

04 Green Operations

- 4.1 Eco Design and Sustainability Liability of Product
- 4.2 Climate Change Strategy and Actions
- 4.3 Greenhouse Gas (GHG) Inventory and Energy Management
- 4.4 Environmental Management



Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

4.1 Eco Design and Sustainability Liability of Product



Name of material topic	Importance of this material topic to Advantech
Eco Design and Sustainability Liability of Product	Advantech regards eco design and product sustainability as both risks and opportunities. Facing strict regulations and market demands, we need to strengthen R&D in the short term to overcome technology barriers, and drive supply chain transformation in the medium and long term to enhance our competitiveness and create environmental and economic benefits.
Policy or commitment	Advantech responds to SDG 9 (Industry, Innovation and Infrastructure) and SDG 12 (Responsible Consumption and Production) by setting goals and implementing standards for product raw materials, design, manufacturing, and environmental management, dedicating our efforts to producing eco-friendly products to minimize our impact on the environment.
Positive impacts	Improve corporate image: Low-carbon products shape Advantech's sustainability image, meet the environmental sustainability requirements of international markets, strengthen marketing in low-carbon markets, and expand the customer base. Implement product carbon footprint calculation: Carbon reduction targets are achieved together with the supply chain by making carbon footprint transparent, effectively meeting regional environmental regulations and carbon reduction requirements, while enhancing our competitiveness in pursuing green opportunities to support market expansion. Green product innovation and sustainable raw material application: We effectively increase brand value and realize long-term advantages by forming a green supply chain, choosing eco-friendly materials, optimizing logistics, and reducing waste.
Negative impacts	Supply chain risks: Supply disruptions resulting from financial difficulties, natural disasters, political factors, or climate events impact production plans and delivery schedules, resulting in a decline in customer trust and a weakening of market competitiveness. Adjustments made in response to energy-saving and carbon reduction requirements may lead to increased raw material costs and management complexity. R&D and technology risks: Green product certification and R&D of low-carbon technologies require a considerable amount of funds and time. These are influenced by differences in certification standards and technological uncertainties, which may result in delayed market launches and weakened market competitiveness. At the same time, the use of compliant materials may affect design costs. Impact on sales after product launch: High costs and delays related to green product certification and the R&D of low-carbon technologies may result in low market acceptance and higher revenue dependency risks after launch, weakening brand competitiveness and sales performance.
Actions in response to negative impacts that occur	- Introduce green packaging materials and eco design, establish a green packaging material supply chain in conjunction with a recycled materials supply chain for mechanical components and dedicated material number classification system. Regularly review the environmental certifications of supply chain materials, and carry out management based on Advantech's definition of recycled materials. - The cost increase associated with using energy-saving key components will be managed through centralized selection and procurement by the procurement and parts management units, increasing common components and reducing costs. - Establish internal energy-saving standards by integrating hardware-level energy-efficient designs and energy-saving software development into x86 architecture systems to comply with carbon reduction trends and requirements.
Overview of target achievement in 2025	- Continued to ensure that 100% of raw materials comply with international environmental regulations and Advantech's standards for regulated substances. 87.07% of new eco design products received the silver medal. - Mass-produced eco design products with the silver medal or products with Advantech's energy-saving label accounted for 18.73% of annual revenue. 40% of new products in specific product lines meet Energy Star requirements or have obtained the internal energy-saving gold medal. - Implemented SW Utility in x86 Windows Image for 100% of new products in specific product lines.

Name of material topic	Importance of this material topic to Advantech
2026 targets	- Continue to ensure that 100% of raw materials comply with international environmental regulations and Advantech's standards for regulated substances. - At least 90% of new eco design products achieve the silver medal. - Mass-produced eco design products or products with Advantech's energy-saving label account for 20% of annual revenue. 5% of new eco design products achieve the gold medal. - Adopt and apply recycled materials in specific products, and increase the percentage of new products that use recycled materials to 10%.
2030 targets	- Continue to ensure that 100% of raw materials comply with international environmental regulations and Advantech's standards for regulated substances. 30% of new eco design products achieve the gold medal.100% achieve the silver medal (excluding certain models). - Mass-produced eco design products or products with Advantech's energy-saving label account for 40% of annual revenue. - Continue to adopt and apply recycled materials in specific products, and increase the percentage of new products that use recycled materials to 50%.
Key action plans or programs in 2025	- Implemented the Hazardous Substances Reduction Plan for raw materials and recycled materials, required all new models to use low halogen materials, and increased the usage ratio. At the same time, used recycled plastics and metals in the mass production of major products, continued to expand applications, and set targets. - Comprehensively implemented short/medium/long-term goals for sustainable packaging materials, and prioritized and required the use of sustainable materials for product packaging. - Continued to implement process waste reduction and hazardous substance management, fully complied with international environmental regulations, and strengthened the ban on high-risk substances. At the same time, we increased the recycling rate and effectively reduced waste by recycling solder dross and PE waste. - Adopted the energy star energy-saving design for new products in specific product lines, continued to promote eco design, and utilized the energy-saving functions of R&D software modules to improve product energy efficiency. - Established the Advantech Global Product Recycling Guidelines to implement the concept of extended producer responsibility (EPR) and circular economy. Reviewed the product recycling mechanisms in each region, and carried out recycling according to local recycling methods in different regions through RMA units with the goal of increasing actual product recycling volume.
Effectiveness evaluation	- Eco Design Committee: The Project Process Management Department calls together relevant departments to jointly carry out standard formulation, implementation, and management, and revise the Advantech Eco Design Standards according to international trends. - Regular review and adjustment: The ESG-Environment Task Force reviews the progress of targets every 2 months, ensuring the effectiveness of implementation and strategies. - External professional support: Consultants and lecturers are invited to provide guidance to ensure that internal processes comply with policy and regulatory developments.
Stakeholders affected by this material topic and actions taken by Advantech	- Information disclosure and communication: Collect the opinions of stakeholders through diverse channels to ensure transparency. - Sustainability issue assessment: Analyze operational impacts and risks, identifying and giving priority to material topics. - Annual reports and verification: Publish a sustainability report every year and have it verified by an external verification body. - Continual internal and external communication: Strengthen the implementation and results of eco design and sustainability responsibilities.

Annual Actions, Performance, and Future Goals

Set the target for recycled material use and implement circular economy

Set percentage targets for the use of recycled materials, and integrate product design with recycling mechanisms to improve recycling efficiency and implement circular economy.

Energy Star target setting

Introduce Energy Star energy-saving design requirements for specific product lines and obtain the internal energy-saving gold medal.

Optimization of eco design products

Continue to standardize the eco design product silver medal standard as a mandatory requirement for Advantech's new model development, and actively design and develop gold medal models of eco design products.

Energy saving SW utility development

Use energy-saving software to improve hardware energy efficiency, and adopt the new product x86 Windows in models of specific product lines.

Performance in 2025

87.07% of new products

Percentage of eco design products that have obtained the internal silver medal.

18.73% of revenue

Percentage of revenue accounted for by mass-produced products with the silver medal for eco design products or with Advantech's energy-saving label.

40% achievement rate

Percentage of new products in specific product lines that meet Energy Star requirements or have obtained the internal energy-saving gold medal.

95% achievement rate

Percentage of low-halogen plastic mechanical parts in products sold each year.

2.08% of materials in new products are recycled materials

Percentage of products made from recycled materials in newly developed models.

37.88% of waste recycled

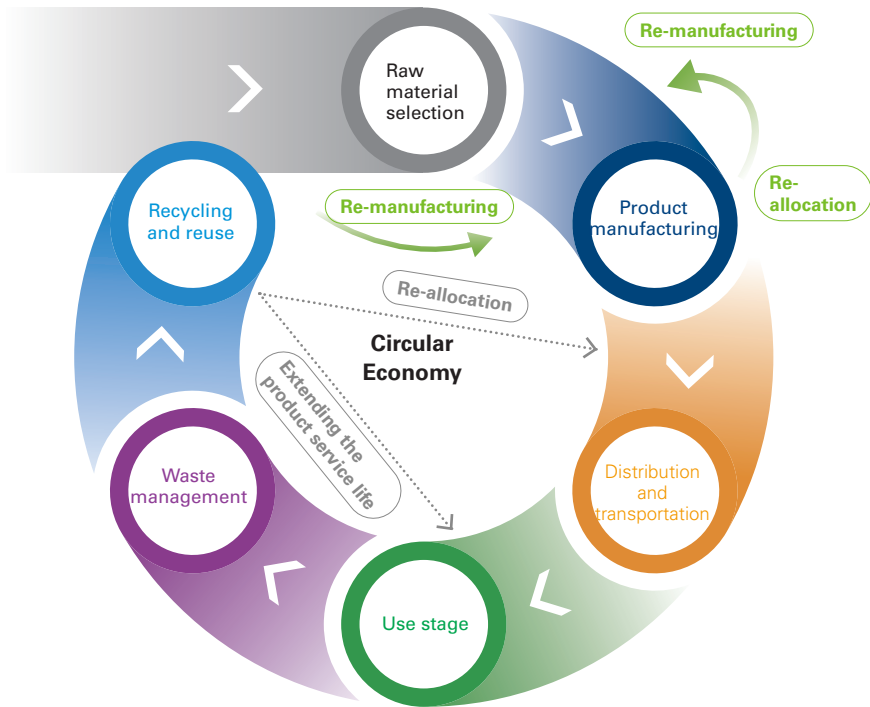
PE waste is recycled by factories and converted into 100% recycled PE products (e.g., packaging film and product packaging PE bags).

4.1.1. Product Eco Design and Lifecycle Management

At Advantech, we follow the concept of product lifecycle and use life-cycle assessment (LCA) and product carbon footprint to quantify the impact of our products on the environment. The assessment covers carbon emissions across all stages from raw material selection, manufacturing, transportation, use, to final disposal. We further set carbon reduction targets and take corresponding actions to incorporate the targets into business management goals.

In addition, we have formulated green product design management guidelines and standards, and utilized the product life cycle to guide the Product Division to design green and innovative products.

We announced our sustainable product strategy and began implementing circular economy at our headquarters in Linkou Smart Campus in 2025. We adopted the 3 core principles of "reuse," "extend service life," and "recycling and design," and have used innovative methods to transform waste into reusable resources, which are gradually incorporated into each stage of the product lifecycle for recycling and sustainability management.



Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

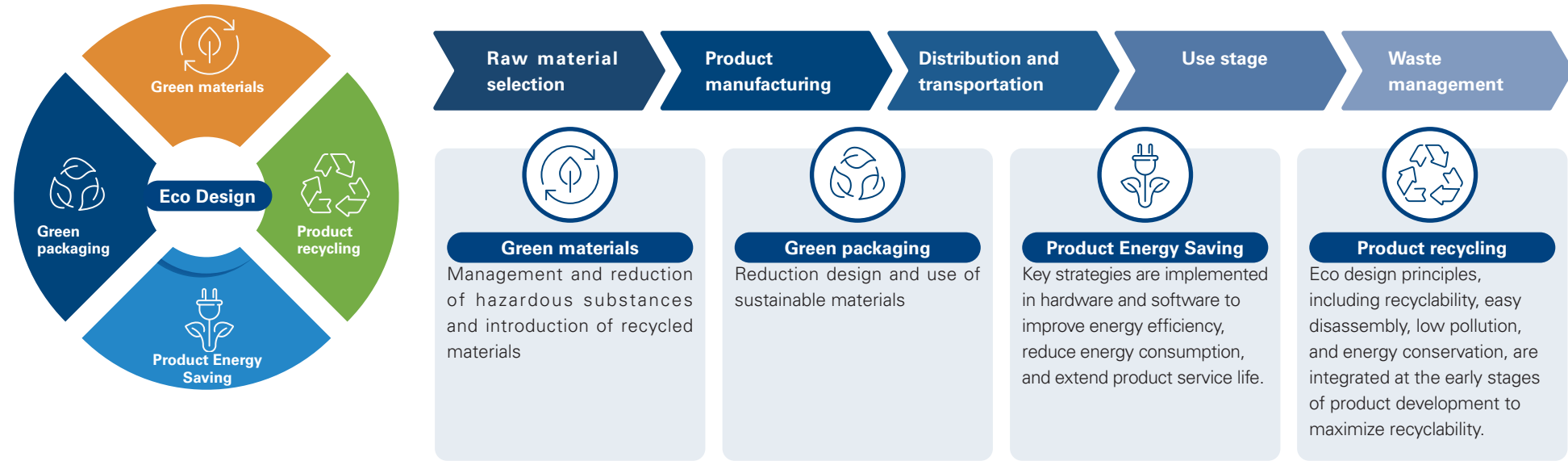
Appendix

Table 4.1.1 LCA of Eco Design Products

Stage in product lifecycle	Eco design guidelines	Regulations, standards, and guidelines	Results and benefits (Achievements as of 2025)
Raw material selection	Green materials	1. Advantech GPM Regulatory Substance Standards 2. Advantech Eco Design Standards 3. Advantech Sustainable Packaging Design Strategy 4. Advantech Green Policy - Hazardous Substances Reduction Plan	Management and reduction of hazardous substances and introduction of recycled materials 1. As of the end of 2025, the external mechanical parts of all newly developed models are required to meet Advantech's low halogen requirements, and 93% of plastic mechanical parts in products sold throughout the year met low halogen requirements, while 5% of PCB boards met low halogen requirements. 2. In 2025, recycled plastics and metals were successfully introduced into 3 benchmark products, including fanless embedded computers (ARK-1125C, ARK-1222) and monitor computers (GSC-7153V); mass production of the models commenced in 2025. * The external mechanical parts of medical devices (POC-6) contain 30% recycled plastics. Medical devices face the challenge of more rigorous chemical resistance tests, which are currently under development. 3. Based on their usage and feasibility assessment, recycled materials are incorporated and applied in specific products to increase the percentage of recycled materials used. We have set the target percentage of recycled materials used as raw materials for specific products. 4. Comprehensively implemented short/medium/long-term goals for sustainable packaging, and prioritized and required the use of sustainable materials for product packaging.
	Green packaging		
	Product recycling		
Product manufacturing process	Green materials	1. Advantech GPM Regulatory Substance Standards 2. Advantech Eco Design Standards 3. Environmental, Occupational Health and Safety Policy	Process hazardous substance management and recycling 1. Reduced the amount of waste and pollution generated and prohibited the use of hazardous substances in the manufacturing process. Advantech is 100% compliant with international environmental regulations and enhanced the ban on ozone-depleting substances and endocrine-disrupting chemicals that may harm human health. 2. In 2025, Advantech's Taiwan Plant successfully recycled and reused solder dross through solder dross separators with a recycling rate of 74.48%, and reused a total of 3.85 tons of solder dross, effectively reducing hazardous waste. Please refer to Chapter 4.4.2 "Energy and Resource Use and Waste Management" for details. 3. We recycled a total of 6.8 tons of PE waste at our Taiwan Plant in 2025, and used it to produce approximately 2.58 tons of 100% recycled PE products (packaging film and product packaging PE bags), achieving an overall waste recycling rate of 37.88%, effectively reducing waste through recycling. This is the starting point of Advantech's waste recycling and re-manufacturing.
	Green packaging		
	Product recycling		
Delivery and transportation	Green materials	1. Advantech Eco Design Standards 2. Advantech Sustainable Packaging Design Strategy 3. Environmental, Occupational Health and Safety Policy	Green packaging material optimization and logistics packaging material recycling 1. According to the guidelines for green packaging materials in the Advantech Eco Design Standards, Advantech uses at least 80% recycled fiber materials for cardboard boxes, reduces packaging materials, improves packaging design, and optimizes packaging sizes to reduce the environmental impact of transportation. Advantech has planned short-term and long-term targets in advance under the PPWR, and completed the implementation of PPWR before the time limit to ensure that we are fully compliant with requirements. 2. Recycled cardboard boxes used by suppliers for incoming, outgoing, and installation processes to reduce disposable cardboard waste. (Reduced by approximately 18,400 cardboard boxes/year, or by 18.4 tons/year.) For details, please refer to: 4.4.2. Energy and Resource Use and Waste Management 3. The size and weight of Advantech's new products are reduced through eco design. Starting in 2025, air transport of products overseas uses 10% sustainable fuel, reducing carbon emissions from transportation. 4. Comprehensively implemented short/medium/long-term goals for sustainable packaging, and prioritized and required the use of sustainable materials for product packaging.
	Green packaging		
Product use stage	Product Energy Saving	Advantech Eco Design Standards	Product Energy Saving We continued to implement eco design in 2025, and used the Energy Star energy-saving design for new products of specific product lines. Among them, 40% were completed and passed internal tests the same year, which meets regulatory requirements. Energy-saving functions were added to the R&D software module in 2024 to improve product energy efficiency. Successfully developed energy-saving functions based on existing software product modules, and successfully introduced them into x86 Windows system products (AIR-150). After measuring energy consumption in the maximum energy-saving scenario, the product can reduce carbon emissions by approximately 242.4 metric tons each year, effectively reducing the impact on the environment, and significantly increasing the overall coverage of our energy-saving products. The functions were introduced into 100% of new products of specific product lines in 2025.
Product waste recycling management	Product recycling	1. Advantech Eco Design Standards 2. Advantech Global Product Recycling Guidelines	Easy-to-dismantle and easy-to-recycle design of products and waste management 1. Designed products that are easy to disassemble and recycle, calculated the percentage of recyclable products by product category, which averaged 97% in 2025, exceeding the requirements of the WEEE Directive. 2. Product waste disposal: Established the Advantech Global Product Recycling Mechanism to implement the concept of extended producer responsibility (EPR) and circular economy. Since 2025, Advantech has received recycling requirements through the RMA system and customer service contact persons, and has handled recycling according to local methods in different regions. The actual recycling volume increased by 25 tons globally, and the actual recycling rate of products reached 15.8% globally.

Green Product Design Management and Standards Setting

At Advantech, we have established standards in accordance with international environmental regulations and international assessment tools (e.g., the Electronic Product Environmental Assessment Tool (EPEAT) in the U.S.) for 4 product aspects: (1) green materials, (2) green packaging materials, (3) product recycling, and (4) Product Energy Saving. We have evaluated the environmental impact in each stage of the product life cycle, and formulated the Advantech Eco Design Standards that comply with international regulations and improve energy efficiency, promote ecological design, and reduce environmental toxic hazards based on the experience from serving brand customers.



• Figure 4.1.1 Product Lifecycle and Advantech's Green Product Design Aspects

Advantech: Developing Intelligent Solution to Comprehensively Monitor the Carbon Footprint of Self-developed Products

As the world moves towards net zero emissions and carbon neutrality, the IPC industry not only needs to provide high-performance and low-power solutions, but also needs to take action to reduce carbon emissions in order to meet the sustainability requirements of customers, investors, and international markets. Following the EU's implementation of the Carbon Border Adjustment Mechanism (CBAM), the implementation of carbon disclosure policies in various countries, and growing emphasis from multinational corporations, the transparency of carbon footprint will become crucial to international competitiveness.

Advantech thus launched the product carbon footprint inventory project in 2023, and obtained the first certification that integrates the carbon footprint of computer products, ISO 14067, in the same year. We evaluated the depth of material selection for products through the product lifecycle assessment (LCA), and identified the top 5 key materials with the highest carbon footprint. In addition, we completed the carbon footprint inventory methodology for our products in the same year, and laid the foundation for the internal development of product LCA. Starting in 2024, we successively completed the carbon footprint inventory for representative products across business groups, and began developing an internal product carbon footprint inventory intelligence platform, developing our own intelligent solution for calculating the carbon footprint of products, and applied it to green product design projects.

We are actively developing a product carbon footprint calculation system. It not only helps monitor product carbon emissions throughout their lifecycle but also aligns seamlessly with carbon pricing and reduction strategies. This system adopts the LCA methodology and references international standards, such as ISO14040, ISO 14067, and GHG Protocol. The system integrates Advantech's internal systems for raw materials, supplier information, and production management, connects to external APIs, and utilizes AI technology to establish a carbon footprint coefficient database for raw materials. This enables the system to quickly calculate the product carbon footprint and generate carbon footprint reports, which can be used to assess the emissions in each stage of the product lifecycle. The calculation of carbon footprint was completed for all products on the market in the current year, accounting for approximately 100% of overall revenue.

This not only simplifies the cumbersome manual calculation process, but also helps Advantech quickly identify product emission hotspots, laying the foundation for future carbon footprint reduction. This system has enabled us to identify products with high-carbon emission risks in advance, so that we can actively adjust our design and production strategies. It also meets the needs of customers worldwide for product carbon footprint information, further consolidating our leadership in sustainability.

4.1.2. Product Liability

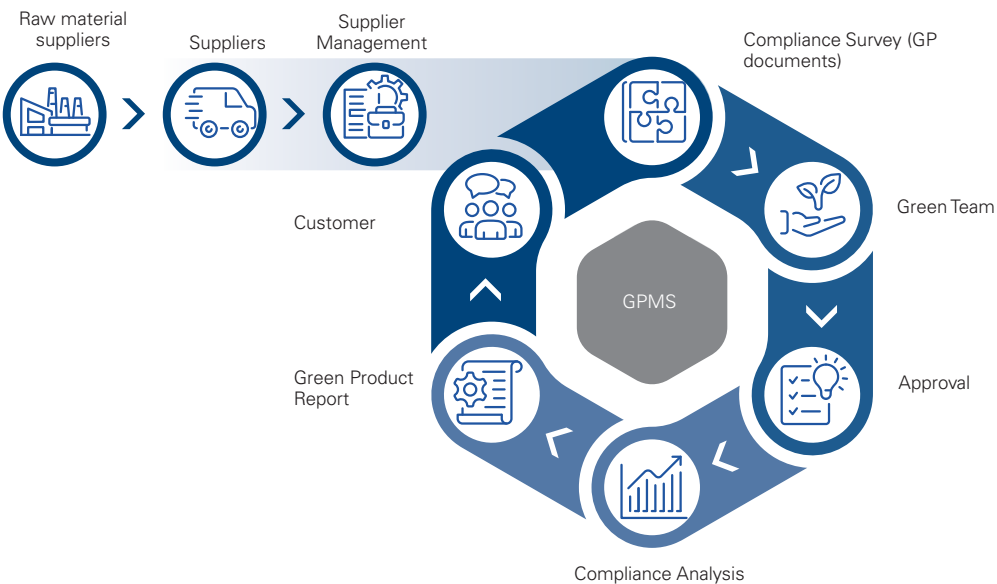
At Advantech, we incorporate eco and circular design principles into the product lifecycle during the product development process, and focus on actual implementation strategies, goals, and directions. We continue to engage in the R&D of innovative green products and solutions, and provide efficient and reliable energy-saving solutions and services, while reducing waste from the source. We will continue to uphold the concept of eco design, introduce low-carbon material options, extend the service life of products, and increase product value. Our products do not contain hazardous substances and are easy to disassemble and recycle. We are increasing the percentage of recycled materials used, and implement “reduce, reuse, and recycle” to promote the responsibility of corporate producers, so as to support the achievement of SDGs.

Raw Material Selection

To mitigate the negative environmental and social impact of raw material use, Advantech established the “Advantech Green Policy – Hazardous Substances Reduction Plan” and the “Sustainable Raw Materials Management Policy” to implement sustainable procurement and optimize supply chain management efficiency, further contributing to the target of net zero emissions by 2050. In line with this policy, we prioritize the use of raw materials with minimal environmental and social impact across all business activities, including R&D, procurement, production, operations, and services.

