monitoring the workplace environment to meet safety and health standards, Advantech pays further attention to employee health issues and regularly measures and maintains drinking water quality, noise levels, temperature and humidity, and lighting. In terms of air-conditioning equipment, we commission a professional inspection company every six months to measure the carbon dioxide concentration of the central air-conditioning building, in order to ensure the quality of the working environment, and protect the health of employees.

2022 Occupational Injuries and Occupational Illnesses Statistics

Advantech takes "Zero-Accident Workplace" as its safety goal, and the "Occupational Accidents and Incidents Investigation and Management Procedures" was formulated to clearly regulate accident reporting, responsibilities of accident investigation, investigation levels, procedures, and accountability. After the accident, the group asked the on-site personnel and unit supervisors to report immediately. Also, unit supervisors, occupational safety and health personnel, and health care personnel are required to investigate, deal with, and write accident reports.

The Company's occupational accident statistics are calculated in accordance with the relevant laws and regulations on occupational safety and health. In 2022, the total working hours of Advantech's global employees exceeded 16 million hours. The statistics of occupational injuries in each region are shown in the table below. The severity rate of occupational injuries in Advantech China (43) is higher than that in the headquarters (1). The types of injuries in each factory are mainly fall, collision, and crushing. In order to prevent harm to personnel, the safety awareness of our employees is actively improved through safety educational training and promotion of literature. The supervision and inspection of the environment and safety by the management unit has been strengthened to reduce safety incidents related to walking and collision. The goal of the Company's continuous efforts is to achieve zero accidents.



Table 5.5.2 Statistics of Occupational Injury of Advantech's Employees

2022	Taiwan	China	Japan	Korea	Europe	USA
Total working hours	6539808	7436000	443520	300960	901600	917940
Total number of occupational injuries	4	6	0	0	1	0
Category of Work Injury	fall/collision/incision, cut	fall/collision/crushing	None	None	Other	None
Days lost due to occupational injury	8	322	0	0	1	0
Disabling Injury Frequency Rate	0.61	0.81	0	0	1.11	0
Disabling Severity Rate	1	43	0	0	1	0
Mortality rate of occupational injury	0	0	0	0	0	0
Absentee Rate of occupational injury	0.001%	0.035%	0%	0%	0.002%	0%
Mortality rate of occupational disease	0	0	0	0	0	0

***Note:**

1. Total working hours (headquarters): The total working hours are based on the data declared by Occupational Safety and Health Administration, Ministry of Labor every month.
2. Other regions/total working hours = number of people in each region * annual working days * daily working hours
3. Disabling Injury Frequency Rate (FR) = (Total number of individuals injured and lost × 1,000,000) ÷ Total working hours (to two decimal places)
4. Disabling Severity Rate (SR) = (Total lost days of disability injury × 1,000,000) ÷ Total working hours (calculated up to the last integer)
5. Mortality rate of occupational injury = Occupational injury deaths ÷ Total number of individuals suffering occupational injuries
6. Mortality rate of occupational disease = number of deaths from occupational illness deaths ÷ occurrences of occupational illness
7. Occupational diseases: Identification was made by doctors of occupational medicine, local labor authorities or Occupational Safety and Health Administration, Ministry of Labor.
8. Absentee Rate of occupational injury = (Total days of absence due to occupational injuries/total working days) × 100%
9. The above data excludes commuting traffic accidents.

Table 5.5.3 Categories of Occupational Injury of Advantech's Employees

2022 Category of Work Injury	Taiwan		China		Europe	
	Number of Injuries	Proportion of Injuries	Number of Injuries	Proportion of Injuries	Number of Injuries	Proportion of Injuries
Fall	2	0.065%	2	0.054%	0	0.000%
Collision	1	0.032%	2	0.054%	0	0.000%
Incision, cut	1	0.032%	0	0.000%	0	0.000%
Crushing	0	0.000%	2	0.054%	0	0.000%
Other	0	0.000%	0	0.000%	1	0.204%

***Note:**

1. Proportion of injuries at headquarters: number of injuries/average number of people per month
2. Proportion of Injuries of Advantech China and Advantech Europe: Number of Injuries/number of employees
3. No occupational injuries occurred in other regions..

Table 5.5.4 Statistics of Occupational Injury of Non-Advantech's Employees

2022	Taiwan	China	Japan	Korea	Europe	USA
Total working hours	236544	174000	168960	3250	3680	5720
Main Category of Work Injury	None	None	None	None	None	None
Total number of occupational injuries	0	0	0	0	0	0
Days lost due to occupational injury	0	0	0	0	0	0
Disabling Injury Frequency Rate	0	0	0	0	0	0
Disabling Severity Rate	0	0	0	0	0	0
Mortality rate of occupational injury	0	0	0	0	0	0
Absentee Rate of occupational injury	0%	0%	0%	0%	0%	0%
Mortality rate of occupational disease	0	0	0	0	0	0

***Note:**

1. Absentee Rate of occupational injury = (Total days of absence <occupational injury leave>/total working days) × 100%
2. Workers who are not Advantech employees: Workers of security, cleaning, group meals, dispatched personnel, etc.
3. The deadline for counting the number of people was 2022/12/31

Employee Absentee Rate Statistics

The COVID-19 pandemic emerged at the end of 2019 and rapidly spread to numerous countries worldwide in 2020. The absentee rates for 2019-2022 encompassed work-related injuries, sick leave, and days off taken at home due to infection. To comply with local government regulations on epidemic prevention and ensure their implementation, the global target absentee rate in 2022 was set at 0.9%, based on the average absentee rate over the previous three years. Through statistical analysis, it was observed that certain regions had higher absentee rates due to employees taking leave for COVID-19 infection and recovery. Nevertheless, Advantech's overall global absentee rate for 2022 stood at 0.79%. As the pandemic improves in 2023, the absentee rate for the year is anticipated to decrease accordingly. We will also monitor employees' absence status from work-related injuries or illnesses.

Table 5.5.5 Employee Absentee Rate Statistics

2022	Taiwan	China	Japan	Korea	Europe	America	Total
Total working days	817476.00	929500.00	54395.50	29530.00	104302.00	917940.42	2853143.92
Lost Days of Absence from Work-related Injury Leave	74.00	322.00	0.00	0.00	1.00	0.00	397.00
Lost Days of Absence Due to Sickness	15637.75	4700.87	173.00	380.50	852.00	365.00	22109.12
Total Lost Days of Absence	15711.75	5022.87	173.00	380.50	853.00	365.00	22506.12
Absentee Rate	1.92%	0.54%	0.32%	1.29%	0.82%	0.04%	0.79%

*Note: Absentee rate calculation method: (Total number of days absent < Work-related injury leave + Sick leave + Menstrual leave + Epidemic prevention leave> / Total person-days of work) x 100%

Emergency Response Measures

Each plant complies with local regulations and provides necessary occupational health and safety education and training to new employees upon their employment. The company regularly conducts occupational health and safety education and training courses for existing employees to enhance their awareness of safe operating procedures and potential hazards, thereby improving safety consciousness.

Every six months, regular fire drills are conducted with the local fire brigade to assist colleagues in understanding the facility's disaster level, response, and evacuation routes. Fire safety training is also provided to ensure colleagues are familiar with appropriate handling and response methods for various situations, including fires, storms, floods, earthquakes, and other events. Regular dissemination of disaster prevention knowledge among colleagues is carried out to establish a sense of disaster preparedness in their daily lives, effectively minimizing risks.



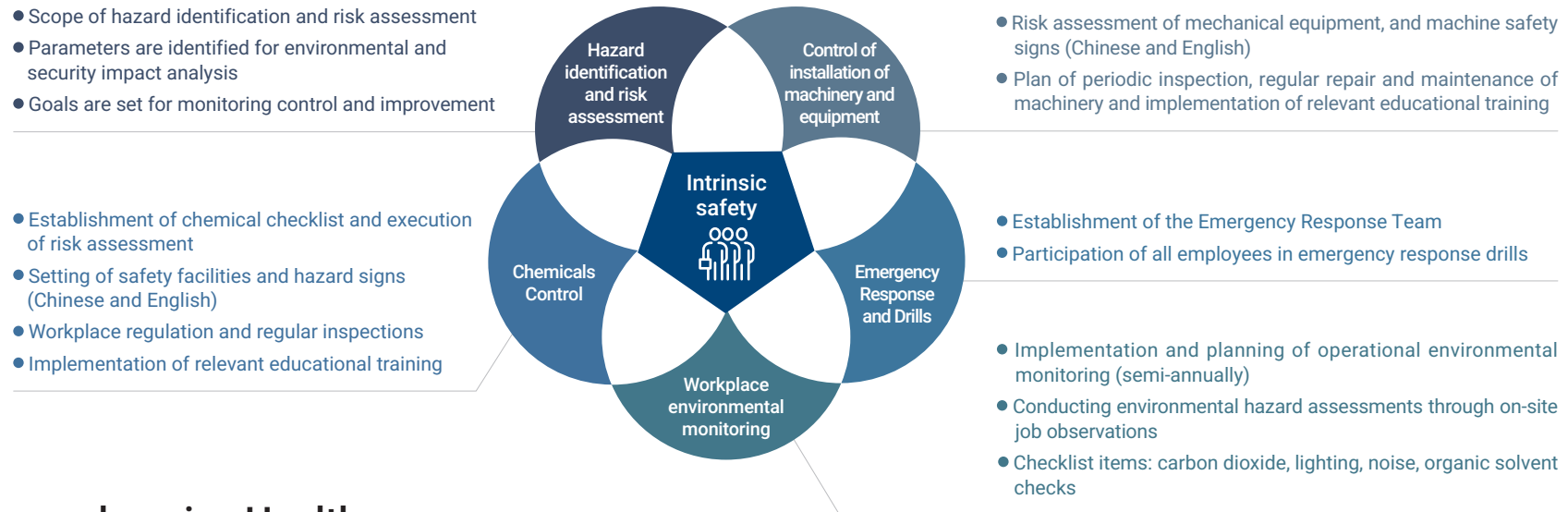
We regularly cooperate with the fire brigade in the district to conduct fire drills every six months



Publicity lecture on fire protection knowledge

Intrinsic Safety

Each plant continuously injects resources into planning and creating a healthy workplace and cultivates a safety culture that puts people first to construct a work environment based on intrinsic safety. This promotes employees' physical and mental well-being, achieves work-life balance, and reduces safety hazards during operations, preventing accidents. This is accomplished through implementing control measures in mechanical equipment, emergency response and drills, workplace environmental monitoring, chemical control, hazard identification, and risk assessment, embodying the optimization of safety.



Comprehensive Healthcare

Establishing a high-quality workplace healthcare environment, the headquarters gradually enhance the standards of healthcare services for employees. With diversified and specialized healthcare service needs, it aims to systematically manage and address health risks in the work environment, safeguarding employees' physical and mental well-being. This allows colleagues to develop a preventive medicine mindset, convey accurate health information, bring the concept of health into their families, and influence their family members, achieving work-life balance and expanding the benefits of health promotion.

The health benefits provided exceed the statutory frequency of the Occupational Health and Safety Act, offering regular health check-ups to employees of all ages. Additionally, various health promotion activities are conducted annually, including health lectures, blood donation drives, first aid training, parent-child activities, and the implementation of a smoke-free workplace policy. Regular environmental monitoring is conducted, and facilities such as lactation rooms and safe and hygienic employee dining areas are provided.



Employee health checks were held regularly every year



AED educational training lectures

Establishment of Healthcare Resource Map

Employees are the most important assets of a company. Health promotion can provide our colleagues with good health and hygiene concepts and living habits. Therefore, the quality of life and work performance of our colleagues can be improved. The "Electronic Health News" is sent monthly to provide our colleagues with instant and practical health and wellness concepts and knowledge according to solar terms and epidemics.

Major government agencies or public places are beginning to be required to install AEDs (Automated External Cardiac Devices) with the recent sudden death of many young performing artists. Advantech is one step ahead of the regulations by deploying and installing AEDs in each factory ahead of time before the companies or businesses are required to set up one. Afterwards, every local and foreign colleague who has received training can hold up a protective umbrella, so that all Advantech colleagues can live happily and work with peace of mind under the umbrella.

In response to the digital trend of health in workplace, smart medical products have been introduced since September 2022. Our colleagues can view personal health examination reports, make online appointments for consultations with resident physicians, view consultation records, and view physiological measurements through LINE. In addition, on-site physicians provide monthly health consultations for colleagues and give guidance on the health of high-risk colleagues to continuously take care of the health of our employees.

Employee Assistance Programs, EAPs

Advantech's core value is "Talent Invigoration". The working environment of intrinsic safety is constructed and the four major plans are implemented to provide sufficient services to our colleagues. From 2022, Advantech headquarters introduced EAP to help our employees solve work-related personal problems through "employee consultants". In this way, the work performance and productivity of our employees are improved to reduce work accidents caused by human errors. Psychological, legal, financial and health consulting services are provided to meet the work and life needs of our employees and their families.

Table 5.5.6 Advantech Headquarters' Healthy Multicare Platform in 2022

Category	Various items	Description of performed behavior
Employee care	Consulting services of physicians in the factories	Each factory regularly provides physician consultation services and health education guidance according to the number of workers. In 2022, there were 78 consultations with a total of 224 participants.
	Multifunctional medical room, physiological measurement station, digital platform tracking	Services such as consultation on health care, treatment of emergency injuries, and guidance on diseases are provided. Sphygmomanometers, scales, blood glucose machines and trauma treatment equipment are ready in some factories.
	Promotion of healthy concepts	Health news is distributed through E-mail and ABLE weekly newsletter to deliver correct health information.
Health Promotion	Health lecture	In 2022, a total of 4 special lectures was held with topics including "weight loss through exercise" and "nutrition through diet". It also includes aspects of psychological relief such as "music therapy" and "post-pandemic psychological adjustment" with a total of 268 people participated.
	Blood donation activities	There are blood donation activities 2-3 times a year in each region.
	Healthy activities (weight loss classes and fitness)	Related health-promoting activities are administered, such as: yoga classes during lunch breaks, walking, running, weight loss programs, etc. A total of 515 people participated in the weight loss activities in 2022 with a total weight loss of 845.5 kg.
	In search for pharmacists	Our colleagues with chronic diseases and their family members need to maintain good regular medication habits. Therefore, we offer the service of calling a pharmacist. After our employees register online and upload prescriptions, pharmacists will deliver medicines to the factory to take care of our colleagues and their families.
Health management	Health checks, prevention of occupational diseases	In accordance with labor health protection rules and concern for our employees' health, we provide annual health checks and special health checks, which is superior to regulations. There were 12 health checks in 2022 with a total of 2097 participants.
	Cardiovascular risk group	Consultation from specialized physicians and nurses is provided for the prevention of cardiovascular high-risk groups.
Four major plans	Prevention of etiological musculoskeletal, abnormal work load, and illegal violations in the workplace	According to the relevant guidelines of the Ministry of Labor, prevention of etiological musculoskeletal, abnormal work load, and illegal violations in the workplace were formulated. The questionnaire survey is thereof designed to include the list of medium and high risks into the list of consulting management. From the collected data and survey results, it is convenient for effective tracking and management.
	Maternal health protection	A health protection plan is developed, and nursing rooms and health checks are provided under the guidelines of the Workers' Health Service Program.
Enterprise Health Care System	Health management system	The health management system is used to manage health check reports and various measurement data. Healthcare workers use it for tracking and management.
Emergency Injury Services	Treatment of emergency injuries	According to the stipulations of the law, the nurses stationed in the factory are arranged to provide our colleagues with emergency treatment of injuries and related health education instructions.
	AED setup	Regarding the setting and maintenance of AED equipment, and related educational training courses, a total of 5 educational training sessions were conducted, and a total of 334 people were trained.
Food Safety and Dietary Nutrition	Dining in the restaurant	Regarding the nutritional checks of our employees' meals, group meal vendors are asked to provide calorie labels for each meal. Vegetable lunch boxes, fruit lunch boxes, low-calorie lunch boxes, etc.
Employee Assistance Programs	Introduction of EAP	We hope to help solve personal problems that affect our colleagues' work performance and work safety by integrating the Company's internal and external resources and establishing the Company's EAP. It helps the Company and the colleagues grow together stably, thereby enhancing the competitiveness of the organization. Aspects designed for counseling includes physical and mental health, interpersonal management, self-growth, financial and legal affairs. Also, services that maintain physical and mental balance are committed to facilitating assistance with care resources for our employees.

