

**HIWIN®**



**ESG REPORT 2023**

# HIWIN TECHNOLOGIES CORP. HIWIN ESG REPORT 2023

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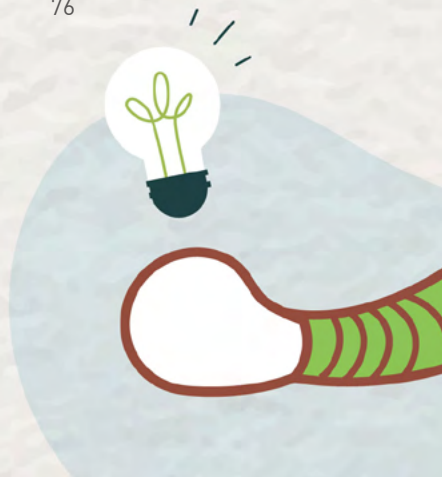
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# 01

## Foreword





## 1.1 Chairman's Statement

In 2023, the world saw the lifting of restrictions following the COVID-19 pandemic. However, international wars, rising interest rates, inflation, and unstable economic growth continued to challenge business strategies. In the face of fluctuating economic conditions, HIWIN made thorough preparations and responsive measures to tackle the most severe challenges. The pressing climate issues have taught us to minimize risk impacts with resilience and to seize the opportunities that arise from these challenges.

HIWIN's consolidated net income in 2023 was US\$802.8 million, with net profit amounting to US\$59.6 million. HIWIN was once again ranked in the top 5% in the 10<sup>th</sup> Corporate Governance Evaluation among listed companies, and the HIWIN brand was ranked in the Top 25 Best Taiwan Global Brands for four consecutive years.

HIWIN's sustainable vision blueprint includes several goals to be achieved with the cooperation of our partners. Through the following four sustainable roles, we undertake various actions, hoping that all stakeholders and those who care about HIWIN can better understand our commitment to sustainable development and our core competencies.

- **An Achiever of Common Good in Society**

Talent cultivation and passing down knowledge and experience have always been integral to HIWIN's educational philosophy. Initiatives such as establishing libraries in elementary schools, sponsoring books, providing English teaching, and demonstrating STEAM education continue to be part of our efforts. We also sponsor the HIWIN Doctoral Dissertation Award and the HIWIN Thesis Award, and engage in industry-academia cooperation with several universities. These efforts focus on cultivating key talents in smart manufacturing, artificial intelligence, and sustainable energy technology to promote industrial development and economic prosperity.

- **A Builder of Diversity in the Workplace**

Our global operations have made us realize the cultural differences across regions. HIWIN nurtures local talents in our global subsidiaries and operates through localized management. In Taiwan, besides creating a suitable workplace environment, we offer comprehensive training systems and salaries above industry standards. We also implement various measures for building a friendly work environment, such as designated parking spaces for pregnant employees, breastfeeding rooms, and Employee Assistance Programs (EAPs) to assist employees in need, especially women. As of the end of 2023, the proportion

of female supervisors increased to 13.6%, women in STEM positions to 12.5%, and the key talent retention rate rose to 94.6%, marking the best performance in five years and showcasing the diversity and strength of our organizational team.

- **A Practitioner of Green Manufacturing**

In 2023, HIWIN made significant strides in sustainable operations. In response to the Paris Agreement's goal of limiting global warming to 1.5°C, we signed up for the Science-Based Targets initiative (SBTi), committing to achieving net-zero emissions by 2050. In our carbon reduction efforts to protect the planet, we have reduced greenhouse gas emissions by over 7% in Scopes 1 and 2 for two consecutive years. We are also calculating the carbon footprint of four targeted products to identify precise carbon reduction improvements and working with supply chain partners to achieve the goal of reaching net-zero.

- **An Innovator of Industrial Transformation**

Continuous innovation is a crucial concept for sustainable operations. In 2023, HIWIN's "Intelligent 4.0 Guideway i4.0GW<sup>®</sup>" won the Silver Award at the 32nd Taiwan Excellence Award. The "Underwater Direct Drive Rotary Table" received the Outstanding Award at the Awards of Robotic System Integration and the Award for Outstanding Sustainability by the British Standards Institute (BSI). Through digital transformation and smart machinery research and development, HIWIN not only empowers key components but also aims to upgrade the entire precision machinery industry and provide advanced manufacturing capabilities.

HIWIN Chairman & CEO  
**Eddie Chuo**

June 28, 2024



## 1.2 Honors & Awards



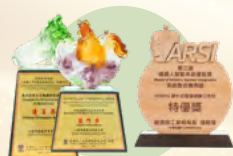
2023 Taiwan Best-in-Class 100



24<sup>th</sup> in Ministry of Economic Affairs 2023 Taiwan's Best International Brand Top 25  
-Brand value US\$84 million



i4.0GW<sup>®</sup> Intelligent 4.0 Guideway was awarded Silver at the 32<sup>nd</sup> Taiwan Excellence Award



Underwater Direct Drive Rotary Table was awarded

- Outstanding Award & Excellent Work Award at the 16<sup>th</sup> Annual Machine Tools "R&D Innovative Products" Competition
- Outstanding Award at the 3<sup>rd</sup> Award for Robotic System Integration (ARSi) in the Innovative Application R&D Category Industrial Development Administration, Ministry of Economic Affairs



Spacer for Cross Roller Bearing was awarded Silver at National Invention & Creation Award



TCSA Taiwan Corporate Sustainability Awards

- Top 100 Corporate Sustainability Awards -Comprehensive Performance
- Platinum for Corporate Sustainability Reports Awards -IT & IC Manufacturing



- Asia-Pacific Sustainability Action Awards (APSAA) "Environmental sustainability-Bronze Award"
- Taiwan Sustainability Action Awards (TSAA) "Social inclusion-Gold Award"



2023 Award for Outstanding Sustainability British Standards Institution (BSI)



An Outstanding Performance Department for Sustainable Leading Enterprise in Healthy Workforce Occupational Safety and Health Administration, Ministry of Labor (Taiwan-OSHA)



44<sup>th</sup> in 2023 Commonwealth Magazine's Top 100 Sustainable Companies





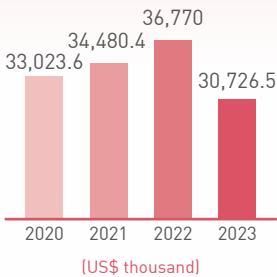
1.3 Achievements in Sustainability



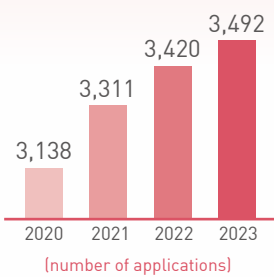
~The largest manufacturer of precision mechanical key components in Taiwan~  
~The world-leading brand in motion control and system technology~

An Innovator of Industrial Transformation

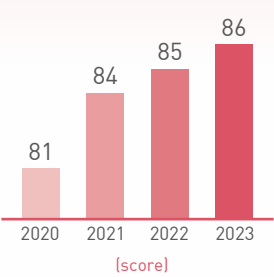
R&D expenditure



Global patent applications

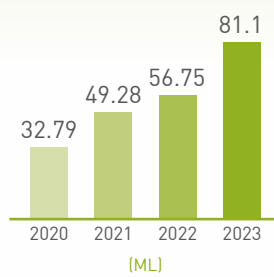


Customer satisfaction

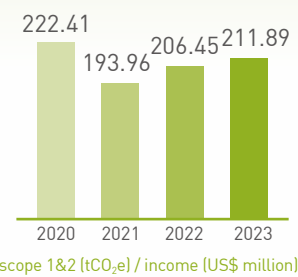


A Practitioner of Green Manufacturing

Water reclaimed volume



GHG emissions intensity

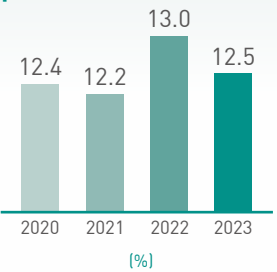


Energy saving project effectiveness

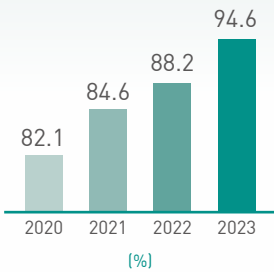


A Builder of Diversity in the Workplace

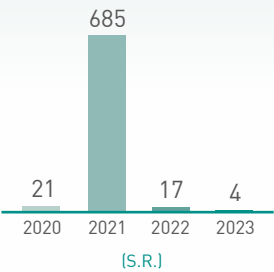
Ratio of female in STEM positions



Key talent retention

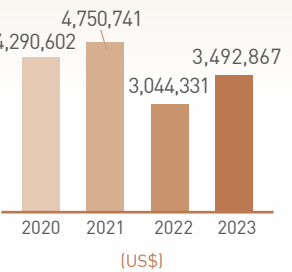


Disabling injury severity rate

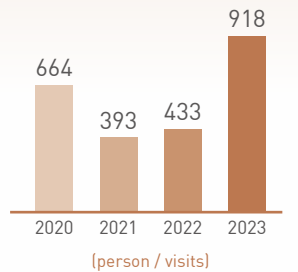


An Achiever of Common Good in Society

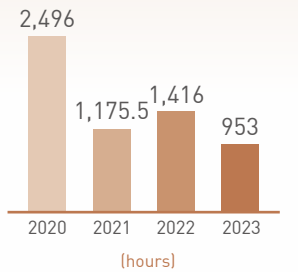
Amount of social engagement investment



Academic visits



Participation in volunteer activities



## 1.4 ESG Feature Stories

### ■ An Innovator of Industrial Transformation: Smart Manufacturing Upgrade

- **HIWIN is an industry innovation leader**

HIWIN remains committed to innovation and the production of intelligent and sustainable products. Beginning with key components, we are leading the transformation and upgrade of Taiwan's machine tool industry into smart machinery. HIWIN upholds the principle of "If you want to go fast, go alone. If you want to go far, go together." We persist in delivering top-notch products and services, thereby contributing to the growth of the precision machinery sector.