■ Green materials and hazardous substance management

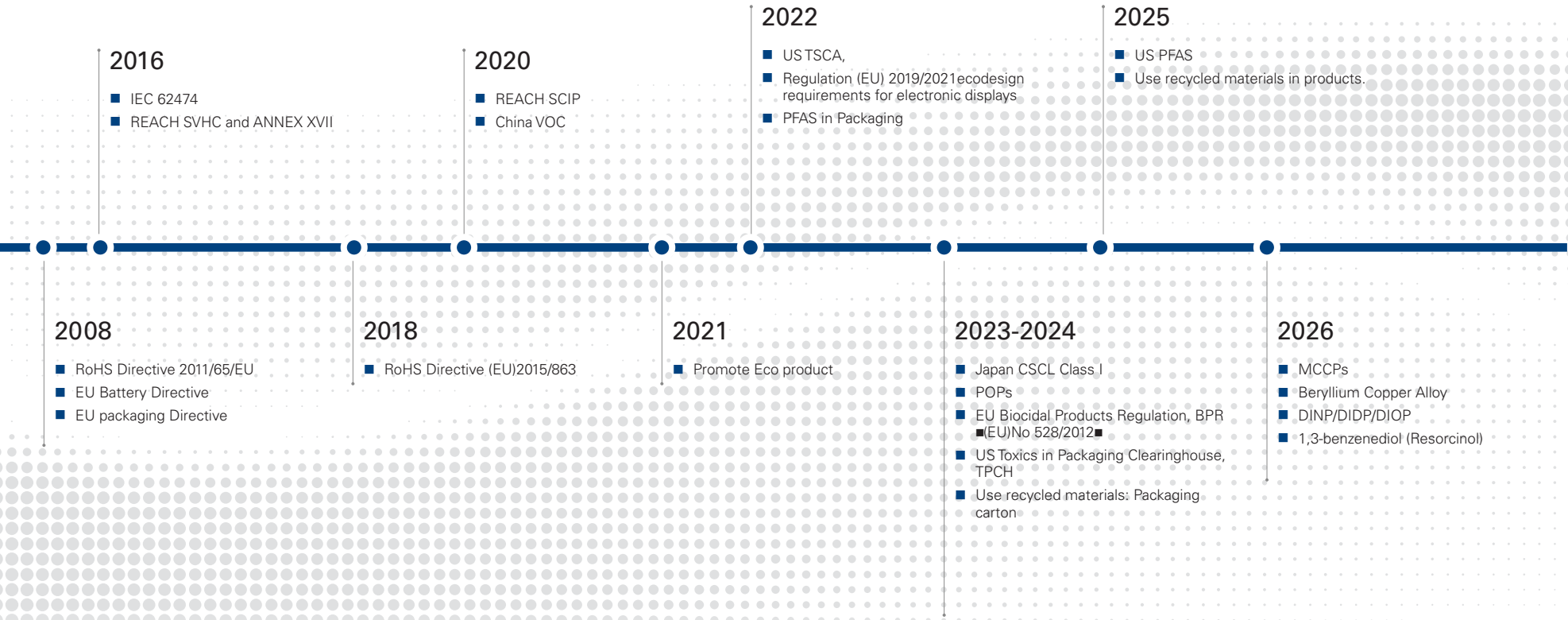
Every year, Advantech reviews the current status of hazardous substance management based on international regulations, the IEC 62474 electronic industry standard, customer requirements, and environmental trends. The Advantech Green Policy – Hazardous Substances Reduction Plan was established on this basis, and goes beyond international regulation requirements, controlling over 500 chemical substances as of 2025. We regularly update the Advantech Green Product Hazardous Substance Management Regulations, and manage it through the Green Product Management System (GPMS). Advantech is also a Sony Green Partner, and our main factories have implemented the IECQ QC 080000 system. Upholding the spirit of rigorous quality management, we continue to control every aspect of product liability, ensuring that all Advantech products comply with relevant regulatory requirements. At the same time, we have incorporated regulatory substance standards when implementing the recycled material mechanism, and managed hazardous substances from the source at the same time. Therefore, we manage 100% of the health and safety issues arising from product production through the source management mechanism for parts. In 2025, Advantech's parts and finished products did not violate any international directives on the restriction of hazardous substances, and there were no incidents related to exceeding the threshold for prohibited or restricted substances.



Raw material source management	■ Select qualified suppliers and upload and manage green data of the supply chain ■ Establish the Advantech GPM Regulated Substances Standard ■ Confirm the compliance of parts through the approval process, which is then verified by a trained green auditor.
Risk assessment of substances and parts	■ Evaluate the use of substances in Advantech products ■ Confirm the compliance of parts in response to the latest regulations
Product compliance report	■ Evaluate the RoHS & REACH compliance of Advantech products ■ Evaluate compliance with other regulations
Information system connection	■ Green Mark management
Supply chain information communication	■ Announcements of relevant information by Advantech ■ Notification of regulatory updates and customer specifications
Conflict minerals investigation	■ Complete conflict minerals reporting forms as required by the RBA ■ Maintain an up-to-date list of smelters to quickly initiate investigations and generate compliant reports

• Figure 4.1.2 Green Product Management System (GPMS)

Advantech is committed to reducing hazardous substances in products and processes, and uses prevention principles and risk management mechanisms to gradually eliminate or replace substances that pose potential risks to the environment and human health. The main measures are as follows: (1) Inventory of substances of very high concern and risk assessment; (2) raw materials and process optimization; (3) eco design introduction; (4) supply chain collaboration, education and training; (5) higher self-management standards. We continue to plan and control prohibited hazardous substances every year, and require all newly developed models and materials to be 100% compliant. We also plan to ban the use of MCCPs and beryllium copper alloy in specific parts in 2026.



Note: For details on the Commitment to Hazardous Substance Management, annual actions, performance, and future goals, please refer to the [Advantech Green Policy – Hazardous Substances Reduction Plan](#)

• **Figure 4.1.3 Advantech Green Policy - Hazardous Substances Reduction Plan**

Results of the Hazardous Substances Reduction Plan in 2025

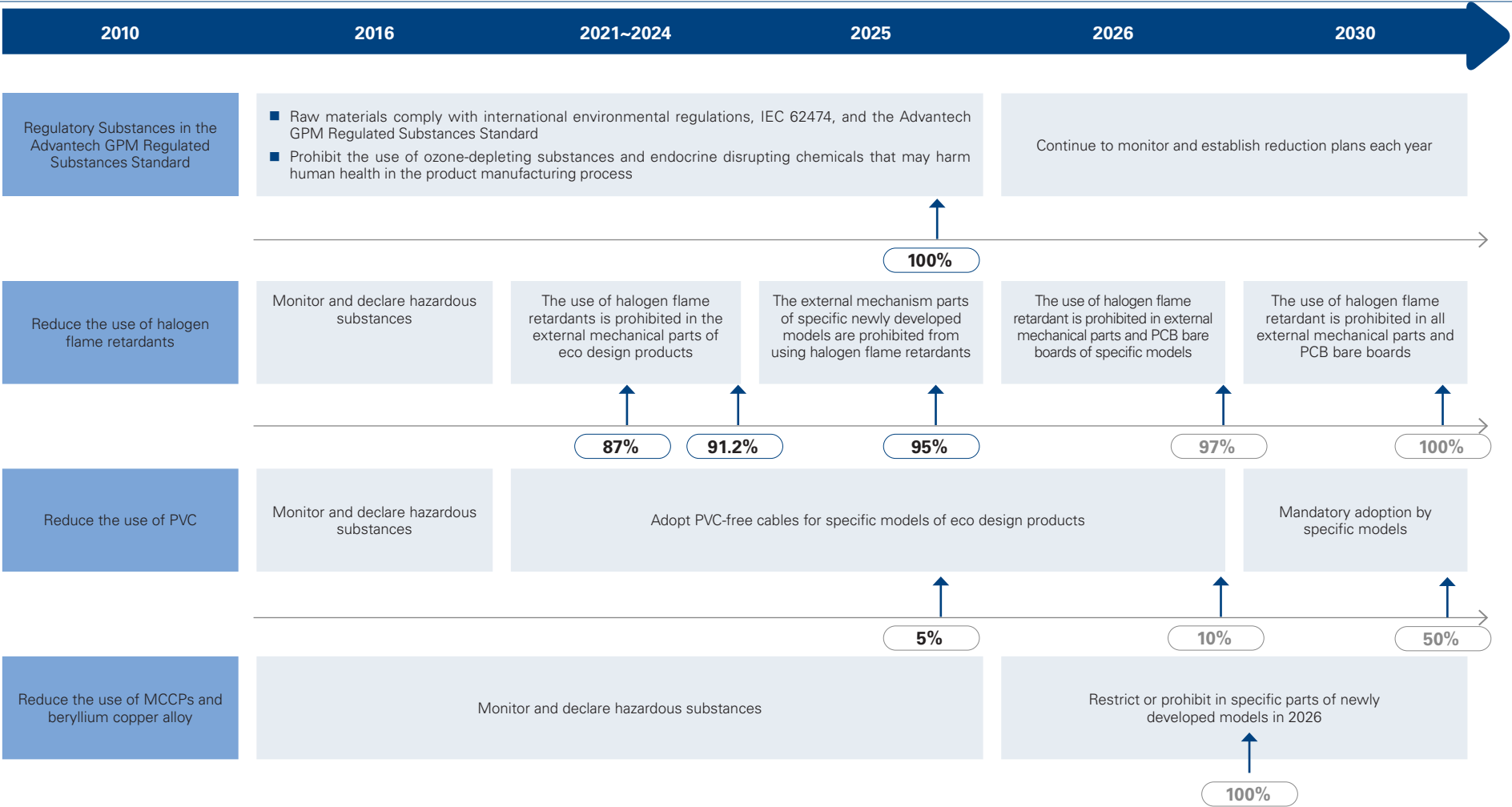


Continued to ensure that 100% of raw materials comply with international environmental regulations, IEC 62474, and the Advantech GPM Regulated Substances Standard.

(All raw materials are disclosed and declared according to IEC 62474, and account for 100% of product revenue.)

Introduced alternative materials and established a green materials database to provide R&D units with a selection of materials, prohibited the use of 95% halogen flame retardant and the use of 5% PVC-free wire materials in specific models. We planned targets for the 2026 reduction plan and long-term targets for 2030 at the same time. Please refer to Figure 4.1.4 Results and Future Goals of the Advantech Green Policy – Hazardous Substances Reduction Plan.

• **Figure 4.1.4 Results and Future Goals of the Advantech Green Policy – Hazardous Substances Reduction Plan**



Sustainable raw material management

Advantech's raw material procurement strategy not only considers cost and benefit, but also determines procurement priorities based on the sustainability risk assessment, ensuring the effective implementation of sustainability management. We work with suppliers to increase the transparency of raw material sources, assess the potential environmental and social impacts of their development and production processes, and select the most appropriate raw materials for Advantech based on the results of supplier sustainability risk assessment.

In the third quarter of 2024, Advantech launched the sustainable raw material project to evaluate the use of recycled materials by tracing the source of raw materials. Moreover, recycled materials were used in the trial production plans for products of major business groups. The project was extended into 2025 and successfully achieved all established goals, including compiling statistics on raw material sources, evaluating the results of using recycled materials in structural parts of products on a trial basis, and drafting preliminary targets for future implementation. Contents include the successful use of recycled plastics and recycled metals in benchmark products, and commencing the mass production of related models. Based on their usage and feasibility assessment, recycled materials were incorporated and applied in specific products to increase the percentage of recycled materials used. We have set the target percentage of recycled materials used as raw materials for specific products. Furthermore, we set the target for the percentage of specific products that use recycled materials to reach 10% in 2026. In terms of raw material traceability, considering the characteristics of Advantech's products, we prioritize the top 3 raw materials by usage volume for implementing control: plastics, steel/iron, and aluminum. These 3 recycled materials were introduced in the sustainable raw materials trial production project. Furthermore, in addition to managing the mechanical parts of products, we also conducted a traceability survey for packaging materials.

Table 4.1.2 Overview of Raw Material Use in 2025

Raw material category		Raw material use (ton, pcs)	Recycled material content percentage (%)
Materials of mechanical parts (ton)	Plastic	147.1	0
	Iron/steel	747.6	0.131
	Aluminum	215	0
Packaging materials (pcs)	Plastic bags/Bubble bags	11,071,268	0
	Cardboard boxes	7,379,953	100
	EPE cushioning material	10,895,202	0

We set targets for the use of recycled materials (plastic/metal) based on project analysis and international trends. In addition, specific recycled material content requirements have been defined for mechanism casings and parts of specific models.

Table 4.1.3 Target Recycled Material (Plastic/Metal) Content in Eco Design Products

Year	Target recycled material (plastic/metal) content in mechanical parts					
	Plastic (Recycled material content percentage)		Metals (Recycled material content percentage)			
			Steel		Aluminum	
2025	Mechanism casing	>30%	Mechanism casing	>10%	■	
2026	Mechanical parts	>30%	Mechanical parts	>10%	Mechanical parts	>50%
2030	Mechanical parts	>50%	Mechanical parts	>20%	Mechanical parts	>80%

Note: The aforementioned mechanism casings or parts were designed by Advantech and comply with Advantech's gold medal criteria for eco design products.

Green Packaging

Reduction design and use of sustainable materials

To make substantial contributions toward biodiversity, deforestation prevention, and land preservation, Advantech requires key packaging material suppliers to obtain the Forest Stewardship Council Chain of Custody (FSC™ CoC) certification. As of 2025, we have successfully applied FSC™ certified paper materials to the packaging cardboard boxes of one Network model.

Since 2023, the product packaging design team has actively optimized green packaging by adopting honeycomb design dividers to replace traditional EPE cushioning materials and increasing the percentage of recycled materials used. At present, our packaging materials contain over 80% recycled fibers, achieving 100% of the target. For packaging materials of products weighing 5 kg or less, molded pulp is used to replace EPE. The achievement rate reached 90% in 2025.

In addition, the project was successfully applied in medical products and AIO computers, expanding green packaging design capabilities while meeting product safety requirements. We optimized the design of packaging, redesigned the package stacking method, designed an increase in shipment quantity, and switched to sustainable materials. As a result, we not only saw a downward trend in materials and costs, but also a decrease in number of trips, achieving carbon reduction results in various aspects, demonstrating our firm commitment to environmental sustainability.

In addition, in response to the requirements set forth in the EU's Packaging and Packaging Waste Regulation (PPWR), we set targets for the minimum recycled material content for different types of plastic packaging. The target is for recycled material content of plastic packaging to reach 35% by 2030, and increase to 65% by 2040. Advantech set targets for the use of recycled materials (cardboard boxes/plastics) in advance, and establishes different recycled material content requirements.

• **Table 4.1.3-1 Target Recycled Material (Cardboard Boxes/Plastics) Content in Packaging Materials of Eco Design Products**

Year	Target recycled material (cardboard boxes/plastics) content in packaging materials	
	Cardboard boxes, cardboard (Recycled material content percentage)	Plastic packaging (Recycled material content percentage)
2025	80%~100%	>35%
2030		>50%
2035		>65%

Note: Meets Advantech's criteria for the gold medal for eco design products

■ **Circular economy implementation**

At Advantech, we implemented the circular economy supply chain in our Taiwan Plant in 2025, recycling a total of 6.8 tons of PE waste throughout the year, and using it to produce approximately 2.58 tons of 100% recycled PE products (packaging film and product packaging PE bags), achieving an overall waste recycling rate of 37.88%. We used the recycled products for actual packaging in product shipments and the AIO computer FPM-S15W. Going forward, we will gradually expand its use in the entire company to effectively reduce the amount of hazardous waste. This is the starting point of Advantech's waste recycling and re-manufacturing.



Product Energy Saving

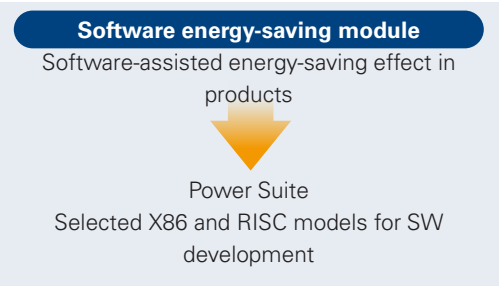
■ **Product use stage**

Key strategies are implemented in hardware and software to improve energy efficiency, reduce energy consumption, and extend product service life.

Hardware: Since 2024, we have incorporated energy-saving designs into the internal design specifications for the development of new products based on the X86 architecture, continuously

increasing the percentage of energy-saving designs. In 2025, we further adopted more stringent Energy Star energy-saving standards and selected new products of 5 product lines for energy-saving design and testing. Without affecting product functions and performance, our internal tests showed that approximately 40% of products already meet the requirements of energy-saving regulations, and we are gradually improving the energy efficiency of our products.

Software: Since 2024, the EIoT Software and Hardware teams have been actively developing energy-saving functions for software modules, and successfully developed them in the Power Suite software module, effectively reducing the energy consumption of devices through BIOS energy-saving detection recommendations, OS energy-saving settings, and optimized power management. Model trial runs were completed for the X86 system products AIR-150 and RISC platform EPC-R3720. We also established standardized energy consumption testing mechanisms to ensure the energy efficiency of the software. Based on tests on actual Windows x86 system products, carbon emissions can be reduced by 242.4 tons each year in maximum energy-saving mode. In 2025, SW Utility was incorporated in x86 Windows Image in 100% of new products of specific product lines, achieving the target ahead of schedule. Going forward, we will continue to pay attention and respond to market demand by optimizing and expanding energy-saving functions.



EIoT AIR-150



EIoT EPC-R3720

Product Recycling

Extended producer responsibility

Eco design principles, including “recyclability, easy disassembly, low pollution, and energy conservation,” are integrated at the early stages of product development to maximize recyclability. Advantech has set a target recycling rate for eco design products at 90%. Adhering to the spirit of producer responsibility, we are committed to electronic waste recycling and management. We implement recycling plans required by law to promote the recycling and reuse of electronic products. The percentage of recyclable products is calculated by product category, which averaged 97% in 2025, exceeding the requirements of the WEEE Directive.

Advantech complies with local waste recycling laws and regulations in various countries, including in Europe, the U.S., Japan, South Korea, Taiwan, and China (Kunshan). According to Global Transboundary E-waste Flows Monitor 2020 and 2024, global e-waste reached 62 million tons while the recycling rate was only 22.3%. In particular, the recycling rate was 12% in Asia, 30% in the U.S., and 42.8% in Europe. The recycling rates in the report are used to calculate the actual percentage of Advantech products recycled worldwide.

Source: 2024 Global Transboundary E-waste Flows Monitor

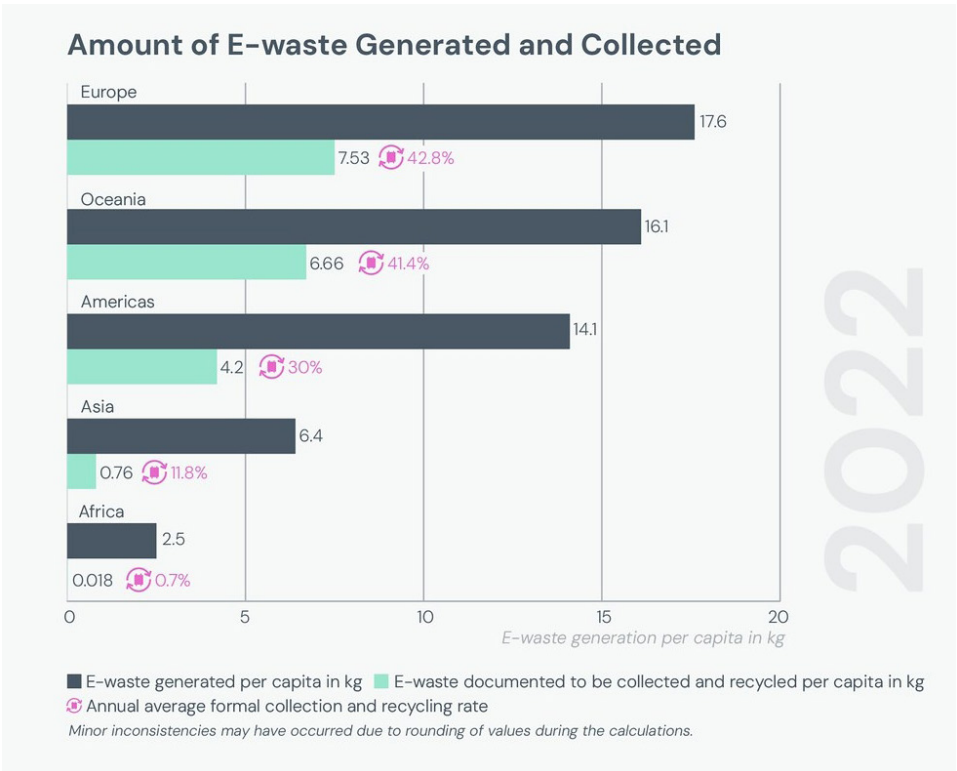


Table 4.1.5 Actual Recycling Rate of Advantech Products Worldwide

	Total weight of products sold worldwide (Metric tons)	Recycling rate of eco design products (%)	Total weight of recyclable products worldwide (Metric tons)	Total weight of products actually recycled worldwide (Metric tons)	Percentage of products actually recycled worldwide (%)
2022	11,157	90	10,041	1,460	13.1%
2023	8,899	94	8,365	1,026	11.5%
2024	8,006	97	7,766	1,136	14.2%
2025	9,341	97	9,060	1,477	15.8%

Advantech established the Advantech Global Product Recycling Mechanism in 2025 to implement the concept of extended producer responsibility (EPR) and circular economy. Advantech has established recycling policies and data management, which are implemented by each region in accordance with local regulations. We work with compliant recycling companies to ensure that waste electronic products are properly recycled.

In particular, recycling in Europe complies with the WEEE Directive. For EU customers, when the product reaches the end of service life or the customer requests the disposal of Advantech products, a nearby registered recycling location can be provided to ensure proper waste disposal. In addition, customers can also notify us to arrange transportation and send the waste equipment to the contracted recycling organization for treatment. Please refer to the [WEEE Directive website](#) for details.

Since 2025, Advantech has received recycling requests through the RMA system and customer service contact persons, recycling products that are mailed backed from different regions. We improved our global product recycling performance, increasing the total weight actually recycled by 25 tons, and increasing the recycling rate to 15.8%. Going forward, Advantech will continue to optimize the global recycling system, expand the coverage of recycling worldwide, increase the total weight recycled, establish a transparent data disclosure mechanism, and use recycled materials in the design of our products. For detailed information, please refer to the [Advantech Global Product Recycling Guidelines](#).

Extending the Product Service Life

■ Return Material Authorization (RMA) and iCare

Advantech actively implements product sustainability management through a comprehensive after-sales service system and digital platform. In the product use phase, Advantech uses the Return Material Authorization (RMA) mechanism to provide repair, testing, and parts and component replacement services to help customers extend the service life of products and reduce the frequency of equipment replacement and the generation of electronic waste. At the same time, we provide product maintenance information, technical support, and upgrade recommendations through the I CARE platform, updating customers on the status of products and performing appropriate maintenance and optimization. This integrated service not only improves the efficiency and reliability of product use, but also facilitates the effective use of resources, showing Advantech's commitment to sustainability in product lifecycle management and circular economy.

Case Study Implementation results of sustainable raw materials and product energy-saving design projects

In this case study, Advantech demonstrated the actual implementation results of eco design products. Using the ARK-1125C and ARK-1222 fanless embedded computers as examples, the products use eco-friendly materials, including 13% PCR metals, PVC-free cables, and halogen-free PCB. The lightweight design and reduced use of plastic packaging materials decreased the volume of packaging materials by 49.6% and the weight by 8.7%, and achieved a 93% recycling rate of products. In addition, the products meet Energy Star energy-saving standards, showing the dual effects of adopting sustainable materials and optimizing product design.

Advantech Green ECO Products Gold Plus

ARK-1125C · ARK-1222



Key Highlights:

This product uses 13% PCR recycled metal, and uses PVC-free cables and halogen-free PCBs.

Lightweight design and reduction in the use of plastic packaging materials.

- Use Corrugated paper contains recycled fibers. (85%~90%)
- The product volume has been reduced by 49.6%
- The product weight has been reduced by 8.7%

Product Recyclability Assessment : Recyclable
Percent 93 %

Conformance with ENERGY STAR



Fan less Embedded Computer

Advantech Green ECO Products Gold Plus

GSC-7153W



Key Highlights:

This product uses 30% post-consumer recycled (PCR) plastic, uses PVC-free cables and halogen-free PCBs.

Lightweight design and reduces plastic packaging (EPE replaced with paper-based material)

- Use Corrugated paper contains recycled fibers. (85%~90%)

Product Recyclability Assessment : Recyclable
Percent 95 %

Conformance with ENERGY STAR



Panel PC

4.1.3 Eco Label and Self-declared Environmental Statement

Advantech has continually invested in the R&D of green products. We have established internal regulations on product energy-saving and green materials to improve eco-friendly packaging. By implementing policies that reduce toxic environmental hazards, we ensure our products are easy to assemble, disassemble, and recycle, thereby achieving energy-efficient designs that provide greater ecological benefits. In 2025, the percentage of Advantech's new eco design products that received the silver medal reached 87.07% ; in addition, eco design products that received the silver medal/Advantech's energy-saving label accounted for 18.73% of revenue . This shows how we have incorporated eco design concepts in each aspect of the product lifecycle, and showcases the performance of circular economy. Additionally, we adhere to the Sustainable Accounting Standards Board (SASB) guidelines, and calculate the percentage of revenue accounted for by products compliant with Type 1 eco label (such as Energy Star and CE ErP). This metric serves as one of the indicators for investors to assess our sustainability performance and demonstrates the green competitiveness of our products.