5.6 Appendix: Employee Structure

Employee Structure

2022 Advantech's Number of Employees

Region	Headquarters	China		Japan	Korea	Europe	USA	Other Region	Global Total
		ACN	AKMC (Kunshan)	AJP					
Number of employees	3488	1242	2476	231	128	490	512	360	8927
Note	-	-	Manufacturing Center	-	-	-	-	-	-

*Note:

1. The number of employees does not include affiliated companies.
2. The scope of this report only discloses the information of the six major regions. The "Global Total" in this table includes the total number of Advantech global's employees in the six regions and other regions.

Region	Item		Number and percentage (% of male)		Number and percentage (% of female)		Total Number of people
Headquarters (Taiwan)	Staff employed	Number of people in the company	1942	55.68%	1546	44.32%	3488
	Number of supervisors above the level of manager and assistant manager		412	80.47%	100	19.53%	512
	Employee age	Below 30 years	242	43.84%	310	56.16%	552
		31 - 49 years old	1403	57.95%	1018	42.05%	2421
		50 years old and over	297	57.67%	218	42.33%	515
	Full-time and contract	Full-time	1886	55.32%	1523	44.68%	3409
		Contract	32	60.38%	21	39.62%	53
		Student participants	24	92.31%	2	7.69%	26
	Functional classification	R&D	1085	77.61%	313	22.39%	1398
		Marketing business	115	44.75%	142	55.25%	257
Administrative		131	36.19%	231	63.81%	362	
Manufacturing		611	41.54%	860	58.46%	1471	

Region	Item		Number and percentage (% of male)		Number and percentage (% of female)		Total Number of people
China	Staff employed	Number of people in the company	2063	55.49%	1655	44.51%	3718
	Number of supervisors above the level of manager and assistant manager		124	68.89%	56	31.11%	180
	Employee age	Below 30 years	429	57.97%	311	42.03%	740
		31 - 49 years old	1555	53.88%	1331	46.12%	2886
		50 years old and over	79	85.87%	13	14.13%	92
	Full-time and contract	Full-time	2045	55.39%	1647	44.61%	3692
		Contract	11	68.75%	5	31.25%	16
		Student participants	7	70.00%	3	30.00%	10
	Functional classification	R&D	411	65.24%	219	34.76%	630
		Marketing business	313	66.74%	156	33.26%	469
		Administrative	157	35.76%	282	64.24%	439
		Manufacturing	1182	54.22%	998	45.78%	2180
Japan	Staff employed	Number of people in the company	160	69.26%	71	30.74%	231
	Number of supervisors above the level of manager and assistant manager		36	94.74%	2	5.26%	38
	Employee age	Below 30 years	14	87.50%	2	12.50%	16
		31 - 49 years old	58	53.70%	50	46.30%	108
		50 years old and over	88	82.24%	19	17.76%	107
	Full-time and contract	Full-time	157	69.47%	69	30.53%	226
		Contract	3	60.00%	2	40.00%	5
		Student participants	0	-	0	-	0
	Functional classification	R&D	10	100.00%	0	0.00%	10
		Marketing business	76	81.72%	17	18.28%	93
		Administrative	15	60.00%	10	40.00%	25
		Manufacturing	68	66.02%	35	33.98%	103

Region	Item		Number and percentage (% of male)		Number and percentage (% of female)		Total Number of people
Korea	Staff employed	Number of people in the company	91	71.09%	37	28.91%	128
	Number of supervisors above the level of manager and assistant manager		11	91.67%	1	8.33%	12
	Employee age	Below 30 years	25	53.19%	22	46.81%	47
		31 - 49 years old	52	80.00%	13	20.00%	65
		50 years old and over	14	87.50%	2	12.50%	16
	Full-time and contract	Full-time	76	69.72%	33	30.28%	109
		Contract	12	75.00%	4	25.00%	16
		Student participants	3	100.00%	0	0.00%	3
	Functional classification	R&D	5	100.00%	0	0.00%	5
		Marketing business	25	50.00%	25	50.00%	50
		Administrative	20	66.67%	10	33.33%	30
		Manufacturing	41	95.35%	2	4.65%	43
Europe	Staff employed	Number of people in the company	325	66.33%	165	33.67%	490
	Number of supervisors above the level of manager and assistant manager		56	88.89%	7	11.11%	63
	Employee age	Below 30 years	27	54.00%	23	46.00%	50
		31 - 49 years old	196	63.64%	112	36.36%	308
		50 years old and over	102	77.27%	30	22.73%	132
	Full-time and contract	Full-time	299	69.21%	133	30.79%	432
		Contract	26	44.83%	32	55.17%	58
		Student participants	0	-	0	-	0
	Functional classification	R&D	45	83.33%	9	16.67%	54
		Marketing business	261	70.54%	109	29.46%	370
Administrative		21	31.82%	45	68.18%	66	
Manufacturing		0	-	0	-	0	

Region	Item		Number and percentage (% of male)		Number and percentage (% of female)		Total Number of people
USA	Staff employed	Number of people in the company	331	64.65%	181	35.35%	512
	Number of supervisors above the level of manager and assistant manager		52	69.33%	23	30.67%	75
	Employee age	Below 30 years	46	58.23%	33	41.77%	79
		31 - 49 years old	149	63.40%	86	36.60%	235
		50 years old and over	136	68.69%	62	31.31%	198
	Full-time and contract	Full-time	330	64.83%	179	35.17%	509
		Contract	1	33.33%	2	66.67%	3
		Student participants	0	-	0	-	0
	Functional classification	R&D	102	85.71%	17	14.29%	119
		Marketing business	99	73.33%	36	26.67%	135
		Administrative	39	27.66%	102	72.34%	141
		Manufacturing	91	77.78%	26	22.22%	117

***Note:**

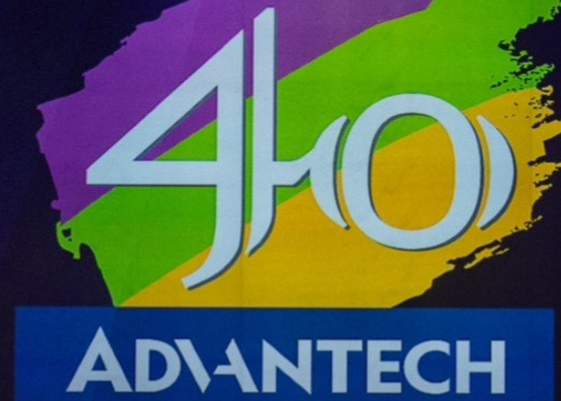
1. The denominator of the ratios in the above table is the total number of employees in the region.
2. The deadline for counting the number of people was 2022/12/31, and there was no significant fluctuation compared with the total number of people in 2021.
3. Permanently employed employees are full-time employees in the above table. Temporary employees are contract employees in the above table. Full-time employees are permanent employees in the above table. Part-time employees are students of cooperative education in the above table. Employees without unlimited hours guarantee.
4. The executives in the above form are of the same grade, but the job titles are different due to regional factors. Advantech headquarters includes the executives of manager level and above, while it includes manager/assistant manager and above in other regions.



6

Altruism and Social Benefit

- 6.1 Neighborhood and Community Care
- 6.2 Summary of Advantech Foundation Achievements



Enabling an Intelligent Planet



6.1 Neighborhood and Community Care

6.1.1 Strategy and Goals

Advantech Corporate Citizenship Policy

Starting from the Company's own core capabilities, Advantech responds to issues of SDG 9 (Industry, innovation and infrastructure) and SDG 4 (Quality Education) by deepening the innovative application of the IoT and education. We offer long-term support for IoT education and various innovative and sustainable education, and look forward to cultivating the children, teenager, and youth in Taiwan with a sustainable outlook on the environment to become citizens of the world.

SDG 4 is also echoed in social investment and education, cultural and public welfare. Advantech promotes sustainable education and aesthetic literacy for the public. It not only invests in educational innovation, but also encourages and hosts sustainable education promotion programs in elementary and secondary schools. We also support private education platforms to promote the Project-Based learning model (PBL). In addition, we continue to invest resources to assist professional schools and art teams to cultivate outstanding artistic talents, and we actively promote the aesthetic literacy for the public. In the future, we will also expand our support to cultivate talent in art creation in Taiwan, enhancing Taiwan's artistic soft power.

Medium and Long Term Goals

The vision statement of the foundation is that "combining the participation of corporate stakeholders based on Advantech's altruistic concept to promote "IoT innovation", "sustainable education", and "humanistic quality" for the purpose of promoting the development of an intelligent and happy community". Advantech is committed to becoming an intelligent promoter of a sustainable earth and a brand enterprise of truth, goodness and beauty. The goal is to promote sound social development in which science and technology and humanities go hand in hand through talent cultivation. From 2022 to 2025, we have continued to deepen the topic of IoT education based on the use of the Company's core capabilities. Also, we promote art and public welfare activities that combine social development and strengthen the connection between the Company and our employees. The promotion of the annual goal is carried out in a planned way with "innovative research and development of IoT", "sustainable innovation education", "humanistic and aesthetic quality", and "charity care for rural areas" as key projects.

All projects of the foundation have been approved by the Board of Directors. And according to the appropriateness, we can effectively bring together the community for a response, or we can invite employees, customers, and manufacturers to participate together with all stakeholders.

Table 6.1.1: Listing of Social Benefit Expenditures of the Foundation in 2022

Spending Type	Arts and Culture	Industry-University	Education	Public welfare	Total Expenses	Percentage
Charitable Donations	-	-	-	\$ 7,476,680	\$ 7,476,680	8%
Neighborhood/Community Investment	\$ 12,669,014	\$ 1,088,478	\$ 9,782,793	\$ 6,574,900	\$ 30,115,185	33%
Commercial Initiatives	\$ 8,832,240	\$ 38,464,732	\$ 7,163,168	-	\$ 54,460,140	59%
Total	\$ 21,501,254	\$ 39,553,210	\$ 16,945,961	\$ 14,051,580	\$ 92,052,005	100%

Table 6.1.2: Analysis of Expenditure Items




Spending Type	Arts and Culture	Industry-University	Education	Public welfare	Total Expenses
Cash Donations	\$ 20,856,216	\$ 32,460,317	\$ 16,437,582	\$ 14,051,580	\$ 83,805,696
Volunteer Fees	-	-	-	-	-
In-Kind Giving	-	\$ 1,822,939	-	-	\$ 1,822,939
Management Overheads	\$ 645,038	\$ 5,269,954	\$ 508,379	-	\$ 6,423,370
Total	\$ 21,501,254	\$ 39,553,210	\$ 16,945,961	\$ 14,051,580	\$ 92,052,005

6.1.2 Annual Results

Sustainability and Innovation Education

The Advantech Foundation has long supported sustainability and innovation education with the hope to create better learning experiences and benefits for the children, teenagers, and youth in Taiwan. Moreover, we are committed to cultivating future talents through the promotion of various projects, including:

- **ACT Dreamers:** See "Project Highlights" below for details.
- **ACT/PBL Sustainability Teachers and Lesson Plans:** We and relevant units jointly cultivate seed teachers and develop lesson plans. Young students can gain a deeper understanding of ESG issues through the Project-Based Learning (PBL) model, and propose sustainable solutions for contribution to a better future and the next generation.
- **Sponsorship of High-Quality Sustainable Education Platforms:** We invest funds to support the educational plans to the original of high-quality education teams such as Junyi Academy, Yingguang Education Association, Chengzhi Education Foundation and other teams. In addition, we sponsor PaGamO Future Literacy Academy to adopt rural schools for improving their reading ability.
- **Support for the cultivation of creative talents in top colleges:** we support the Musical Theater Elite Talents Cultivation plans to, Graduate Institute of Performing Arts, National Taiwan Normal University.
- **Various types of caring scholarships and grants:** We cooperate with schools in remote mountainous areas and underprivileged areas such as Hsinchu, Miaoli, and Nantou to formulate scholarships and grants. The schools are responsible for setting up a selection committee to select outstanding and diligent students to give encouragement in order to increase their learning motivation and flip their lives.

Link to SDG	Driving force	Axis	Commercial Benefits and Performance	Social/ Environmental Benefits and Performance
  	The quality of education is improved, and multiple educational development opportunities are provided to support the development of children and young people's abilities	Advantech ACT Dreamer	In line with the SDGs of the United Nations' sustainable indicators, we cultivate students' innovative creativity, practical ability, teamwork and other abilities through the process of dreaming and practicing.	A total of more than 10 schools were sponsored, and the PBL study group was supported for more than 30 educators to visit the United States for a week. The amount invested by the foundation was more than NT\$3.6 million.
		Sponsorship of high-quality sustainable education platform	The lack of school education resources is supplemented by the sponsorship of the innovative education platform. We also invite the education team to conduct the employee's knowledge lectures to promote and advocate innovative educational concepts. Our colleagues can pick up new knowledge and apply it in raising their own children. In 2022, a total of 5 educational lectures were held with 355 employees participating.	A total of nearly NT\$4.56 million was invested in sponsorship funds. <ul style="list-style-type: none"> ● Junyi: The number of registered users on the platform has exceeded 4.3 million, accompanying more than 3,500 teachers in the transformation of teaching technology. ● Yingguang Education Association: We cooperate to promote the "School and Teacher Assistance Program in Under-resourced Areas". In 2022, more than 90 elementary and secondary schools in Taiwan have been assisted with more than 550 accompanying sessions on campus. ● PaGam: In 2022, the SDGs Sustainability Elementary School of Advantech had 446,595 participants. ● Pley School: We cooperate to promote the "Social Responsibility Education Downward Seed Teacher Accelerator Program". A total of 106 teachers in Taiwan participated, benefiting 4,397 students.