- **Innovative value-addition-building competitive advantages across the supply chain**

With its unique patented sensing technology, i4.0GW® Intelligent 4.0 Guideway boasts sensitivity ten times higher than similar market products. It visualizes and digitizes equipment status, allowing production line managers to flexibly adjust production capacity, schedule maintenance, and implement lean production management for clients. The installation is simple, the web interface is user-friendly, and the edge computing module can be connected to the internal network of the factory for immediate use. With access control, it protects customer confidential information, meeting industry requirements for information security management. When equipment vibration or temperature exceeds threshold values, the exclusive smart algorithm of i4.0GW® Intelligent 4.0 Guideway can maintain the equipment timely, alert managers, and prevent the scrapping of high-value products (such as wafers and substrates), thus improving product yield, saving unnecessary

labor costs, and avoiding production loss due to downtime. It maintains the expected production capacity for clients, maximizing OEE while also focusing on environmental protection and energy conservation, becoming the best partner for smart manufacturing.



i4.0GW® Intelligent 4.0 Guideway was awarded Silver at the 32<sup>nd</sup> Taiwan Excellence Award



### ■ A Practitioner of Green Manufacturing: Collaborating with the Supply Chain and Clients Towards Net Zero Emissions Target

Climate changes has become extremely severe, with record high temperatures worldwide. The Carbon Disclosure Project (CDP), the United Nations Global Compact (UNGC), the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF) jointly formed the Science-Based Targets initiative (SBTi). Aiming to limit global warming to no more than 1.5°C, the initiative researches and estimates the carbon reduction targets and pathways that each industry must set, and encourage businesses be a part of low-carbon transition, and work together to creatively implement carbon reduction.

In response to the Paris Agreement's climate goal of limiting global temperature rise to within 1.5°C, HIWIN has signed up for the SBTi, committing to become a net-zero emissions company by 2050. We work together with our supply chain and customers to demonstrate our determination to address climate change and protect the natural environment.

Based on the methodology specified by SBTi, HIWIN systematically analyzes data to set specific carbon reduction targets and paths for Scopes 1, 2, and 3. We aim to establish these targets within two years and submit them to SBTi for review. Using 2021 as the base year, Scopes 1 and 2 will see an absolute reduction of at least 4.2% annually compared to the base year. For Scope 3, using 2022 as the base year, we aim for an annual absolute reduction of at least 2.5%, striving to limit global warming to within 1.5°C. This marks a new milestone for HIWIN GROUP's sustainable development. We are also formulating four core strategies: improving energy efficiency, innovating low-carbon products, reducing waste through a circular economy, and introducing renewable energy, to fully implement carbon reduction actions.



HIWIN has signed up for the SBTi, committing to achieving net-zero emissions



## A Builder of Diversity in the Workplace: Encouraging Employees for Proactive Health Management and Diverse Learning

HIWIN emphasizes on the internalization of health beliefs, highlighting that behavior is decided autonomously by individuals. It encourages employees to proactively manage their own health. To ensure enthusiastic participation in health promotion activities, the content is considered from multiple angles and types, including self-directed exercise, health check-ups and follow-ups, participation in internal events, and other activities (example: quitting smoking and weight loss). To facilitate the certification process, we collaborate with external vendors, adding the option to upload information via the WALKII APP. The app combines mini-games and wearable device integration, increasing employees' willingness to upload related activity proofs. Participation in 2023 increased by 8.66% compared to 2022.

"Safety" and "Health" are fundamental responsibilities for every employee, and it is essential to prevent workplace hazards. Through Safety Moment microlearning activities, HIWIN encourages case sharing among employees, reinforcing safety and health awareness and actions.

In 2023, both the disabling injury frequency rate (F.R.) and disabling injury severity rate (S.R.) were lower than the overall performance and cross-sectional rates of 2022 and the three-year average.

In addition, the Occupational Safety and Health Administration, Ministry of Labor (Taiwan-OSHA), held the inaugural Sustainable Leading Enterprise in Healthy Workforce Award in 2023, evaluating 633 ESG Reports. HIWIN was recognized as an outstanding enterprise,

honoring our practical performance in promoting safety, health, and SDGs. If the maintenance of safety and health by various departments is seen as planting seeds, and the actual actions of employees as nutrients, we believe that with the continuous nourishment from the team, HIWIN's safety and health culture will grow stronger each year, becoming a forest of safety and health.



An Outstanding Performance Department for Sustainable Leading Enterprise in Healthy Workforce

## An Achiever of Common Good in Society: Contributing Industry Experience to Cultivate Precision Machinery Talent

Global Chairman Eric Y. T. Chuo (Ph.D.), founder of the HIWIN GROUP, has significantly contributed to the development of the industry and technological education in Taiwan. He was awarded an honorary doctorate in engineering by National Taiwan University of Science and Technology (NTUST) in 2015 and serves as an advisory committee member of the NTUST Industry-Academia Innovation College (INNC), offering valuable industry experience to cultivate outstanding talents.

In 2023, HIWIN signed a 12-year long-term cooperation agreement with NTUST INNC to provide students with broader paths in research and development, more diverse and forward-looking development, and expand the innovative landscape of Taiwan's technological talents. This cooperation aims to create a new industry-academia cooperation paradigm through four core areas: knowledge exchange, technological innovation, talent cultivation, and resource sharing.

NTUST and HIWIN GROUP establish a close connection through industry-academia cooperation programs, jointly cultivating talents in smart manufacturing, artificial intelligence, and sustainable energy technology. Through management training, innovative R&D courses, and international exchanges, we aim to nurture talents in the machinery industry, strengthen technical foundations, and cultivate globally competitive technological and management talents.



HIWIN GROUP is partnering with NTUST to create a new industry-academia cooperation paradigm





# 02

## Sustainable Management

HIWIN is dedicated to achieving sustainable development while prioritizing the well-being of its employees and investors.





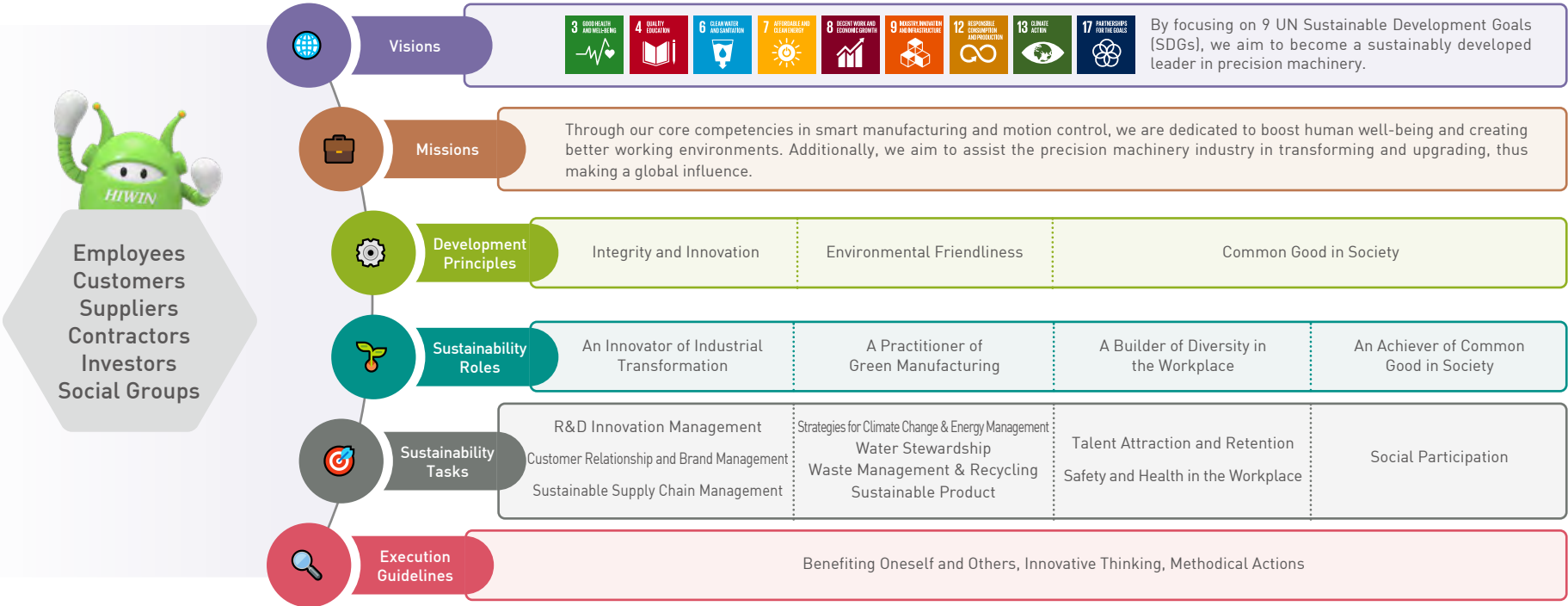
## 2.1 Vision in Sustainability & Strategies