Environmental and ecological label:

■ Percentage of revenue from products that meet industry certification standards

Certification standard	2023	2024	2025
Products that obtained the CE ErP or Energy Star certification	2.79%	3.05%	4.09%
Products that meet EPEAT or equivalent standards	9.74%	14.04%	18.73%

■ Obtained the Energy Star energy-saving label and EU's Energy-related Products Directive certification in the past 3 years

Certification standard	Product category
Energy Star energy-saving label	Embedded computers, panel PC equipment, and box PCs have obtained the certification
EU's Energy-related Products Directive certification	Newly developed computer products based on the X86 architecture

Self-declaration environmental statement: The planning and implementation of Advantech's internal eco design label and energy-saving design classification are as follows

■ Internal label for the 4 major aspects of eco design

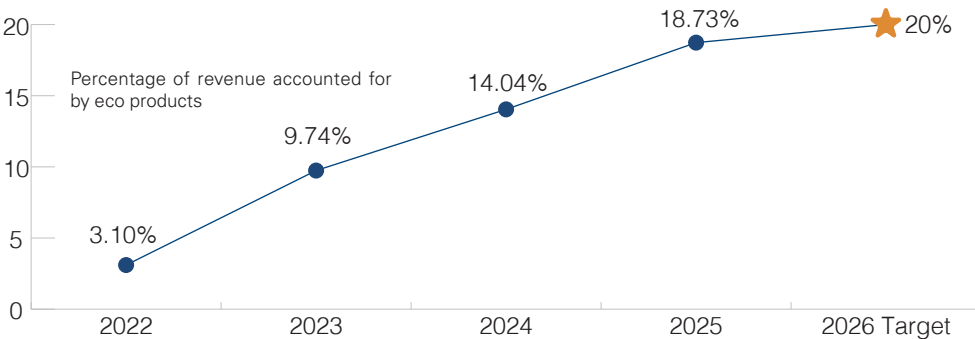
Description	Internal label for eco design products
The gold medal is awarded to products that meet both the mandatory and optional criteria for the 4 major aspects defined in the Advantech Eco Design Standards and successfully pass the evaluation.	
The silver medal is awarded to products that meet the mandatory criteria for the 4 major aspects defined in the Advantech Eco Design Standards and successfully pass the evaluation.	

■ Number of new eco design products that received the silver/gold medal

Year	2023	2024	2025
Silver medal	37%	60%	87.07%
Gold medal	-	ARK-1125C	ARK-1222■ FPM-710SW■ FPM-S15W■ GSC-7153W

■ Energy-saving design classification for Advantech's internal label

Description	Internal energy-saving label
Product energy efficiency meets Energy Star testing standards	
Product energy efficiency meets ERP testing standards	



■ Percentage of revenue accounted for by green products/products that obtained Advantech's energy-saving label in 2025: 18.73%

- For Advantech's green design products with the silver medal or gold medal, we systematically integrated environmental information related to the entire product lifecycle, and created a passport for Advantech green products to improve information transparency and traceability. The disclosure of this information is in preparation for future alignment with the EU's Digital Product Passport (DPP).



Advantech's Eco Design Product Silver Medal

Product categories include: digital signage players and mini PCs, Medical All in One, touch panel computers, embedded computers, fanless embedded industrial computers, and others

Eco Product Design Management Mechanism

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

(1) Green materials _ Substance Management

(If the product contains the following component, it meets the following requirements.)

- Conformance with provisions of European Union RoHS Directive, China RoHS, Taiwan BSMI RoHS, IEC62474, REACH, POPs...etc.
- Conformance with substance restriction requirements of the European Union Battery Directive. (If product contains batteries)
- No mercury is intentionally added to the light source. (If product contains LCD)
- External mechanical plastic parts (homogeneous parts) larger than 25 g do not contain brominated, chlorinated flame retardants, PVC.

(2) Green packaging

- Conformance with EU packaging Directive.
- The chlorine used as a bleaching agent in paper packaging materials is less than 1000 ppm. (Cl < 1000 ppm).
- Corrugated paper contains recycled fibers. (85%~90%)

(3) Product Recycling

- Conformance with EU WEEE Directive.
- External mechanical plastic parts larger than 100g do not contain plating and surface coating (except paint) that are not easy to be recycled and reused.
- All plastic parts larger than 25g are marked according to ISO 11469.
- All External mechanical plastic parts larger than 100g only use a single type of plastic pellets.
- The green products are designed to be recyclable, easy to disassemble, low in pollution, and energy-efficient, with a recycling rate of 90% or higher.
- WEEE Recyclability Assessment

The actual inventory and calculation of the recyclable proportion of products based on product categories were conducted, reaching approximately 94%, which is higher than the WEEE directive requirements.

(4) Product Energy Saving

Conformance with ERP Directive.

ITA-178



POC-4



TPC-100



TPC-307W



UNO-238 V2



FPM-S21W, FPM-S18W



UBX-110K



AIMB-308;IPC-320



UNO-137 V2



AMAX-5086



UBX-330M



UBX-210K



ARK-1221L



MIC-770 V3



PPC-415W, PPC-421W





Advantech Eco Design Product Gold Medal

Product categories include: Fanless embedded computers and touch panel computers

Eco Product Design Management Mechanism

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

(1) Green materials _ Substance Management

(If the product contains the following component, it meets the following requirements.)

- Conformance with provisions of European Union RoHS Directive, China RoHS, Taiwan BSMI RoHS, IEC62474, REACH, POPs...etc.
- Conformance with substance restriction requirements of the European Union Battery Directive. (If product contains batteries)
- No mercury is intentionally added to the light source. (If product contains LCD)
- External mechanical plastic parts (homogeneous parts) larger than 25 g do not contain brominated, chlorinated flame retardants, PVC.
- Printed circuit board (PCB) do not contain brominated or chlorinated flame retardants.
- Cable/Wire do not contain PVC. (except for Power cord and power supply)
- External mechanical plastic parts larger than 100g use >10% recycled materials.

(If product contains external mechanical plastic parts)

(2) Green packaging

- Conformance with EU packaging Directive.
- The chlorine used as a bleaching agent in paper packaging materials is less than 1000 ppm. (Cl < 1000 ppm).
- Corrugated paper contains recycled fibers. (85%~90%)
- Lightweight design and reduction in the use of plastic packaging materials.

(3) Product Recycling

- Conformance with EU WEEE Directive.
- External mechanical plastic parts larger than 100g do not contain plating and surface coating (except paint) that are not easy to be recycled and reused.
- All plastic parts larger than 25g are marked according to ISO 11469.
- All External mechanical plastic parts larger than 100g only use a single type of plastic pellets.
- The green products are designed to be recyclable, easy to disassemble, low in pollution, and energy-efficient, with a recycling rate of 90% or higher.
- WEEE Recyclability Assessment

The actual inventory and calculation of the recyclable proportion of products based on product categories were conducted, reaching approximately 94%, which is higher than the WEEE directive requirements.

(4) Product Energy Saving

- Conformance with ERP Directive.
- Conformance with ENERGY STAR.

ARK-1125 ; ARK-1222



FPM-710SW



GSC-7153W



FPM-S15W



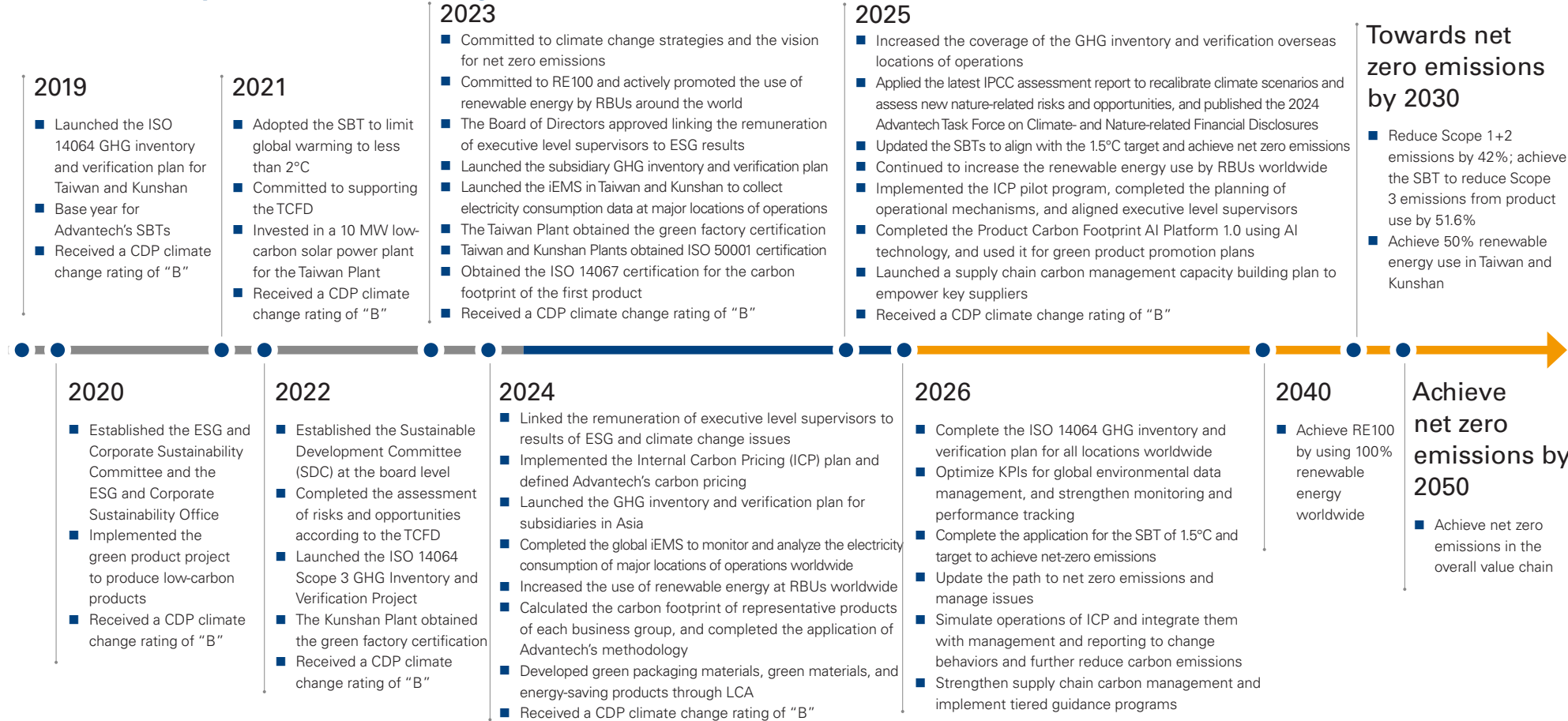
4.2 Climate Change Strategies and Actions



Advantech, a global leader in industrial computing and IoT technologies and services, deeply recognizes its responsibility toward the global environment. The Company's climate change policies align with the Paris Agreement's goal of limiting global temperature rise to 1.5°C. Since committing to and securing validation for its Science Based Targets (SBT) in 2021, Advantech has continuously deepened its carbon reduction initiatives. In 2023, the Company joined the RE100 initiative, committing to 100% renewable energy use by 2040 as a cornerstone of its transition toward net-zero emissions. Beginning in 2025, Advantech has established the 1.5°C science-based target as the core driver of its carbon reduction strategy for the coming decade. To account for expanded target boundaries resulting from new construction and facility expansion projects, the Company recalculated and secured approval for more ambitious goals in the first quarter of 2026. These include the SBTi 1.5°C Near-Term targets and Net-Zero targets, which pledge a 90% reduction in Scope 1, 2, and 3 emissions by 2050, solidifying the Group's long-term vision of net-zero emissions while advancing RE100 and related initiatives across its global business units.

Furthermore, Advantech has integrated climate change into its corporate risk management framework for sustainable development, managing it systematically through both "mitigation" and "adaptation." Beyond actively identifying potential risks and strengthening adaptive capabilities, the Company proactively captures opportunities arising from climate transition. By continuously leveraging and enhancing its R&D strengths, Advantech has increased investment in green energy, energy-efficient products, and eco-friendly solutions, combining its energy management expertise to drive comprehensive energy conservation and sustainable growth. For details on our climate transition pathways, please refer to the "2025 Advantech Climate- and Nature-related Financial Disclosures (TC(+N)FD) Report."

Advantech's Response to Climate Change



4.2.1. Net Zero Commitment

Advantech actively aligns with international initiatives. Our SBT application was approved in 2021, taking action through SBTs to reduce carbon emissions. We completed the verification and review of our targets in the first quarter of 2026 to control temperature rise within 1.5°C based on the SBTi near-term and long-term net zero targets that were updated in 2025.

In terms of medium- and long-term climate actions, Advantech has set clear milestones, including: renewable energy use at our manufacturing centers in Taiwan and Kunshan reaching 50% by 2030, and reaching 100% at all locations of operations worldwide by 2040. In addition to reducing Scope 1 and Scope 2 emissions, we will also strengthen the planning and implementation of measures to reduce Scope 3 emissions by 2050. We will work with supply chain partners to promote low-carbon transformation, introduce forward-looking low-carbon technologies, and use the carbon credits mechanism where appropriate, realizing the long-term goal of net zero emissions through green product design and development.

Advantech's Vision for Net Zero Emissions

Achieve net zero emissions

2050

Achieve net zero emissions in the value chain and reduce Scope 1, 2, and 3 emissions by 90%

Expand renewable energy use

2030

Achieve 50% renewable energy use in Taiwan and China's Kunshan

2040

Achieve RE100 by using 100% renewable energy worldwide

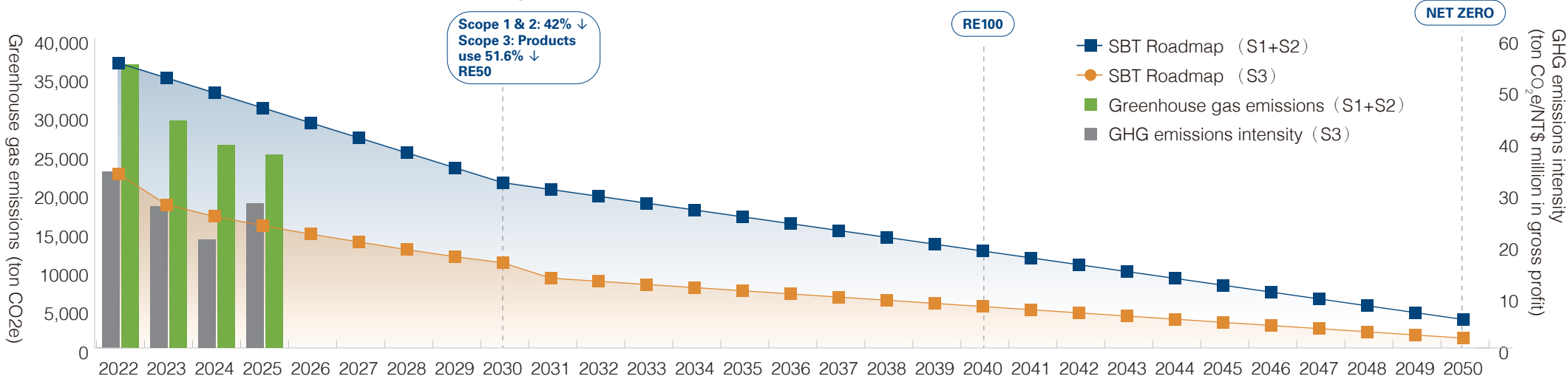
Improve energy efficiency

2030

Reduce Scope 1 + 2 emissions by 42%

Reduce the intensity of Scope 3 emissions from product use by 51.6%

Advantech's Net Zero Emissions Roadmap



GHG Reduction & Net Zero Strategies:

Stage 1: Advantech continues to expand manufacturing capacity, which increases energy consumption, but improves energy efficiency to reduce GHG emissions



Stage 2: Core production sites (Linkou AIoT Co-Creation Campus and Kunshan Manufacturing Center) continue to increase the use of renewable energy to reduce carbon emissions



Stage 3: Use GHG alternatives, advanced low-carbon technologies, and obtain carbon credits to achieve net zero emissions

*Note:

1. We obtained approval for our SBTs in 2026 Q1 and therefore updated our roadmap to net zero emissions. This roadmap is different from the roadmap disclosed in the previous year.
2. The Scope 3 GHG emissions intensity from product use did not achieve the target due to the impact of the external environment and market fluctuations in 2025. The main reason was that despite the overall expansion of production capacity, the global supply chain faced the challenge of raw material price hikes and rising operating costs. Coupled with the changes in customer demand, overall gross profit performance was impacted as a result (changes in the denominator). At the same time, the rise in electricity carbon emission factor worldwide (changes in the numerator) resulted in a rise in carbon emission intensity per unit profit. At Advantech, we will continue to strengthen our profit structure and resilience of carbon reduction measures to attain our SBTs in the future.

Strengthen ICP and Low-carbon Product Promotion Strategies

To accelerate our progress towards net zero emissions and fulfill our environmental responsibilities, we launched the Internal Carbon Pricing (ICP) project in 2024. After incorporating the organizational cost-benefit assessment mechanism, the shadow price is set at NT\$1,700 to NT\$3,000 per metric ton of CO₂e (approximately US\$55-100 per metric ton of CO₂e). Considering that Advantech mainly produces end products, GHG emissions from direct operations (Scope 1 and Scope 2) are relatively low. Our overall emissions mainly come from Scope 3 in the value chain, in which supplier production and product use account for over 90%. Therefore, when Advantech is implementing internal carbon pricing and carbon reduction management, we not only to pay attention to Scope 1 and Scope 2, but also focus on Scope 3, especially the eco design of products. We are gradually reducing overall carbon emissions through the development and promotion of low-carbon products, thereby accelerating our decarbonization. In this regard, we further implemented the carbon fee pilot program in 2025, and set the carbon fee at NT\$3,000 per metric ton CO₂e (approximately equivalent to US\$100/metric ton CO₂e). We completed the planning of ICP operation mechanisms and built consensus among executive level supervisors to ensure that the system and the overall ESG strategy are aligned. At the same time, we incorporated carbon costs into low-carbon production and investment decisions to strengthen risk control and align with the international carbon trading mechanism. Looking towards 2026, we plan to drive the mock operations of the ICP carbon fee, integrate management reports, and establish comprehensive evaluation indicators and supporting measures. Our goal is to trigger internal behavioral changes through financial incentives, comprehensively strengthen carbon reduction efforts, and lay a solid foundation for compliance with laws and regulations and the transition to net zero emissions.

At the same time, to further step up efforts to reduce carbon emissions, we adopted the SBT to control temperature rise within 1.5°C as our carbon reduction target for the next decade, and continue to implement RE100 projects across RBUs worldwide. In terms of green products and sustainability responsibility, Advantech announced its sustainable product strategy and used AI technology to develop a product carbon footprint inventory system platform, which is integrated into the overall green product promotion plan. Advantech also established a Sustainable Raw Materials Task Force to implement experimental projects in the four major business groups, introduce recycled materials, and optimize sustainable packaging materials. The task force works with suppliers and green product teams in the joint R&D of low-carbon products, accelerating the progress towards net zero emissions, and continuing to jointly drive the growth of the low-carbon economy with value chain partners.

4.2.2 TCFD Climate Governance and Management Strategy

Extreme weather events caused by climate change, the growing pressure for low-carbon transitions due to aggressive national carbon reduction goals, and carbon reduction demands from upstream and downstream value chain partners have already begun to pose potential operational challenges for enterprises. In response to the growing global emphasis on linking identified climate risks with financial impacts, Advantech has adopted the TCFD framework and the IFRS S2 Climate-related Disclosures. We promote climate change management and disclosure based on the four core elements recommended by these frameworks: governance, strategy, risk management, and metrics and targets. This systematic approach allows Advantech to assess the climate risks and opportunities we face. We conduct in-depth evaluations of climate-related risks identified through our existing risk management processes and map them across our Pan-Operational Risk Map to ensure comprehensive coverage of our overall operational risk landscape. The assessment results and response plans have also been reported to the Sustainable Development Committee (SDC) for confirmation, and the SDC will report the progress of climate management to the Board of Directors on a regular basis to enhance the Company's resilience in responding to climate risks. For more details on our climate risk and opportunity disclosures and management actions, please refer to the “2025 Advantech Climate- and Nature-related Financial Disclosures (TCNFD) Report.”



Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

Governance			
Advantech's climate governance framework			
Board of Directors	■ The highest supervisory unit for risk management (including climate risk)	■ Review major climate-related goals and implementation budgets	■ Oversee climate risk management and strategy implementation results
Chairman	■ Chairing the Corporate Sustainable Development Committee (SDC) and leading the climate issue management mechanism	■ Confirm climate-related KPIs and action plans	
Corporate Sustainability Development Committee (SDC)	■ Responsibilities and and decision-making unit for climate risk management ■ Regular reporting to the Board on climate management progress	■ Review climate-related risk and opportunity assessment results and response strategies ■ Approve the TC(+N) FD report	■ Monitor the implementation of climate issues and review KPIs
ESG Corporate Sustainability Development Office	■ Coordinate the implementation of climate-related risk and opportunity analyses and integrate the disclosure reports ■ Promote climate-related action plans and report the progress to the Corporate Sustainable Development Committee (SDC) on a quarterly basis		■ Research and analyze policies on climate issues and scientific research development trends, and monitor climate risk events on a regular basis
Board oversight	■ The Corporate Sustainable Development Committee (SDC) regularly reports climate-related management plans and results to the Board of Directors, while the Board of Directors reviews related major goals and budgets ■ In 2021, the Board of Directors approved Advantech Taiwan's renewable energy goals, renewable energy PPA procurement budget, and the project of setting up solar power plants in collaboration with renewable energy providers ■ In 2022, consulting companies and external experts were commissioned to attend the Board of Directors' training on topics such as how the ICT industry can help fight climate change, international sustainability trends, emerging trends in risk management, and response sharing. ■ In 2023, the Board of Directors reviewed the annual comprehensive ESG performance, which included climate change-related aspects such as RE100 global workforce group and local target progress, product carbon footprint progress, annual GHG inventory, and EU carbon tariff response topics, etc. ■ In 2024, besides reviewing the overall 2023 ESG performance, we also re-identified climate-related risks and opportunities, and selected four material risks and opportunities for scenario analysis. The Company also reported to the Board of Directors its plans to update SBT to keep up with industry benchmarks and international declarations regarding carbon reduction commitments in the coming year, as well as proactively address climate and nature-related risks and opportunities faced by Advantech. ■ In 2025, Published the inaugural "Climate- and Nature-related Financial Disclosures (TCNFD) Report" to integrate related dependencies, impacts, risks, and opportunities, while continuously advancing climate action. Concurrently initiated sustainability financial disclosures aligned with IFRS S1/S2 to meet evolving climate risk and opportunity requirements.		
Advanced management mechanisms	■ Led by the Chairman, the SDC Committee holds meetings each quarter The ESG Corporate Sustainability Development Office reports on climate-related issue trends, strategic planning, and implementation progress The SDC supervises the achievement of goals and reviews the assessment results of relevant risks and opportunities and countermeasures.		
Strategy			
Disclosure aspect	Advantech's implementation progress		
Short-, medium- and long-term risks and opportunities	■ By referencing the risk and opportunity topics and their financial impact case studies outlined in the TCFD guidelines, and integrating analyses of our operational sites and industry landscape, we identified a total of 13 risks and 10 opportunities. Based on the level of impact, Advantech identified 7 significant risks and 3 opportunities. Among these, 4 most significant items were selected for financial impact assessment that aligns with Advantech's future development direction. ■ The short, medium, and long term are defined as within 3 years, 3 to 5 years, and more than 5 years, respectively. Each identified topic is assessed based on the timeframe in which it is most likely to occur.		
Potential impacts and financial planning	■ Qualitatively assess the possible financial impacts of various major risks and opportunities, develop preventive and improvement measures, and set KPI targets accordingly.		
Scenario analysis	■ We analyzed Advantech's carbon reduction and financial impact using the STEPS (Stated Policies Scenario) and the International Energy Agency (IEA)'s 1.5°C Scenario (1.5DS); In addition, we also applied the RCP4.5 (BAU scenario) and RCP8.5 (the most severe warming scenario) to assess the physical impacts on operations as part of our evaluation of adaptation strategy resilience.		

Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

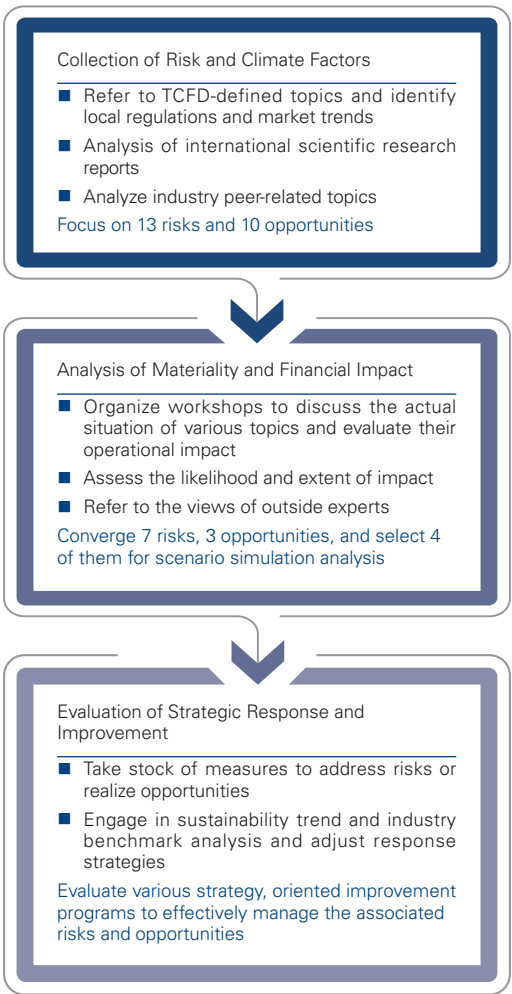
Risk management	
Disclosure aspect	Advantech's implementation progress
Evaluation and Management Process	■ ESG Corporate Sustainability Development Officeeach year convenes cross-departmental members to collect and review relevant the Company's climate risks and opportunities, assess material climate issues through the level of impact and likelihood, monitor changes in risk levels, review and develop response strategies, and report them to the SDC for resolution, as well as review relevant disclosures. The SDC regularly reports to the Board of Directors to oversee the progress of climate risk management and review relevant major decisions.
Overall Risk System Integration	■ At the beginning of each year, the risk management team evaluates the Company's overall operational risks according to established risk management procedures, develops a comprehensive operational risk map, and reports the risk management processes and plans to the Board of Directors. ■ Since 2021, climate change risks have been included in the assessment process, and risk levels are identified by the Auditing Office in conjunction with the ESG Corporate Sustainability Development Office. ■ In 2022, a comprehensive TCFD assessment process was implemented. The assessment methodology and results have been applied to the climate change risk analysis within the foregoing risk map and consolidated into the overall risk management process. ■ In 2023, the TCFD assessment process continued to be included in the overall risk management process. In 2024, we expected to adjust climate scenarios based on the latest IPCC assessment report and re-evaluate climate risks and responses. ■ In 2024, we re-identified our climate-related risks and opportunities, selecting 4 most significant risks and opportunities for scenario analysis. A qualitative assessment of their potential financial impacts was conducted, along with the development of corresponding response measures. ■ In 2025, Published the inaugural "Climate- and Nature-related Financial Disclosures (TCNFD) Report" to integrate related dependencies, impacts, risks, and opportunities, while continuously advancing climate action. Concurrently initiated sustainability financial disclosures aligned with IFRS S1/S2 to meet evolving climate risk and opportunity requirements.
Indicators and targets	
Disclosure aspect	Advantech's implementation progress
Scope 1, 2, and 3 GHG emissions and targets	■ Secured initial SBT validation in 2021, and achieved approval for more ambitious SBTi Net-Zero targets across the entire value chain in Q1 2026. ■ Annually complete ISO 14064-1 GHG inventory, verification, and target tracking for Advantech Taiwan and Kunshan sites. ■ Completed GHG inventory and verification for Japan and South Korea subsidiaries (2024–2025), expanded to the Netherlands subsidiary (2025–2026), and will continue extending coverage to key overseas locations.
Other climate-related management indicators and targets	■ Commit to joining the RE100 initiative and set the net-zero target by 2050 ■ We have set targets for power saving, renewable energy usage, water saving, waste reduction, percentage of green products in revenue, and energy efficiency improvement for product power supplies ■ Already implemented the ISO 50001 energy management system to conduct energy efficiency management, while management indicators and targets will continue to be formulated for relevant strategies ■ Already implemented life cycle assessment (LCA) and carbon footprint evaluation for our main products, as well as developed an internal product carbon footprint calculation system, which will be applied to our green low-carbon product project.

*Note: According to ISO 14064-1, the GHG scope names correspond to categories as follows: Scope 1 corresponds to Category 1, Scope 2 corresponds to Category 2, and Scope 3 corresponds to Categories 3~6.

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

Advantech identifies significant climate-related risks and opportunities by referencing the risk and opportunity definitions outlined in the TCFD framework, combined with multi-dimensional issue collection, cross-departmental discussions, and external consultations Through this process, we concretely identify significant risks and opportunities relevant to Advantech, their potential occurrence scenarios and impact levels, and analyze their possible financial implications.

We focus on operational aspects (reduction, natural disasters), product aspects (including the supply chain), and market aspects based on industry characteristics and international developments. This enables us to comprehensively inventory climate risks and opportunities at the organizational level and develop precise response strategies. Consequently, Advantech's climate risk management covers the entire value chain, including upstream, downstream, and our own operations. Advantech's climate-related risks and opportunities, financial impact evaluation process, items, and materiality assessment results are shown in Figure 4.2.1.



Risk and opportunity description:

1. Very high risk / opportunity: $16 < \text{"Impact likelihood (L) X Impact extent (M)" } < 25$
2. High risk / opportunity: $9 < \text{"Impact likelihood (L) X Impact extent (M)" } < 16$
3. Moderate risk / opportunity: $4 < \text{"Impact likelihood (L) X Level of Impact (M)" } < 9$
4. Low risk / opportunity: $1 < \text{"Impact likelihood(L) X Level of Impact (M)" } < 4$
5. Extremely low risk / opportunity: $\text{"Impact likelihood (L) X Level of Impact (M)" } < 1$

• Figure 4.2.1 Materiality Matrix for Advantech's Climate Risks and Opportunities

Results of a scenario analysis of Climate Change risks

(For a detailed explanations on the quantitative financial assessments under the TCFD framework, please refer to the “2025 Advantech Climate- and Nature-related Financial Disclosures (TCNFD) Report”)

Transition risk/opportunity scenario analysis results

Category	Scenario	Impact assessment	Financial impact
Risks	STEPS Stated Policies Scenario	Evaluated the potential impact of government regulations on the our overall operations from 2025 and 2035. This includes the tightening of regulations for large power consumers requiring a certain proportion of renewable energy, amendments to the Climate Change Interaction Act, and the implementation of carbon tax/fee-related laws. Failure to comply may require the payment of substitute fees or carbon emission-related charges, leading to an increase in the Company's operating costs.	Payment of renewable energy substitute fees and carbon charges increased operating costs by NTD 5,116,749 in 2025, NTD 68,663,138 in 2030, and NTD 227,265,171 in 2035 ; the estimated annual management cost is NTD 6,217,526.
	1.5DS Net zero scenario	Evaluated the potential impact of government regulations on the our overall operations from 2025 and 2035. This includes the tightening of regulations for large power consumers requiring a certain proportion of renewable energy, amendments to the Climate Change Interaction Act, and the implementation of carbon tax/fee-related laws. Failure to comply may require the payment of substitute fees or carbon emission-related charges, leading to an increase in the Company's operating costs	Payment of renewable energy substitute fees and carbon charges increased operating costs by NTD 184,749 in 2025, NTD 187,564,574 in 2030, and NTD 441,453,013 in 2035 ; the estimated annual management cost is NTD 6,217,526.
	ESG Image and Reputation Management scenario Referencing historical scenarios	Evaluated the impact of Advantech's market ESG image and reputation (including low-carbon or sustainability performance) on revenue and financing costs, including increased bank financing costs and revenue affected by environmental sustainability performance, i , which may lead to higher operational cost of company.	The increase in operating costs resulting from efforts to improve Advantech's ESG image and reputation is NTD 59,907,158; the estimated annual management cost is NTD 11,283,703.
Opportunities	Low-carbon products and market scenarios Referencing historical scenarios	Evaluate the revenue generated from our low-carbon product up to 2025 and 2030. as a financial opportunity related to low-carbon initiatives.	Advantech's low-carbon product-related revenue is expected to reach NTD 707,258,810 in 2025 and NTD 791,456,288 in 2030 ; the estimated annual management cost is NTD 57,792,607.

Physical risk scenario analysis results

Scenario	Impact assessment	Financial impact
RCP8.5 The most severe warming scenario	Assessed the financial impact of extreme climate events (typhoons/tropical cyclones) on Advantech's overall operational production up to 2030 and 2050, excluding the impact of other physical risks (such as rising temperatures and droughts)	Damage to factory equipment, production disruptions, delayed attendance of personnel, and inventory losses have resulted in increased operating costs of NTD 21,631,559 in 2030, and NTD 23,510,821 in 2050; the estimated annual management cost is NTD 5,408,167.
RCP4.5 BAU scenario	Assessed the financial impact of extreme climate events (typhoons/tropical cyclones) on Advantech's overall operational production up to 2030 and 2050, excluding the impact of other physical risks (such as rising temperatures and droughts)	Damage to factory equipment, production disruptions, delayed attendance of personnel, and inventory losses have resulted in increased operating costs of NTD 21,348,542 in 2030, and NTD 22,692,369 in 2050 ; the estimated annual management cost is NTD 5,408,167.

Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

Climate risks and opportunities and response strategies

■ Climate risks ■ Climate opportunities

Category		Risk or opportunity issues	Advantech encounters risk or opportunity	Affect schedule	Impact level	Financial impact	Advantech's response strategy
Operation	Transition risk	R1 Legal and policy risks	■ Rising operating cost: More rigorous emissions regulations (such as Taiwan's carbon fee and the EU's CBAM) increase costs ■ Equipment replacement and renewable energy investment pressure: To obtain international certifications and meet customers' sustainability needs, the Company replaces energy-intensive equipment and invests in renewable energy, resulting in increased expenditures ■ System design and maintenance burden: To meet carbon data collection requirements, we must invest in resources to establish and maintain relevant systems ■ Product pricing adjustment risk: After the implementation of carbon pricing, Advantech's financial system must be adjusted to reflect Internal Carbon Price. As a result, product prices are increased, and our market competitiveness is diminished.	Short-term	High	■ Increased operating costs ■ Increased capital expenditure ■ Reduced revenue	■ Introduce energy-saving and carbon reduction measures (energy-efficient equipment, LED lights, automatic temperature and humidity control, and recycling and reuse of consumables) ■ Establish a systematic approach for collecting Scope 1, 2, and 3 emissions data to lower future carbon taxes through precise monitoring of carbon emissions data ■ Building on the established shadow price, we will continue to finalize the Internal Carbon Pricing mechanism, integrating carbon emission costs into the Company's financial system to accurately reflect these costs in product pricing and cost structures ■ Join the RE100 initiative and commit to achieving 100% renewable energy usage by 2040 to lower carbon emissions
	Physical risk	R2 climate-related physical risks	■ Operational disruptions and production risks: Extreme weather events (such as typhoons and flooding) may lead to factory shutdowns, damage to equipment, increasing costs and delivery risks. ■ Increased facility and equipment maintenance costs: In response to climate risks, it is necessary to bolster flood control and drainage systems, reinforce building structures, and address the potential acceleration of equipment aging due to high temperatures, all of which will increase costs. ■ Inventory damage and financial losses: Typhoons and floods can damage inventory, leading to financial losses ■ Increased expenditure in disaster prevention and insurance: To mitigate the impact of extreme weather, we must invest in disaster prevention equipment, improve our emergency response capabilities, and purchase additional insurance coverage to diversify financial risks ■ Pressure from seismic construction and maintenance:: New plants need to incorporate enhanced seismic design, while existing facilities require seismic retrofitting, leading to increased expenditures	Medium-term	High	■ Increased operating costs ■ Increased capital expenditure ■ Reduced revenue ■ Reduced assets	■ Analyze the impact of climate change and develop emergency response plans ■ Establish business continuity management procedures to respond to and manage major incidents, thereby mitigating and minimizing negative impacts ■ Maintain emergency power systems through regular maintenance to prevent power outages from affecting operations. ■ Upgrade emergency response equipment and install additional backup systems, such as standby generators, to improve resilience against unexpected events. ■ Strengthen disaster prevention facilities, improve drainage systems, and install rainwater infiltration prevention measures to minimize natural disaster-related losses ■ Risk transfers and diversification, purchase property insurance to transfer potential financial risks and ensure asset safety
Product	Transition risk	R5 Supply chain disruptions	■ Increased operational and supply chain costs: In response to climate risks and political factors, we must allocate resources to establish alternative supply chains, which can lead to increased costs ■ Inventory and capital pressure: Supply chain disruptions may result in capital and cash flow pressures and increased storage management costs ■ Product development delays: Supply chain changes may require redesigning components or switching suppliers, which can extend product development timelines and delay market launch. ■ Uncertainty in production and delivery: Supply chain disruptions can increase the risk of production plan interruptions and delay the delivery of products	Medium-term	High	■ Increased operating costs ■ Operational disruptions ■ Reduced revenue	■ Introduce eco packaging materials and eco designs to form a sustainable packaging material supply chain ■ Develop a network of suppliers across different locations to enhance supply chain resilience ■ Design backup mechanisms to prevent supply chain disruptions (such as advancing shipments, setting safety stock levels based on material categories, diversifying suppliers, and preparing alternative materials)

About Advantech's Sustainability Report

Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

Category		Risk or opportunity issues	Advantech encounters risk or opportunity	Affect schedule	Impact level	Financial impact	Advantech's response strategy
Product	Transition risk	R6 Regulatory penalty risks and increased cost pressure due to EU requirements for plastic content disclosure	■ Regulatory and penalty risks: European countries require disclosure of plastic content, including the weight of structural components and external packaging. Non-compliance may result in fines ■ Increased material and supply chain costs: In response to local regulations and sustainability trends, the use of sustainable materials and eco packaging will result in increased procurement and production costs ■ Increased design and development costs: Regional regulatory compliance requires redesigning product packaging and external components, resulting in longer development timelines and higher costs ■ Data transparency and management burden: To meet sustainability and compliance requirements, a cross-departmental database need to be established, increasing manpower, technical, and maintenance costs ■ Risk of diminished market competitiveness: Rising material and design costs may diminish the Company's market competitiveness	Short-term	Medium	■ Increased operating costs ■ Increased compliance expenditures	■ Introduce eco packaging materials and eco designs, and form a sustainable material supply chain ■ Establish a component recycled material supply chain and regularly review environmental certifications of supply chain materials ■ Develop dedicated part number classification rules for Cable, Plastic, Sheet Metal, and Metal, to distinguish between sustainable and conventional materials ■ Establish relevant data, statistical, and statistical analysis platforms.
	Transition risk	R7 Risk of increased costs and extended timelines due to testing and certification of eco products	■ Increased costs due to differences in certification standards and compliance requirements: Meeting green and energy efficiency standards across various regions requires additional investment in testing and design modifications, leading to higher management, design, and material costs ■ Risks of higher certification fees and delayed product launches: Acquiring green certification requires paying corresponding fees, and the lengthy certification process may have an impact on the product's time-to-market and market share ■ Risks of delayed time-to-market and revenue concentration: If products fail to meet international energy efficiency standards, such as EU ErP and US Energy Star, they may be unable to enter key markets such like Europe and the United States, resulting in concentrated revenue sources and increasing vulnerability to regional policies and market fluctuations	Short-term	High	■ Increased operating costs	■ Establish a component recycled material supply chain and regularly review environmental certifications of supply chain materials ■ Develop dedicated material number classification rules for Cable, Plastic, Sheet Metal, and Metal, to distinguish between sustainable and conventional materials ■ Establish a product carbon footprint calculation system, which can be applied to the eco product program ■ To comply with mandatory regulatory requirements in product design, we have created internal verification resources and implemented a management system to monitor external certification-related expenses
Product	Opportunities	O4 Low-carbon products shape Advantech's sustainability image, enhance marketing in the low-carbon market, and expand the customer base	■ Enhance sustainability image and marketing: Develop low-carbon products to strengthen market positioning and showcase our achievements through energy-saving and carbon reduction solutions (e.g., WISE-IoT iEMS), thereby enhancing international buyers' awareness of and trust in Advantech ■ Expand international customer base: Promote low-carbon products to meet the demands of the international market and thereby increase market share ■ Market competitive advantages and internal innovation: Center on low-carbon products to strengthen sustainable supply chain partnership and promote cross-departmental collaboration through product design and promotion, creating brand differentiation advantages and enhancing product value	Medium-term	High	■ Increased revenue ■ Increased market value	■ Introduce eco packaging materials and eco designs, and form a sustainable material supply chain ■ Develop a product carbon footprint calculation system, and implement internal carbon pricing to facilitate the launch of low-carbon products ■ Continue to invest resources in the R&D of low-carbon technologies in response to market needs. For instance, design products with higher performance and lower energy consumption. Also, establish relevant reward mechanisms to encourage low-carbon innovation and creative thinking. ■ In addition to the R&D of low-carbon products, Advantech's technical advantages in IIoT and edge computing are combined to provide integrated low-carbon solutions, creating differentiation advantages in low-carbon products. ■ Highlight the low-carbon products' sustainable values and environmental contributions in marketing activities, such as presenting the products' carbon footprint data and energy-saving effectiveness.

Category		Risk or opportunity issues	Advantech encounters risk or opportunity	Affect schedule	Impact level	Financial impact	Advantech's response strategy
Product	Opportunities	O5 Establish and engage in product carbon footprint calculations to elevate Company's competitiveness in green business opportunities	■ Enhance market competitiveness and brand image: Meet market demands by establishing a carbon footprint calculation system, strengthen customer trust, enhancing product value, and creating green business opportunities. Moreover, compliance with environmental regulations further bolsters Advantech's sustainability image ■ Support sustainable supply chain development: Use Advantech's CarbonR solution to simplify carbon footprint calculation process, assist supply chain partners in achieving carbon reduction goals, thereby enhancing the partnership	Short-term	High	■ Increased revenue ■ Increased market value	■ Establish Advantech's product carbon footprint methodology and complete the carbon footprint inventory of various business groups' representative products ■ Develop an internal product carbon footprint evaluation system and proactively provide customers with relevant information to improve carbon footprint disclosure transparency ■ Assess material selection through product life cycle (LCA) evaluations to identify key materials contributing to the carbon footprint ■ Promote Advantech's CarbonR solution, assist supply chain partners in calculating carbon emissions and product carbon footprint, as well as offer relevant training and technical support to reinforce collaborative partnership
Market	Transition risk	R11 Increasingly stringent international review standards and regulations	■ Regulatory risks: Global regulations are becoming increasingly stringent, such as the CBAM and the CCA in the United States, failure to respond accordingly may lead to legal risks, fines, and even market entry restrictions ■ Loss of market entry opportunities: If value chain partners are unable to provide solutions in response to relevant regulations, market entry opportunities may be reduced	Short-term	High	■ Increased operating costs ■ Reduced revenue ■ Increased compliance expenditures	■ Local laws and regulations are considered when procuring raw materials during the product design stage to ensure compliance with all relevant standards. ■ Relevant regulations are incorporated into the new product development evaluation process to assess suitability in advance. ■ Regularly audit factories and suppliers to ensure alignment with international trends and customer requirements ■ Identify suitable existing ESG response solutions from internal BUs or external partners and offer them to strategic partners and invested companies to address carbon emission-related needs across the supply chain
	Transition risk	R13 Market ESG image and reputation risks	■ Brand value and customer trust: Failure to effectively manage climate risks or demonstrate adequate ESG performance may negatively impact the company's market reputation and erode stakeholders' trust, including that of customers, shareholders, and investors ■ Climate risks: Inadequate assessment of climate risks may disrupt factory operations during natural disasters such as typhoons or earthquakes, thereby damaging the company's reputation	Medium-term	Medium	■ Increased operating costs ■ Increased capital expenditure ■ Reduced revenue	■ Conduct regularly employee education and training on ESG developments and trends to enhance their ESG awareness and foster a culture of sustainability ■ Introduce energy-saving and carbon reduction equipment with temperature and humidity regulation functions into hardware facilities ■ By joining RE100, setting SBT, and participating in sustainability ratings such as DJSI, CDP, and EcoVadis, we aim to disclose our ESG performance and enhance our corporate sustainability value
Market	Opportunities	O7 Market opportunities derived from complying with international environmental initiatives (such as SBTi, CDP, etc.)	■ Global market deployment: Participation in major evaluations and initiatives, along with voluntary compliance with local environmental regulations, facilitates the introduction of Advantech's ESG-rated products to the market and enhances our brand image ■ Enhancing sustainability image and attracting sustainable investments: Enhance ESG performance through active engagement in international environmental initiatives, such as SBTi, CDP, and RE100, attract sustainable investment, and strengthens both brand image and supply chain stability	Medium-term	High	■ Increased revenue ■ Increased capital ■ Increased market value	■ Develop product solutions that comply with international environmental regulations, including energy management, ESG information integration systems, carbon emission inventory, raw material supply chain management, and carbon footprint system implementation, etc. ■ Strategically invest in ESG-related fields through small equity investments to mitigate risks and explore market opportunities ■ By joining RE100, setting SBT, and participating in sustainability ratings such as DJSI, CDP, and EcoVadis, we aim to disclose our ESG performance and enhance our corporate sustainability value

Note:

1. Affect schedule: Based on the potential occurrence, affect are categorized as “short-term (< 3 years), mid-term (3 – 5 years), and long-term (> 5 years).”

2. Impact level: An internal evaluation, based on the likelihood of occurrence and level of impact, categorizes the impact level as “high, medium, or low.”

Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

4.3 Greenhouse Gas Inventory and Energy Management



Name of material topic	Importance of this material topic to Advantech
GHG inventory and energy management	Advantech is committed to reducing GHG emissions and effectively using energy and resources and strives to achieve the carbon reduction targets we have publicly committed to ensure that environmental protection and corporate sustainability can thrive together.
Policy or commitment	■ We have committed to and secured approval for our 2030 and 2050 SBTs. ■ Advantech joined the RE100 Initiative and committed to achieving the goal of using 100% renewable energy by 2040. ■ Set the goal of achieving net zero emissions by 2050.
Positive impacts	■ Reduce carbon emissions: Advantech set carbon reduction targets after accurately identifying GHG emission sources and volume. ■ Reduce operating costs: Achieved the goal of reducing energy consumption and operating costs through the introduction of energy management systems, implementation of energy policies, target setting, and implementation of energy conservation projects. ■ Reduce energy impact: The deployment of renewable energy at each location of operations not only gradually achieves the goal of RE100, but also reduces our dependence on external renewable energy, and further controls and reduces operating costs. ■ Improve corporate image: Joining the RE100 and CDP initiatives and setting SBTs not only shows our determination to achieve net zero emissions but also improves our international image.
Negative impacts	■ Increased operating and financial costs: Management of GHG emission data, implementation of energy management systems, equipment replacement, and installation and procurement of renewable energy equipment may increase operating costs. ■ Energy transition risks: If the amount of green electricity purchased does not meet expectations, it may delay the achievement of RE100 and prolong our energy transition timeline.

Name of material topic	Importance of this material topic to Advantech
Actions in response to negative impacts that occur	The actions taken by Advantech in response to negative impacts are as follows. For details, please refer to 4.3.2 of this Report: ■ Improve energy management efficiency: Advantech uses the internal iEMS for monitoring and analysis to improve energy efficiency. Meanwhile, we have implemented ISO 50001 for comprehensive energy management, with energy-saving plans targeting core energy-consuming equipment such as chillers, laboratory equipment, production equipment, and air conditioning systems, effectively reducing operating costs. ■ Expand investments in renewable energy: Advantech actively invests in renewable energy. Our main production sites have adopted measures such as installing solar panels and implementing aquavoltaics, and have also purchased renewable energy certificates and directly purchased green electricity from power suppliers, ensuring that we achieve the RE100 goal. At the same time, we ensure that the percentage of renewable energy used gradually increases by formulating specific short-, medium-, and long-term green electricity investment plans, further moving towards sustainable development.
Overview of target achievement in 2025	■ Achieved GHG targets: In 2025, our overall GHG emissions intensity per unit of revenue decreased by 42% compared to 2019 and by 20% compared to 2024. ■ The target of 20% renewable energy was not achieved: The use of renewable energy at major production sites worldwide reached 18%, and each RBU continues to increase the use of renewable energy. ■ The energy reduction target was achieved: Electricity consumption per person in offices was reduced by 3% compared to 2024. Electricity consumption per work hour at production sites was reduced by 10% compared to 2024. ■ Advantech received a "B List" rating in the CDP Climate Change Questionnaire in 2025. ■ Advantech expanded the GHG inventory and ISO 14064-1 verification at AESC in Europe in 2025. ■ Advantech's Taiwan and Kunshan Plants maintained the validity of their ISO 50001 certificate in 2025.
2026 targets	■ Renewable energy target: Continue to increase the use of renewable energy at Advantech's production sites worldwide to 24%. ■ GHG emissions target: Reduce Advantech's Scope 1 and Scope 2 GHG emissions intensity by 21% compared to 2022. ■ Energy reduction target: Reduce electricity consumption intensity at production sites worldwide by 6% compared to 2024.
2030 targets	■ Renewable energy target: Achieve 50% renewable energy use in Taiwan and Kunshan ■ GHG emissions target: Reduce Scope 1 + 2 emissions by 42%. Reduce the intensity of Scope 3 emissions from product use by 51.6%. ■ Energy reduction target: Reduce energy intensity at production sites by 10% compared to 2024.

Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

Name of material topic	Importance of this material topic to Advantech
Key action plans or programs in 2025	■ In addition to the Taiwan and Kunshan Plants, our production sites also gradually implemented ISO 50001 energy management systems, and reduced energy consumption by setting energy KPIs and monitoring and improving energy efficiency using the iEMS. ■ Increased the use of renewable energy and reduced Scope 2 emissions to gradually achieve RE100. Locations that currently use renewable energy include Taiwan, China, South Korea, the U.S., and Europe. ■ Gradually expanded the scope of the GHG inventory and ISO14064-1 verification to enhance the Group's control over carbon data. The GHG inventory and verification for the overseas subsidiary AESC was added in 2025. ■ Advantech set an even more challenging SBT (1.5°C pathway) in 2025 to show our determination to reduce carbon emissions.
Effectiveness evaluation	■ Monitor energy management at each location of operation by implementing ISO50001 energy management systems, setting energy KPIs, and holding regular energy meetings. ■ Ensure the credibility of GHG emission data of each location through ISO 14064-1 verification. ■ Increase the credibility of energy use data through the AA1000 verification process in the report.

Name of material topic	Importance of this material topic to Advantech
Stakeholders affected by this material topic and actions taken by Advantech	Employees: Provide internal and external training to personnel responsible for compiling the GHG inventory. In addition, we also send the Advantech ESG e-newsletter to internal employees each quarter to raise their sustainability awareness. Customers: Respond to customer questionnaires and audits, and provide supporting records as needed. Suppliers and contractors: Conduct on-site audits of certain suppliers to gain an in-depth understanding of their GHG management. We also organize supplier training activities, during which we not only explain Advantech's expectations for suppliers in terms of GHG management, but also provide resources and channels for GHG inventory free of charge. Furthermore, Advantech began providing diverse resources for training and seminars based on supplier classification results in 2025, so as to help suppliers continue to improve their sustainability management capabilities. Shareholders and investment institutions: Advantech's sustainability performance is disclosed in the Sustainability Report and on the official website. Partners: Respond to inquiries from partners and provide supporting records as needed. Government/Associations/Media: Respond to inquiries from government agencies and related associations and provide supporting records as needed.

Advantech upholds the core values of being a global citizen. In addition to compiling our inventory in accordance with ISO 14064-1:2018 and the GHG Protocol, we have completed third-party verification for our 2 major production sites since 2019. We further completed third-party verification of GHG emissions of the plants in Japan and South Korea in 2024, and added third-party verification of GHG emissions of the plants in Europe in 2025. In recent years, we have continued to manage our GHG emissions based on the inventory each year, and also dedicated great effort in product design, product material management, product energy efficiency improvement, and renewable energy use. Advantech joined the RE100 Initiative in 2023 and announced that we will fully use renewable electricity by 2040. Currently, all location of operations in Taiwan, Kunshan, South Korea, Europe, and the U.S. are using renewable energy. The scope of this section covers Advantech's main locations of operations and production sites worldwide, which account for 94.6% of our consolidated revenue.

4.3.1. Greenhouse Gas Inventory and Management

Advantech established the Greenhouse Gas Inventory Promotion Committee to create a low-carbon business environment. The committee follows the quantitative, supervision, reporting, and verification procedures outlined in Taiwan's Climate Change Response Act, the GHG Protocol, and ISO 14064-1 when compiling the GHG inventory and reducing carbon emissions, aiming to reduce both direct and indirect emissions each year. Advantech joined the international organization Carbon Disclosure Project (CDP) in 2015; in addition, we disclose our carbon reduction plans and performance every year.

GHG Inventory

Starting in 2024, in addition to the Taiwan and Kunshan Plants, Advantech began compiling the GHG inventory of major locations of operations and production sites overseas. The sites that were added in 2024 include AJMC (Japan) and AKSC (South Korea). AESC (Europe) was added in 2025, and major locations of operations and production sites overseas will be subsequently added.

Advantech's Taiwan Plant compiles its inventory in accordance with ISO 14064-1 and the GHG Protocol, and its inventory has

been verified by a third party since 2019. The organizational boundaries are based on operational control in accordance with the requirements of ISO 14064-1:2018. The scope of the inventory not only includes qualitative and quantitative items of Scope 1 (Category 1 direct GHG emissions) and Scope 2 (Category 2 energy indirect GHG emissions), but also Scope 3 emission sources (Category 3, 4, and 5 indirect GHG emissions). In 2025, Advantech's plants in Taiwan, Kunshan, Japan, and South Korea have completed their inventory and passed third-party verification. Furthermore, Advantech included AESC in Europe into the scope of the ISO 14064-1 GHG inventory and verification for the first time in 2025. The location of operations in the U.S. continues to compile its GHG inventory from energy use. Advantech plans to complete the inventory and third-party verification of all Scope 1 and Scope 2 emissions of the Group's important locations of operations starting in 2026. The emissions in each region are shown in Table 4.3.1.

The base year for Advantech's GHG inventory is 2022, which serves as the basis for comparing emissions management and reduction effectiveness. The emission factors used in the inventory are mainly national emission factors. If there are no applicable emission factors, the applicable factors announced internationally are used. Global warming potential (GWP) is calculated using the factor in IPCC AR6.

For ACL in Taiwan, Scope 2 emissions only include purchased electricity. Carbon emissions are calculated using the 2024 electricity carbon emission factor of 0.474 kg CO₂e announced by the Energy Administration, Ministry of Economic Affairs, and the electricity carbon emission factor of 0 kgCO₂/kWh for purchased renewable energy, totaling 8,408.61 metric tons of CO₂e (market-based). The Scope 2 emissions of AKMC include purchased electricity, renewable energy electricity, and purchased steam, totaling 11,318.32 metric tons CO₂e (market-based). The electricity carbon emissions are calculated using the average national electricity carbon emission factor (excluding non-fossil energy electricity from market-based transactions) of 0.6096 kg CO₂/kWh, as well as the electricity carbon emission factor of 0 kgCO₂/kWh for purchased renewable energy, in the "Announcement on the Electricity Carbon Emission Factor for 2023."The carbon emissions from steam are calculated using the emission factor for steam of 110 kg CO₂/GJ according to the "GHG Emission Accounting and Reporting Guidelines for Industrial and Other Sectors." In addition, Scope 2 emissions of AJMC, AKSC, AASC, and AESC only include purchased electricity. Among them, AJMC uses the electricity carbon emission factor of 0.449 kg CO₂e/kWh provided by the manufacturer, Kyushu Electric Power. AKSC and AASC use the nationally announced electricity carbon emission factors of 0.4541 kg CO₂e/kWh (market-based) and 0.17906 kg CO₂e/kWh (market-based), respectively. AESC's electricity carbon emission factor is 0 kg CO₂e/kWh as it uses 100% renewable energy.

• Table 4.3.1 Scope 1 GHG Emissions of Advantech's Major Locations of Operations and Production Sites in 2025

Region \ GHG	CO ₂	CH ₄	N ₂ O	HFCS	PFCS	SF ₆	NF ₃	Other*	Total (Metric tons of CO ₂ e)
Taiwan ACL	35.6771	0.0195	0.0273	769.6447	0	0	0	3.5986	808.9672
China AKMC	1,351.2320	238.5813	2.9987	1,094.1054	0	0	0	0	2,686.9175
Japan AJMC	25.5935	8.4259	0.1365	103.6429	0	0	0	9.4080	147.2068
South Korea AKSC	1.6109	1.6433	0.0273	4.5305	0	0	0	1.3721	7.8120
United States AASC	21.0586	0.0004	0	0	0	0	0	0	21.0590
Europe AESC	62.4639	0.4158	1.2831	6.3408	0	0	0	0	70.5036
Total	1,497.6360	249.0862	4.4730	1,976.8922	-	-	-	14.3787	3,742.4661

*Note:

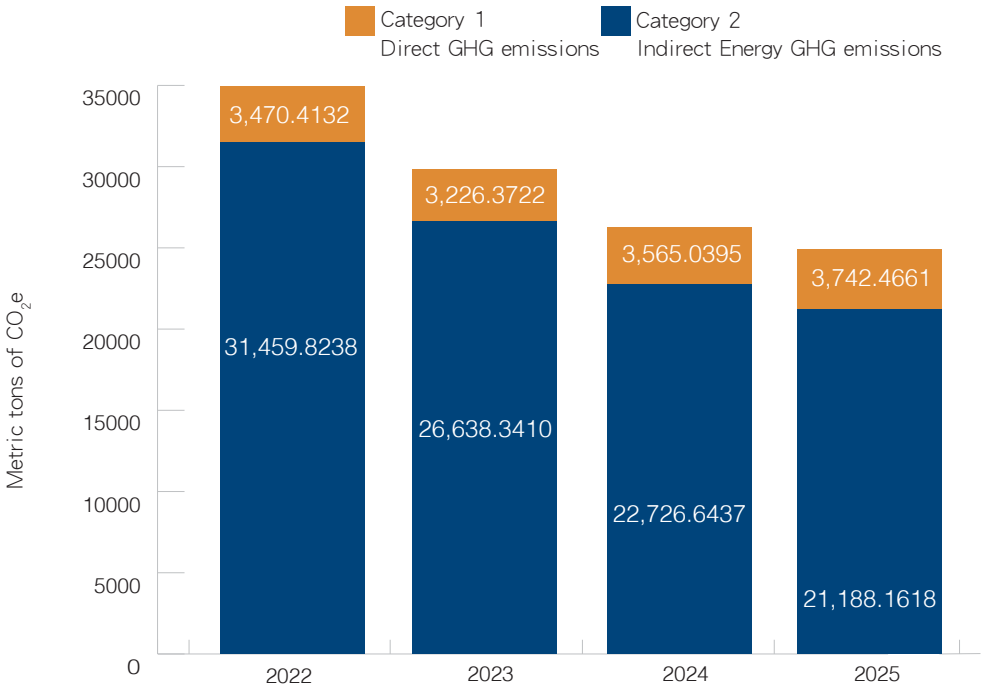
- 1. For AASC in the U.S., Scope 1 emissions only include GHG emissions from energy use (natural gas, diesel, gasoline, and liquefied petroleum gas).
- 2. Other refers to GHGs not in the 7 major categories of GHGs.

The Scope 1 and Scope 2 GHG emissions of Advantech's main locations of operations and production sites are shown in Table 4.3.2. In 2025, combined Scope 1 and Scope 2 emissions totaled 24,930.6280 metric tons of CO₂e (market-based), which showed a reduction in GHG emissions by 10,000 and 1,361 metric tons of CO₂e compared to 2022 and 2024, respectively. The Scope 1 and Scope 2 GHG emissions of Advantech's major locations of operations and production sites in recent years are shown in Figure 4.3.1. In 2025, Advantech launched a comprehensive energy-saving improvement project. In addition to numerous energy-saving plans, we built our own renewable energy sources and purchased green electricity at the same time, which significantly reduced the carbon emission intensity of energy use and successfully achieved the SBTs for 2025. This shows that we are making concrete progress on the path to net zero emissions. Please see 4.3.2 Energy Management Actions for more information on energy-saving improvements and renewable energy. We will continue to work towards the SBTs to reduce carbon emissions by 42% by 2030 and 90% by 2050, as shown in Figure 4.3.2.

• **Table 4.3.2 Scope 1 and Scope 2 GHG Emissions of Advantech's Major Locations of Operations and Production Sites in 2025**

2025					
Region	Scope 1 Direct GHG emissions	Scope 2 Indirect Energy GHG emissions		Total	
		Market-based	Location-based	Market-based	Location-based
Taiwan ACL	808.9672	8,408.6062	8,981.1863	9,217.5734	9,790.1535
China AKMC	2,686.9175	11,318.3170	14,443.9599	14,005.2345	17,130.8774
Japan AJMC	147.2068	1,283.3008	1,283.3008	1,430.5076	1,430.5076
South Korea AKSC	7.8120	146.5535	154.3599	154.3655	162.1719
United States AASC	21.0590	31.3844	163.8454	52.4434	184.9045
Europe AESC	70.5036	0	42.7041	70.5036	113.2077
Total Scope 1 and Scope 2 emissions (Metric tons of CO ₂ e)	3,742.4661	21,188.1618	25,069.3564	24,930.6280	28,811.8225

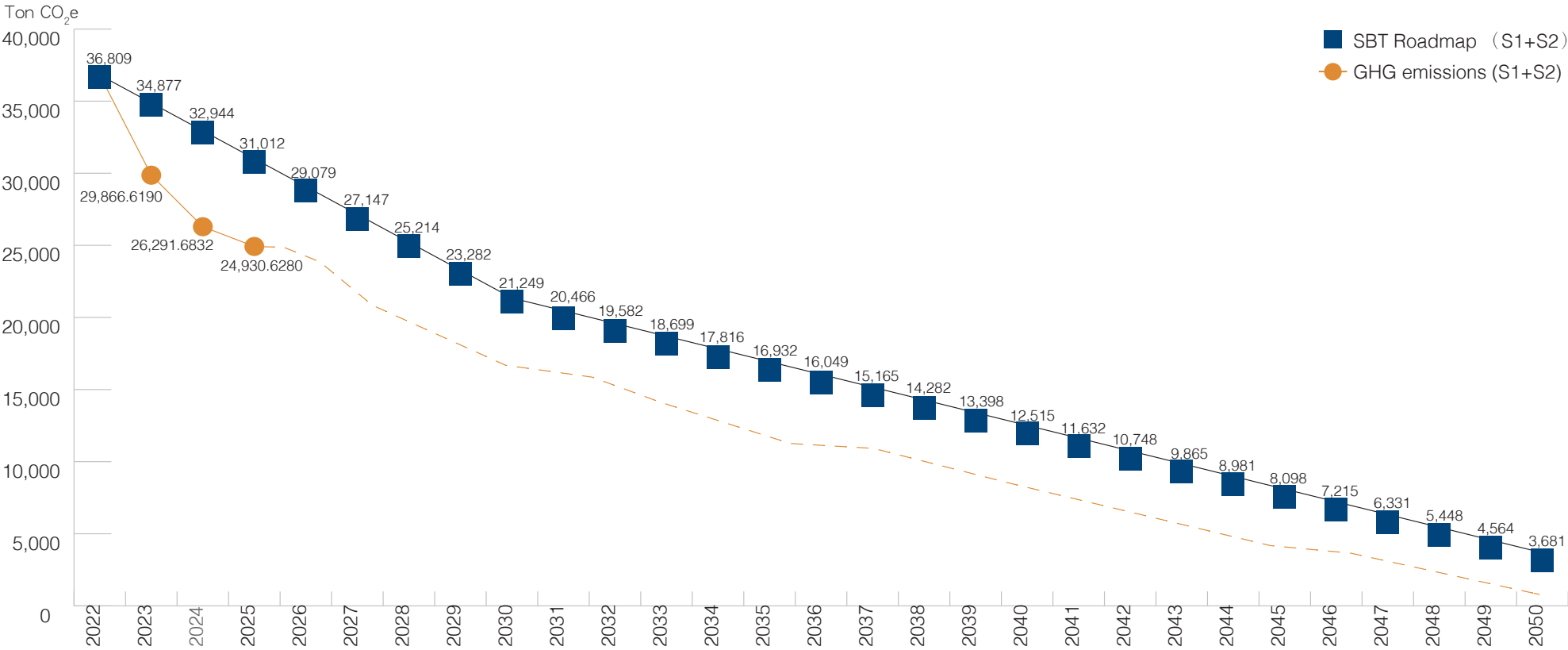
*Note
1: The GHG inventory of AASC has not yet been verified by a third party.
2: In the market-based calculation, the GHG emissions from renewable energy in Taiwan, Kunshan, South Korea, Europe, and the U.S. are calculated using an electricity emission factor of 0.



*Note
1: Statistics for Category 2 are "market-based" GHG emissions.
2: Plants in Taiwan, Kunshan, South Korea, Europe, and the U.S. used renewable energy in 2025.

• **Figure 4.3.1 Scope 1 and Scope 2 GHG Emissions of Advantech's Major Locations of Operations and Production Sites in Recent Years**





*Note: Statistics for Category 2 are “market-based” GHG emissions.

• **Figure 4.3.2 GHG Emissions and SBT Carbon Reduction Roadmap of Advantech’s Major Locations of Operations and Production Sites in Recent Years**

In 2025, the GHG emissions intensity (Scope 1 and Scope 2) of Advantech’s main locations of operations and production sites was 0.352 tons CO₂e/million NTD in revenue, a 20% decrease in GHG emissions intensity compared to 2024.

In 2025, we continued to manage and optimize our energy efficiency in accordance with the Energy Management Policy, ISO 50001 energy management systems, and the iEMS. We also regularly convene energy project meetings to facilitate experience sharing among plants and continue to improve energy efficiency.

Going forward, we will continue to work towards RE100 and carbon reduction targets through employee education and training, carbon reduction and energy conservation projects, setting energy targets, expanding the use of renewable energy, setting stricter SBTs (1.5°C), and setting internal carbon prices. We have also dedicated our efforts to deeply embed energy conservation and carbon reduction concepts into our corporate culture, combining the capabilities of all employees to jointly move towards a sustainable future with net zero emissions.

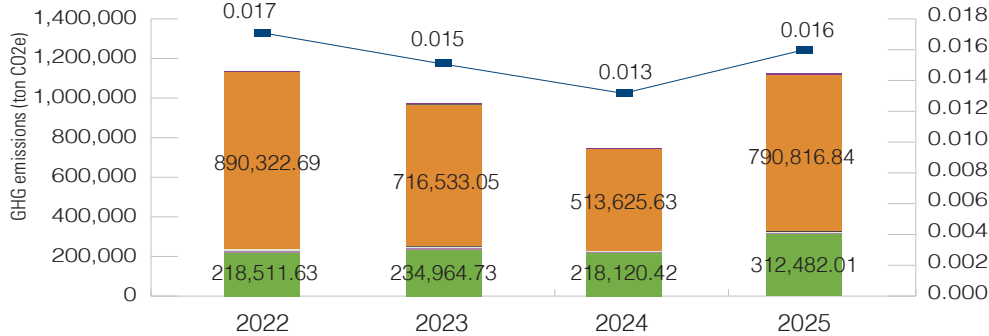
Advantech has 6 major production sites worldwide. The plants in Taiwan and Kunshan are the main production sites. To determine key factors for climate change mitigation, in addition to GHG emissions from our own operations, we identified the materiality of other indirect emission sources based on the ISO14064-1 inventory method in 2019, and established related inventory methodologies to identify emission hotspots, set reduction targets, and gradually implement reduction measures. For Advantech’s Scope 3 emissions in 2025, please refer to Table 4.3.3. Scope 3 emissions over the years are shown in Figure 4.3.3. Advantech’s Scope 3 GHG emissions intensity in 2025 increased by 27% compared to 2024. C1 (Purchased goods and services) and C11 (Use of sold products) increased due to the continued development of products and expansion of production capacity. Going forward, we will continue to work with suppliers to reduce Scope 3 emissions through supplier carbon reduction strategies, product energy-saving labels, product energy-saving design, power efficiency improvement, and internal carbon pricing.

Table 4.3.3 Categories and Emissions of Advantech's Scope 3 GHG Emissions in 2025

Scope 3/Category item	Scope of verification	Emissions in 2025 (Metric tons of CO ₂ e)
C1/Category 4	Purchased goods and services	312,482.0088
C2/Category 4	Capital goods	7,426.6174
C3/Category 4	Fuel-and-energy-related- activities (not included in Scope 1 or 2)	3,405.2271
C4/Category 3	Upstream transportation and distribution	2,000.6367
C5/Category 4	Waste generated in operations	43.4851
C6/Category 3	Business travel	343.5095
C7/Category 3	Employee commuting	928.5078
C8/Category 4	Upstream leased assets	50.2611
C9/Category 3	Downstream transportation and distribution	125.1796
C10/Category 5	Processing of sold products	0
C11/Category 5	Use of sold products	790,816.8395
C12/Category 5	End-of-life treatment of sold products	8.6387
C13/Category 5	Downstream leased assets	0
C14/Category 5	Franchises	0
C15/Category 5	Investments	8,627.1313
Total		1,126,258.0427

* Note: The GHG Protocol Scope 3 C1 to C15 corresponds to ISO14064-1:2018 Categories 3 to 6

C1 Purchased goods and services C2 Capital goods C3 Fuel-and-energy-related- activities (not included in Scope 1 or 2)
C4 Upstream transportation and distribution C5 Waste generated in operations C6 Business travel C7 Employee commuting
C8 Upstream leased assets C9 Downstream transportation and distribution C10 Processing of sold products
C11 Use of sold products C12 End-of-life treatment of sold products C13 Downstream leased assets C14 Franchises
C15 Investments ■ emission intensity

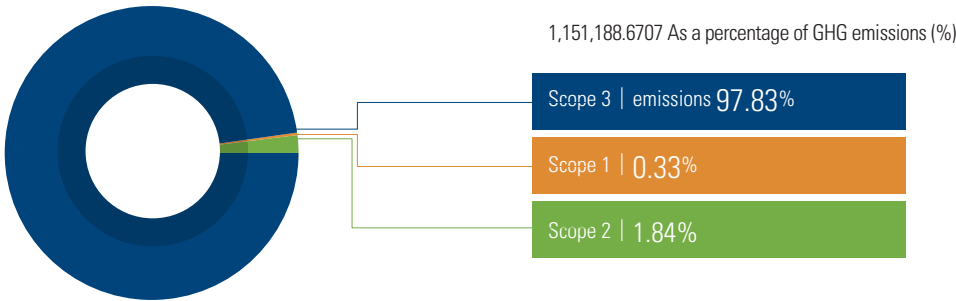


* Note: The data for 2022-2025 was compiled according to ISO 14064-1 and verified by a third party.

Figure 4.3.3 Advantech's Scope 3 Emissions in Recent Years

GHG Emissions in the Value Chain

Overall value chain GHG emissions include direct emissions related to Advantech's operations, as well as various indirect emissions from upstream and downstream, including Scope 1 (direct emissions), Scope 2 (energy indirect emissions), and Scope 3 (other indirect emissions). In 2025, the total GHG emissions from Advantech's value chain in each market were 1,151,188.6707 metric tons of CO₂e, in which Scope 3 accounted for 97.83%, while Scope 1 and Scope 2 accounted for approximately 0.33% and 1.84%, respectively. In addition to implementing Scope 1 and Scope 2 emission reduction measures, Advantech has extended carbon reduction actions to the overall value chain. We actively communicate and work with upstream and downstream partners towards the 1.5°C carbon reduction target.



Highlight Project: Participation in the Carbon Disclosure Project (CDP) Evaluation

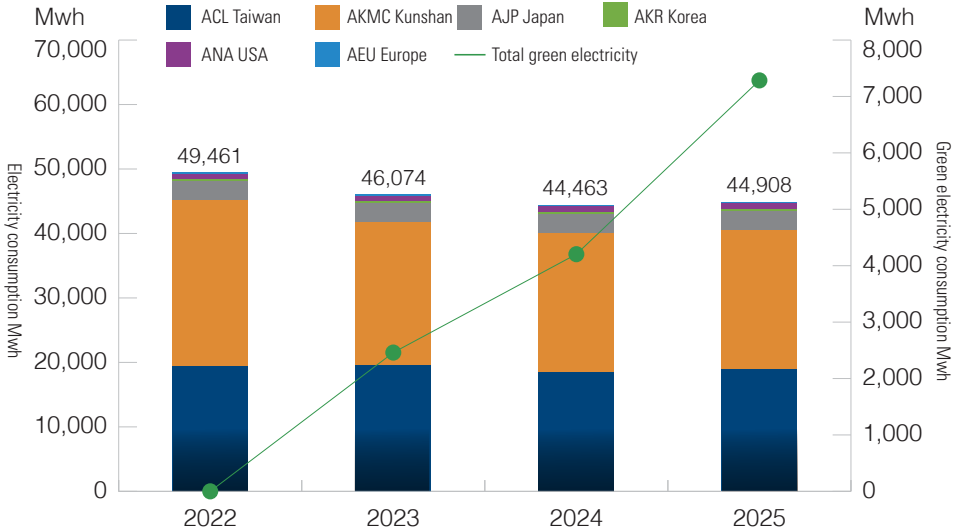


Advantech has participated in the Carbon Disclosure Project (CDP) evaluation in coordination with customers since 2015. The CDP is currently the world's largest database related to global climate change. Each year, questionnaires are distributed to determine how businesses are responding to climate change and reducing their GHG emissions. The survey results are then used to evaluate the potential business risks and opportunities caused by climate change. Through annual CDP information disclosure, Advantech carefully reviews climate-related issues such as climate regulations and hazards caused by climate change. To mitigate potential risks in business management, we adopt effective reduction and elimination measures and thereby adhere to the GHG management requirements requested by international clients. Advantech received a Level B rating in 2025.