Inheritance and development of traditional culture and art education

Promotion of life aesthetics

- We support the performance team and hold the "Art Salon". More than 10 high-quality Taiwanese performing arts teams were sponsored.
- The podcast "Easy Listening to Arts and Culture" is produced and broadcast to invite artists, curators, authors, and performers to the program to introduce performances, new books, movies, exhibitions, or cultural events.
- Visual arts are promoted through the Advantech Gallery holding exhibitions as well as hosting small Advantech drawing competitions.

Sponsorship of traditional cultural revival

- **Sponsorship of National Taiwan College of Performing Art:** Since 2015, Advantech has continued to support Taiwan College of Performing Art. The graduation performance of the Department of Acrobatics, the Jing Ju Troupe and the Acrobatics Troupe were both sponsored. In results, the performance stage of students engaged in traditional art and culture has been expanded, and the visibility of traditional opera has been improved. In order to encourage students with superb skills to continue to study hard, we sponsor the Department of Acrobatics to establish the art scholarship of the [Advantech Elite Award] to commend outstanding students.
- **Young Talents Cultivation Program of GuoGuang Opera Company:** In order to relieve Jing Ju's talent gap and focus on training for young talents with potential, we focus in talents, recruit talents, and cultivate new seedlings in the existing official GuoGuang Opera Company members and youth reserve members , Taiwan College of Performing Art student. In addition, we sponsored the funds for the promotion of the film "Popular Traditional Opera", allowing young actors to find different ways to promote it.

We support potential players in the sports world by sponsoring training equipment and related funds.

Driving force	Axis	Commercial Benefits and Performance	Social/ Environmental Benefits and Performance
Inheritance and development of traditional culture and art education to promote the cultivation and succession of young talents	Sponsorship of National Taiwan College of Performing Art	Through active interaction, we invite the school to participate in Advantech's various internal and external activities and performances to enhance the visibility of traditional art performances. Stakeholders (including employees, customers, etc.) are encouraged to actively participate.	A total of 12 people won the art scholarship of the "Advantech ABLE Elite Award" . The total sponsorship funds to support Taiwan College of Performing Art's traditional arts exceeded NT\$460 thousand.
	Young Talents Cultivation Program of GuoGuang Opera Company	The inheritance and transmission of traditional classics can be combined with the cultivation of key talents to comprehensively improve the performance capabilities of young actors. Therefore, the coexistence and co-prosperity between the cultivation of opera professionals and the performing arts market is promoted.	32 series of courses are arranged to be taught by senior actors/teachers to guide the courses. A total of 18 young actors and 6 behind-the-scenes staff are learning and inheriting. Furthermore, they starred in showcasing their skills and/or served as key staff to assist in the annual series of performances. The annual sponsorship fund exceeds NT\$3.6 million.

Driving force	Axis	Commercial Benefits and Performance	Social/ Environmental Benefits and Performance
<p>High-quality arts and cultural teams are supported and encouraged to promote aesthetic quality education for all.</p>	<p>Sponsorship of the Taiwan arts and culture team, production and broadcast of the podcast "Easy Listening to Arts and Culture", promotion of art education in rural areas, and holding of art gallery exhibitions</p>	<p>These can enhance the opportunities for stakeholders to actually participate in arts and culture, and then the cultivation of arts and culture for all are promoted.</p>	<p>More than NT\$8.83 million was invested to support 100 performances by the art team. More than 1,700 stakeholders participated in to watch the performances. The 60-episode podcast program introduces more than 50 productions, 11 exhibitions, 8 books and multiple large-scale cultural events. By December 2022, the cumulative number of listeners has exceeded 11,000. The Story Factory Rural Art Promotion Project was sponsored. The Charity Gallery held a total of 6 grades of exhibitions.</p>
<p>to support sports activities and training of young players</p>	<p>Sponsorship of Technology Cup Road Run and Youth Sports Players</p>	<p>Stakeholders are motivated to participate in physical activities that promote their physical and mental health. We also cooperate with the Olympic national players in the inheritance plan, sponsoring young sports players with potential to cultivate future sports national players.</p>	<p>The invested funds exceeded NT\$1.1 million. We sponsored the 2022 Taipei Technology Cup - Charity Run for Love the Earth. We also encourage employees of the Company to participate which attracted a total of 900 employees and their families to sign up (the event was canceled due to the epidemic). Through the sponsorship of the Qatar World Cup broadcast at Shin Kong Cinemas, we supported stakeholders to pay attention to important international sports events, and about 200 people attended the event. We cooperated with the Olympic gold medalist, Kuo Hsing-chun (Tana), to support the six potential young athletes recommended by Kuo Hsing-chun (Tana).</p>

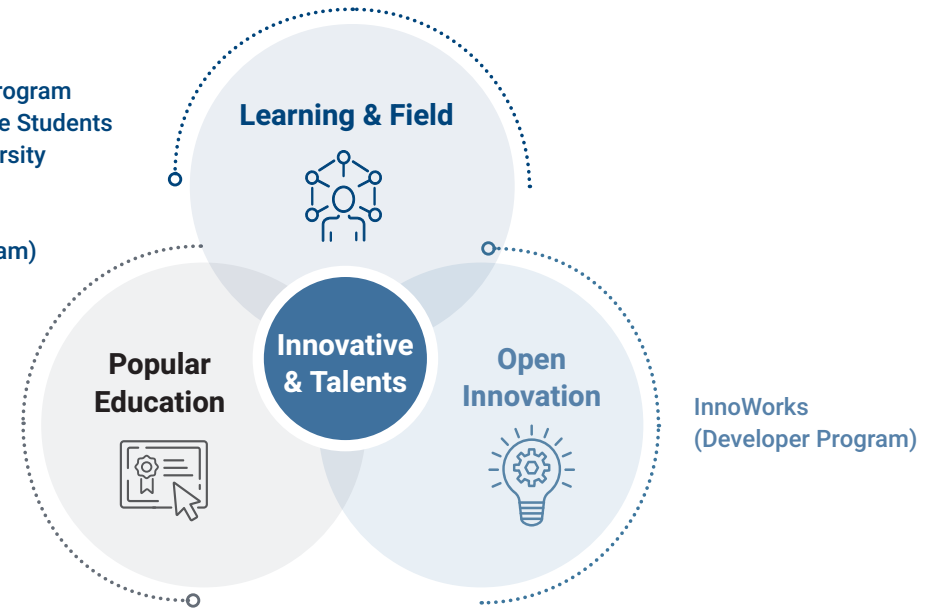


Education of IoT and Industry-University Co-Creation

As an international benchmark enterprise for industrial computers and IoT, Advantech regards the cultivation of IoT talents as the key to corporate competitiveness and the significant development of corporate sustainability. Therefore, we promote three major axes and five programs to cultivate IoT talents with the vision of popularizing and deepening IoT education.

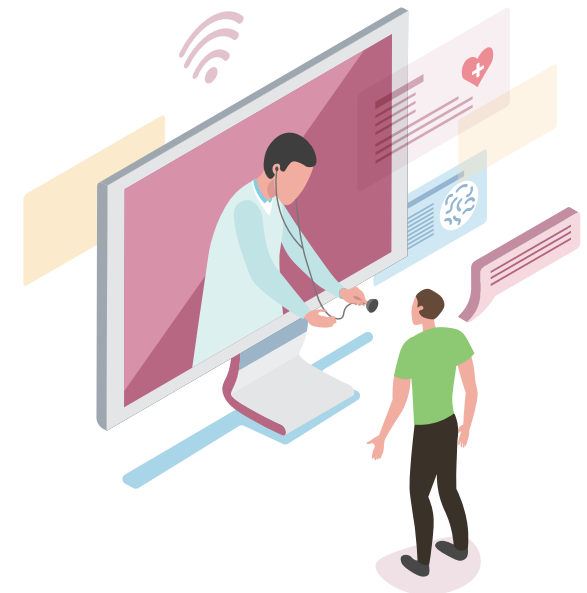
- Industry-University Program
- Doctoral and Graduate Students on the Industry-University Interface
- Elite100 Internship (IoT Internship Program)

AloT Academy (Education Courses and Certifications)



1 Learning & Field: Co-Creation ecosystem is promoted to improve industrial growth and employment opportunities.

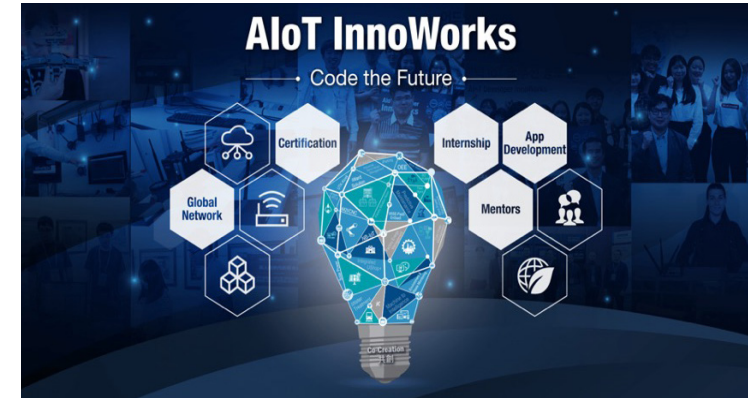
- Industry-University Proposition Projects of University Co-Creation (see Chapter 3 for details)
- Doctoral and Graduate Students on the Industry-University Interface (see Chapter 3 for details)
- IoT Career Opportunities: Elite 100 IoT Internship Program
 - Elite100 Internship Program focuses on forward-looking issues in different application fields. Advantech mentors lead students to understand actual needs and industry pain points through user situation analysis and field interviews, and then innovative conceptual designs are proposed.
 - In-house investment units: human resources, internal business units, and foundations
 - Main beneficiary unit: students and schools
 - External cooperation: resources of field provided by Advantech's partners.
 - More than hundreds of students have participated in the internships since 2018. More than 50 thematic projects have been produced and actually promoted to Advantech's in-house application.
 - In 2022, a total of 35 students from Taiwan participated in the summer internship and produced 14 thematic proposals. 7 students thereof got extended internship contracts after the summer vacation. There were 12 interns in China, and 10 students became full-time employees after graduation in 2022.
- Events website: <https://intern.advantech.tw/>
- 2022 Internship Recap Video ([Please refer to the video link](#))
- 2022 Interns' Thoughts ([Please refer to the link for their thoughts](#))



2 Open innovation: Students' cross-field co-creation is guided to promote industrial innovation.

• InnoWorks Developer Project Competition

- **Activity mechanism:** AIoT InnoWorks is an IoT competition for students and developers around the world. Innovative application solutions in various industries and fields are learned and developed on the basis of Advantech's WISE-IoTSuite IoT cloud platform. Therefore, social and environmental challenges are solved with generous bonus available. The topics include public health, solar and wind energy, smart agriculture, smart factories, smart campuses, smart cities, etc.
- **Continuous development mechanism**
 - Students from excellent teams are invited to join Advantech Elite 100 Internship Program.
 - Students participating in the competition are invited to join Advantech WISE-IoTSuite ambassador program to support the implementation of WISE-IoTSuite cooperation projects in Advantech's various campuses, serve as lecturers in on-campus training workshops, provide AIoT InnoWorks technical support, and answer advanced development questions in technical forums .
 - We support the team's continuous development of topics that are in line with Advantech's product road map or have continuation significance. Advantech's internal product department also forms an Industry-University plan to be connected according to demand.
- **Results of Quantification:** It has entered the fourth session since its inception in 2019. A total of 19 schools from 8 countries have participated, including Taiwan, mainland China, Vietnam, Malaysia, Singapore, Brazil, South Korea and other countries. In 2022, there were 90 student teams from 6 countries with more than 360 students participating.



Practical case 1: Taiwan_WIFI AP User Management Project from Team of National Taiwan University of Science and Technology

In 2022, one of the participating InnoWorks teams of National Taiwan University of Science and Technology developed the WIFI AP user traffic management on campus. It also was actually introduced in the computer center of National Taiwan University of Science and Technology. Advantech supports the student team in the continuous follow-up development of the management interface through practical actions. It includes student development internship allowances and mentoring resources for industry instructors, while medium and long-term evaluations are promoted and introduced in other campuses.

Practical case 2: Mainland China_Combination of government policies and sponsorship of specialized competition for green campus carbon neutrality

The campus carbon emission accounting platform was jointly developed with professional scholar of green building and new energy of Tongji University in mainland China with supports on resources of team and platform provided. In 2023, more Industry-University collaboration projects related to energy management will be launched to cultivate talents in the IoT industry.

Practical case 3: Vietnam_In-depth collaboration with an index university in the south to form a professional team to expand the market

We signed a memorandum of cooperation with three index universities in the Ho Chi Minh City area with smart cities as the axis. InnoWorks is the main focus of the first phase of cooperation, facilitating a number of cooperation projects. We look forward to forming an expert team with experts and scholars to strengthen the technical support power of the local market.



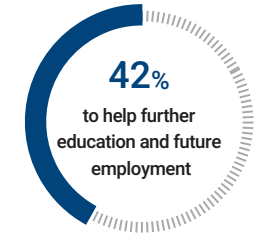
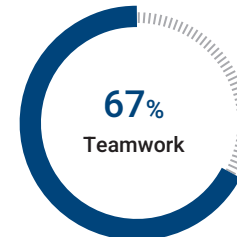
[Vietnam InnoWorks Developer Programs' Competition Report 1](#), [Vietnam InnoWorks Developer Programs' Competition Report 2](#), [Vietnam InnoWorks Developer Programs' Competition Report 3](#)

Practical case 4: Malaysia_Students' project will be used as an example of marketing promotion to evaluate the feasibility of commercialization.

The winning teams in 2022 focused on AI trash identification. Sustainability issues were combined to automatically identify garbage types through machine learning to improve students' consciousness and ideas about the environment. Advantech Co. Malaysia Sdn. Bhd. invites students to communicate and share in the in-house meeting, and the feasibility of subsequent industrial application will also be evaluated.

- **Feedback from students:** More than 80% of the responses to the questionnaire indicated that the new tool (the Internet of Things cloud platform WIS-IoTSuite) has been learned and used in depth.

Feedback from participants



Team D
2020 winning team from Malaysia

"Advantech provides a platform that we have never known before. This is a good opportunity. We are able to experience the first-hand technologies that industry professionals are currently using"



The Builder BOB
2021 Team Leader of the winning team from Taiwan - Student Liang

"This competition is an attempt for me to step out of my comfort zone. Therefore, I am determined to study programming harder, and I am more determined to become a multi-talented person."