### Vision in Sustainability & Goals

HIWIN’s ESG vision was jointly drafted by the team led by Chairman & CEO Eddie Chuo and President Enid H.C. Tsai, with a focus on nine UN Sustainable Development Goals (SDGs). Leveraging our core strength in smart manufacturing and motion control, HIWIN is committed to enhancing human well-being and cultivating better work environments. Our goal is to become a leading sustainable enterprise in the precision machinery industry, driven by innovative thinking and actions that promote positive interactions between the economy, society, and the environment. We strive to contribute to the transformation and advancement of the precision machinery industry, making a global influence.

At HIWIN, from top-level executives to all employees, everyone needs to value and understand their role in promoting sustainability in the organization. These roles include being “an innovator of industrial transformation,” “a practitioner of green manufacturing,” “a builder of diversity in the workplace,” and “an achiever of common good in society.” We firmly believe that by fulfilling these sustainability roles, we can achieve our vision by adhering to the three principles of “Integrity and Innovation, Environmental Friendliness,” and “Common Good in Society.”

To promote sustainable development, HIWIN has established 10 sustainable tasks that addresses the material topics concerning our stakeholders. We encourage all employees to approach these tasks with a mindset of “benefiting oneself and others,” embracing “innovative thinking” and “methodical action in order” to gradually accomplish these tasks and contribute to the realization of our company’s sustainable vision.

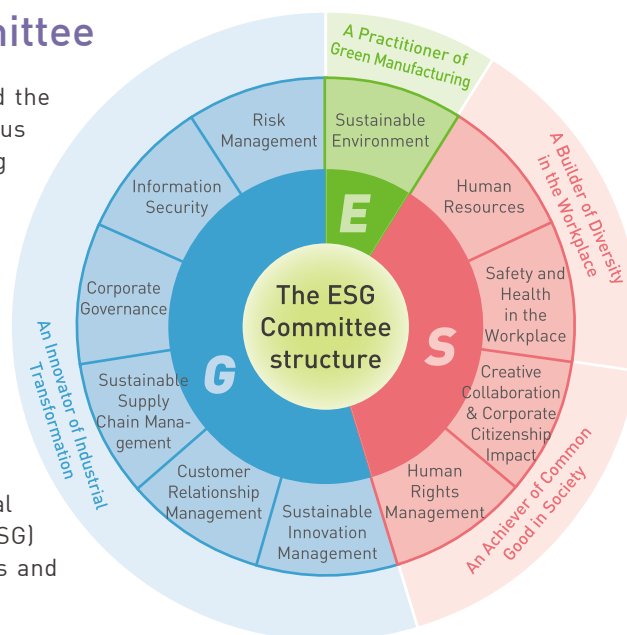




## 2.2 Sustainable Development Committee

To fulfill our ESG vision and mission, HIWIN has established the “ESG Committee,” comprised of senior executives from various departments. This committee is responsible for developing sustainable policies in the areas of economics, environment, and society, as well as planning and implementing relevant projects.

The ESG Committee is led by Global Chairman Eric Y.T. Chuo (PH.D.) and Chairman & CEO Eddie Chuo, providing top-level guidance. President Enid H.C. Tsai serves as the Committee Chairperson. In addition, there are two Vice Chairpersons, seven Advisory Committee members, two Executive Secretaries, and eleven functional organizations within the ESG Committee. The ESG Committee formulates short, medium, and long-term goals, strategies, and action plans based on material topics related to Environmental, Social, and Governance (ESG) aspects. Monthly meetings are held to monitor the progress and outcomes of each task, providing advisory guidance as needed.



**Corresponding chapters of the functional organization of the ESG committee**

	No.	Functional Organization	Corresponding Report Chapters	Corresponding Roles
<b>E</b>	1	Sustainable Environment	Strategies for Climate Change & Energy Management, Water Stewardship, Waste Management & Reuse, Air Pollution Prevention, Biodiversity, Sustainable Products	A Practitioner of Green Manufacturing
	2	Human Resources	Employee Diversity and Inclusion, Talent Attraction and Retention, Talent Capital Development	A Builder of Diversity in the Workplace
<b>S</b>	3	Safety and Health in the Workplace	Safety and Health in the Workplace	
	4	Creative Collaboration & Corporate Citizenship Impact	Social Impacts, Talent Development, Industry-academia Cooperation, Community Care, The Industrial Development Advocate	An Achiever of Common Good in Society
	5	Human Rights Management	Human Rights	
<b>G</b>	6	Sustainable Innovation Management	R&D Innovation Management, Smart Manufacturing	An Innovator of Industrial Transformation
	7	Customer Relationship Management	Product Quality, Customer Service Satisfaction, Customer Privacy	
	8	Sustainable Supply Chain Management	Sustainable Supply Chain Management	
	9	Corporate Governance	Corporate Governance, Business Performance, Brand Values	
	10	Information Security	Information Security	
	11	Risk Management	Risk Management	

## 2.3 UN Sustainable Development Goals

In 2022, HIWIN's President led senior executives to encourage department heads and colleagues to refer to the spirit and practices of the UN SDG Compass. Through collaborative brainstorming sessions, we have followed a structured process consisting of five key steps: “Understanding SDGs,” “Defining Priorities,” “Setting Objectives,” “Integration,” and “Disclosure and Communication.” These steps have enabled us to identify the SDGs that are most relevant and impactful to HIWIN's operations. After a year of effort, all HIWIN employees have gradually implemented the UN Sustainable Development Goals (SDGs) in their operations, resonating with the essence of operations, and enhancing corporate sustainability and employee awareness levels.

HIWIN has identified nine primary Sustainable Development Goals (SDGs) and established long-term objectives for 2030 based on ten material topics and four sustainability roles. With SDG 17 (Partnerships for the Goals) as a fundamental principle, we actively collaborate with internal and external stakeholders, including business partners throughout the value chain who share our commitment to HIWIN. Together, we implement sustainable initiatives such as promoting the transformation of innovative industries, practicing low carbon manufacturing, create open workplaces, connect society values and other sustainable tasks. These endeavors are deeply rooted in our corporate mission, as we endeavor to improve the well-being of humanity and create a healthier working environment.



### ① Understanding SDGs and Define Priorities

HIWIN actively engages in and supports initiatives related to the SDGs. In 2023, we continued to deepen our focus on the following eight material topics that are highly related to our value chain and operational core, strengthening the link between our operations and public welfare. Simultaneously, as we pursue each sustainable development goal, we also embrace SDG 17 (Partnerships for the Goals), collaborating with stakeholders to collectively address global sustainable development.



### ② Setting Objectives and Integration

HIWIN aligns our industry characteristics with the content of each SDG and addresses the challenges in sustainable development, integrating the company's material topics while collaborating with stakeholders, spanning across the supply chain, manufacturing processes, and product value chain stages. This allows us to establish HIWIN's action plans and longterm objectives. By translating the alignment with SDGs into tangible sustainable tasks, we continuously enhance employee awareness and engagement towards SDGs, strengthening the company's internal implementation capabilities and ensuring the realization of sustainable development goals.





### ③ Disclosure and Communication

In accordance with the disclosure and communication principle of the SDGs Compass, we identify and connect priority SDGs based on material topics. Moving forward, we will annually review and adjust the priority of sustainable development goals, and provide explanations of our management performance and goal achievements for the identified sustainable actions related to the SDGs. We actively disclose and communicate our progress to stakeholders to foster interaction and build trust.