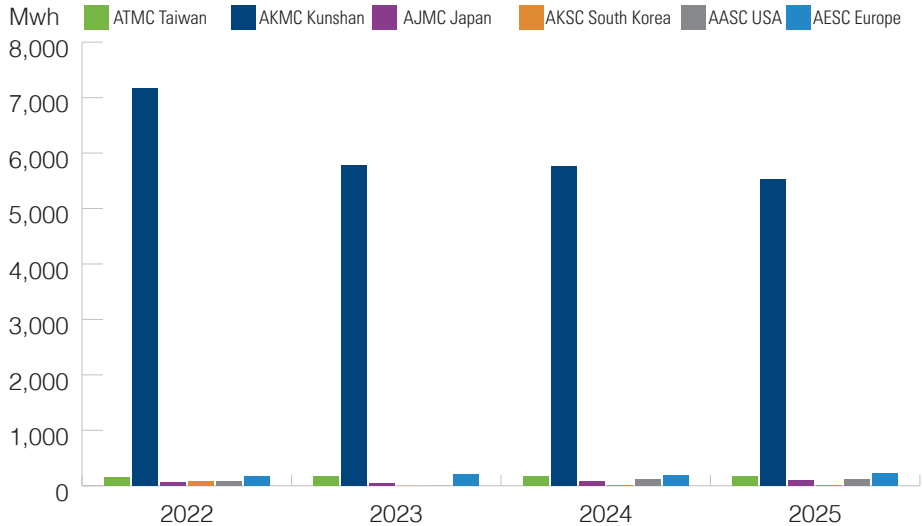


Energy Data Management

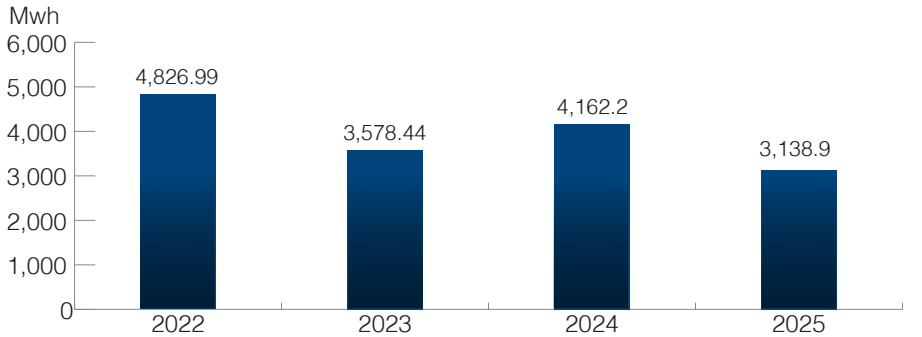
Advantech's main source of GHG emissions was CO₂ generated from the use of purchased electricity in company operations. This source of emissions accounted for more than 84% of the total emissions in 2025. In 2025, the total energy consumption (electricity, steam, gasoline, diesel, and natural gas) of Advantech's main locations of operations and production sites was 183,771.00 GJ, in which purchased electricity accounted for 87.97% of energy use (including 16.22% renewable energy use). The total renewable energy consumption in 2025 was 7,284,651 kWh. The total consumption increased by 0.5% compared to 2024, mainly due to the increase in production volume, resulting in the increase in electricity use.



• **Figure 4.3.4** Electricity Consumption of Advantech's Main Locations of Operations and Production Sites in Recent Years



• **Figure 4.3.5** Non-renewable Fuel Consumption at Advantech's Main Locations of Operations and Production Sites in Recent Years



*Note: Among Advantech's main locations of operations and production sites, only the Kunshan Plant in China uses steam.

• **Figure 4.3.6** Steam (Non-renewable Energy) Consumption at Advantech's Main Locations of Operations and Production Sites in Recent Years

4.3.2. Energy Management Actions

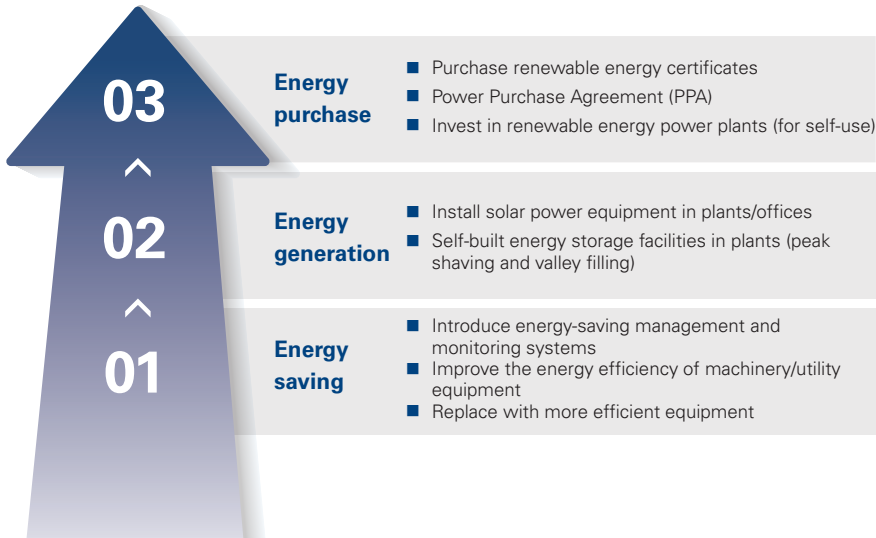
Overview of Energy Use

Electricity is Advantech's main source of energy. To reduce the environmental impact of the product lifecycle and production processes, we continue to deepen ISO 50001 energy management systems in our plants in Taiwan and Kunshan according to the [Energy Management Policy](#). We systematically conduct energy reviews, plan energy-saving projects, conduct benefit assessments, and improve processes to ensure that energy efficiency is improved each year. Advantech continues to upgrade the iEMS to improve energy transparency and management accuracy. The monitoring and identification of energy consumption hotspots enables further optimization of equipment operation and schedule management, effectively improving overall energy efficiency. The energy management unit convenes regular management review meetings according to the annual energy saving target, tracks implementation performance and improvement progress, continues to manage operations, and implements energy saving mechanisms.

In 2025, Advantech continued to use the 6 electricity consumption management indicators for RBUs worldwide. We implemented a unified energy management framework for locations of operations to monitor their energy consumption, implement energy saving measures, and examine the consistency of results, which further improved the maturity of cross-regional energy management. At the same time, Advantech continues to implement the global renewable energy strategy, and cooperates with locations through diverse procurement channels to gradually increase the percentage of renewable energy use, supporting our commitment to RE100 and moving towards the goal of using 100% renewable energy.

Energy Management Strategy

Advantech continues to adopt energy management strategies in each of the 3 stages – energy saving, energy generation, and energy purchase, gradually advancing through each stage as we continue to strengthen energy management and optimize resource allocation, so as to realize sustainable energy management and renewable energy transformation goals.



Energy Management Processes

Advantech established an internal energy management mechanism and uses the iEMS it developed for monitoring, which is supported by the effective operation of ISO 50001 energy management systems. In the energy change assessment stage, Advantech reviews energy impact risks and source management. In the operations stage, Advantech reviews the organization's energy use, and focuses on energy consumption hotspots. In the improvement stage, Advantech implements energy-saving action plans and conducts benefit analysis. In these 3 stages, we continue to improve energy management processes and measures, and also continue to improve energy efficiency.

Energy review

A list of energy-consuming equipment in plants is compiled through the energy review process, and significant energy use (SEU) equipment is defined based on operating time, equipment age, and equipment power

Management of SEU equipment

SEU equipment is subject to routine monitoring and management (including operator capabilities and documentation of specifications)



Management of SEU Equipment at Main Production Sites in 2025

Advantech has 6 major RBUs worldwide, in which the Taiwan and Kunshan Plants are the main production sites. Therefore, we continue to implement energy conservation management in accordance with ISO 50001 energy management systems.

Place	SEU equipment	SEU equipment management methods
ATMC (Taiwan)	Chiller systems	Real-time monitoring of chiller system operations and inlet/outlet water temperature control is conducted using the SCADA system, and periodic maintenance is specified in the SOP.
	Laboratory equipment and process-related equipment	Maintenance and management are specified in the SOP, including routine inspection management and regular maintenance.
AKMC (Kunshan, China)	Production equipment (solder reflow oven, liquid baking line, solder pot)	Regular monitoring plans are formulated based on the qualifications required for operators at each post. Contents of the plans include: monitoring methods, frequency, personnel, and records.
	Air conditioning system	Air conditioning equipment is maintained and managed according to the SOP, and the control system of the air conditioning system is used to monitor its operation and control water temperature.

Energy-saving Management Actions of Main Production Sites in 2025

Place	Category	Energy saving topic	Total cost (K NTD)	Energy saving
Taiwan ACL	Air conditioning system	Replacement of old chillers and air conditioning units on each floor, installation of air conditioner inverters	1,320	369,238 kWh
	Power systems	Replacement of passenger and cargo elevators, scheduling and control of elevator operation time	0	50,289 kWh
	Power consumption of electrical outlets	Public equipment usage schedule management	0	32,940 kWh
	Lighting systems	Lighting fixture replacement	1,700	69,580 kWh
AKMC (Kunshan, China)	Air conditioning system	Replacement of cooling towers, water pumps, and heat pumps with Grade 1 energy efficiency models and installation of inverters	1,007.5	118,000 kWh
	Process improvement	Coating Process Optimization	388	187,164 kWh 47,628 m³
Total			4,415.5	827,211 kWh 47,628 m³

2025 Process Energy Saving Management Highlight Project



Coating Process Optimization

Increased the capacity of plating racks to spray multiple products, optimizing the maximum spraying area and utilization rate. This reduced production line operation time by 3.2 hours, reduced electricity consumption and natural gas consumption per hour. This has been used for 539 material numbers to date, saving 187,164 kWh of electricity and 47,628 M³ of natural gas per year.

Solar power grid connection

The purchased electricity consumption of ANA in the U.S. decreased by 76% compared to 2024, significantly reducing its dependence on the power grid for power supply, while reducing Scope 2 GHG emissions and enhancing long-term energy resilience, thereby fulfilling our commitment to ESG and achieving our carbon reduction strategy.



Renewable Energy Promotion Program

Advantech commits to RE100 by 2040

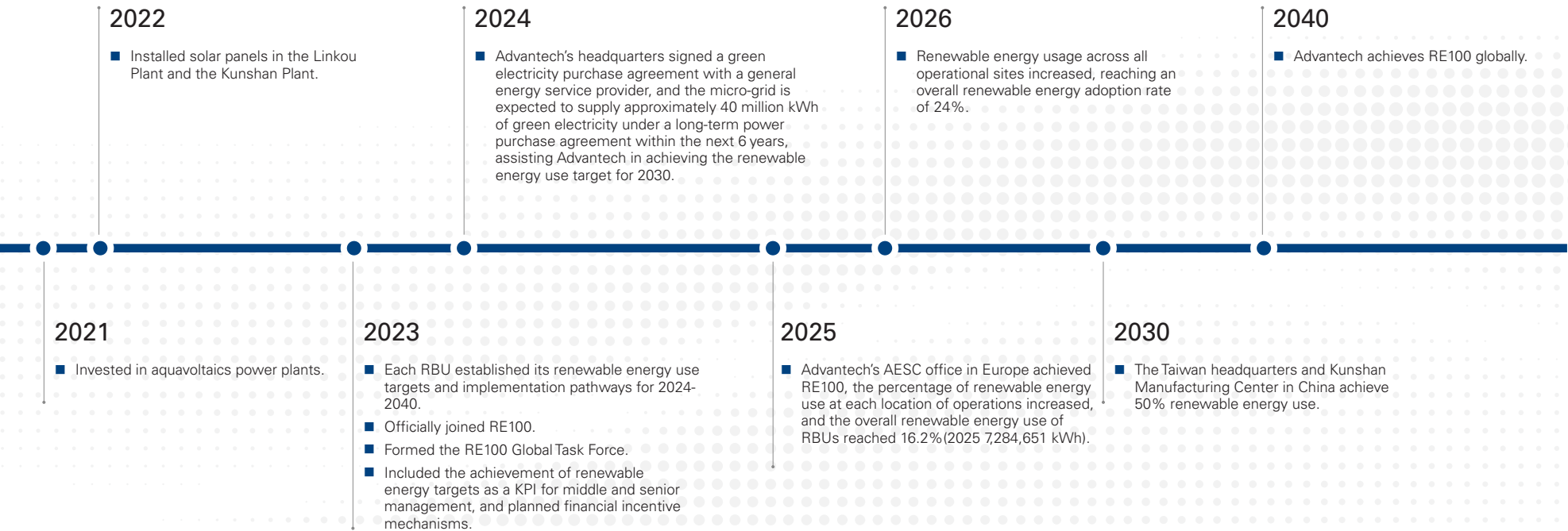
Since becoming an RE100 member in 2023, Advantech has actively implemented renewable energy development plans for the headquarters and overseas subsidiaries. Advantech's Taiwan headquarters and Kunshan Manufacturing Center in China account for over 90% of Advantech's global electricity consumption. Therefore, we will focus on the progress of renewable energy use at these 2 manufacturing centers.

For the disclosure of renewable energy-related data, please refer to the section on Energy Data Management in this Report. The implementation timeline and management model are as follows:

Management model

- Advantech officially established the Global RE100 Task Force in 2023. The ESG and Corporate Sustainability Office coordinates and reviews the progress of renewable energy implementation, while the president of general management conducts the review during the quarterly ESG regional meeting.
- The RBUs under this task force span Advantech's headquarters and 5 countries/regions, including China, the U.S., Europe, Japan, and South Korea.
- Each RBU has appointed renewable energy personnel to formulate local plans that comply with local policies, regulations, and electricity price markets to achieve the renewable energy target.
- The progress of achieving renewable energy targets was included as a performance indicator for the chairman and responsible supervisors in 2024, management and financial incentive mechanisms were planned and implemented to encourage them.
- Starting in 2025, the renewable energy progress and goals are regularly reviewed in the quarterly ESG meetings of RBUs.

Renewable energy implementation timeline and goals:



Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

Renewable energy highlight projects of major overseas locations:

ACL	Purchased a total of 1,159,069 kWh in renewable energy certificates, and the renewable energy coverage rate reached 6.1%.
ANA	AASC actively installed solar panels, with a total solar power generation of 739,758 kwh, and the renewable energy coverage rate reached 80.9%.
AKR	1. Launched a local solar power installation plan and applied for support from government funds. 2. The renewable energy target is expected to be achieved through the installation of solar panels and the procurement of RECs. 3. Solar panels on the rooftop began generating electricity in the fourth quarter of 2025. 4. Statistics show that the total renewable energy electricity generation was 17,191kWh, and the renewable energy coverage rate reached 5.1%.
AJP	AJP aligns with the national renewable energy policy and has identified suitable renewable energy suppliers. It plans to contact the suppliers in 2026 to discuss purchase.
AKMC	With the goal of increasing the percentage of renewable energy use by 5% each year, renewable energy sources include solar panels (1,753,367 kWh) and the purchase of RE100-approved RECs (3,374,000 kWh). The percentage of renewable energy use in 2025 was 23.7%.
AEU	Directly purchases from local renewable energy suppliers and has already achieved the target of 100% renewable energy.(241,266kWh)
Global	2025 Renewable energy coverage - 16.2% (7,284,651 kWh)

Establishing an Intelligent Energy Monitoring System and Continuing to Implement Energy-saving Projects

Advantech made significant progress in the intelligent energy management system (iEMS) in 2024. The system integrates digital professional technologies to provide a variety of functions for energy consumption monitoring and management, heating and air-conditioning energy efficiency management, and air compressor energy efficiency management. The system helps enterprises improve energy use, improve energy efficiency, deepen energy saving potential, and assists in carbon credits trading, reducing carbon emissions through digitalization. The management of online data drives offline improvements, providing concrete support for Advantech's transition towards green operations. As of 2025, the iEMS has been implemented at ANA, AJP (Tokyo), AESC, AASC, AKMC, ACL, ACN (Xian, Shanghai, and Beijing), AKR, AMY (ASSC), and ASG; planning and implementation at the new headquarters of ANA Tustin in Southern California and AJP(Nogata) is expected to be completed in 2026.

Training Program

To raise awareness of energy saving and carbon reduction among Advantech employees, the energy management unit irregularly arranges energy management-related training courses or external training courses. The types of courses include energy knowledge courses and professional technology courses. The summary of each course and participating units is shown below. The courses aim to enable energy management professionals to improve their energy management abilities and obtain relevant information in Taiwan and overseas, strengthening their knowledge acquisition and application.

Category	Content	Training unit
 Knowledge training	Energy knowledge introductory course: Describes the concepts of energy review, energy baseline, energy performance indicators, and energy procurement based on the management system's PDCA. The course also shares energy management practices to raise employees' awareness of energy saving and energy management.	All employees, new employees
	RE100 technical standard training: Members of RE100 and the Chung-Hua Institution for Economic Research are invited to give lectures, explain the RE100 technical standards and requirements, and share practices for companies to implement RE100.	Energy management units, investment units, procurement personnel, ESG and Corporate Sustainability Office, product and quality management departments, smart energy management product planning and design departments, major overseas locations of operations (AKMC, ACN, ANA, AEU, AURES), and suppliers
 Technical training	Technical training for SEU equipment: 1. Training on air conditioning and weak current monitoring systems 2. Equipment operation in the burn-in section	Plant facilities, general affairs Burn-in operators

4.4 Environmental Management

Highlights

No violations of environmental laws and regulations occurred, and no fines in the past 5 years.

0

The Kunshan Plant in China obtained the UL2799 Platinum Certification in 2025.

ACHIEVED

The Linkou Plant in Taiwan began reusing waste plastics in 2025, achieving circular economy.

ACHIEVED

AESC engaged a third party for verification of ISO14064 GHG inventory and obtained a verification statement.

NEW

4.4.1. Environmental Responsibility

Advantech is well aware of the environmental impact of our product manufacturing processes. We have therefore adopted ISO 14001 environmental management systems as the core framework for systematically identifying environmental risks and opportunities. We also ensure that all of our production sites comply with local regulations and meet stakeholders' expectations. We conduct internal audits every year to maintain the effective operation of management systems, and continue to ensure that ISO 14001 requirements are incorporated in daily operations through third-party verification.

In addition, we have planned comprehensive education and training, including water conservation measures, waste reduction, recycling, and other related policies and management mechanisms, so that employees will become more aware and feel a sense of responsibility towards environmental issues. In addition to training for new employees, all current employees are required to complete courses related to environmental issues every year, ensuring that all employees are familiar with Advantech's latest environmental policies. Our environmental policy was officially announced after being confirmed by the Board of Directors, and is disclosed on Advantech's official website to show our determination to fulfill our commitment to environmental sustainability.

Environmental Implementation Procedures and Actions

Implementation procedures	Management actions
Environmental protection-related management regulations Environmental management systems (ISO 14001) GHG inventory (ISO 14064-1) Energy management systems (ISO 50001)	■ Pollution control and prevention ■ Environmental responsibility training, such as: water conservation, waste reduction, and recycling ■ Environmental management system maintenance ■ GHG management ■ Supervise and improve energy performance

Environmental Promotion Goals

Advantech set environmental management targets for each RBU or production site in 2023, and plans to gradually achieve the reduction targets in 2024 and 2025. Taking into account the timeline of each reduction plan, if an RBU fails to reach an annual reduction target, its achievement of the target will be determined by comparing the final year (2025) with the base year (2023), as shown in the table below.

Item	Base year	Target		Implementation results (compared to the base year)	
		Y2024	Y2025	Y2024	Y2025
Water withdrawal (M³/people)	Y2023	2% decrease compared to the base year	2% decrease compared to the previous year or 4% compared to the base year	Each RBU achieved the target An average decrease of 3.01% (only AJMC did not achieve the target)	All RBUs achieved the target An average decrease of 22%
Waste volume (ton/production hours)		5% decrease compared to the base year	5% decrease compared to the previous year or 10% compared to the base year	Each RBU achieved the target An average decrease of 15.93% (only AJMC did not achieve the target)	Each RBU achieved the target An average decrease of 21% (only AJMC and AKSC did not achieve the target)
VOC emissions (only AKMC) (ton/production hours)		5% decrease compared to 2023	5% decrease compared to 2024 or 10% decrease compared to 2023	Achieved 55.51% decrease	Achieved 57% decrease

In addition, as the industry continues to make technological advancements and refine existing processes, overall process complexity has increased each year. In the past, the use of working hours as the intensity indicator has made it difficult to fully reflect actual operational differences, and is not conducive to tracking and comparing long-term environmental performance. Advantech thus switched to intensity indicators based on unit revenue starting from 2026, and set long-term targets for 2030 with 2024 as the base year. Taking into account the timeline of each reduction plan, if an RBU fails to reach an annual reduction target, it must explain the reason and its achievement of the target will be determined by comparing the target year (2030) with the base year (2024). The targets we have set are shown in the table below.

Annual short-term targets:

	Water withdrawal	Waste volume	VOC emissions
2026 targets	Compared to 2024 ↓ 3% (M³/revenue)	Compared to 2024 ↓ 3% (ton/revenue)	Compared to 2024 ↓ 6% (ton/revenue)
	Each RBU	Each RBU	Kunshan Plant, China (AKMC)

Long-term targets:

	Water withdrawal	Waste volume	VOC emissions
2030 targets	Compared to 2024 ↓ 10% (M³/revenue)	Compared to 2024 ↓ 10% (ton/revenue)	Compared to 2024 ↓ 10% (ton/revenue)
	Each RBU	Each RBU	Kunshan Plant, China (AKMC)

Advantech continued to implement environmental management mechanisms according to ISO environmental management systems in 2025, showing our strong commitment to green operations and sustainable development. We also planned and implemented environmental protection initiatives to improve resource use efficiency and environmental performance. We strengthened the environmental management framework and implemented green operations, pollution prevention, waste management, and green procurement through the Environmental Safety and Health Committee established by each production site, as well as regular management review meetings. This has enabled us to achieve energy saving, emission reduction, continued use of resources, and circular economy. Advantech's main locations of operations and production sites are working to obtain third-party certifications for environmental management systems, GHG inventory, and energy management systems. Certifications already obtained are shown in Table 4.4.1, which includes the new third-party certification for GHG inventory obtained by AESC in Europe. The scope of this section covers Advantech's main locations of operations and production sites worldwide, which account for 94.6% of our consolidated revenue.

• Table 4.4.1 Environmental Certifications Obtained by Advantech's Main Locations of Operations and Production Sites Worldwide

Certification \ Plant	Taiwan ACL	Taiwan Linkou ATMC	AKMC (Kunshan, China)	Japan AJMC	South Korea AKSC	United States AASC	Europe AESC
ISO 14001:2015	☑	☑	☑	☑	☑	☑	☑
ISO 14064-1:2018	☑	☑	☑	☑	☑		☑
ISO 50001:2018	☑	☑	☑				

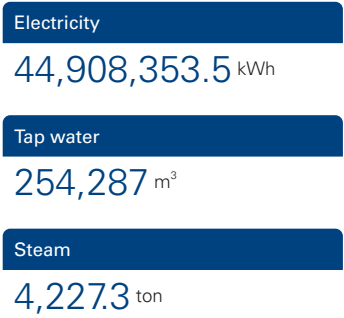
There were no fines for violating environmental laws and regulations in 2025. Environmental violations of Advantech's main locations of operations and production sites around the world in the past 4 years are summarized in Table 4.4.2.

• Table 4.4.2 Environmental Violations by Advantech's Main Locations of Operations and Production Sites Worldwide

Year \ Plant	Taiwan ACL	Taiwan Linkou ATMC	AKMC (Kunshan, China)	Japan AJP	Korea AKR	United States ANA	Europe AEU
2025	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0

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

■ Energy and resource input
■ Output



4.4.2. Energy and Resource Use and Waste Management

Water Resource Risk Management and Water Withdrawal/Wastewater Management

Advantech utilizes the World Resources Institute (WRI) Aqueduct Water Risk Atlas to confirm the water resource risks at major locations of operations and production sites (as shown in Figure 4.4.1), and discloses the sources of water withdrawal and the receiving water bodies for discharge in each region, as shown in Table 4.4.3. The analysis results show that Advantech's major locations of operations and production sites face low to medium water resource risks, except for the Kunshan Plant in China, which faces high water resource risk. Based on the results of the water resource risk analysis, we plan and manage our water resources according to the risk level at major locations of operations and production sites, ensuring effective and sustainable water use.