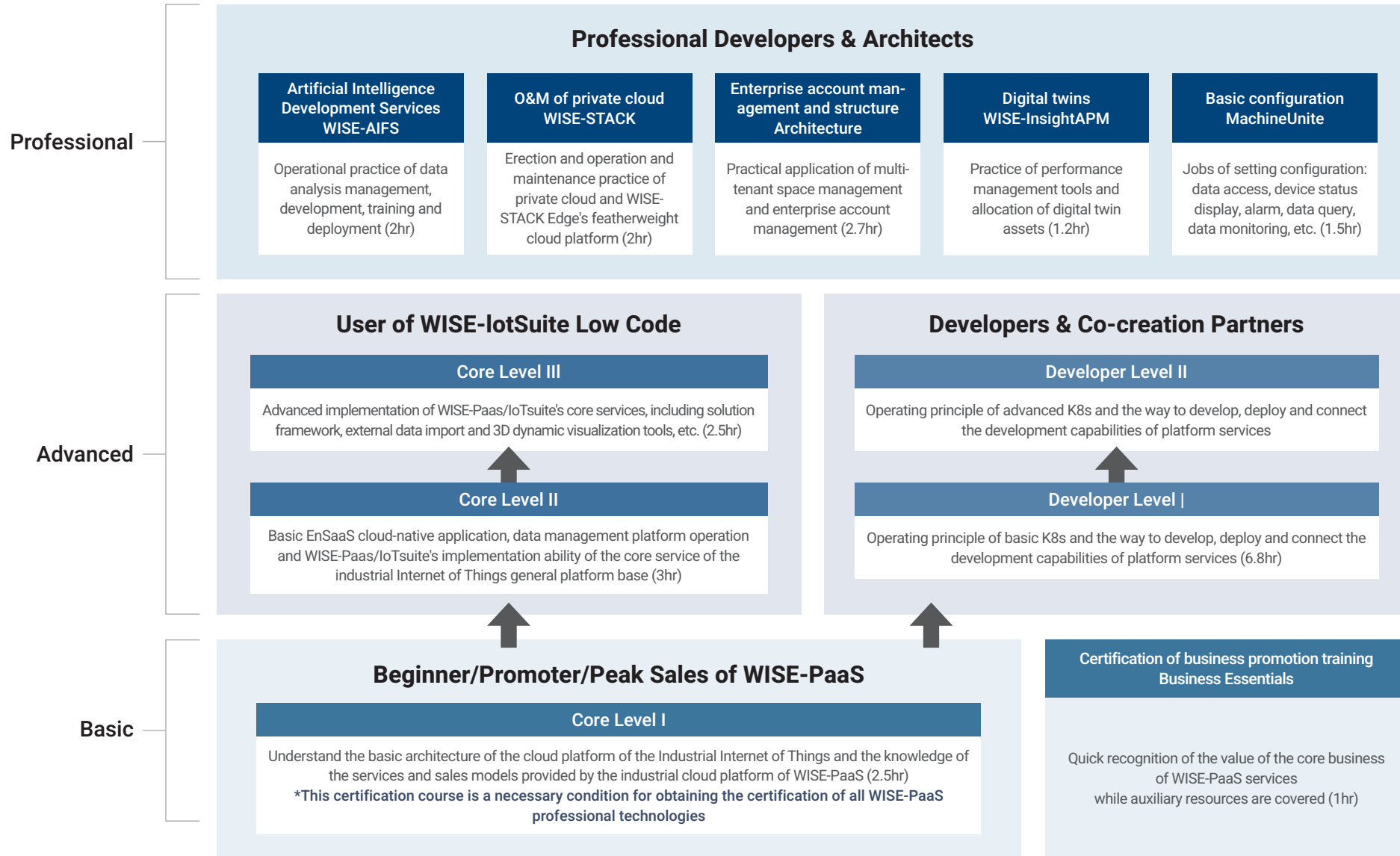
3 Popular Education: The gap between industry and education in higher education is shortened through extended training for summer internships → long-term internships → full-time jobs.

Online Learning Platform for IoT [IoT Higher Education Courses & Certification of AIoT Academy]


- Advantech's training and certification official website: <https://academy.advantech.com/>
- As an online platform for global learners to develop cloud-related skills, Advantech provides free user accounts, training courses, and usage space. Therefore, more learners can explore industrial cloud applications, including course consultation, technology transfer, co-teaching by industry instructors, and obtaining certificates through examinations.
- In-house investment units: technical support department, foundation, emerging business development department
- Main beneficiary unit: students, schools, and general public who are interested in popular education on the IoT
- External collaboration: experts and scholars in the field of IoT
 - From 2018 to 2022, we cooperated with a total of more than 14 universities and universities of technology.
 - From 2018 to 2022, a total of 28 IoT internship courses have started, including 6~30 hours of lectures combining theory and industrial solutions coordinately given by industry instructors, including industrial IoT, cloud data platform, AI artificial intelligence, etc.
 - In 2021-2022, a total of more than 800 technical certificates on WISE-IoTSuite have been issued in campus cooperation.

Schools that run courses together	
Taiwan	National Taiwan University, National 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
Mainland China	Nanjing University of Science and Technology, Henan University of Technology
Production of teaching material of IoT and software engineering	
Taiwan	National Taiwan University of Science and Technology, Tunghai University
Mainland China	Nanjing University of Science and Technology, Henan University of Technology

Learning Path of WISE-IoTSuite's Certification Courses



Please refer to report **3.2 Innovation Mechanisms** for more Industry-University project information.

Link to SDG	Driving force	Axis	Commercial Benefits and Performance	Social/ Environmental Benefits and Performance
	Promotion of innovation and co-creation in the Industrial Internet of Things industry	Industry Academia Innovation School / IOT Innovation Center of National Yang Ming Chiao Tung University	It establishes the practical application and technical research of the industrial AIoT Internet of Things, and becomes a creative idea to give birth to a new business. The research and development topics include Intelligent video analytics, Industrial 4.0, IoT embedded PaaS, and AIoT domain applications. By 2022, there were accumulated 44 project with cooperations.	Advantech has cultivated outstanding talents through Industry-University collaboration since 2015. Also, the plan is expected to be newly launched in 2023 to train 7 graduate students on the Industry-University Interface.
		AIoT Academy Higher Education Courses and Certifications in IoT	<ul style="list-style-type: none"> ● It strengthens Advantech's brand visibility and influence in the Internet of Things. ● It strengthens the link of the campus ecosystem. From 2018 to 2022, a total of 28 IoT internship courses have been assisted to start within more than 14 universities and universities of technology. 6~30 hours of lectures combining theory and industrial solutions are coordinately given by industry instructors, including industrial IoT, cloud data platform, AI artificial intelligence, etc. 	We popularize IoT education, and support the teaching work of schools and the learning of students around the world. From 2021 to 2022, a total of more than 800 technical certificates were issued through the cooperation with schools.
		AIoT InnoWorks IoT Developer Projects	<ul style="list-style-type: none"> ● We build connections with schools and students. More than 360 students of 19 schools participated from regions include Taiwan, Mainland China, Vietnam, Malaysia, Singapore, Brazil, etc. ● IoT applications are promoted. In 2022, a total of 90 special projects were produced with topics related to smart manufacturing, smart city, smart medical care, and smart agriculture. ● The Advantech brand has the opportunity to be exposed and the link of the campus ecosystem is strengthened. 	Students' project-based learning is supported through providing opportunities to hone their programming skills and challenge themselves. In 2023, more than 600 students from 7 countries around the world are expected to participate.
		Elite100 Internship Program	<ul style="list-style-type: none"> ● 14 topic researches and thematic plans were produced. ● Employer brand is strengthened and top talents are attracted through internship recruitment. ● In 2022, a total of 35 interns were recruited, and 7 students thereof extended their internship after the summer vacation. 	The cultivation of excellent talents is assisted through corporate internships, and students' workplace experience and learning are provided as well. 40 interns are expected to be recruited in 2023.

6.1.3 Advantech Global Highlights Project

▲ Taiwan "ACT Dreamers"

Since 2020, the Foundation has invested resources to hold the "ACT Dreamers" activity with PBL learning mode imported. The main spirit of the ACT Dreamers Project is to "let children learn about sustainable awareness from action through creativity and cooperation".

ACT's elementary and secondary school student proposals must be aligned with the United Nations' Sustainable Development Goal indicators (SDGs). The purpose is to cultivate the qualities that international citizens should have through project execution. The process focuses on connecting with the real world to guide students to find topics, design subjects, plan action plans, collect data, establish decision-making actions, complete the process, and present learning results in order to empower children to grow.

In 2022, we have deepened our Projected-Based Learning (PBL). Dual empowerment sessions for teachers and students have been added. In this way, students' in-depth discussion of SDGs United Nations sustainable indicators is strengthened and implemented in life issues. In 2022, Advantech employees joined to serve as industry instructors to discuss the logic of thinking in the real world with students face to face. Students are assisted to discuss issues more fully. The topics that the student team focuses on include epidemics, health, ecology, local creation, education and learning, and community care. The foundation hopes to sow the seeds of sustainable action through this event. Students can have the ability to care for society, develop problem-solving abilities and mobility.

▲ Taiwan "Hsinchu/Miaoli Scholarship Program for Students in Need"

The Foundation has supported the "Hsinchu/Miaoli Scholarship Program for Students in Need" since 2013 for ten years until now. It is mainly aimed at underprivileged students who perform well below high schools in Taiwan's Hsinchu and Miaoli areas. School teachers nominate and praise students based on their comprehensive performance in family situation, school morality and academic performance. In 2013, a total of 12 schools were supported with one million NTD, benefiting 500 students. Now it has been extended to a total of 36 schools supported with NT\$3 million, benefiting more than 1,600 students in 2022. In 2023, we plan to extend sponsorship to 42 schools. Through the provision of scholarships, we aim to encourage students in need, strengthen the connection between teachers and students, and provide support tailored to their individual needs. Our goal is to help these students discover their potential and transform their lives through education, creating new opportunities for their future.



InnoWorks Global Developer Project Competition

AIoT InnoWorks is an IoT competition activities for students and developers around the world. The Taiwan headquarters solicited cases from branches in 28 countries around the world. Students participating in the activity learned and developed innovative application solutions in various industries and fields on the basis of Advantech's WISE-IoTSuite IoT cloud platform. Therefore, social and environmental challenges are solved with generous bonus available. Meanwhile, Advantech invites customers/partners in various fields to serve as industry teachers, to provide students with more practical advice on the industry, and to jointly coach students to make proposals. The topics include public health, solar and wind energy, smart agriculture, smart factories, smart campuses, smart cities, etc.

Expand Breadth, Increase Influence

In 2022, there were 90 student teams of 16 schools from 6 countries (Taiwan, Mainland China, Malaysia, Singapore, Vietnam, Brazil) with 360 students participating. Students are encouraged to use their creativity to promote the application advocacy and education of IoT.

Emphasize the Continuity of Post-activity, Cultivate Future Talents in the Internet of Things Industry

- **Elite100 Internship Program:** In 2022, 6 students have become Advantech interns through InnoWorks.
- **Advantech on-campus seed program:** In 2022, National Taiwan University of Science and Technology was the primary partner. Three outstanding students were selected as the first batch of seeds, who will assist Advantech in cross-school InnoWorks technical support tasks.
- **Sponsorship:** We support the team's continuous development of topics that are in line with Advantech's product development plan or have continuation significance. Advantech's internal product department also forms an Industry-University plan to be connected according to demand.



China "Warm Winter Action in Hubei Area: the plan of Protecting Rural Elementary Schools from the Cold Winter "



A straw shows which way the wind blows so as needs are often seen from details of daily life. At the beginning of December 2022, our colleagues from Advantech Technology (China) saw the need for winter clothes for elementary schools in Guizhou from social networks' messages. After verification, the Human Resources and the Welfare Committee internally launched the "Protecting Rural Children" volunteer activity to collect winter clothes for rural children. Our colleagues from North China, East China, South China, West China, and Advantech Kunshan have responded quickly to the activity. A total of more than 300 colleagues were attracted to participate, and over 100 pieces of near-new winter padded jackets and other clothing were collected, which were quickly packaged and sent to the elementary schools in need. In addition, our colleagues also donated 2,360 welfare points (equivalent to an amount of \$11,800) as the cost of purchasing warm-weather materials.

This activity funded three schools in Guizhou, Hubei, and Hunan for a total of more than 200 students from the No. 3 Elementary School of Guzhou Town in Rongjiang County of Guizhou Province, Dongyue Village Elementary School in Tanshan Town of Shiyan City of Hubei Province, and Dongyue Village Elementary School in Tanshan Town of Shiyan City of Hubei Province. Our colleagues of Advantech Technology (China) gather strength from all directions into a full of love. Therefore, we believe that where there is love, there is power. We hope that these warm clothes can help children to have a warm winter!

Japan's "Future Data Scientists - Programming Course for Middle School Students"



Advantech Japan has been cooperating with the Nogata City Government and the local college student club, GLEAP, for a long time. The technical advantages of our industry are used as assistance to conduct programming courses for middle school students. A total of 16 trainees, 6 GLEAP student advisors, and 5 Advantech Japanese colleagues participated in the three-day course, and the corporate volunteer service totaled 120 hours. Nogata City Government of Japan invested ¥110 million for this project to support the development of future youth as AIoT talents. Advantech presented actual products, demos, application cases and real industrial computer products in the courses. Advantech's corporate volunteers also guided students to complete works independently in order to stimulate the students' creativity and practical ability. The students learned new technologies and gained a sense of accomplishment in the camp, and therefore being helped to develop their future careers. Advantech's corporate volunteers also took this opportunity of educational services to strengthen our employees' sustainable DNA and to implement actions to give back to society.

USA "A4C (Advantech for the Community) Plan"

Advantech North America released the A4C (Advantech for the Community) Plan in 2021 to encourage employees to submit proposals. Also, funding utilization is directed and activities are organized through the A4C Committee. It is expected to achieve the goals of giving back to the community, strengthening the connection between the community and employees, improving employee morale, etc. In 2022, these activities have been successfully promoted, such as: blood donation activities, community garbage removal, Girl Ink. female cultivation workshops, food banks, etc. Among them, the most grand event is the sponsorship of CHOC, a well-known children's hospital in Orange County, California. The purpose of CHOC (Children's Health of Orange County) is to provide children's medical resources. Since 2020, Advantech USA has cooperated with CHOC, and has donated more than US\$43,000. It has also supported and responded to the entity through a series of employee activities.

A4C advocates social welfare, and another major focus is employee participation. Taking CHOC as an example, we held charity draws for employees in Irvine, Cincinnati, and Ottawa, and donated the proceeds from the lottery tickets. In addition, Manager Dunk Tank is also held this year to invite employees, their relatives and friends to respond to the fundraising together. As long as the employees, their relatives and friends reached the goal of fundraising, they will have the opportunity to shoot the goal. It allows executives above the manager level to be dunked into the pool based on the amount of employee donations! While all employees are doing public welfare, they can also promote team interaction to gather centripetal force.