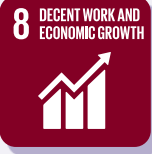




### International indicators focused by HIWIN

Sustainability Roles	Material Topics	Value Chain			Corresponding SDGs									GRI Specific Standards	SASB Index	ESG Report Chapters
		Procurement	Manufacture	Customer	SDG3	SDG4	SDG6	SDG7	SDG8	SDG9	SDG12	SDG13	SDG17			
G An Innovator of Industrial Transformation	R&D Innovation Management		✓		✓					✓			✓	Innovative R&D	RT-IG-440b.1	4.1 R&D Innovation Management
	Customer Relationship and Brand Management		✓	✓					✓	✓			✓	Customer Privacy (418), Customer Health & Safety (416)		4.4 Customer Relationship and Brand Management
	Sustainable Supply Chain Management	✓							✓		✓	✓	✓	Supplier Environmental Assessment (308), Supplier Social Assessment (414)	RT-IG-440a.1	4.5 Sustainable Supply Chain Management
E A Practitioner of Green Manufacturing	Strategies for Climate Change & Energy Management	✓	✓	✓				✓				✓	✓	Energy (302), Emissions (305), Economic Performance (201)	RT-IG-130a.1	5.1 Strategies for Climate Change & Energy Management
	Water Stewardship		✓				✓				✓		✓	Water and Effluents (303)		5.3 Water Stewardship
	Waste Management & Reuse		✓								✓		✓	Waste (306)		5.4 Waste Management & Recycling
	Sustainable Products	✓	✓	✓				✓		✓	✓		✓	Customer Health & Safety (416), Energy (302)		4.3 Sustainable Products
S A Builder of Diversity in the Workplace	Talent Attraction and Retention		✓						✓				✓	Employment (401), Market Presence (202), Training and Education (404)		6.1 Employee Diversity and Inclusion 6.2 Talent Attraction and Retention 6.3 Talent Capital Development
	Safety and Health in the Workplace	✓	✓		✓				✓				✓	Occupational Safety & Health (403)	RT-IG-320a.1	6.4 Safety and Health in the Workplace
	Social Engagement		✓			✓			✓				✓	Local Communities (413)		7. An Achiever of Common Good in Society

## Actions of HIWIN responds to the UN SDGs

SDGs	Action Plans	Long Term Goal (2030)
 <p><b>3</b> GOOD HEALTH AND WELL-BEING</p>	<ol style="list-style-type: none"> <li>① HIWIN-CMU R&amp;D Center: Engaging in foresight technological development for medical and healthcare, conducting cross-disciplinary research, and fostering high-level research talent development in medical engineering, driving Taiwan's medical engineering and rehabilitation technology towards new milestones.</li> <li>② Implementing Precision Medical Care: Continuously developing HIWIN surgical robots, rehabilitation robots, endoscopic robotic arm, etc., to realize the concept of providing precision medical services for everyone.</li> <li>③ Promoting health management: Dedicated to the care and promotion of colleagues' physical and mental health, building a healthy workplace through the four major areas: special protection, health care, health promotion, and employee assistance.</li> </ol>	<ol style="list-style-type: none"> <li>① &gt;720,000 individuals for medical services annually</li> <li>② Reduce the proportion of colleagues with metabolic syndrome 50%</li> </ol>
 <p><b>4</b> QUALITY EDUCATION</p>	<ol style="list-style-type: none"> <li>① HIWIN Thesis Award, HIWIN Doctoral Dissertation Award: Combining academia and industry, upgrading R&amp;D, and increasing product added value and industrial core competitiveness. These awards are highly regarded and have been praised by the mechanical industry and academia, being hailed as the "Nobel Prize" of the mechanical industry.</li> <li>② STEAM Education Model Base Project: HIWIN Education Foundation set up a STEAM classroom in the Chuo Yong-Tong Memorial Library in Liu-Jia Elementary School, Hsinchu. The foundation sought out teaching materials suitable for different grades and commissioned professional agencies to conduct STEAM teacher training. The project enables all students in the school to immerse themselves in an abundance of imagination and creativity through STEAM education.</li> <li>③ Improving Local Basic Education: In townships where visits and surveys were conducted, HIWIN assisted primary schools in upgrading equipment, book collections, and reading environments or sponsored English courses. Additionally, HIWIN has granted free authorization to elementary schools and kindergartens across Taiwan to show the Ecological Education Film - "We Love Living Here," sharing the concept of environmental sustainability through HIWIN's examples of ecological coexistence.</li> <li>④ Education and Training: We foster an environment conducive to learning, providing employees with opportunities for classroom training, digital learning, on-the-job training, overseas training, study groups, lectures, exhibition visits, degree programs, job rotation, and project assignments to ensure proper development.</li> <li>⑤ Employee Course Participation: Our course planning is closely linked to organizational development strategies and employee capability building. By systematically integrating courses with work and projects, we help employees effectively solve work-related problems and enhance performance. Employees who complete training programs or excel in competitions may receive additional learning rewards.</li> <li>⑥ Corporate Succession Training: For over a decade, we have been deeply committed to nurturing talent in the precision machinery field through industry-academia cooperation. Each year, through diverse industry-academia cooperation programs, we arrange for managers, mentors, and HR professionals to jointly guide industry-academia students, providing long-term training in professional skills and personal development. Many former industry-academia students have grown from young seedlings into the backbone of the company, taking on key positions in various departments.</li> </ol>	<ol style="list-style-type: none"> <li>① Invest at least 2% of the annual profits towards social welfare each year</li> <li>② Employee learning satisfaction 4.6</li> <li>③ Employee training participation rate 90.5%</li> <li>④ Growth rate of new generation talent 37%</li> </ol>
 <p><b>6</b> CLEAN WATER AND SANITATION</p>	<ol style="list-style-type: none"> <li>① Reduce Water Risk: To ensure sustainable production, we implement various measures such as increasing reclaimed water rates and installing smart water meters to achieve water balance.</li> <li>② Increase the Use of Recycled Water: Received verification for ISO 14046:2014 water footprint, in which we reviewed the reasonable water usage from manufacturing processes and uncovered opportunities for water recycling to reduce the amount of tap water needed. We obtained ISO 46001:2019 water efficiency management systems certification in 2023, rolling out more effective and comprehensive water conservation and management measures.</li> </ol>	<ol style="list-style-type: none"> <li>① Water reclamation ratio 16% (base year: 2021)</li> </ol>
 <p><b>7</b> AFFORDABLE AND CLEAN ENERGY</p>	<ol style="list-style-type: none"> <li>① Energy Efficient Manufacturing Reduction: Optimize the energy management system and smart monitoring system. Enhance energy performance through continuous improvement, accelerate the replacement of old energy-consuming equipment, and adopt more efficient production equipment.</li> <li>② Renewable Energy Source: We are currently in the process of installing renewable energy sources at HIWIN Headquarters: From 2023 to 2030, we will continuously evaluate the installation of solar power generation equipment on the rooftops of all our factories in Taiwan. Additionally, we have incorporated wind power and thermal power generation into our plans. We are participating in the "Taipower Small Green Energy Auction on the Green Energy Platform" project to purchase small green energy. Starting in 2024, all factories will gradually purchase and supply green energy externally and continue negotiations to sign contracts for green energy supply.</li> </ol>	<ol style="list-style-type: none"> <li>① Cumulative renewable energy power generation reached 12,100 kW</li> <li>② Cumulative energy saved from efficiency projects 27,406kWh</li> </ol>