• **Table 4.4.3 Sources of Water Withdrawal and Receiving Water Bodies for Discharge by Advantech's Main Locations of Operations and Production Sites Worldwide**

Plant	ATMC	ACL	AKMC	AJMC	AKSC	AESC	AASC	Water Risk
Water withdrawal source	Shimen Reservoir	Xindian River	Yangtze River	Onga River	Paldang Reservoir	Brabant Water	Hetch Hetchy	
Water treatment plant	Guishan Water Resources Recycling Center	Neihu Wastewater Treatment Plant	North District Wastewater Treatment Plant	Septic Tank	Bupyeong Water Purification Plant	Municipal sewage system	San Jose-Santa Clara Regional Wastewater Facility	
Receiving water body	Nankan River	Keelung River	Taicang Tang	Onga River	Han Rive	Connected to the municipal wastewater treatment plant	South San Francisco Bay	

Low

Low

Low (0–1)

Low-Medium

Low-medium

Low-medium (1–2)

ACL

ATMC

AJMC

AKSC

AESC

AASC

Medium-High

Medium-high

Medium-high (2–3)

High

High

High (3–4)

AKMC

Extremely high

Extremely high

Extremely high (4–5)

• **Figure 4.4.1 Analysis of Water Resource Risks at Advantech's Main Locations of Operations and Production Sites Worldwide**

All of Advantech's offices and plants are located in developed industrial zones or parks within metropolitan areas, and tap water is their primary water source. They do not rely on groundwater or well water. Their production processes mainly involve assembly and are not water-intensive. Their water withdrawal needs are mainly for domestic purposes. As such, they do not have a significant environmental impact on water resources. Despite the relatively low water withdrawal risk, Advantech still systematically identifies and evaluates water resource use and wastewater management in accordance with ISO 14001 environmental management systems, identifying opportunities for water efficiency improvements and actively implementing water-saving management plans to reduce water consumption and wastewater discharge, so as to ensure the proper management of water resources. The total water consumption of Advantech's main locations of operation and production sites worldwide in the past 4 years is shown in Figure 4.4.2.

Advantech's plants continue to explore water conservation possibilities, and employees are required to receive annual environmental responsibility education and water efficiency management training (including water conservation concepts). In addition to using water-saving faucets and water-saving toilets, the plants also install rainwater recycling systems for toilet flushing and watering, which is performed by a smart watering system to save water. Regarding chiller systems used by the Taiwan Plant, smart temperature control is implemented to accurately control the temperature and humidity of the work areas, avoiding unnecessary water waste. The total water withdrawal of Advantech's main locations of operations in 2025 decreased by approximately 16,075 m³ compared to 2024. Each plant actively implements a number of water-saving measures to improve water use efficiency. In 2025, the Taiwan Plant replaced 2 chillers and repaired the landscape pond, improving the efficiency of the chillers to reduce water withdrawal. For the landscape pond, we adopted the management measure to gradually reduce the amount of water used for replenishment. The annual water withdrawal was reduced by approximately 9,194 m³ compared to 2024, improving the overall water efficiency. The factory buildings planned to be constructed at the original site of the plant in Japan were reduced by one, so their overall water withdrawal in 2025 decreased by 39% compared to 2024, a reduction of approximately 1,932 m³. The water consumption of Advantech's main locations of operations and production sites worldwide in recent years is shown in Table 4.4.4.

• **Table 4.4.4 Water Consumption at Advantech's Main Locations of Operations and Production Sites Worldwide**

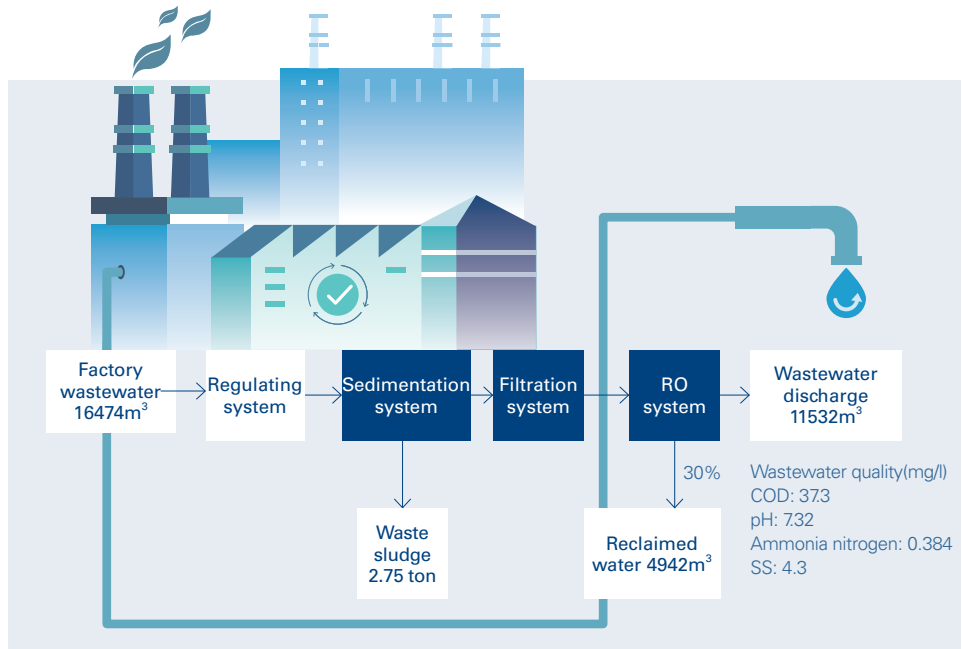
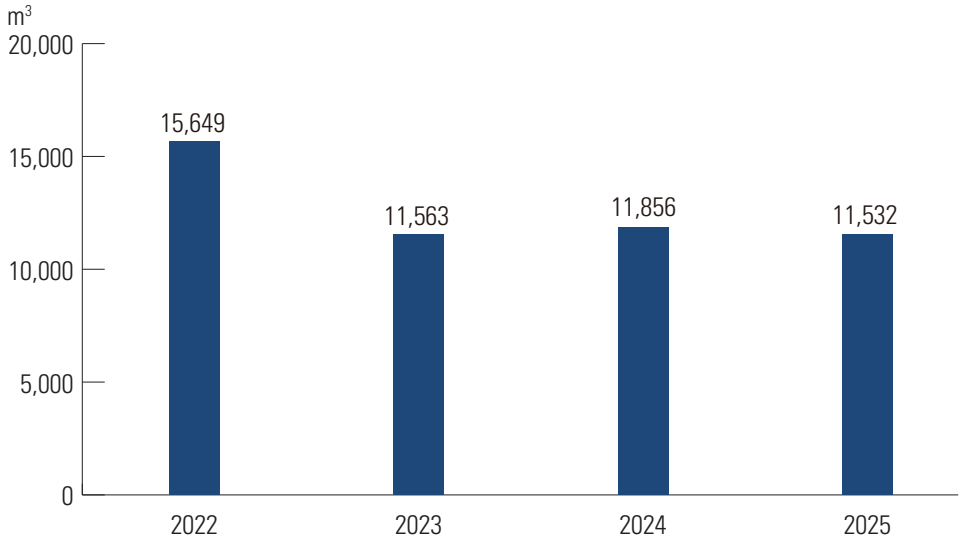
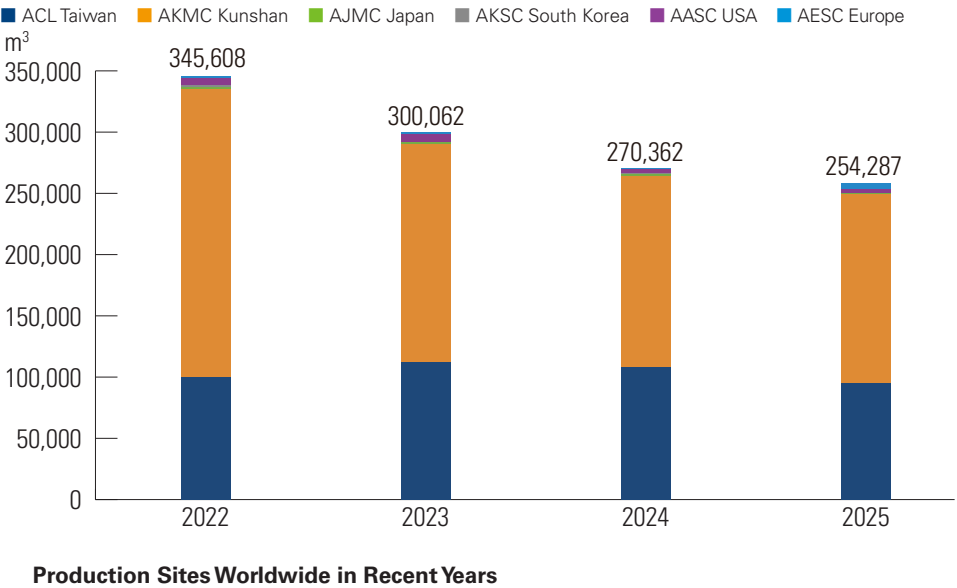
		2022	2023	2024	2025
Water withdrawal (m³)		345,608	300,062	270,362	254,287
Water discharge	Domestic sewage (m³)	226,277	198,481	177,397	166,469
	Industrial wastewater (m³)	15,649	11,563	11,856	11,532
Water consumption (m³)		103,682	90,019	81,108	76,286
The scope covers Advantech's consolidated revenue		92.3%	92.6%	92.8%	94.6%

*Note:

- Domestic sewage is calculated by multiplying water withdrawal by 70% minus industrial wastewater.
- Water consumption is calculated as water withdrawal minus water discharge.

Among Advantech's production sites, only the Kunshan Plant in China discharges industrial wastewater, no other production sites discharge industrial wastewater. The Kunshan Plant has its own wastewater treatment system, which uses neutralization reaction and biological treatment to first treat wastewater within the plant. The water quality of wastewater discharge is monitored in real time using the smart factory solution developed by Advantech: i-factory, ensuring that all wastewater meets quality standards before discharge. There were no penalties for non-compliance with water quality standards in 2025. The wastewater treatment process and quality of wastewater discharged by the Kunshan Plant are shown in Figure 4.4.3.

• **Figure 4.4.2 Water Withdrawal of Advantech's Main Locations of Operations and**



*Note: Among Advantech's main locations of operations and production sites, only the Kunshan Plant in China discharges industrial wastewater.

• **Figure 4.4.3 Industrial Wastewater Discharge of Advantech's Main Production Sites Worldwide**

Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

Waste Management and Circular Economy

Name of material topic	Please describe the importance of this material topic to Advantech
Circular economy	Advantech is driven by the corporate vision of “Enabling an Intelligent Planet,” and reduces waste and carbon footprint through recycling. We also consider how to change the linear process that generates waste into a closed-loop sustainable cycle for environmental sustainability and to improve resource utilization efficiency. This will mitigate the environmental impact of product manufacturing, while improving energy efficiency and the use of sustainable materials, improving the environmental benefits and competitiveness of our products.
Management strategy	■ We have established a circular strategy to design new products with an eco design and green production process to reduce waste and carbon footprint. ■ Advantech adopted the UL2799 management model for waste management, prioritizing waste reduction plans and increasing the recycling rate of waste to maximize the benefits of resource reuse. Disposal methods such as incineration and landfill are only used as a last resort for waste that cannot be reused.
Policy or commitment	Advantech is committed to making every effort to protect the environment, and strives to achieve zero pollution from production. We will fulfill our responsibilities as a global citizen by actively pursuing sustainable development. Advantech is committed to implementing green operations, green product design, pollution prevention, waste management, and green procurement. We work with customers, suppliers, and contractors to jointly establish a green supply chain from design and manufacturing to product transportation and services, implementing energy conservation, emission reduction, recycling, and circular economy.
Positive impacts	Creating a circular economy can improve the efficiency of product resource use, reduce the use of non-renewable resources, lower production costs, reduce waste, make products more eco-friendly, improve resource utilization efficiency, reduce the impact on the environment and product carbon footprint, and improve the environmental benefits and competitiveness of products.
Negative impacts	The inability to keep up with the trend of green products will reduce the environmental benefits and competitiveness of products. In the long term, it may lead to panic buying of virgin resources and raw materials, increase procurement volumes and waste disposal expenses, and also directly impact our reputation and brand image.
Actions in response to negative impacts that occur	The actions taken by Advantech in response to negative impacts are as follows: ■ Actively introduce recycled materials into the production process. ■ Prioritized green procurement of products with eco-friendly, energy-saving, water-saving, and green building material labels. ■ Adopted the UL2799 waste management model for waste to pursue sustainable use of resources.



Name of material topic	Please describe the importance of this material topic to Advantech
Overview of target achievement in 2025	■ A recycled material management mechanism was established on the supplier management platform, and recycled materials are taken into consideration when we are designing products. ■ The waste diversion rate at the Kunshan Plant reached 90%, obtaining the UL2799 Platinum Certification. The waste diversion rate of the Linkou Plant was 81%. Although it did not achieve the target of 90%, it increased by 17% compared to 2024. ■ The amount of green procurement (e.g., products with the Green Mark, recycled plastic products, etc.) by ACL was NT\$78.45 million. ■ In 2025, Advantech's main locations of operations and production sites achieved a 95% recycling rate for industrial waste outsourced for treatment; 5% was incinerated, and no waste was sent to landfills.
2026 targets	■ The percentage of recycled materials used in the mechanism casing of gold medal products reaches 30% recycled plastics and 10% recycled metals, depending on the material. ■ Adopt and apply recycled materials in specific products, and increase the percentage of new products that use recycled materials to 10%. ■ Comprehensively implement short/medium/long-term goals for sustainable packaging materials, and prioritize and require the use of sustainable materials for product packaging. ■ Continue to engage in green procurement (e.g., eco-friendly products, recycled materials, etc.) ■ The waste diversion rate of Linkou Plant and Kunshan Plant reaches 90%. ■ Advantech's main locations of operations and production sites do not send any waste to landfills.
2030 targets	■ The percentage of recycled materials used in the mechanical parts of gold medal products reaches 50% for recycled plastics and 20% for recycled metals (steel)/80% (aluminum), depending on the material. ■ Adopt and apply recycled materials in specific products, and increase the percentage of new products that use recycled materials to 50%. ■ Continue to engage in green procurement (e.g., eco-friendly products, recycled materials, etc.) ■ The waste diversion rate of Advantech's production sites worldwide reaches 90%. ■ Advantech's main locations of operations and production sites do not send any waste to landfills.

About Advantech's Sustainability Report

Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

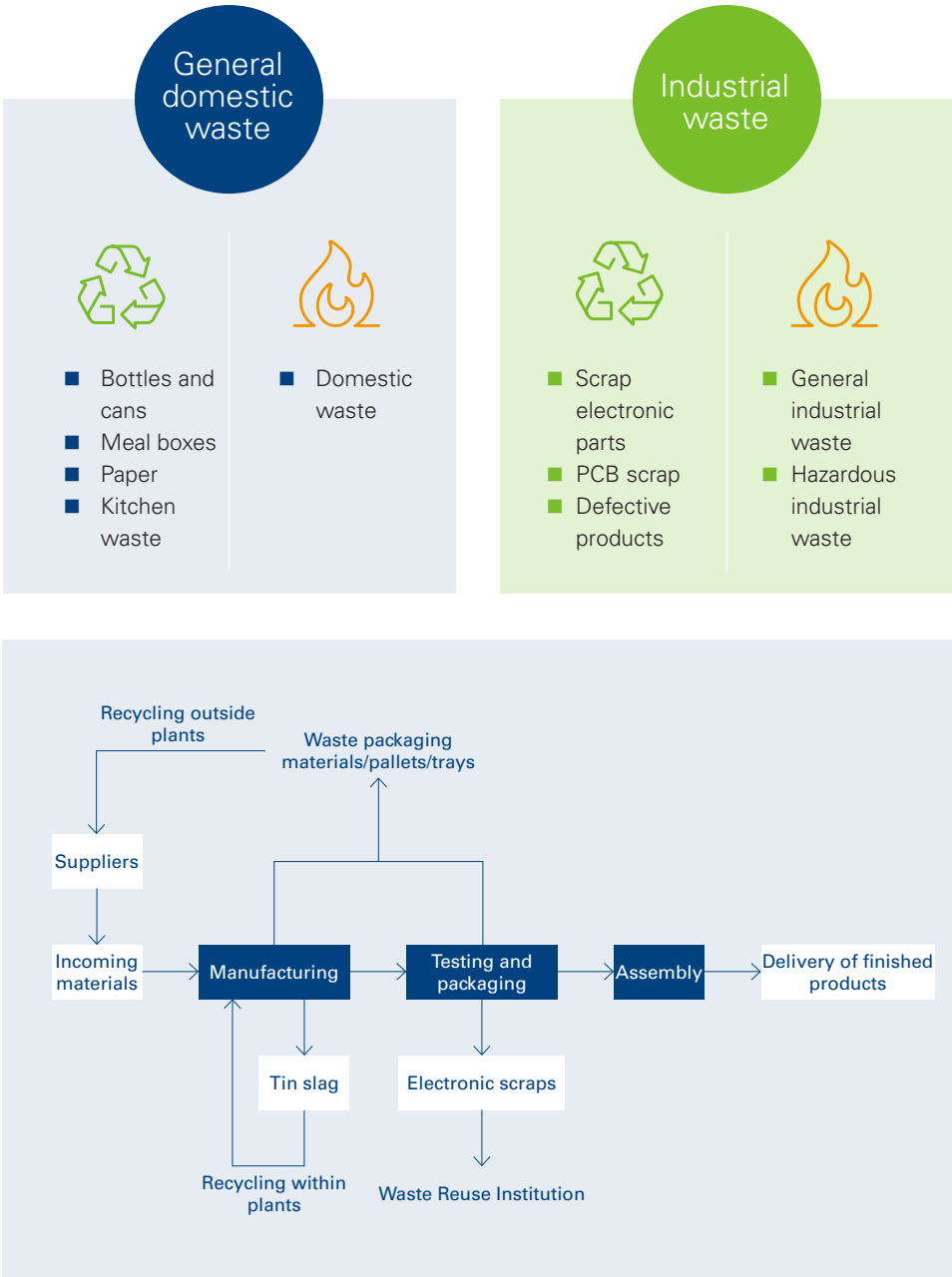
Name of material topic	Please describe the importance of this material topic to Advantech
Key action plans or programs in 2025	- Formulated a sustainable raw materials policy, launched an implementation plan, and gradually introduced recycled materials into specific models. - Implemented plans to introduce recycled materials, introduced recycled plastics and recycled metals into representative products, commenced mass production, and continued to expand applications. - Used the UL2799 management model to verify the reduction, recycling, and reuse of waste within Advantech. - Carried out green procurement. - Encouraged electronic waste partners to apply for the Responsible Recycling (R2) certification.
Effectiveness evaluation	- The progress of the Sustainable Raw Materials Project is explained and reported to the Sustainable Development Committee. Committee members provide suggestions for the continuous optimization and improvement of circular economy and resource use efficiency. - The waste diversion rate is periodically calculated to confirm the effectiveness of waste reduction, recycling, and reuse, and the progress is reported to the EHS Management Review Committee to ensure the achievement and tracking of reduction and recycling goals.

Name of material topic	Please describe the importance of this material topic to Advantech
Stakeholders affected by this material topic and actions taken by Advantech	- Employees: Policies are included in employee education and training courses, and HR is asked to include them in compulsory online courses. Awareness campaigns and audits of waste sorting are conducted from time to time. - Customers: Respond to customer questionnaires and audits, and provide supporting records as needed. - Suppliers and contractors: A supplier conference was held for Tier 1 suppliers in 2024; the concept of sustainability management and goals were mentioned at the conference, encouraging suppliers to jointly implement circular economy-related projects with Advantech. We encouraged waste disposal companies to apply for the R2 certification in 2025. - Shareholders and investment institutions: Results are disclosed in Advantech's annual report and sustainability report. - Partners: Respond to inquiries from partners and provide supporting records as needed. - Government/Associations/Media: Respond to inquiries from government agencies and related associations and provide supporting records as needed.

Note: For more information on sustainable raw materials and recycled materials, please refer to [Section 4.1 Eco Design and Product Sustainability Liability](#).

Advantech is committed to implementing the zero waste to landfill policy, as well as the industrial waste reduction, recycling, and reuse projects of all plants. Starting in 2024, Advantech's Taiwan Plant began implementing management based on the UL2799 zero waste to landfill standard, which was also implemented at the Kunshan Plant in 2025. Advantech no longer disposes of waste via landfilling and is further optimizing waste management. We reevaluated the types and flow of waste to find more opportunities for waste reuse, reducing the possibility of waste directly entering an incineration plant, thereby increasing the waste diversion rate. In 2025, the self-assessed diversion rate of Advantech's main locations of operations and production sites worldwide was 81% (calculations for AASC, AESC, AJMC, and AKSC only include industrial waste, and do not include the waste recycled by plants on their own), an increase of 6% compared to 2024, showing the effectiveness of Advantech's efforts in waste reduction and circular use worldwide. At the same time, Advantech complies with ISO14001 management system standards to ensure that waste disposal companies and disposal methods comply with local regulations. Advantech regularly audits waste contractors in accordance with the law to stay up-to-date on the disposal of waste, ensuring that all waste generated from our plants is disposed of in accordance with the law. When selecting waste contractors, we evaluate whether they have obtained/passed the relevant qualifications. After waste leaves our plants, we confirm whether it was lawfully disposed of based on government reporting websites or the certificate of disposal issued by the contractor. If necessary, we will also conduct on-site inspections at the waste disposal plant to ensure that the waste handling process and the contractor's quality meet requirements of Advantech and regulations. There were no major breaches of contracts or violations of regulations by any waste contractors in 2025.

In terms of waste recycling and reduction, in addition to searching for companies capable of using waste to produce recycled materials, Advantech also works with upstream suppliers, such as recycling and reuse of various packaging materials, wooden pallet reuse, and PCB design changes to reduce edge scraps. Within plants, solder dross is reused to reduce waste. We are working with suppliers and waste disposal companies to minimize the amount of waste incinerated and thereby reduce the impact on the environment, in hopes of achieving the goal of sustainable resource use. In addition, Advantech's Kunshan Plant launched a project in 2023 to change the liquid coating process to a powder coating process. The powder coating process was implemented in 2024, and the amount of waste generated from coating in 2025 was reduced by approximately 48 tons compared to 2024. Advantech's waste management model is shown in Figure 4.4.4.

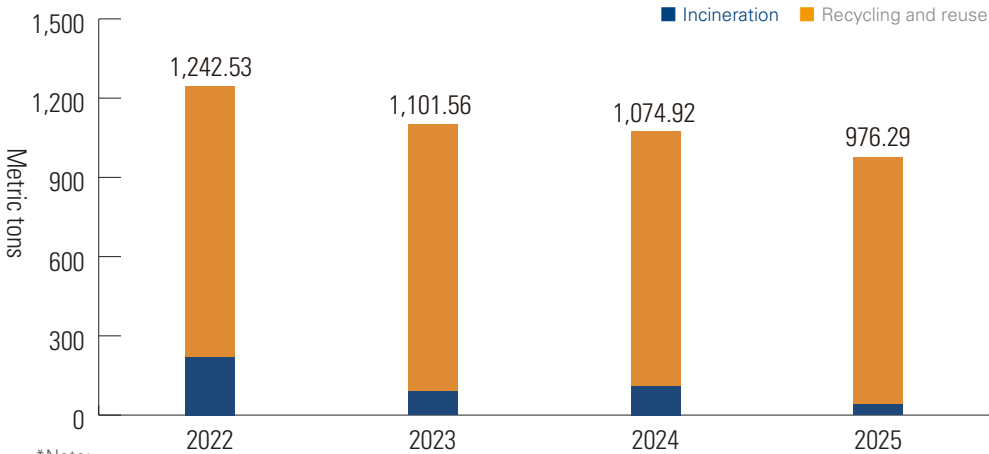


• **Figure 4.4.4 Advantech's Waste Management Model**

Statistics show that the total amount of industrial waste outsourced for disposal by Advantech's main locations of operations and production sites in 2025 was approximately 976.29 metric tons, of which non-hazardous waste was 896.80 metric tons (91.86%) and hazardous waste was 79.49 metric tons (8.14%). In terms of hazardous industrial waste, the recycling rate was 60% (47.50 metric tons), and 40% (31.99 metric tons) was incinerated. As the weight of domestic waste is the estimated weight in the contract, more detailed information on waste disposal cannot be obtained. Therefore, only information on the disposal of industrial waste is disclosed. For waste disposal methods, please refer to Table 4.4.5 and Figure 4.4.5.

• **Table 4.4.5 Waste Disposal Methods of Advantech's Main Locations of Operations and Production Sites in 2025**

	Waste generated	Disposal transfer: Waste recycled/reused	Direct disposal: Incineration	Direct disposal: Landfill
Hazardous industrial waste (Metric tons)	79.49	47.50	31.99	-
Non-hazardous industrial waste (Metric tons)	896.80	884.79	12.01	-
Total (Metric tons)	976.29	932.29	44.00	-



*Note:

1. Statistics on the weight of waste generated by the Taiwan and Kunshan Plants are the data reported by each plant to the competent authority, while the statistics for plants in Japan, the U.S., and Europe are based on outsourced disposal data.