6.2 Summary of Advantech Foundation Achievements

In 2022, Advantech Foundation spent a total of NT\$39,553,210 on IoT talent cultivation; NT\$21,501,254 on promotion of arts and culture; NT\$16,954,961 on sustainable education; and NT\$14,051,580 on Good Together in public welfare. The focus items are listed in the table below:

Focus	Project Name	2022 Results	2023 Goals
Education of IoT Cultivation of innovation talents	AIoT InnoWorks Developer Program AIoT Academy Higher Education Courses and Certifications in IoT	The invested funds exceeded NT\$6.16 million <ul style="list-style-type: none"> • 90 topics were produced by 360 students participated from 16 universities around the world • From 2021 to 2022, a total of more than 800 technical certifications have been issued in campus cooperation • From 2018 to 2022, a total of 28 IoT internship courses have been assisted to start with more than 14 universities and universities of technology. 6~30 hours of lectures combining theory and industrial solutions are coordinately given by industry instructors, including industrial IoT, cloud data platform, AI artificial intelligence, etc. 	Estimated investment: NT\$52.93 million <ul style="list-style-type: none"> • InnoWorks 26 schools participated around the world • Internship The scale is enlarged to 40 students participated in the Internship Program. • Industry Academia Innovation School / IOT Innovation Center of National Yang Ming Chiao Tung University 3 campus IoT application large projects and 7 Industry-University collaboration projects were promoted. • AIoT Academy <ol style="list-style-type: none"> 1. AIoT Internet of Things knowledge field course development, including two major areas: smart manufacturing, and energy management 2. A total of 12 cooperation numbers to participate in educational projects or university courses of cultivation
	Elite Internship Program	The invested funds exceeded NT\$7.54 million <ul style="list-style-type: none"> • 14 topic researches and thematic plans were produced. • In 2022, a total of 35 interns were recruited, and 7 students thereof extended their internship after the summer vacation 	
	Industry Academia Innovation School / IOT Innovation Center of National Yang Ming Chiao Tung University	The invested funds exceeded NT\$10 million <ul style="list-style-type: none"> • 6 research projects were jointly collaborated 	
Business management case Talent cultivation of teachers	EACC Case Study	The invested funds exceeded NT\$1.08 million <ul style="list-style-type: none"> • Sponsorship of the professor's research, and 10 case writings completed and published in the traditional Chinese version of Harvard Business Review. 	Removed in 2023
Innovation and Sustainable Education Program	ACT Dreamers	A total of more than 10 schools were sponsored, and the PBL study group sponsored more than 30 educators to visit the United States for a week. The amount invested by the foundation was more than NT\$3.6 million	We continue to expand the scale and invite schools and educational innovation groups to participate and join. 40 schools and the second PBL International Study Group are expected to be sponsored. The invested amount exceeded NT\$15.6 million

Focus	Project Name	2022 Results	2023 Goals
Inheritance of traditional art and carrying it forward	"Successor of Taiwan Jing Ju - Young Talents Cultivation Program" of GuoGuang Opera Company	32 series of courses are arranged to be taught by senior actors/ teachers to guide the courses. A total of 18 young actors and 6 behind-the-scenes staff are learning and inheriting. Furthermore, they started in showcasing their skills and/or served as key staff to assist in the annual series of performances. The annual sponsorship fund exceeds NT\$3.6 million	The youth talent training program is continuously supported, and 2023 international tour is sponsored in addition. The continuous sponsorship funds are expected to be NT\$2.8 million
	Talents Cultivation Program of National Taiwan College of Performing Art	A total of 12 people won the art scholarship of the "Advantech ABLE Elite Award". In addition, the project sponsored the custom-made clothes and shoes needed for practicing. The total sponsorship funds to support Taiwan College of Performing Art's traditional arts exceeded NT\$460 thousand	Outstanding students are continuously encouraged with scholarship support. Also, the fundings of Jing Ju Troupe and the Acrobatics Troupe are sponsored. The expected investment amounted to NT\$1.2 million
Improvement of aesthetic literacy (various types of arts and sports)	High-quality arts and cultural teams are supported and encouraged to promote aesthetic quality education for all.	More than NT\$8.83 million was invested to support more than 100 performances by the art team. The 60-episode podcast program introduces more than 50 productions, 11 exhibitions, 8 books and multiple large-scale cultural events. The Alliance Cultural Foundation and the Story Factory Rural Art Promotion Project was sponsored. The Charity Gallery held a total of 6 events of exhibitions	The promotion of diverse arts and culture is expected to be carried out. Sponsorship is applied to performances by high-quality Taiwanese teams, production and broadcasting of 30 episodes of "Easy Listening to Arts and Culture" podcasts, and holding of themed exhibitions. Creative talents are cultivated and artistic vision is expanded through cooperation with professional schools. The goal is to drive 3,000 people to participate. Also, the invested funds exceeded NT\$10 million
	to support sports activities and training of young players	The invested funds exceeded NT\$1.1 million We sponsored the 2022 Taipei Technology Cup - Charity Run for Love the Earth and World Cup soccer broadcast. We also encourage stakeholders of the Company participated together, and about 200 people attended the event. We cooperated with the Olympic gold medalist, Kuo Hsing-chun (Tana), to support the six potential young athletes recommended by Kuo Hsing-chun (Tana).	We continue to support the six potential young athletes recommended by Kuo Hsing-chun (Tana), including hurdles, judo, wrestling, track and field, etc. The invested funds amounted to NT\$2.5 million
Innovation and cultivation of social enterprises	Sponsorship of sustainable projects for innovative social enterprises	<ul style="list-style-type: none"> Social Enterprise Insights was sponsored with NT\$500 thousand. "2022 Sustainability Action Carnival" was planned and exhibited. More than 2,700 people participated in the two-day event, and more than 2,800 people watched it live online Tic100 was sponsored with NT\$1 million, which is mainly used in the competition of sustainability proposals. The Social Innovation School (School 28) was sponsored by NT\$2 million. Young colleagues who are enthusiastic about social enterprises and have a total working experience of 2-5 years have the opportunity to participate in the selection and cultivation The Lovely Taiwan Foundation was sponsored by NT\$1 million for the Shennong Project, entering national schools to promote food and agriculture education, to accompany teachers and students to explore the ecological environment, and to cultivate the concept of a friendly land 	It is expected to sponsor NT\$3 million to continuously support innovative social enterprises and non-profit organizations to invest in sustainability. Lectures and power-building activities are held to deepen Advantech's ESG strategic cooperation
Rural charity care	Hsinchu/Miaoli Rural Care Scholarship	It is mainly aimed at underprivileged students who perform well in elementary and secondary schools in Taiwan's Hsinchu and Miaoli areas. School teachers nominate and praise students based on their comprehensive performance in school morality and academic performance The total donation was NT\$3 million, benefiting more than 1,600 people from 36 schools	The number of schools sponsored is expected to increase to 42 schools. We hope that underprivileged students will be encouraged to be positive and the connection between teachers and students will be strengthened through the scholarships. In this way, the teacher can pay attention to the needs of the students and see the bright spots of the students to help the poor students find the light in life. Also, more possibilities are created.

Appendix 1: GRI, SASB, Assurance Standards Index Table

Statement of use	The report of Advantech Co., Ltd. was compiled with reference to GRI standards, and the information disclosure period of this report is 2022 (January 1, 2022 to December 31, 2022)
GRI	Reference options for GRI Standards 2021
SASB	Indicators to be disclosed by specific industries required by the Financial Supervisory Commission, R.O.C - by industry: Computer and Peripheral Equipment Industry

SASB Sustainable Disclosure Index - Computer and Peripheral Equipment Industry

Index	Type of Index	Unit	Disclosure Chapter	Page no. position
Total amount of energy consumed, the percentage of purchased electricity, and the utilization rate of renewable energy	Quantification	Gigajoule (GJ) Percentage(%)	4.4 Environmental Management	118
Total Water Intake and Total Water Consumption	Quantification	Thousand cubic meters (m ³)	4.4 Environmental Management	123-124
Weight of Hazardous Waste Generated and Percentage Recycled	Quantification	Metric Ton (t) Percentage(%)	4.4 Environmental Management	125-127
Description of types, number of people and ratio of occupational accidents	Quantification	Ratio(%) Quantity	5.5 Occupational Health & Safety	169
Disclosure of product life cycle management: including the weight of end-of-life products and electronic waste and the percentage of recycling (Note)	Quantification	Metric Ton (t) Percentage(%)	4.1 Eco Design and Sustainability Liability of Product	105
Description of the risk management associated with the critical materials used	Qualitative Description	Not applicable	2.3 Sustainable management of the supply chain	68
Aggregate amount of pecuniary damages resulting from legal proceedings relating to anti-competitive conduct regulations	Quantification	Reporting Currency	2.1 Operational Performance and Corporate Governance Structure	47
Output of major products by product category	Quantification	Varies by product category	2.1 Operational Performance and Corporate Governance Structure	41

*Note: Including the disposal of scraps or other recycling, relevant instructions should be provided.

GRI 2: General Disclosure 2021

GRI Standards No.	Disclosure Item	Disclosure Chapter	Page no. position
2-1	Organization Details	2.1.1. Company Profile	39
2-3	Duration, frequency and contact person of the report	About Advantech 2022 Sustainability Report	2
2-4	Information Reorganization	5.5 Occupational health & safety	166-172
2-5	External Guarantee and Assurance	Appendix: Statement of Verification by a Third Party Appendix: Report of Assurance by a Third Party	198-199 200-201
2-6	Activities, value chains and other business relationships	2.1.1. Company Profile	41-42
2-7	Employees	5.1.1 Talent attraction and retention 5.1.2 Development Program 5.2.1 Employee Relations 5.2.2 Living wages for employees 5.3. Employer-employee relationship and diverse and inclusive workplaces 5.4 Protection of human rights 5.5 Occupational health & safety 5.6 Appendix: Employee Structure	131-176
2-10	Nomination and Selection of the Highest Governance Unit	2.1.2. Corporate Governance	43
2-11	Chairman of the Highest Governance Unit	2.1.2. Corporate Governance	43
2-17	Crowd Intelligence of the Highest Governance Unit	2.1.2. Corporate Governance	44
2-18	Performance Evaluation of the Highest Governance Unit	2.1.2. Corporate Governance	44
2-20	Process of salary determination	2.1.2. Corporate Governance	45-46
2-27	Regulatory compliance	2.1.2. Corporate Governance	47
2-28	Membership in Guilds and Associations	APPENDIX: List of Public Associations Participated and Description of Investing in Resources	207-211
2-29	Stakeholder Engagement Policy	1.3 Stakeholder Engagement	11-13
2-30	Collective Bargaining Agreement	5.4 Protection of human rights	158

Environment aspect

GRI Standards No.	Disclosure Item	Disclosure Chapter	Page no. position
302-1*	Energy consumption within the organization	4.3.1 Greenhouse Gas Inventory and Management	118
303-3*	Water Withdrawal by Source	4.4.2 Energy Resource Use and Waste Management	124
305-1*	Direct (Scope 1) Greenhouse Gas Emissions	4.3.1 Greenhouse Gas Inventory and Management	115
305-2*	Energy Indirect (Scope 2) Greenhouse Gas Emissions	4.3.1 Greenhouse Gas Inventory and Management	116
305-3*	Other Indirect (Scope 3) Greenhouse Gas Emissions	4.3.1 Greenhouse Gas Inventory and Management	117
305-4*	Intensity of greenhouse gas emissions	4.3.1 Greenhouse Gas Inventory and Management	107
305-7*	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant gaseous emissions	4.3.1 Greenhouse Gas Inventory and Management	127-128
306-3*	Source of waste	4.4.2 Energy Resource Use and Waste Management	125-127
306-5*	Direct disposal of waste	4.4.2 Energy Resource Use and Waste Management	125-127
307-1*	Violation of environmental regulations	4.4.1 Environmental Responsibility	121
308-1	New suppliers that were screened using environmental criteria	2.3.1 Supplier Management	64-66

*Note: Those marked with an asterisk are voluntary disclosures..

Social aspect

GRI Standards No.	Disclosure Item	Disclosure Chapter	Page no. position
401-1	New employee hires and employee turnover	5.1.1 Talent attraction and retention	New Employee 132- 133 Resigned employees 136-137
401-3*	Parental leave	5.2.1 Employee Relations	144
403-1*	Occupational health & safety management system	5.5 Occupational health & safety	166
403-2*	Hazard identification, risk assessment, and accident investigation	5.5 Occupational health & safety	167-169
403-3*	Occupational Health Services	5.5 Occupational health & safety	170-172

GRI Standards No.	Disclosure Item	Disclosure Chapter	Page no. position
403-4*	Worker participation, consultation and communication regarding occupational safety and health	5.5 Occupational health & safety	166, 172
403-5*	Worker training on occupational health and safety	5.5 Occupational health & safety	166, 170
403-6*	Promotion of worker health	5.5 Occupational health & safety	171-172
403-7*	Prevention and mitigation of occupational safety and health impacts directly related to business relationships	5.5 Occupational health & safety	166-170
403-8*	Workers covered by the occupational safety and health management system	5.5 Occupational health & safety	166
403-9*	Work-related injuries	5.5 Occupational health & safety	168-170
403-10*	Work-related ill health	5.5 Occupational health & safety	168-170
404-1	Average hours of training per employee per year	5.1.2 Development Program	139-141
404-3	Percentage of employees receiving regular performance and career development reviews	5.1.1 Talent attraction and retention 5.3. Employer-employee relationship and diverse and inclusive workplaces	133-135 154-155
405-2	Ratio of salary increase on base salary for women to men	5.1.1 Talent attraction and retention	135
406-1	Incidents of discrimination and corrective actions taken	5.4 Protection of human rights	161, 164-165
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	5.4 Protection of human rights	158
408-1	Child labor	5.4 Protection of human rights	165
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	5.4 Protection of human rights	165
414-1	New suppliers that were screened using social criteria	2.3.1 Supplier Management	64-66

*Note: Those marked with an asterisk are voluntary disclosures..

Economic Aspect

GRI Standards No.	Disclosure Item	Disclosure Chapter	Page no. position
201-2*	Financial impacts and other risks and opportunities due to climate change	4.2.2 Identification of Climate-Related Risks and Opportunities, and Financial Implications	110-113
204-1	Proportion of spending on local suppliers	2.3.1 Supplier Management	61

*Note: Those marked with an asterisk are voluntary disclosures..