SDGs	Action Plans	Long Term Goal (2030)
 <p><b>8</b> DECENT WORK AND ECONOMIC GROWTH</p>	<p>① Competitive Remuneration and Benefits: Employees in Taiwan and worldwide receive salaries that exceed the local minimum wage. Additionally, we offer comprehensive benefit policies that prioritize the well-being of our employees, ensuring their physical and mental care. This commitment enables each team member and their families to enjoy an improved quality of life.</p> <p>② Promoting Industrial Sustainability: We research the progression of targeted technologies and refer to pertinent patents related to process enhancement and automation to aid the manufacturing efficiency and productivity of our products. Furthermore, we support conventional manufacturing industries in modernizing their operations by substituting labor-intensive tasks with smart automation, thereby bolstering their competitiveness.</p> <p>③ Promoting a Safe Working Environment and Culture: We establish an annual safety and health education training plan to enhance employees' knowledge in safety and health. We actively encourage all employees to participate in identifying and improving hazards, thereby enhancing and optimizing our occupational safety and health management performance. Our objective is to form a culture of safety and health awareness.</p>	<p>① Promotion rate for managerial positions from internal employees 90%</p> <p>② Retention rate of key talents 85%</p> <p>③ Output value per capita US\$325.7 thousand</p> <p>④ Disabling injury frequency rate <math>\leq 0.45</math></p> <p>⑤ Disabling injury severity rate <math>\leq 13</math></p>
 <p><b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>① Encouraging Innovation: HIWIN consistently foster innovation and research among our employees by implementing a patent innovation incentive system and a thorough internal patent review process. Our total number of patent applications has exceeded that of our competitors, establishing our prominent position in the patent landscape for intelligent linear motion products.</p> <p>② Green Product Innovation: HIWIN's product range includes various components such as ballscrews, linear guideways, special bearings, and reducers, as well as subsystems like single-axis robots and torque motor rotary tables. We also offer full systems such as industrial robots and medical-related equipment. All of our products are specifically designed to optimize production efficiency and support energy conservation efforts. As a result, HIWIN is the best partner for the global automation and medical industries. our innovative solutions have gained significant traction in the global automation and medical sectors.</p>	<p>① R&amp;D expenditure as a percentage of revenue 6%</p> <p>② Enhanced investments in industry-academia cooperation US\$11398.8 thousand</p> <p>③ Accumulated global patent applications 4,000</p> <p>④ Overall product manufacturing energy intensity <math>\downarrow</math> 54% (base year: 2021)</p> <p>⑤ Energy efficiency of products <math>\uparrow</math> 20 % (base year: 2021)</p> <p>⑥ Waste per unit of product production <math>\downarrow</math> 50% (base year: 2021)</p>
 <p><b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>① Waste Reduction: In line with our commitment to recycling, we consistently apply waste management practices, implement efficient reclamation and reuse methods, and integrate the life cycle concept into our processes. We also incorporate green design principles from the initial design phase to disposal.</p> <p>② Green Supply Chain Management: HIWIN requires its suppliers to sign an agreement for Non-use of Hazardous Substances to comply with environmental laws and regulations, standards, and directives, ensuring that the relevant electrical materials used meet RoHS guidelines. We prioritize sourcing from local suppliers who demonstrate environmentally friendly practices, emphasizing green, energy-efficient operations. Regular audits are conducted to verify adherence to green procurement practices.</p>	<p>① Waste resource utilization ratio 83%</p> <p>② Achievement in conflict minerals investigation 100%</p> <p>③ Diversifying production bases and evaluate new suppliers, developing 26 alternative raw material sourcing solutions</p> <p>④ Green procurement accounts for total annual procurement amount 10%</p> <p>⑤ Achieve local procurement percentage target by 100%</p> <p>⑥ Implementation ratio of low carbon raw materials 20%</p>
 <p><b>13</b> CLIMATE ACTION</p>	<p>① Implementing Climate Change Adaptation Strategies: HIWIN has initiated cross-departmental integration of climate action resources to identify potential risks and opportunities. In 2021, we adopted the TCFD framework to assess climate risks and opportunities, developing adaptation action plans through exposure and vulnerability matrices. In 2023, we signed up for the Science Based Targets initiative (SBTi), committing to becoming a Net Zero company by 2050. Additionally, we maintained ISO 50001:2018 certification for our eight operating sites and promoted internal carbon pricing and the Energy Conservation and Carbon Reduction Committee to actively drive energy-saving and carbon reduction improvements.</p> <p>② Energy-saving, Carbon Reduction and Green Living Initiatives: Promoting through diverse environmental and green consumption campaigns, which encompass advocating for electricity conservation, implementing water-saving measures, establishing eco-friendly loyalty programs, and implementing plastic reduction initiatives.</p>	<p>① By 2030, the combined total of Scope 1 and Scope 2 at global operating location <math>\downarrow</math> 42%</p> <p>② By 2030, the total of Scope 3 at global operating location <math>\downarrow</math> 25%</p> <p>③ Disruptions due to climate disasters 0 days</p> <p>※ In response to the 2023 initiative to adjust the boundaries of SBTi, the targets will be adjusted simultaneously.</p>
 <p><b>17</b> PARTNERSHIPS FOR THE GOALS</p>	<p>① HIWIN collaborates with the value chain to enhance the consistency of sustainable development policies.</p> <p>② Strengthen global partnerships for sustainable development through multilateral cooperation, mobilizing and sharing knowledge, expertise, and technology.</p>	<p>① The achievement rate of Sustainable Supply Chain evaluation is 100%</p> <p>② Cumulative number of Major Suppliers audited under the health improvement program 135</p>

## 2.4 Sustainable Impact

As a leading manufacturer of motion control and system technology, HIWIN is dedicated to improving the quality of life and work environment for society. We uphold a spirit of technological innovation and continuous improvement, providing our customers with top-quality products and services. Additionally, we strive to create long-term value for stakeholders and fulfill our commitment to sustainable impact on society.

Since 2022, HIWIN has implemented a sustainable impact assessment method once in two years that incorporates the Triple Bottom Line (TBL) management approach. This approach considers the economic, environmental, and social aspects from a Profit & Loss perspective. By evaluating the positive (benefit) and negative (cost) impacts of various value chain activities on social welfare and translating them into a consistent monetary language, we can effectively manage the risks and opportunities associated with our business processes.

The analysis reveals that in 2022, HIWIN contributed a total of US\$472.2 million to stakeholders. This contribution encompasses operating net profit, tax payments, dividend distributions, employee remuneration, depreciation, and amortization, among others. These activities not only generated added value income for stakeholders but also fostered economic growth in society. However, the production process resulted in an environmental cost of US\$9.4 million due to the environmental footprint and resource consumption. Furthermore, occupational accidents consumed medical resources and posed health risks, resulting in social costs of US\$0.91 million. In the upstream supply chain, HIWIN's procurement demands drove a total output value of US\$814.2 million and provided

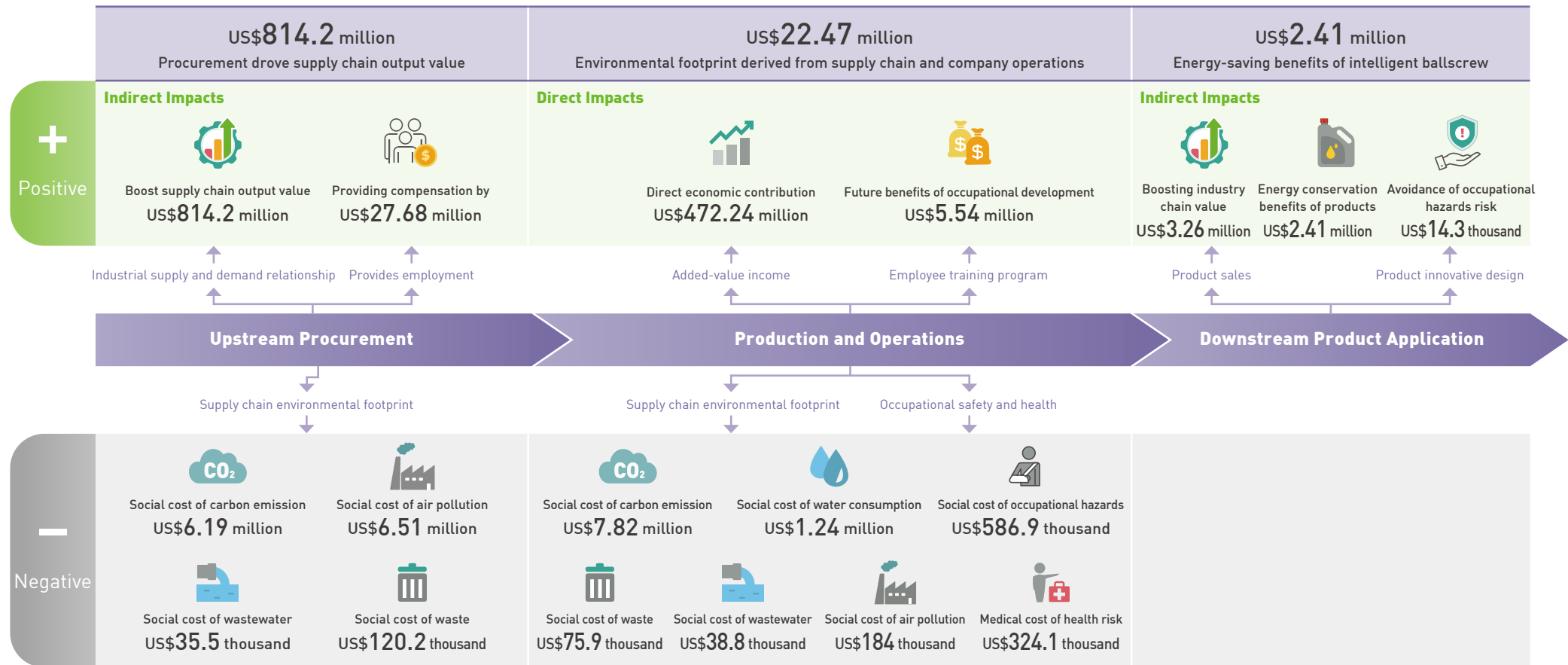
US\$27.68 million in wages to workers. Nevertheless, the supply process also incurred US\$13.03 million in environmental costs. Regarding downstream product applications, we prioritize the analysis of our Intelligent ballscrew (BS) and Crossed Roller Bearing (CRB) product series. The sales process generated a total output value of US\$3.26 million for customer industries. Additionally, the energy-saving and automation innovative designs of these products allowed us to avoid carbon emissions and occupational accidents, resulting in a positive contribution of US\$2.41 million.