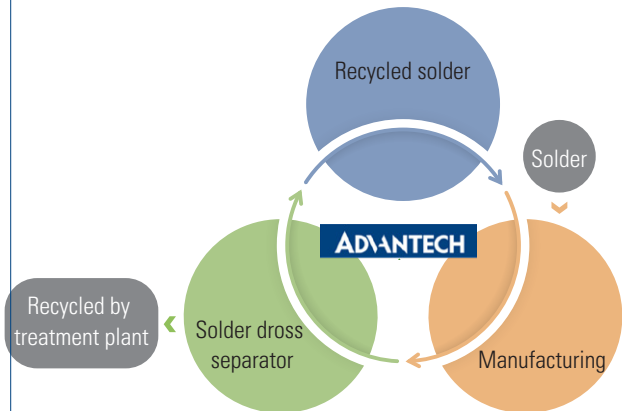
2. There are no statistics for South Korea from 2022 to 2023.

• **Figure 4.4.5 Industrial Waste Disposed by Advantech's Main Locations of Operations and Production Sites in Recent Years**

Featured Case Study:
Circular Economy Activities at the Taiwan Plant

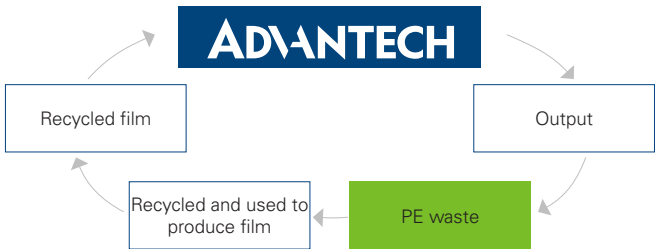
Introduction to the Waste Solder Recycling and Reuse Project

Advantech's Taiwan Plant continues to implement the Waste Solder Recycling and Reuse Project based on the concept of circular economy, as well as the principles of resource reuse and waste reduction. It successfully recycled and reused hazardous solder dross using a solder dross separator. It recycled 3.85 tons of waste solder in 2025, effectively reducing the amount of waste solder generated and the amount of solder purchased.



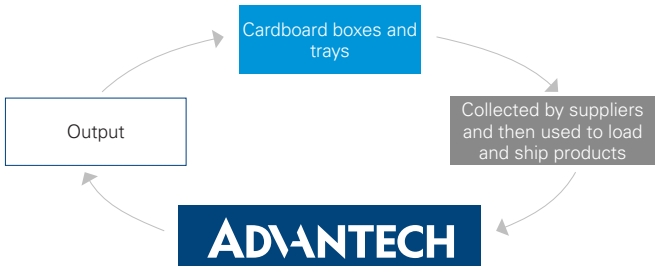
Introduction of recycled waste plastic packaging materials

Advantech actively implements circular economy by establishing a recycling management mechanism for waste plastic packaging materials generated by processes. We collaborated with professional recycling companies to sort, recycle, and process waste plastics into recycled plastic pellets, which are used to produce film and reintroduced as packaging materials, achieving a circular economy for packaging materials. In terms of management, we continue to optimize the waste sorting and quality control process to ensure that recycled materials have value for reuse. We continue to evaluate the uses and feasibility of recycled materials to gradually increase the percentage of recycled materials used, improve resource use efficiency, and reduce the environmental impact throughout the product life cycle. For more information on the eco design of products and evaluation items for the use of recycled materials, please refer to [4.1 Eco Design and Product Sustainability Liability](#).



Recycling and reuse of packaging materials

In terms of waste management, Advantech not only recycles and reuses waste within plants, but also invites upstream suppliers to participate in packaging recycling and reduction activities. Suppliers collect packaging materials (cardboard boxes, trays, etc.) used for the previous delivery when they deliver materials. They then use the packaging materials to package products that are delivered to Advantech, reducing and recycling packaging materials. Approximately 39 tons of packaging materials were repeatedly used between Advantech and suppliers in 2025.



Featured Case Study

Circular economy activities at the Kunshan Plant



Advantech's Kunshan Plant implemented the UL 2799 project, and implemented hierarchical management for source reduction, sorting and collection, recycling, and final disposal according to its waste management approach, covering production lines, warehouses, and logistics areas. The plant introduced high-value recycling and reuse methods, strengthened supplier responsibility for recycling and traceability documents, and established monthly KPIs (recycling rate, landfill rate, and hazardous waste compliance rate) and third-party audit mechanisms to ensure the completeness and traceability of data. It implemented the zero waste pathway and obtained the highest level UL 2799 platinum certification in 2025.



Featured Case Study

Environmental activities in the plant in Europe

Energy and resource reduction and GHG emissions reduction

Advantech Europe installed heat pumps to replace the gas heating system, and regularly maintains heating and ventilation equipment to ensure its efficient operation. It reduced natural gas consumption and GHG emissions by 10,203 m³ compared to 2024, strengthening Advantech Europe's commitment to sustainability.

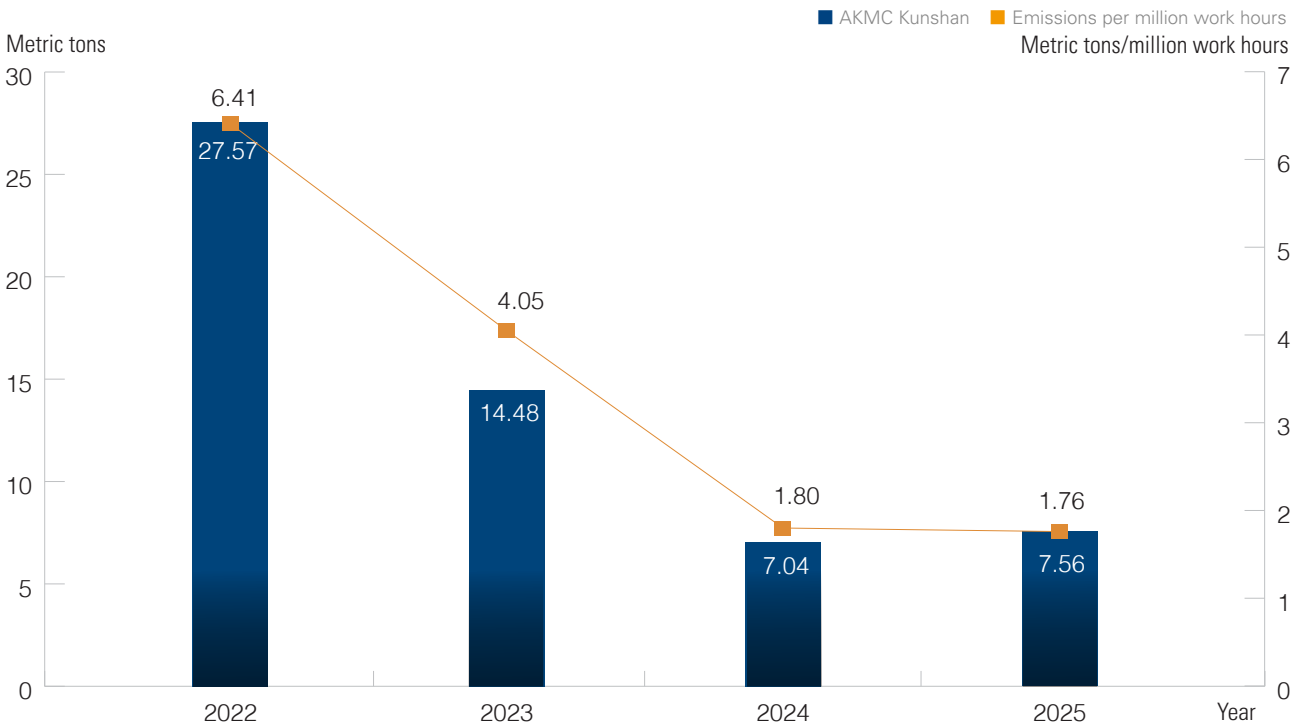


Air Pollutant Management

Air pollution data and information disclosure are summarized into the following 3 key points:

- Advantech's production processes do not generate ozone-depleting substances (ODS), so there are no ODS emissions.
- Process emissions of the Kunshan Plant in China are the main source of VOCs, and VOCs emissions are all uploaded to the government's environmental reporting website in accordance with local regulations. Calculations based on the reporting website show that annual VOCs emissions partially meet local regulatory requirements.
- Advantech's other production sites mainly have assembly processes that do not generate much air pollution, and do not have any NOx, SOx, or VOCs emissions.

Advantech's Kunshan Plant in China has adopted effective controls for VOCs of volatile organic compounds (VOCs). It manages emissions through online continuous monitoring and outsourced testing, and improves equipment efficiency to reduce emissions into the environment. The plant has implemented a number of improvement projects in recent years, such as the transformation of process technologies, switching from liquid coating to powder coating, and improving the efficiency of production line equipment, effectively reducing energy consumption and waste gas and VOCs emissions. Due to the increase in production volume in 2025, VOCs emissions in 2025 increased by approximately 7.4% compared to 2024. However, emissions on a unit work hour basis still show a downward trend, as shown in Figure 4.4.6.



*Note: Among Advantech's main locations of operations and production sites, only the Kunshan Plant in China has VOCs emissions.

• **Figure 4.4.6 VOCs Emissions of Advantech's Main Locations of Operations and Production Sites in Recent Years**



4.4.3 Biodiversity and Forest Protection

Advantech began paying attention to biodiversity and forest protection issues in 2022, and joined the Taiwan Nature Positive Initiative (TNPI) launched by BCSD Taiwan. We took even more proactive actions on this issue to increase our resilience, and utilized our expertise in IoT to empower nature conservation. In 2025, Advantech's headquarters and overseas subsidiaries organized numerous activities on biodiversity topics.

Activities of the TNPI that Advantech participated in during 2025 are listed below:



Chief Sustainability Officer Tea Party during the Lunar New Year in 2025



Post CBD COP16 Observations and Business Trends Forum



Nature Platform Workshop



Nature Experts Engagement Tea Party



Post UNFCCC COP30 Seminar on Nature Issue Observations and Nature Positive Transformation

Performance Improvements Related to the Taskforce on Nature-related Financial Disclosure (TNFD)

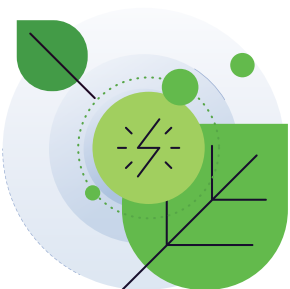
Advantech plans to conduct biodiversity risk assessments once every 2 years (the scope includes upstream supply chain, Advantech's important locations of operations, and important downstream customers). The course of events is as follows:

In 2023, we conducted the first assessment of biodiversity risks of our locations of operations and supply chain (scope: headquarters and China), and identified major risks, affected locations, potential risks, and risk management recommendations.

In 2024, the scope of evaluation was expanded to downstream customers.

In 2025, Advantech continued to make improvements based on results of the previous year, and published an integrated Taskforce on Climate- and Nature-related Financial Disclosures (TCNFD) Report on the official website.

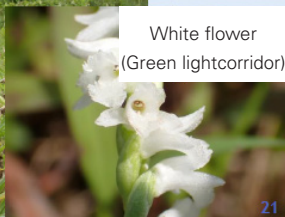
In 2026, Advantech continued to update the TCNFD Report on the official website. Advantech's biodiversity commitment is also disclosed on the official website.

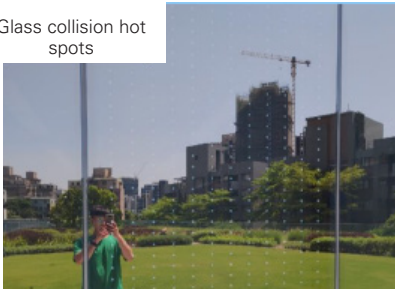


Technology and Nature Thriving Together: Protected Species Discovered in Advantech's Linkou Smart Technology Park, Strengthening the Blueprint for Ecological Restoration

Advantech's Linkou Smart Technology Park covers an area of approximately 3.477 hectares and is located in Linkou Industrial Park (Zone 3) at an altitude of approximately 250 meters (Spatial Planning Act: Type 1 urban-rural development zone). It is adjacent to Shuiduike River. Advantech's Linkou Smart Technology Park is located in a wildlife refuge (Type 1 urban-rural development zone: animal and plant refuge buffer corridor) at the core of Linkou Special District (Taoyuan part). Modern buildings and some greening and beautification plants are visible. Advantech partnered with the local government to adopt trees in surrounding areas of Linkou Smart Technology Park. In 2025, we conducted a biodiversity survey at the Advantech Linkou Smart Technology Park for the first time. The survey items included: plants and animals (including mammals, birds, butterflies, amphibians, reptiles, and insects) to compile an inventory of biodiversity information and plan the future direction for conservation. Based on the survey, we identified feasible eco-friendly measures that can be immediately taken for plants and offices, such as: to adjust the location where trash is stored in the park, to avoid excessive weeding where rare flowers and plants grow, and to avoid placing unnecessary snake repellent and rat poison. Going forward, we will support the government policy to jointly promote the vision of conservation and symbiosis.

Findings of the survey are as follows:

Category	Discoveries	Recommended follow-up action plan
Plants	Discovered the rare plant: <i>Spiranthes sinensis</i> <i>Spiranthes sinensis</i> is a small terrestrial orchid native to Taiwan. <i>Spiranthes sinensis</i>, commonly known as Chinese ladies' tresses, has been included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora. <i>Spiranthes sinensis</i> is a Grade II protected plant with extremely high requirements on environmental conditions, making it a typical indicator species that reflects the health of the ecological environment.  Spiranthes x hongkongensis	■ <i>Spiranthes sinensis</i> about 10 to 45 cm tall. It blooms from February to May each year. However, it looks like a weed when it is not blooming and can easily be removed by gardeners. The protection measures we took in the Linkou Campus included asking the gardening company to not perform weeding before the flowering period and while it is blooming. ■ Depending on future needs, we will plan educational activities with <i>Spiranthes sinensis</i> as the theme to help employees better understand the ecology of the park and raise their protection awareness.

Category	Discoveries	Recommended follow-up action plan
Birds, butterflies, and insects	■ Birds: The survey found that there were birds from urban areas, forest, farmland, and plains. Alien bird species accounted for 29% and native bird species accounted for 71%. The birds were observed carrying nesting materials and drinking water from the landscape pool in the park. Hot spots where the reflection of windows caused glass collisions of birds were also found. ■ Butterflies and insects (rhinoceros beetles, stag beetles, and hornets): Compared with records in 2019, a total of 14 butterfly species (an increase of 12 species) were observed in the survey this quarter, the majority were <i>Pieris rapae</i>. Glass collision hot spots  <td> ■ Continue to maintain the green environment in the park to serve as a respite space and living corridor for nearby animals. ■ For mammals and birds: Reduce unnecessary use of herbicides, rat poison, and snake repellent. Regularly clean the open top trash cans in the park to prevent stray cats and dogs from searching through the trash and to drive away wild animals. Set up measures to reduce glass collisions of birds, and retain the landscape pond in the park to provide drinking water for birds or animals. ■ Plant nectar plants and reduce excessive weeding in the part to facilitate the reproduction of butterflies and insects. </td>	■ Continue to maintain the green environment in the park to serve as a respite space and living corridor for nearby animals. ■ For mammals and birds: Reduce unnecessary use of herbicides, rat poison, and snake repellent. Regularly clean the open top trash cans in the park to prevent stray cats and dogs from searching through the trash and to drive away wild animals. Set up measures to reduce glass collisions of birds, and retain the landscape pond in the park to provide drinking water for birds or animals. ■ Plant nectar plants and reduce excessive weeding in the part to facilitate the reproduction of butterflies and insects.
Amphibians, reptiles	■ Reptiles discovered in the park include <i>Japalura</i>, <i>Bungarus multicinctus</i>, <i>Trimeresurus stejnegeri</i>, and <i>Protobothrops mucrosquamatus</i>. ■ Amphibians include the native species <i>Duttaphrynus melanostictus</i> and <i>Fejervarya limnocharis</i>, and the foreign species <i>Polypedates megacephalus</i>.	
Mammals	Images of pangolin, Formosan masked palm civet, and Formosan Ferret-badger were unexpectedly captured by an infrared camera, showing that wildlife activities have been preserved in the park and nearby mountainous areas.  ■ Pangolin ■ Formosan masked palm civet ■ Formosan Ferret-badger <td></td>	

Furthermore, the Linkou Smart Technology Park is also committed to reducing its negative environmental impacts, and obtained the Green Building Label (Gold) and Smart Building Label (Qualified) certificates from the Ministry of the Interior in 2025. These honors are not only recognitions of the park's hardware design, but also reflect the leadership of Advantech in the development of smart green parks.



From Removal to Restoration: Advantech Assists the Society of Wilderness in Taking Action to Protect Wetland Diversity in the Xizhi and Neihu Area

Advantech's headquarters is located in Neihu District, Taipei City. We have partnered with the Society of Wilderness to support wetland ecological conservation actions in the Xizhi and Neihu area, and provide regular support for Cuihu, Jinmianshan, and Xinshan Dream Lake. The results of our support are shown in the table below, and the total number of participants in the year was 217.

Theme	Event
Annual ecological guided tour	Daku River night ecology tour Neihu River night ecology tour
Volunteer empowerment courses	Theme 1: Freshwater fish and water quality Theme 2: Ecology of Taipei City Theme 3: Sharing the ecological landscape of Wufengang Stream in Zhongmei Theme 4: Moths in the Order Lepidoptera
Removal of alien fish and plant species at Xinshan Dream Lake	Removal of alien fish species in Xinshan Dream Lake Removal of alien plant species at Xinshan Dream Lake
Manual trail maintenance at Xinshan Dream Lake	Trail maintenance at Xinshan Dream Lake

Sustainable Forests and Green Offices

Advantech's headquarters and major overseas business units have implemented green office plans. We are encouraging paperless operations, doublesided printing, paper recycling and reuse, and prioritizing the use of paper made from sustainable forests or recycled paper certified by the Forest Stewardship Council (FSC) for office use and daily use. In terms of green packaging material, all cardboard boxes used by Advantech for shipping are made from recycled paper. We also provide customers with the option of using FSC-certified sustainable forest cardboard boxes to meet market requirements.

In terms of forest conservation progress, Advantech sponsored the "Taichung Dadu Tableland Afforestation Project" of the Taiwan Reforestation Association with the goal of producing 6,000 saplings of 75 species, which must cover more than 70% of the native species in coastal areas and shallow mountains of Taichung. The saplings are provided to Taichung City Government for reforestation, and also provided to other government agencies for afforestation for public welfare purposes. The funding will be used to plant saplings, to cultivate saplings of native species, for mountain and forest ecological education, and to monitor sapling growth. This project is expected to support the afforestation of 0.8 hectares, which will absorb 1.76 metric tons of carbon. Actual quantitative results are as follows:

- 1. Phenology and seed collecting: In 2025, 166 seeds were collected in Taichung.
- 2. Sapling production: In 2025, a total of 134 species and 1,217 pots were planted.
- 3. Tree nursery inventory: In the third quarter of 2025, the tree nursery inventory of Taichung included 37,936 saplings of 167 native species.
- 4. A total of 18,194 saplings of 192 native species were planted in Taichung
- 5. A total of 43 tree planting and environmental education activities were held with a total of 3,301 participants.
- 6. Ecological education activities: In 2025, a total of 3 ecological tours and 2 reforestation volunteer training sessions were held.
- 7. Relevant reports and videos: There were 8 news reports in 2025.



Biodiversity Initiatives of Advantech's Overseas Subsidiaries

- **Advantech USA:** This is the second year Advantech has partnered with the Arbor Day Foundation in an afforestation project to support Earth Day. Advantech has made a commitment to plant thousands of trees in damaged forests in the U.S. and across the world, dedicating our efforts to restoring biodiversity and improving air pollution. This initiative not only shows our determination to fulfill our corporate social responsibility (CSR) and achieve ESG and sustainable development goals, but also plants trees to contribute to climate change mitigation, so that we can create a greener future environment.
- **Advantech Europe:** The bee program has been upgraded. Advantech Europe is actively implementing biodiversity initiatives, and began implementing the Beehive Project next to the AESC Office Building in 2024 to create a friendly habitat for important pollinators, bees. Bees play an indispensable role in the ecosystem and the food supply chain. This is not only an environmental initiative, but also an experiment of coexistence with nature starting from the office. We began using new beehives in 2025, further expanding the space for bees in hopes of creating a safe, healthy, and vibrant environment for a species that is critical to the ecosystem and food supply chain.
- **Advantech Brazil and India:** At Advantech, we firmly believe that sustainability is not some vague vision, but a commitment that needs to be gradually implemented in all parts of the world. From South America to Asia, different social and environmental challenges are driving us to respond to global issues with local actions. At Advantech Brazil, we planted 25 trees to symbolize 25 years of local efforts in response to the challenges of deforestation and climate change, as well as our efforts in the restoration of agriculture and forests, carbon absorption, and co-prosperity with local communities. At Advantech India, we went on campus and planted 100 saplings with 200 students to restore the glory of the "Garden City" and sow the seeds of environmental responsibility for the next generation.
- These tree planting initiatives not only offset carbon emissions, but are also practices for ecological restoration, community involvement, and imparting education. They show that Advantech is committed to innovation and sustainability, and continues to create a positive impact on the Earth and human society.
- **Advantech China:** Advantech held a biodiversity parent-child event in Shanghai with the theme "Explore the Green Wonderland." More than 170 Advantech employees and their family members participated in the hiking activity, the biodiversity guided tour of the greenhouse garden, and handicraft activities that concluded the event.

Message from the Executive Management

01 Sustainability Vision and Goals

02 Corporate Management and Governance

03 Innovation and Services

04 Green Operations

4.1 Eco Design and Sustainability Liability of Product

4.2 Climate Change Strategy and Actions

4.3 Greenhouse Gas (GHG) Inventory and Energy Management

4.4 Environmental Management

05 Talent and Employee Relations

06 Altruism and Social Welfare

Appendix

Biodiversity Volunteer Services

Every Advantech employee enjoys 2 days of paid volunteer leave each year. In 2025, Advantech's headquarters engaged in local volunteer activities on biodiversity topics based on the location of each branch. Allowing employees to experience performing ecological work while on paid leave achieves both public welfare and sustainability.

Event name	Location	Theme	Photos
Earth Day - Knowing Mountains to Clean Mountains, Protecting the Beauty of the Banping Lake Wetland	Kaohsiung	Advantech volunteers participated in local activities in Kaohsiung under theme of "Knowing Mountains to Clean Mountains," and attended ecological explanation activities, venue cleaning, and introductory courses for plants in important wetlands in Kaohsiung.	
World Environment Day - Dadu Trail Restoration Volunteer Work	Taichung	On World Environment Day in 2025, (6/5), we went to Dakeng District, Taichung, to repair the wooden trail, repair the hiking trail, and build catch work in mountain areas.	
World Environment Day Volunteer Activity - Repair the Shuangxi Arboretum Trail	Kaohsiung	On World Environment Day in 2025 (6/5), Advantech's Kaohsiung employees assisted in repairing trails and environmental cleaning before a typhoon struck. Volunteer participation in the activities raises awareness of the natural environment, local ecology, and public space maintenance.	
Earth Day Volunteer Activity - Donda River Volunteer Seed Planting	Taichung	To support Earth Day, we invited employees and their families to go into nature/ water areas and participate in ecological conservation and environmental education. They mainly assisted in cultivating the native species Hibiscus taiwanensis and learned about local ecological characteristics of Taichung.	

Event name	Location	Theme	Photos
Earth Day – Exploring Citizen Science in the Manyueyuan National Forest Recreation Area	Taipei	With Earth Day as the theme, participants used the citizen science app iNaturalist to produce ecological records and participated in forest experience activities under the guidance of professional mentors.	
The Society of Wilderness Taiwan X Advantech Corporate Volunteer Activity	Taipei	Advantech partnered with the Society of Wilderness in organizing volunteer activities to maintain the habitat at Wugu Wetland. This event focused on wetland conservation, and led volunteers to participate in the removal of alien species and beach maintenance, so that employees could understand the importance of wetlands and jointly protect precious natural resources in Northern Taiwan.	
Kaohsiung Wild Bird Society X Advantech Corporate Volunteer Activity	Kaohsiung	In 2025, Advantech supported World Migratory Bird Day by partnering with the Kaohsiung Wild Bird Society in organizing a half-day ecological volunteer service in Niaosong Wetland, leading Advantech volunteers to learn more about the species and ecological environment of Niaosong Wetland, and jointly support habitat conservation actions.	