GRI 3: Disclosure of material issues

GRI Standards No.	Disclosure Item	Disclosure Chapter	Page no. position
Material issues			
Information security management			
3-3	Management of material issues	1.3.2 Management policy for material issues	23
Eco Design and Sustainability Liability of Product			
3-3	Management of material issues	1.3.2 Management policy for material issues	24
Application advocacy and education of IoT			
3-3	Management of material issues	1.3.2 Management policy for material issues	25
Sustainable intelligent solutions			
3-3	Management of material issues	1.3.2 Management policy for material issues	27
Co-creation of customers and partners			
3-3	Management of material issues	1.3.2 Management policy for material issues	28
Sustainable management of the supply chain			
3-3	Management of material issues	1.3.2 Management policy for material issues	30
308-1	New suppliers that were screened using environmental criteria	2.3.1 Supplier Management	64-66
204-1	Proportion of spending on local suppliers	2.3.1 Supplier Management	61
Risk Foresight and Crisis Management			
3-3	Management of material issues	1.3.2 Management policy for material issues	31
Employer-employee relationship and diverse and inclusive workplaces			
3-3	Management of material issues	1.3.2 Management policy for material issues	32
404-3	Percentage of employees receiving regular performance and career development reviews	5.3. Employer-employee relationship and diverse and inclusive workplaces	154-155

GRI Standards No.	Disclosure Item	Disclosure Chapter	Page no. position
Innovative mechanism			
3-3	Management of material issues	1.3.2 Management policy for material issues	33
Human rights			
3-3	Management of material issues	1.3.2 Management policy for material issues	34
406-1	Incidents of discrimination and corrective actions taken	5.4 Protection of human rights	161, 164-165
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	5.4 Protection of human rights	158
408-1	Child labor	5.4 Protection of human rights	165
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	5.4 Protection of human rights	165
Industry Talent Cultivation and Development			
3-3	Management of material issues	1.3.2 Management policy for material issues	35-37
401-1	New employee hires and employee turnover	5.1.1 Talent attraction and retention	New Employee 132- 133 Resigned employees 136-137
404-1	Average hours of training per employee per year	5.1.2 Development Program	139-141
404-3	Percentage of employees receiving regular performance and career development reviews	5.1.1 Talent attraction and retention 5.3. Employer-employee relationship and diverse and inclusive workplaces	133-135 154-155
405-2	Ratio of salary increase on base salary for women to men	5.1.1 Talent attraction and retention	135

Assurance Index

Assurance Object	Disclosure Chapter	Page no. position
Average training hours for employees	5.1.2 Development Program	139-141
Types, number of people and ratio of occupational accidents	5.5 Occupational health & safety	169
Aggregate amount of pecuniary damages resulting from legal proceedings relating to anti-competitive conduct regulations	2.1.2. Corporate Governance	47
Proportion of Existing Suppliers Audited	2.3.1 Supplier Management	64
Ratio of significant suppliers that have signed the "Consent Form for Code of Conduct"	2.3.1 Supplier Management	64
The amount of fines imposed for violating environmental laws and regulations	4.4.1 Environmental Responsibility	121
Disposal volume of total wastes outsourced (metric tons)	4.4.2 Energy Resource Use and Waste Management	125-127

Appendix 2: Statement of Verification by a Third Party



ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE ADVANTECH CO., LTD.'s SUSTAINABILITY REPORT FOR 2022

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION

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 Sustainability Report for 2022. The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the sampled text, and data in accompanying tables, contained in the report presented during verification in the period of 14 March 2023 to 14 April 2023. 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 Sustainability Report of 2022 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 Sustainability Report.

Our responsibility is to express an opinion on the report content within the scope of verification 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 manages 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

Assurance has been conducted at a high level of scrutiny.

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 Universal Standard (2021) (Reference)
2	AA1000 Accountability Principles (2018)
3	Taiwan Stock Exchange Corporation (the "TWSE") Sustainability Indicators for Hardware Industries

- evaluation of content veracity of the sustainability performance information based on the materiality determination at a high level of scrutiny for ADVANTECH and moderate level of scrutiny for subsidiaries, and applicable aspect boundaries outside of the organization covered by this report;
- AA1000 Assurance Standard v3 Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2018); and
- evaluation of the report against the requirements of Global Reporting Initiative Universal Standards (2021) listed in the GRI content index where the organization has referenced for the preparation of the reported information.
- 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.

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 verification, 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 OPINION

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, investors, suppliers, and other stakeholders 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 Sustainability Report of 2022, complies with the Requirements for reporting with reference to the GRI Standards set out in Section 3 of GRI 1. The significant impacts are assessed and disclosed with reference to the guidance defined in GRI 3: Material Topic 2021. 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 engage external experts while assess its impacts.

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 202Y. 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.

Signed:

For and on behalf of SGS Taiwan Ltd.

Stephen Pao
Knowledge Deputy General Manager
Taipei, Taiwan
05 June, 2023
www.sgs.com



AA1000
Licensed Report
000-8/V3-6ISUN



Appendix 3: Report of Assurance by a Third Party



Independent Limited Assurance Report

PWCM22000664

To **Advantech Co.,Ltd.**

We have been engaged by **Advantech Co.,Ltd.** (“**the Company**”) to perform assurance procedures on the sustainability performance information identified by the Company and reported in the 2022 Sustainability Report (“**the Sustainability Report**”), and have issued a limited assurance report based on the result of our work performed.

Subject Matter Information and Applicable Criteria

The sustainability performance information identified by the Company (hereinafter referred to as the “**Subject Matter Information**”) and the respective applicable criteria are stated in the “Summary of Subject Matter Assured” on page 201 of the Sustainability Report. The scope of the aforementioned Subject Matter Information is set out in the “Reporting Scope” on page 3 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 and FAQ issued by TWSE Listed Companies and 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.

Management’s Responsibilities

The Management of the Company is responsible for the preparation of the sustainability performance information disclosed in the Sustainability Report in accordance with the Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports and FAQ issued by TWSE Listed Companies and related laws and regulations, the GRI Standards published by GRI and the other criteria referred to or designed by the Company based on the Company’s industry characteristics and sustainability performance information reported, and for such internal control as management determines is necessary to enable the preparation of the sustainability performance information that is free from material misstatement, whether due to fraud or error.

資誠聯合會計師事務所 PricewaterhouseCoopers, Taiwan
110208 臺北市信義區基隆路一段 333 號 27 樓
27/F, No. 333, Sec. 1, Keelung Rd., Xinyi Dist., Taipei 110208, Taiwan
T: +886 (2) 2729 6666, E: + 886 (2) 2729 6686, www.pwc.tw



Our Responsibilities

We conducted our assurance work on the Subject Matter Information disclosed in the Sustainability Report 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, to identify whether any amendment is required of the Subject Matter Information to be prepared, in all material respects, in accordance with the respective applicable criteria, and issue a limited assurance report.

We conducted our assurance work in accordance with the aforementioned standards including identifying the areas where there may be risks of material misstatement of the Subject Matter Information, and designing and performing procedures to address the identified areas. 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.

The extent of the assurance work we performed were based on the identified risk areas and determined materiality, and given the circumstances of the engagement, we designed and performed the following procedures:

- Made inquiries of the persons responsible for the Subject Matter Information to understand the processes, information systems 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, performed selective testing including inquiry, observation, and inspection to obtain evidence for limited assurance.

We do not provide any assurance on the Sustainability Report as a whole or on the design or operating effectiveness of the relevant internal controls.

Compliance of Independence and Quality Management Requirement

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies Standard on Quality Management 1, “Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements” of the Republic



of China, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Inherent Limitations

Certain Subject Matter Information involves non-financial data which is subject to more inherent limitations than financial data. Qualitative interpretations of the relevance, materiality and the accuracy of data are subject to individual assumptions and judgments.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, we are not aware of any amendment that is required of Subject Matter Information to be prepared, in all material respects, in accordance with the respective applicable criteria.

Other Matter

The Management of the Company is responsible for maintaining the Company's website. If the Subject Matter Information or the applicable criteria are modified after this limited assurance report is issued, we are not obliged to re-perform the assurance work.

Chao, Yung-Chieh

Chao, Yung-Chieh
Partner

For and on behalf of PricewaterhouseCoopers, Taiwan
21 July 2023

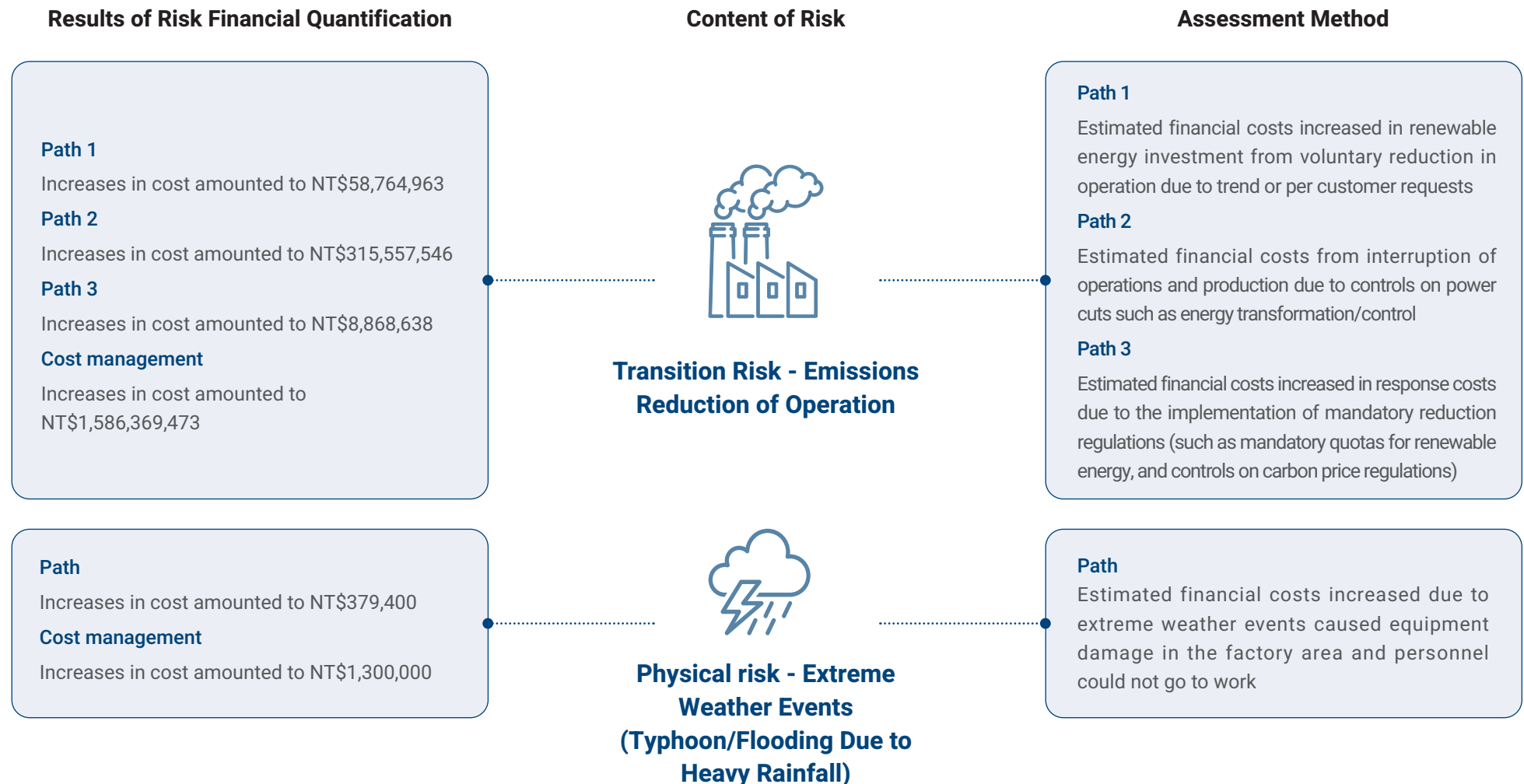
Advantech Co., Ltd.
Summary of Subject Matters Assured

No	Subject Matter Assured	Information	Page	Applicable Criteria
1	Average training hours for employees	In 2022, the average training time per person was 48.3 hours.	139-141	The statistical data of average training hours in 2022 according to Advantech's regulation of education and training divided by the total number of employees in 2022.
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.	169	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 2022 is 0. Therefore, no monetary loss due to litigation.	47	Total pecuniary damages of ACL and AKMC in 2022 resulting from legal proceedings relating to anticompetitive conduct regulations, as indicated by the companies.
4	Proportion of Existing Suppliers Audited	The total number of planned implementations is 88, of which 77 are audited. The implementation audit ratio is 87.5%.	64	The final implementation audit ratio of ACL and AKMC in 2022 of the planned implementations. Note: Existing suppliers are defined as suppliers with actual transactions in 2022.
5	Ratio of significant suppliers that have signed the "Consent Form for Code of Conduct"	100% of significant suppliers have signed the "Consent Form for Code of Conduct"	64	The ratio of significant suppliers at ACL that have signed the "Consent Form for Code of Conduct"
6	The amount of fines imposed for violating environmental laws and regulations	In 2022, there was no fine imposed for violating environmental laws and regulations.	121	The amount of fines imposed for violating environmental laws and regulations related to environmental protection at ACL and AKMC.
7	Disposal volume of total wastes outsourced (metric tons)	The total waste disposal volume in 2022 was 1,242.53 metric tons.	125-127	Please refer to the content of the sustainability report.

Appendix 4:TCFD financial quantification status report

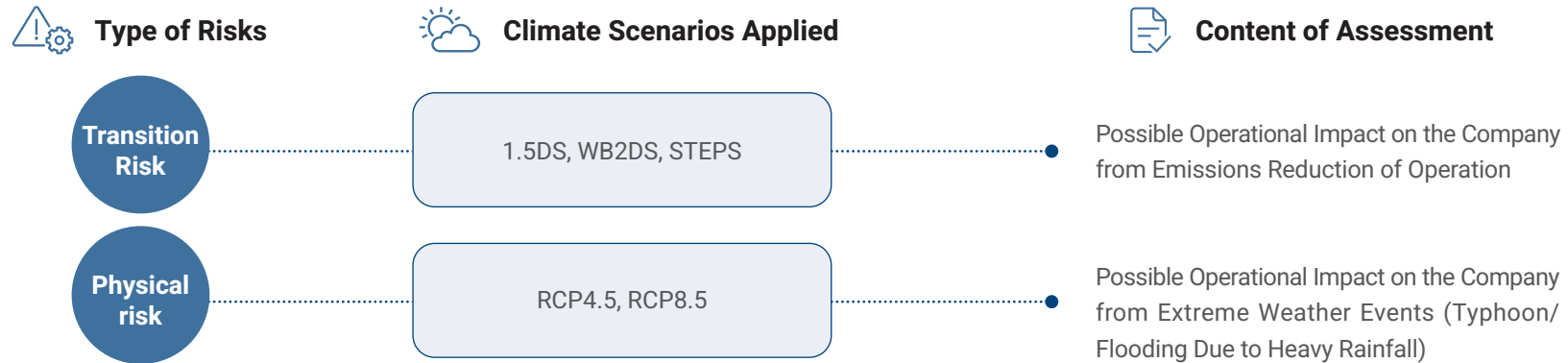
Quantification of the financial impact of climate change risk

Based on the results of climate risk identification, Advantech has invited consultants to work together to consider the internal and external environmental changes, focusing on the two types of risks issues, " Transition risk - operational emissions reduction and Physical risk-extreme weather events (typhoon/flooding due to heavy rainfall)", and we conducted impact financial quantitative assessment with reference to the methodologies disclosed by domestic and foreign companies.