Moving forward, we will expand the assessment of the influence of product innovation design and applications. We will also strengthen sustainable supply chain management and implement more efficient production methods to reduce the environmental impacts of the value chain and enhance social well-being. By doing so, we aim to create even more significant positive outcomes for our stakeholders.



## Indicator for sustainable impact

Unit: US\$



Note:

1. Upstream procurement utilizes the Input-Output Model to calculate the economic benefits resulting from supply-demand effects in the industry chain, as well as the associated environmental issues, job opportunities, and salary income. Reference sources include the 2020 Report on Input-Output Tables (Directorate-General of Budget, Accounting and Statistics, 2020), the Green National Income Account Report (Directorate-General of Budget, Accounting and Statistics, 2022), Energy Balances in Taiwan, Republic of China (Energy Bureau, 2022), and the EXIOBASE 2 database, among others.
2. The direct economic contribution is assessed using the Gross Value Added (GVA) method to evaluate the positive impact generated for stakeholders in the operational process. This includes operating profits, dividends (for investors), remuneration (for employees), taxes (for the government), and depreciation and amortization (for suppliers).
3. The environmental footprint impact is calculated using the Environmental Profit and Loss (EP&L) methodology, which considers the carbon social cost, human health loss cost, and ecosystem damage cost resulting from greenhouse gas emissions, air pollution, wastewater, waste, and water resource consumption. Reference sources include the US EPA (2016), OECD (2012), and CE Delft (2018).
4. The future benefits of occupational development are evaluated using VBA (2021) to assess the professional skills and

knowledge acquired by employees through the company's training program. This not only enhances productivity but also improves employability for their future career development, thereby influencing their average annual expected salary.

5. The social cost of occupational hazards is determined based on the UK HSE (2017) guidelines, considering the value of employees' willingness to pay to avoid occupational hazards and the input of medical resources.
6. Health risks are assessed by considering potential factors of cardiovascular disease in employees, such as hypertension, hyperlipidemia, hyperglycemia, and obesity. The attributable relationship between their health risks and workload, as well as the potential input of medical resources, is evaluated. Reference sources include WHO (2008) and Chieh-Hsien Lee (2009).
7. Downstream product applications focus on the Intelligent Ballscrew (BS) and Crossed Roller Bearing (CRB) series products. We analyze the supply and demand relationship between sales volume and customer industrial output value, and assess the indirect economic value created by product sales. Additionally, we compare energy and time-saving efficiency, calculate the avoided carbon social cost, and assess the risk of occupational hazards.
8. Considering variations in economic conditions across different countries, the value coefficient is adjusted based on the Gross National Income (GNI) per capita measured by Purchasing Power Parity (PPP) in each region. The time frame is aligned with the currency value as of 2017 as the baseline. The methodology is referenced from OECD (2012) and PwC UK (2015) studies.



## The impact path of sustainable influence

Cause of Impact	Sustainable Topics Management	Activity Output	Impact Category	Impact Properties	Currency Value (US\$thousand)	Impact Object
Supply chain	Sustainable Supply Chain Management	Procurement demand drives industrial supply and demand relationship	Social externalities-Boost supply chain output value	Positive +	815,297.4	Society
		Procurement demand creates supply chain jobs	Social externalities-Supply chain employee employment income	Positive +	27,679.8	External employees
		Supply chain derived greenhouse gas emissions	Environmental externalities-Supply chain greenhouse gas emissions	Negative -	6,315.8	Environment
		Supply chain derived air pollution emissions	Environmental externalities-Supply chain air pollution emissions	Negative -	6,647.3	Environment
		Supply chain derived wastewater discharge	Environmental externalities-Supply chain derived water pollution	Negative -	35.5	Environment
		Supply chain derived waste	Environmental externalities-Supply chain waste disposal	Negative -	120.2	Environment
Company operations	Business Performance	Operating profits	Stakeholder Gross Value added	Positive +	102,742	Shareholders/ Investors
		Tax		Positive +	50,423.6	Society
		Interest and lease		Positive +	6,375.6	Suppliers
		Depreciation and amortization		Positive +	72,828.5	Suppliers
		remuneration and benefits		Positive +	240,255.5	Employees
	Water Stewardship	Energy use produces greenhouse gas emissions	Environmental externalities-Operational greenhouse gas emissions	Negative -	7,825.7	Environment
		Water used in manufacturing processes leads to water scarcity	Environmental externalities-Use of operational water resource	Negative -	1,240.3	Environment
		Wastewater discharged during manufacturing process leads to water pollution	Environmental externalities-Operational wastewater discharge	Negative -	38.9	Environment
	Air Pollution Prevention and Control	Gas emissions from manufacturing process cause air pollution	Environmental externalities-Operational air pollution emissions	Negative -	183.8	Environment
		Environmental impact caused by waste disposal processes	Environmental externalities-Operational waste disposal	Negative -	75.8	Environment
	Workplace Safety and Health	Employee occupational accidents	Social externalities-Employee occupational accidents	Negative -	586.8	Employees, Society
		Number of people at risk for cardiovascular disease	Social externalities-Employee Workplace Health Management	Negative -	324.1	Employees, Society
	Talent Development and Retention	Training to acquire skills and income growth	Social externalities-Employee future benefits	Positive +	5,453.6	Employees, Society
Products and services	Customer Relations and Brand Management	Product sales drive the supply and demand relationship in downstream industries	Social externalities-Boost Industrial chain output value	Positive +	3,269.8	Society
	Sustainable Products	Energy-saving product design avoids greenhouse gas emissions	Environmental externalities-Product Use	Positive +	2,395.6	Environment
		Product automation design to avoid occupational accidents	Social externalities-Product Use	Positive +	14.4	External employees

## 2.5 Materiality & Stakeholders

### The Process of Materiality Analysis

According to the GRI3: Material Topics of GRI Universal Standards 2021, HIWIN has collaborated with the Value Balancing Alliance (VBA), the Harvard Business School's "Impact-Weighted Accounts" research project, the London Benchmarking Group (LBG), and other institutions to develop methodologies for assessing economic, environmental, and social impacts. These methodologies have been used to establish a materiality analysis process based on impact. The purpose of this process is to identify the material topics for HIWIN, define the boundaries and scope for sustainability disclosure, and serve as the foundation for setting long-term sustainable goals. After internal discussions and considering there are no significant changes in the company's operations and industry environment, the material topics for Year 2023 will follow the identification results of Year 2022.

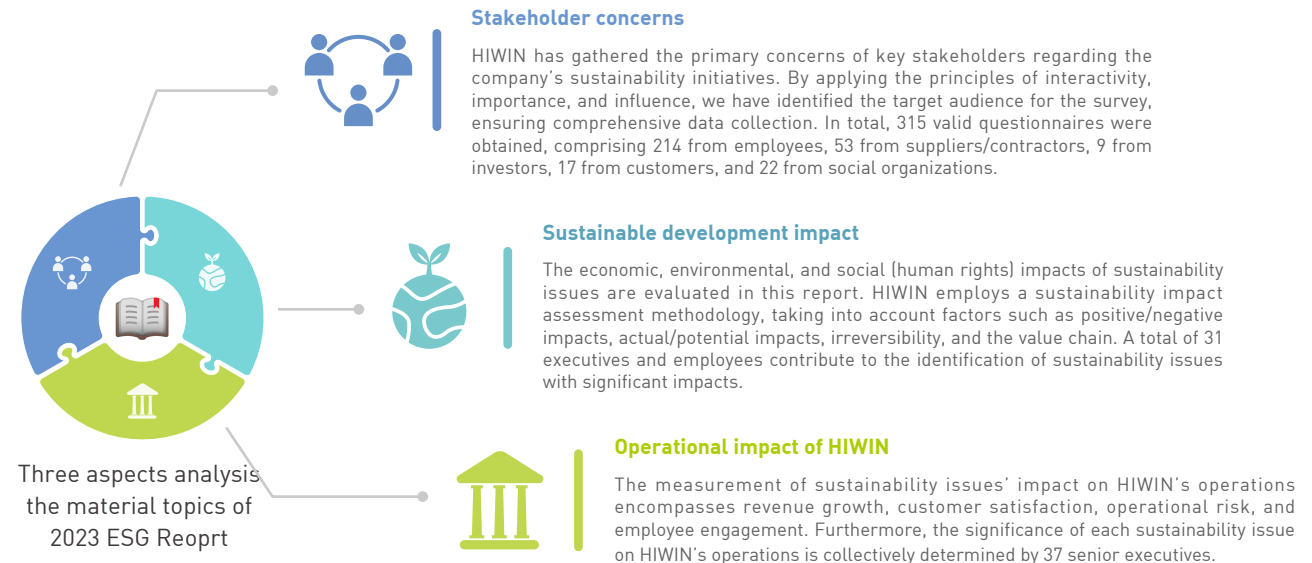


#### Stage 1: Identify communication objects and topics

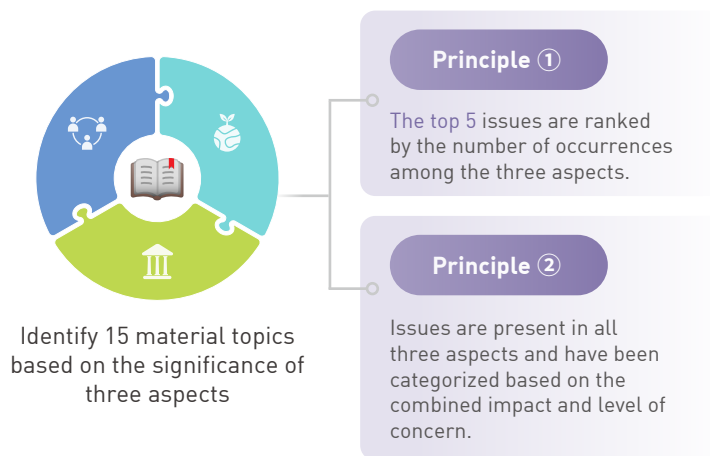
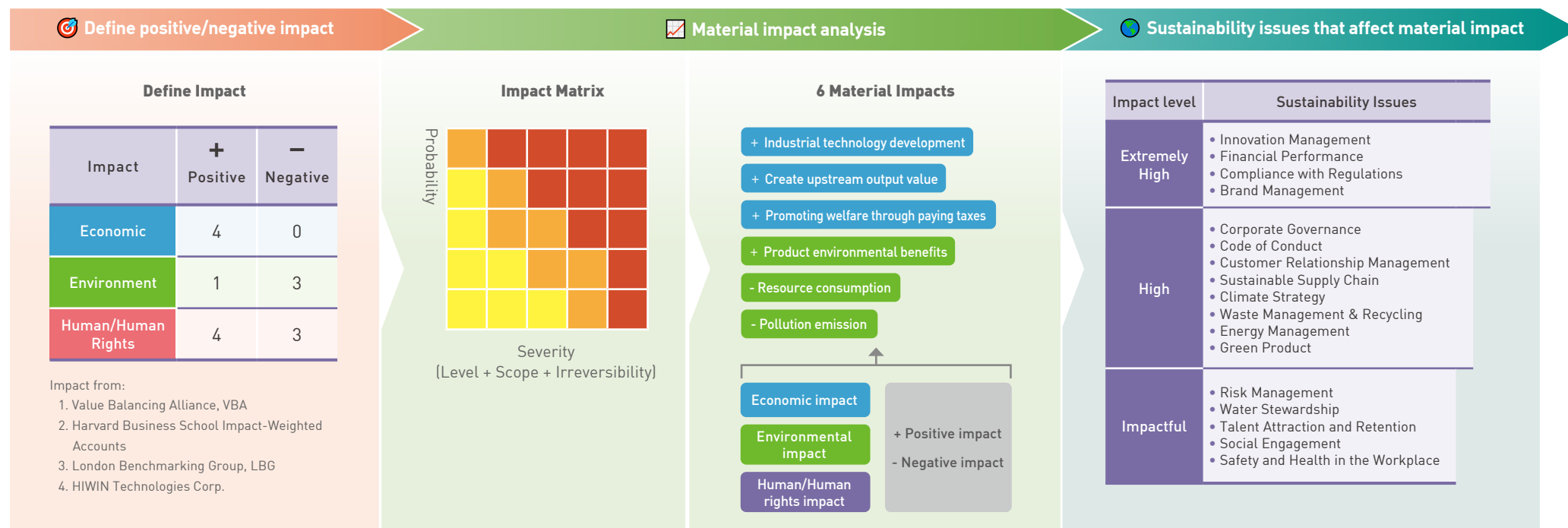
In Stage 1 of this process, the communication objects and topics for the sustainability report were identified. The AA1000 Stakeholder Engagement Standards (SES) principles of Dependence, Responsibility, Attention, Influence, and Multiple Perspectives were used as a reference. Through open discussions, the ESG committee members identified five types of stakeholders-employees, customers, suppliers/contractors, investors, and social groups - and ranked them based on their relationship with the company.

In line with the updated GRI Universal Standards 2021, as well as considering the UN Sustainable Development Goals (SDGs), international trends, and recommendations from external consultants, HIWIN has reevaluated and adjusted its ESG issues. After thorough discussions, a total of 23 ESG issues were identified as relevant to HIWIN's operations.

#### Stage 2: Analysis of material topics



## HIWIN process of sustainability impact assessment






## HIWIN material topics ranking

Material Topics	Ranking	Operational Impact of HIWIN	Stakeholder Perspectives	Sustainable Development Impact
R&D InnovationManagement	1	***	***	****
Customer Relationship and Brand Management	2	****	***	***
Safety and Health in the Workplace	3	**	****	**
Sustainable Supply Chain Management	4	***	****	***
Sustainable Products	5	**	***	***
Talent Attraction and Retention	6	**	****	**
Strategies for Climate Change & Energy Management	7	*	**	***
Social Engagement	8	*	***	**
Waste Management & Reuse	9	*	*	***
Water Stewardship	10	*	*	**

Material Topics: ● Environmental Aspect ● Social Aspect ● Economic Aspect



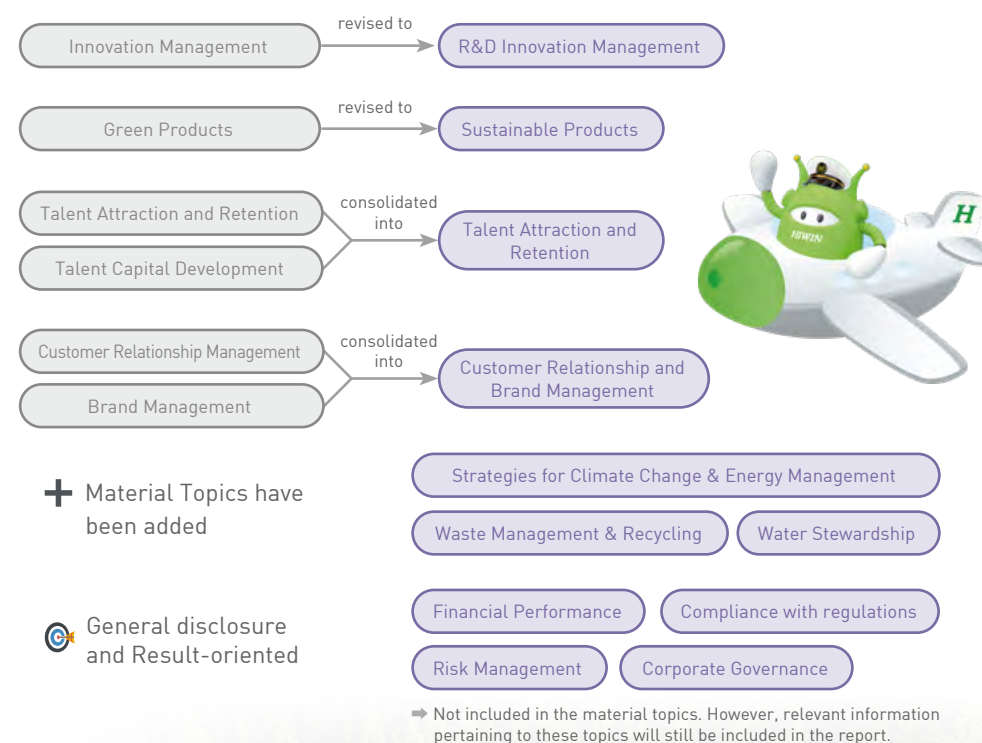
## Impact levels of material topics on three aspects