Resilience and Scenario Analysis

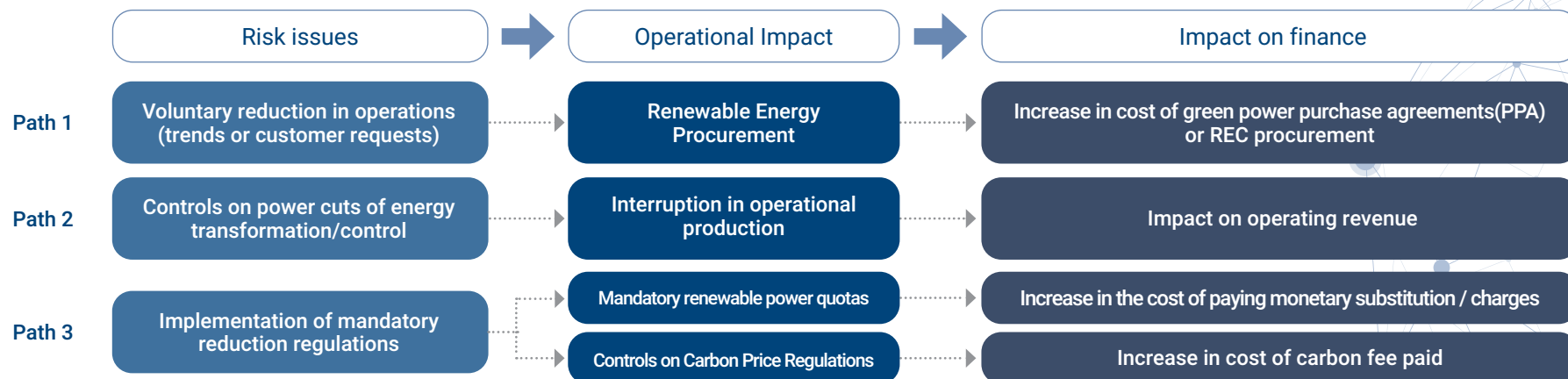
According to the TCFD recommended guidance, Advantech uses various scenarios faced by the two risk types of transformation and entities to analyze and evaluate the impact of different scenarios on the company's operations, and we also incorporates the analysis results into the strategic resilience assessment.



- *Note:**
- 1.5DS and WB2DS represent aggressive emission scenarios, reaching net zero emissions around 2050 and 2060, representing warming of 1.5°C and 1.7°C, respectively.
 - STEPS (Stated Policies Scenario) represents the emissions of the existing control policies of each country, reaching net zero emissions during 2070 to 2080, representing warming of 2.7°C.
 - RCP4.5 refers to the radiative forcing will reach about 4.5Wm⁻² by the end of the century, and it represents the existing policies of each country around the world to achieve the goal of reducing greenhousegases, representing warming of 2.7°C.
 - RCP8.5 refers to the continuous increase of radiative forcing to greater than 8.5Wm⁻², and it represents the countries of the world act without any reduction, representing warming of 4.4°C.

Transition Risk - Identification of influence and potential impact on finance

We apply three scenarios to analyze the impact of emissions reduction of operation on future operations.





Path 1: Voluntary reduction in operation

Year of assessment 2023

Key Assumptions

Overall assessment considers the financial impact of offsetting carbon reduction through the full purchase of renewable energy, regardless of the cost of purchasing carbon rights.

Usage scenario

Carbon reduction path of WB2DS and 1.5DS of International Energy Agency (IEA)

Scenario 1

WB2DS (Scenario of SBT Voluntary reduction)

Results of Impact Analysis

Increase in cost of green power purchase agreements (PPA) or I-REC procurement amounted to NT\$57,706,595

Scenario 2

1.5DS (Scenario of Net Zero)

Results of Impact Analysis

Increase in cost of green power purchase agreements (PPA) or I-REC procurement amounted to NT\$58,764,963



Path 2: Energy transformation/controls on power cuts of energy

Year of assessment 2021/Annually

Key Assumptions

China's policy on power limits caused interruption of water supply and power supply, resulting in increases in equipment damage and uninterruptible power system maintenance cost and reduction in revenue due to operational production interruption.

Usage scenario

Implementation of Controls Scenarios (Refer to Historical Scenarios)

Results of Impact Analysis

Increase in cost due to operational production interruption amounted to NT\$315,557,546



Path 3 Implementation of mandatory reduction regulations

Year of assessment 2025–2030/Annually

Key Assumptions

Advantech may be affected by government regulations in Taiwan in the future, including the tightening of regulations for large power consumers requiring a certain proportion of renewable energy and the revision of the Climate Change Response Act. The Company's operating costs will increase due to payment of monetary substitution or carbon fees if it fails to meet the specifications.

Usage scenario

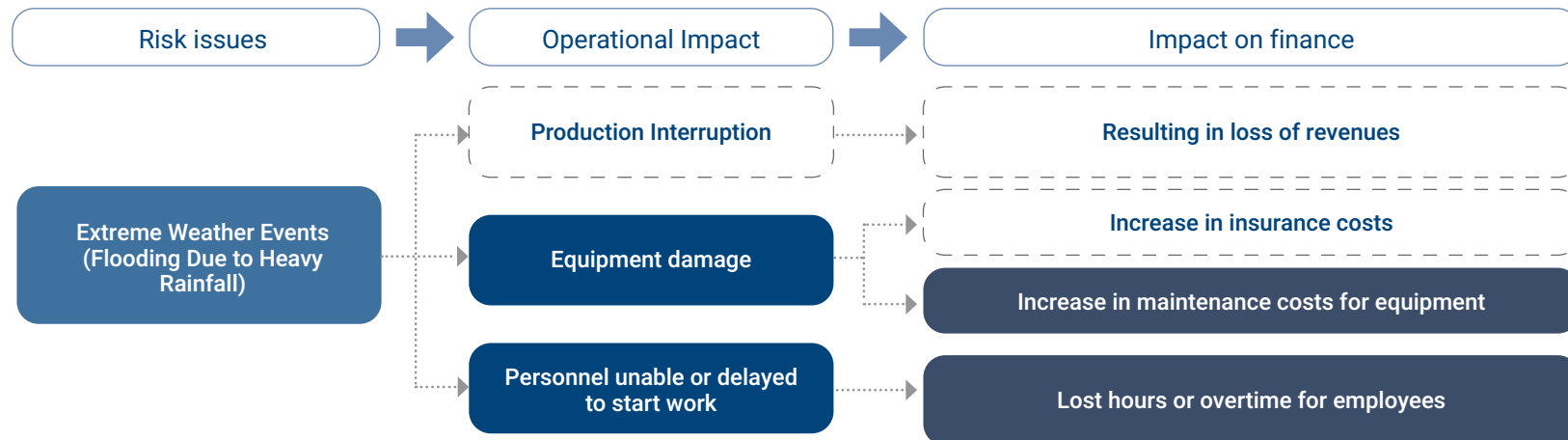
Implementation of Stated Policies Scenario (STEPS)

Results of Impact Analysis

Increase in operation cost due to renewable energy monetary substitution paid and carbon fee imposed amounted to NT\$8,868,638

Physical risk - Identification of influence and potential impact on finance

We apply two scenarios to analyze the impact of extreme weather events on future operations.



*Judging the discussion based on what actually happened in history



Path: Extreme climate events

Year of assessment
until mid-century (2050) /Occurs
every 5 or 10 years

Key Assumptions

Overall assessment considers the financial impact from operational production caused by extreme weather events (flooding due to heavy rainfall), regardless of the impact of other physical risks (such as temperature rise and drought)

Usage
scenario

Scenarios RCP8.5 and RCP4.5 of the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP)

Scenario 1

RCP8.5 (Worst-Case
Scenario for Warming)

Results of Impact Analysis

Increase in operation cost due to equipment damage in the factory area and personnel could not go or delayed start to work amounted to NT\$379,400

Scenario 2

RCP4.5 (BAU Scenario)

Results of Impact Analysis

Increase in operation cost due to equipment damage in the factory area and personnel could not go or delayed start to work amounted to NT\$379,400

Advantech's future change rate of days with heavy rain in Taiwan

- Days with heavy rain: accumulated rainfall in a single day>200mm
- Scenario: The Taiwan Climate Change Projection and Information Platform Project (TCCIP) RCP4.5, RCP8.5

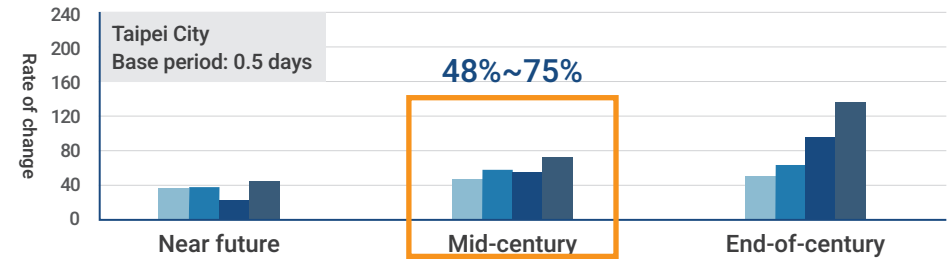
Operation Base of Advantech	Base period/each year (1986-2005)	Scenario	Annual change rate of days with heavy rain (%)		
			Near future (2016~2035)	Mid-century (2046~2065)	End-of-century (2081~2100)
Ruiguang headquarter	0.5 day	RCP4.5	39.22%	59.89%	64.7%
Yangguang Tower		RCP8.5	45.89%	75.03%	140.71%
Donghu plant	0.7 day	RCP4.5	40.81%	60.67%	66.89%
		RCP8.5	51.39%	75.26%	147.97%
Linkou Campus	0.7 day	RCP4.5	52.75%	77.88%	85.56%
		RCP8.5	63.68%	93.52%	189.00%

Advantech's Scenario-Based Assessment of Future Extreme Rainfall in Taiwan

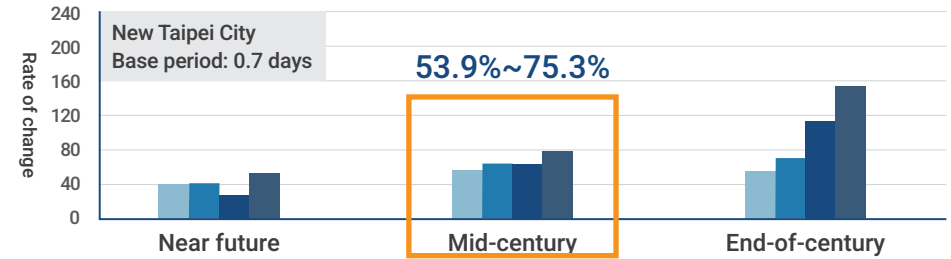
- Rainfall standards for the design of drainage systems for urban stormwater sewers:
Current stage: return period of 5 years
Medium-term target in the future: return period 10 years
- Scenario : The Taiwan Climate Change Projection and Information Platform Project (TCCIP) RCP4.5, RCP8.5 (unpublished RCP6.0)

Operation Base of Advantech	latitude and longitude	Base period (1976-2005)	Change rate of design rainfall (%)	
			Mid-century(2046~2065)	
			RCP4.5	RCP8.5
Ruiguang headquarter	121.583, 25.070	5-year return period percentile 50%	18%	16%
Yangguang Tower	121.578, 25.073		18%	16%
Donghu plant	121.623, 25.067		13%	17%
Linkou Campus	121.382, 25.059		19%	14%

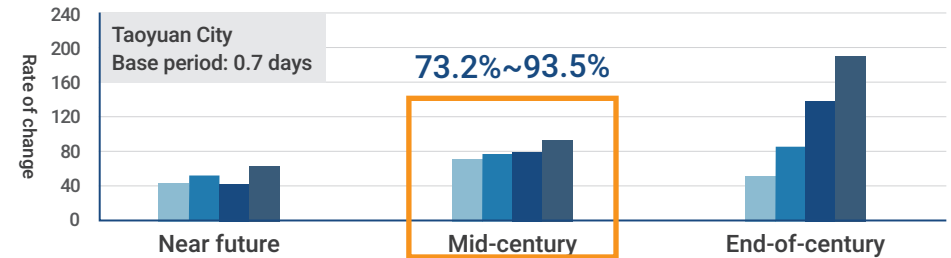
Ruiguang Headquarter, Yangguang Tower RCP2.6 RCP4.5 RCP6.0 RCP8.5



Donghu plant RCP2.6 RCP4.5 RCP6.0 RCP8.5



Linkou Campus RCP2.6 RCP4.5 RCP6.0 RCP8.5



Operation Base of Advantech	latitude and longitude	Base period (1976-2005)	Change rate of design rainfall (%)	
			Mid-century(2046~2065)	
			RCP4.5	RCP8.5
Ruiguang headquarter	121.583, 25.070	10-year return period percentile 50%	23%	20%
Yangguang Tower	121.578, 25.073		23%	20%
Donghu plant	121.623, 25.067		17%	16%
Linkou Campus	121.382, 25.059		20%	17%


Appendix 5: List of Public Associations Participated and Description of Investing in Resources

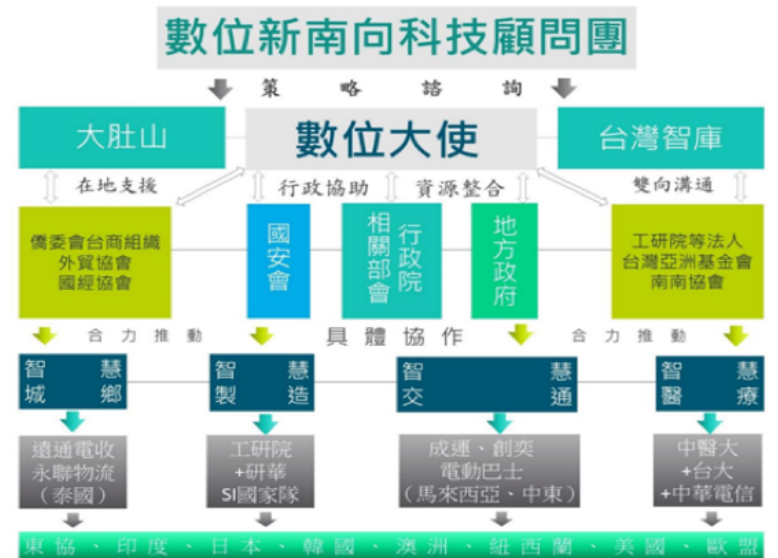
<p>The Meaning and Importance of Participating the Associations</p>	<p>Under the corporate vision of "Enabling an intelligent planet", Advantech works with industry partners to develop the industrial ecological chain and create various IoT software and hardware solutions. Furthermore, we combine the concepts of green operation and sustainable development to actively promote industries and issues related to the Industrial Internet of Things, including smart factories, smart manufacturing, industry 4.0, smart healthcare, smart transportation, smart logistics and retail, etc., through participation in domestic and overseas organizations and groups of official and non-governmental associations.</p>
<p>Performance Overview</p>	<p>We are involved in nearly 40 organizations and groups of official and non-governmental associations around the world. Approximately NT\$3 million was invested, and hundreds of colleagues participated in the activities.</p>

Project Highlights 1

Technology Ambassador of Digital New Southbound Technology Advisory Group

Advantech, Industrial Technology Research Institute (ITRI) and several system integrators have become technology ambassadors in the field of smart manufacturing to assist the Taiwan government to promote Taiwan's IoT technology and technique to the world. The project includes online courses and application Course: "Real-time management, production optimization, data-driven decision-making, START YOUR DIGITAL TRANSFORMATION" are adopted by Advantech as the content of online courses; the courses are also publicly promoted to members on the youtube channel of Taiwan Electronic Equipment Industry Association (TEEIA).





數位新南向科技顧問團

策略諮詢

大肚山 | 數位大使 | 台灣智庫

在地支援 | 行政協助 | 資源整合 | 雙向溝通

僑委會台商組織 外貿協會 國經協會 | 國安會 | 相關部會 | 行政院 | 地方政府 | 工研院等法人 台灣亞洲基金會 南南協會

合力推動 | 具體協作 | 合力推動

智慧城市 | 智慧製造 | 智慧交通 | 智慧醫療

遠通電收 永聯物流 (泰國) | 工研院 +研華 SI國家隊 | 成通、創奕 電動巴士 (馬來西亞、中東) | 中醫大 +台大 +中華電信

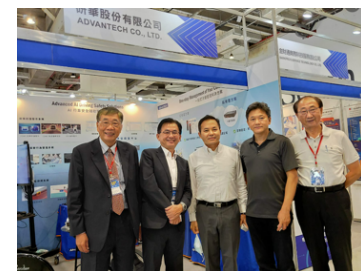
東協、印度、日本、韓國、澳洲、紐西蘭、美國、歐盟

Project Highlights 2


Cooperate with Taiwan Cold Chain Association and TAITRA to promote innovative cold chain solutions

- Promotion of 2022 Taipei International Cold Chain Technology Exhibition:**

Advantech and the Taiwan Cold Chain Association jointly demonstrate the solutions of promoting cold chain innovations, and we exchange and share with relevant industry players in the cold chain seminar.


- Taiwan Cold Chain Technology Innovation Seminar:**

Advantech, TAITRA and Taiwan Cold Chain Association jointly promote Taiwan's cold chain experience to the Southeast Asian market. We also co-organized the "Taiwan Cold Chain Technology Innovation Seminar" in Malaysia on October 14, 2022. During the meeting, Chiang, Wei-Lun, our business directors from Advantech Co., Malaysia Sdn. Bhd (AMY), attended to communicate with industry partners.



Item	Invested amount in 2019 (NTD)	Invested amount in 2020 (NTD)	Invested amount in 2021 (NTD)	Invested amount in 2022 (NTD)
Lobbying, interest representation or similar	0	35,000	0	0
Local, regional or national political campaigns / organizations / candidates	0	0	0	0
Trade associations or tax-exempt groups (e.g. think tanks)	1,186,800	1,487,865	3,071,628	2,965,615
Other (e.g. spending related to ballot measures or referendums)	0	0	0	0
Total contributions and other spending	1,186,800	1,522,865	3,071,628	2,965,615
Data coverage (as % of denominator, indicating the organizational scope of the reported data)	62.9 (%)	79.37(%)	88.86(%)	90 (%)

*Note: The calculation principle of the coverage rate: the number of employees in Taiwan, the United States, China and Japan/global = 7,966 (3,497 Taiwan + 508 USA + 3,736 China + 225 Japan) / 8,899*100% = 90%

Association or Special Interest Group (SIG)	Investment Type	Investment(NTD)	Investment (Local Currency)	Association Type (A=Industry, B=Technology)	Membership Type	Strategic Meaning for Joining the Associations or SIG
Cloud Computing & IoT Association in Taiwan (Taiwan)	2022 annual membership fees for Tier 2 membership	50,000	-	A	Organization membership	Promotion of cloud application services, and enhancement of the value of the national information and communication industry
Taipei Computer Association (Taiwan)	2022 annual membership fee	15,000	-	A	Tier 1 membership	Promotion of computer applications, improvement of economic development, and coordination of industry solidarity
Taiwan Automation Intelligence and Robotics Association (Taiwan)	2022 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
Taiwan Electrical and Electronic Manufacturers' Association (Taiwan)	Membership fees for the first period of 2022 from January to June	21,000	-	A	Tier 1 membership	Promotion of Internet of Things platform and smart manufacturing development
Taiwan Electrical and Electronic Manufacturers' Association (Taiwan)	Membership fees for the second period of 2022 from July to December	21,000	-	A	Tier 1 membership	Promotion of Internet of Things platform and smart manufacturing development
Taiwan Electrical and Electronic Manufacturers' Association (Taiwan)	Membership fees for the second period of 2022 from July to December	21,000	-	A	Tier 1 membership	Promotion of Internet of Things platform and smart manufacturing development
Taiwan Electronic Equipment Industry Association (Taiwan)	2022 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

Association or Special Interest Group (SIG)	Investment Type	Investment(NTD)	Investment (Local Currency)	Association Type (A=Industry, B=Technology)	Membership Type	Strategic Meaning for Joining the Associations or SIG
Taiwan Printed CFircuit Association (Taiwan)	2022 annual membership fee	48000	-	A	Organization membership	Promotion of Industrial cooperation and marketing
Chinese International Economic Cooperation Association (CIECA), Taiwan (Taiwan)	2022 annual membership fee	20000	-	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.
Taiwan Association of Machinery Industry (Taiwan)	2022 annual membership fee	52800	-	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.
Taiwan Telematics Industry Association (Taiwan)	2022 annual membership fee	20000	-	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
Taiwan Cold Chain Association (Taiwan)	2022 annual membership fee	20000	-	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.
Institute for Biotechnology and Medicine Industry (Taiwan)	2022 annual membership fee (1 seat)	20000	-	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.
Computer Internet of Things for Smart Industry Association (Taiwan)	2022 annual membership fee	50000	-	B	Tier 1 membership	This is a joint establishment of Taiwan's industrial computer industry to hopefully promote AIoT-related policies together and form a consensus and direction for industrial promotion.
Intelligent Transportation Society of Taiwan (Taiwan)	2022 annual membership fee	10000	-	A	Organization membership	
SEMI Semiconductor Equipment and Materials International Taiwan Branch (U.S) (Taiwan)	2022 membership fee for renew	88259	USD 2,940.00	A	Organization membership	Promotion of the application of IoT solutions in semiconductor-related industries
AIA (Association for Advancing Automation) (USA)	2022 Annual Membership Fee	54036	USD 1,800.00	B	Enterprise membership	Deepening of industrial automation technology
OPC Foundation (USA)	2022 Annual Membership Fee	540360	USD 18,000.00	B	Enterprise membership	Definition of future technical standards for the Industrial Internet of Things
ODVA (Open Device Net Vendors Association) (USA)	2022 Annual Membership Fee	234156	USD 7,800.00	B	Enterprise membership	Promotion of related technologies and standards for industrial automation

Association or Special Interest Group (SIG)	Investment Type	Investment(NTD)	Investment (Local Currency)	Association Type (A=Industry, B=Technology)	Membership Type	Strategic Meaning for Joining the Associations or SIG
CSIA (Control System Integrators Association) (USA)	2022 Annual Membership Fee	93062	USD 3,100.00	B	Enterprise membership	Promotion of related technologies and standards for industrial automation
AHTD (Association for High Technology Distribution) (USA)	2022 Annual Membership Fee	37525	USD 1,250.00	B	Enterprise membership	Promotion of related technologies and standards for industrial automation
APTA (American Public Transportation Association) (USA)	2022 Annual Membership Fee	41278	USD 1,375.00	A	Enterprise membership	Promotion of related technologies and standards for industrial automation
ITS America (Intelligent transportation system America) (USA)	2022 Annual Membership Fee	150100	USD 5,000.00	A	Enterprise membership	Promotion of related technologies and standards for industrial automation
Edgecross Consortium (Japan)	2022 Annual Membership Fee	6900	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
Japan Railway Engineers' Association (Japan)	2022 Annual Membership Fee	5520	JPY 24,000.00	A	Enterprise membership	Promotion of the intelligent development of Japan railways
CC-Link Partner Association (Japan)	2022 Annual Membership Fee	23000	JPY 100,000.00	A	Enterprise membership	Promotion of related industries for industrial automation
Anritsu Fuji Meeting annual membership fee (Japan)	2022 Annual Membership Fee	4600	JPY 20,000.00	A	Enterprise membership	Promotion of related industries for industrial automation
Edge Computing Consortium (China)	2022 annual membership fee	88400	CNY 20,000.00	B	General membership	Promotion of related technologies and trends for industrial IoT
Machine Vision Industry Union (China)	2022 annual membership fee	176800	CNY 40,000.00	A	General membership	Promotion of related technologies and trends for machine vision
Low Speed Unmanned Driving Industry Alliance	2022 annual membership fee	190060	CNY 43,000.00	B	Enterprise membership	Promotion of related technologies and trends for low speed unmanned driving
E-paper Industry Alliance	2022 annual membership fee	35360	CNY 8,000.00	B	Enterprise membership	Promotion of related technologies and trends for e-paper
China Energy Storage Alliance	2022 annual membership fee	88400	CNY 20,000.00	A	Enterprise membership	Promotion of related technologies and trends for energy storage
Taiwan External Trade Development Council (Taiwan)	2022 New Southbound Smart Industry Economic and Trade Delegation	30000	-	A	Enterprise membership	Assistance in promoting Taiwan's Internet of Things and related industries in its value chain ecosystem
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
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
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,

Association or Special Interest Group (SIG)	Investment Type	Investment(NTD)	Investment (Local Currency)	Association Type (A=Industry, B=Technology)	Membership Type	Strategic Meaning for Joining the Associations or SIG
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
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
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
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

Overview of participation in climate change-related associations

As climate issues are getting more and more attention, Advantech has established Climate Change Strategies, a vision of net zero carbon emissions, and a description of Advantech's response to climate change. In addition, the above-mentioned related plans support and promote the initiative to support the Paris Agreement to limit global warming to 1.5 degrees. For relevant information, please refer to Chapter 4 of this report. Regarding to participate in climate change-related lobbying and the management mechanism of public associations, the ESG Office screens and identifies public associations or non-profit organizations that match the connotation of sustainability and echo the goals and spirit of the Paris Agreement to participate. Also, we report and plan the resources invested to the senior executives in charge of sustainable issues. We attend seminars, workshops and lectures related to climate change as planned. If the association is found to be inconsistent with the Company's climate change stance or inconsistent with the goals and spirit of the Paris Agreement, the Company's support will be stopped. The scope covered by this mechanism is Advantech global. Advantech's participation in climate change-related associations is summarized in the table below. By participating in educational training, forums, workshops and other activities organized by the following organizations, new knowledge is absorbed and communicated with benchmarking companies. Advantech responds to the Paris Agreement's commitment with empower.

Business Council for Sustainable Development of the Republic of China (Taiwan)	Participation in association forums or related education and training activities	90000	--	A	Standing membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
Taiwan Climate Partnership (Taiwan)	Participation in association forums or related education and training activities	150000	--	A	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
Taiwan Nature Positive Initiative (Taiwan)	Participation in association forums or related education and training activities	300000	--	A	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
CSR@CommonWealth (Taiwan)	Participation in association forums or related education and training activities	120000	--	A	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance
RE10X10 (Taiwan)	Participation in forums of non-profit organizations or related education and training activities	0	--	A	General membership	Absorption of new knowledge on corporate sustainability for improving corporate sustainability performance

The topics of concern of the public associations that Advantech participated in are as follows:

Issues of concern	Level of support	Advantech's Positioning and Significance of Participation	2022 Substantial Investment (NTD)
Actively participation in the Alliance of Industrial Internet of Things	Strong support	Actively participate in the alliance as speakers and engage in exhibitions to promote the IoT and its ecosystem. Also, we carried out co-marketing activities and introduced the industrial IoT concepts and solutions to partners and public.	1642656
The promotion of the Industrial IoT and the acceleration of the implementation of its solutions		Participation of industrial IoT promotion organizations and technical associations to support the reliable and up-to-date technologies and standards. To secure the operation and data transmission of industrial automation are developed under the latest technology.	1322959

Appendix 6: Comparison Table of ISO Certification and United Nations Sustainable Development Goals (SDGs) of Advantech

ISO certification		Certification scope							Corresponding SDGs
Category	ISO name	HQ	ATMC	AKMC	AJP	AKR	ANA	AEU	
Quality	ISO 9001 Quality management system	✓	✓	✓	✓	✓	✓	✓	   
	ISO 13485 Medical equipment quality management system	✓	✓	✓			✓	✓	 
	ISO 17025 Laboratory quality management system	✓	✓	✓					-
Environment	ISO 14001 Environmental management system	✓	✓	✓	✓		✓		           
	ISO 14064 Greenhouse gas inventory standards	✓	✓	✓					 
	ISO 50001 Energy management system	✓	✓	✓					   
Safety	ISO 45001 Occupational health & safety management system	✓	✓	✓			✓		      
Information	ISO 27001 Information security management system		✓	✓			✓		-

Appendix 7: Product compliance with environmental regulations and key performances of voluntary environmental labels

Advantech revised its internal management standards for various environmental protection policies related to the management of environment-related substances (such as EU RoHS, REACH, POPs, etc.), and introduced the IECQ HSPM QC080000 hazardous substance management system in 2009 to conduct risk control through Advantech's supplier management platform and supply chain eco information management platform. Advantech's selection of materials for various products conforms to the relevant environmental protection standards of the following countries according to the product sales area, as shown below:

1. RoHS Directive
2. REACH SVHC Control Requirements for Substances of Very High Concern
3. Product Recycling Specifications
 - 3.1 EU Waste Electrical and Electronic Equipment Directive (WEEE)
 - 3.2 International Standards - ISO 11469 Standard (marking of plastic parts)
4. Battery Recycling Regulations
5. Waste Packaging Regulations
6. Regulations related to energy saving
 - 6.1 Energy-Related Products Directive (ErP) Mark
 - 6.2 Energy Star Mark



All products of the Company have undergone safety verification operations in the design and development stage to ensure compliance with CE/FCC/CCC safety marking requirements. Advantech abides by the environmental protection laws and regulations issued internationally, from the effective utilization of natural resources, to the ban on hazardous substances and the Life Cycle Assessment (LCA) of proper waste management, and we follow the relevant international standards for eco products. The Company's products promote eco products based on the three aspects of safety, energy saving, and environmental protection. Relevant information announcements are described in the product catalogue on the Company's website, as shown below.

Example of Environmental Declaration on Advantech's Product Marketing Website

TPC-100W

7"/10.1"/15.6" Touch Panel Computer with ARM Cortex™-A53 Processor

NEW

Features

- NXP® ARM® Cortex™-A53 i.MX 8M 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/at 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)



International Energy Conservation and Environmental Protection Marks

Energy Star Mark: since 2009, Advantech's specific types of models conform to Energy Star, an international energy-saving and environmental protection mark; the models introduced in the past four years are shown in table below.

Advantech Products Introducing the Energy Star Environmental Protection Mark in the Past Four Years

Product Number	Product Type
ESY152,ESY15i5,ESY22i2,EY22i5	Panel PC Industrial computer equipment with screen
ESY20X2;ESY20X3;ESY20X5;ESY20X7	
ESY15X2;ESY15X3;ESY15X7;ESY17X2;ESY17X3;ESY17X7;ESY15X5	
ESY15i2,ESY15i5,ESY22i2,ESY22i5	
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	

Advantech's eco design products achieved a silver medal in 2022

Advantech has established Advantech's Green ECO design standards since 2020 in response to international trends in carbon reduction and low-energy consumption regulations. Please refer to the table below for voluntary introduction of Advantech eco design product models.

Advantech's eco design products silver medal 2022

Product Number	Product Type
FPM-212,215217219221	Computers, Panel PC...etc.
FPM-1150G-RHAE	
ARK-1250L	
FPM-7151,7181,721	
IDP31	
TPC-107	
VEGA-7110	
DS-085	