 Operational Impact of HIWIN	 Stakeholder Perspectives	 Sustainable Development Impact
<b>Extremely High</b> <ul style="list-style-type: none"> <li>Customer Relationship Management</li> </ul>	<b>Extremely High</b> <ul style="list-style-type: none"> <li>Safety and Health in the Workplace</li> <li>Talent Attraction and Retention</li> <li>Financial Performance</li> <li>Sustainable Supply Chain</li> </ul>	<b>Extremely High</b> <ul style="list-style-type: none"> <li>Innovation Management</li> <li>Financial Performance</li> <li>Compliance with Regulations</li> <li>Brand Management</li> </ul>
<b>High</b> <ul style="list-style-type: none"> <li>Corporate Governance</li> <li>Financial Performance</li> <li>Innovation Management</li> <li>Sustainable Supply Chain</li> </ul>	<b>High</b> <ul style="list-style-type: none"> <li>Green Product</li> <li>Talent Capital Development</li> <li>Social Engagement</li> <li>Customer Relationship Management</li> <li>Innovation Management</li> </ul>	<b>High</b> <ul style="list-style-type: none"> <li>Corporate Governance</li> <li>Code of Conduct</li> <li>Customer Relationship Management</li> <li>Sustainable Supply Chain</li> <li>Climate Strategy</li> <li>Waste Management &amp; Reuse</li> <li>Energy Management</li> <li>Green Product</li> </ul>
<b>Impactful</b> <ul style="list-style-type: none"> <li>Brand Management</li> <li>Risk Management</li> <li>Information Security</li> <li>Compliance with Regulations</li> <li>Green Product</li> <li>Employee Diversity and Inclusion</li> <li>Talent Capital Development</li> <li>Talent Attraction and Retention</li> <li>Human Rights</li> <li>Safety and Health in the Workplace</li> </ul>	<b>Concerned</b> <ul style="list-style-type: none"> <li>Risk Management</li> <li>Brand Management</li> <li>Compliance with Regulations</li> <li>Energy Management</li> <li>Employee Diversity and Inclusion</li> </ul>	<b>Impactful</b> <ul style="list-style-type: none"> <li>Risk Management</li> <li>Water Stewardship</li> <li>Talent Attraction and Retention</li> <li>Social Engagement</li> <li>Safety and Health in the Workplace</li> </ul>

Material Topics: ● Environmental Aspect ● Social Aspect ● Economic Aspect

## Stage 3: Identify and disclose material topics

Based on the materiality analysis results, HIWIN has identified 10 ESG topics as its major issues, which have been confirmed by internal senior executives and the president. Furthermore, each significant ESG issue has been carefully examined to assess its impact across the upstream, company operations, and downstream boundaries of HIWIN's value chain. In accordance with the reporting requirements of the GRI guidelines, relevant internal information, data, and management policies will be collected and disclosed.



## Material topics and HIWIN management approach

	Material Topics	Significance to HIWIN	Commitment	Strategy
G	<b>R&amp;D Innovation Management</b>	Consider our proprietary brand and R&D innovation as the cornerstones of our corporate competitiveness. We are dedicated to developing innovative, low-energy, high-efficiency sustainable products and enhancing quality and efficiency through smart manufacturing to achieve customer satisfaction.	Create an environment conducive to innovation, stimulating innovative momentum. By leveraging our core competencies in "Sustainable Products" and "Smart Manufacturing," we maintain our technological leadership and integrate global resources to advance HIWIN's focused SDGs.	1. Innovation Management in R&D: Establishment of Innovation Platforms, Industry-Academia Innovation, and IP Management. 2. Smart Manufacturing: Visualization of production processes, IoT-enabled machinery, intelligent automation, lean production, smart scheduling, smart machinery maintenance.
	<b>Customer Relationship and Brand Management</b>	1. Strengthen customer relationships, enhance customer experience, and improve customer satisfaction, loyalty, and trust to maintain brand value. 2. Enhance global market competitiveness, maintain stability, and achieve sustainable growth.	Provide enthusiastic, professional, and comprehensive services to realize the goal of continuous operation.	1. Customer Evaluation: Develop marketing and sales strategies based on customer attributes to create value. 2. Agile Marketing: Value interactions with customers and provide timely and precise responses to their needs. 3. Precision Service: Propose comprehensive solutions tailored to industry and customer needs. 4. Innovative Value: Providing transformation and upgrade services and products to create added value for customers and meet their needs.
	<b>Sustainable Supply Chain Management</b>	Utilize precise procurement to establish partnerships that satisfy both internal and external customers; connect a green value chain that supports sustainable business operations and environmentally friendly development.	Enhance sustainable risk management to drive a green, low-carbon supply chain, creating an operational model that is responsible to both the environment and society.	1. Supply chain hierarchy management. 2. Enhance sustainability risk management. 3. Promote a green and low-carbon supply chain. 4. Avoid using conflict minerals in raw materials. 5. Promote the reuse of materials. 6. Local Sourcing.
E	<b>Strategies for Climate Change &amp; Energy Management</b>	Actively formulate measures and action plans to address climate change to prevent impacts on operations.	Align with global carbon reduction trends to keep temperature rise within 1.5°C by continuously promoting energy-saving and carbon reduction measures, aiming to achieve net-zero by 2050.	1. Strengthen Climate Resiliency (Opportunities, Risks). 2. Use renewable energy sources to increase energy efficiency.
	<b>Water Stewardship</b>	Increase water recycling rates to achieve water balance, ensuring sustainable production.	Ensure the sustainable use and management of water resources, actively expanding diverse water resources and implementing water risk management.	1. Introduce water-saving technologies to strengthen wastewater recycling. 2. Water Stewardship Risk Management.
	<b>Waste Management &amp; Recycling</b>	Implement circular economy principles through procurement, R&D design, and manufacturing source reduction and reuse technologies to enhance resource efficiency and reduce environmental impact.	Prevent waste pollution, reduce and recycle waste, continuously manage waste control, comply with legal regulations, and realize a green and sustainable environmental vision.	1. Source Reduction. 2. Circular Economy. 3. Inspections & coaching.
	<b>Sustainable Products</b>	Committed to green manufacturing and sustainable development by incorporating green product design strategies throughout the product lifecycle, from raw materials to end-use and waste recycling, to achieve sustainable products and reduce environmental impact.	Strive to reduce the environmental impact at all stages of the product life cycle to achieve sustainable development.	1. Green and low-carbon product design. 2. Product Liability and Certification.
S	<b>Talent Attraction and Retention</b>	1. Develop talent and build outstanding teams to create maximum value for the company. 2. Enhance employee capabilities to maintain long-term competitive advantages.	1. Provide a diverse, open, respectful, and encouraging work environment for professional development, attracting talent, and promoting organic organizational growth. 2. Develop employees' professional skills and ensure training opportunities to strengthen their growth and employability.	1. Recruit high-quality talents to build future industry capabilities. 2. Develop employee potential and retain outstanding employees. 3. Stimulate employees' desire to learn and spread the effectiveness of learning.
	<b>Safety and Health in the Workplace</b>	Embed safety and health awareness deeply into employees' minds, ensuring consistency across all levels and internalizing it as part of their DNA.	Create a friendly workplace that prioritizes safety and health, fostering an organizational culture where employees feel secure and dedicated.	1. Establish a safety culture and promote safety performance management. 2. Strengthen employee participation and safety incentive system. 3. Monitor and evaluate the occupational health and safety of the work environment. 4. Promote health and implement appropriate occupational disease prevention measures.
	<b>Social Engagement</b>	1. Cultivate top mechanical experts and ensure a continuous supply of skilled personnel. 2. Care for local communities and vulnerable groups, promoting common good with both the community and the planet. 3. Enhance brand visibility and showcase Taiwan to the world through cross-disciplinary collaboration.	Allocate more than 2% of annual profits to give back to society.	1. HIWIN Education Foundation is dedicated to talent cultivation in the field of precision machinery. 2. HIWIN Volunteer Group practices social care. 3. Integrate resources to encourage cross-domain creative collaboration and create value. 4. Conduct satisfaction surveys and regular tracking to ensure more considerate and effective sponsorship.

## Material topics and HIWIN value chain





	Material Topics	Operational Impact of HIWIN				Sustainable Development Impact						Impact Stage			
		Revenue Growth	Customer Satisfaction	Operational Risk	Employee Engagement	Industrial Technology Development	Create Upstream Output Value	Promoting Welfare Through Paying Taxes	Product Environmental Benefits	Resource Consumption	Health Effects Caused by Pollution	Procurement	Manufacture	Customer	Society
G	R&D Innovation Management	○	○			○	○		○	○			●		
	Sustainable Supply Chain Management	○	○			○	○					○	●		
	Customer Relationship and Brand Management	○	○	○	○	○	○		○				●	○	
E	Strategies for Climate Change & Energy Management			○					○	○	○	○	●		
	Water Stewardship			○						○			●		
	Waste Management & Recycling			○					○		○		●		
	Sustainable Products		○			○			○				●	●	
S	Talent Attraction and Retention				○	○							●		
	Safety and Health in the Workplace				○						○	○	●		
	Social Engagement							○					●		◎

Topics to operational or sustainable development impacts: ○ Impactful ● Cause ○ Facilitate ◎ Directly related






## Stakeholder Communication Channels






Highlights	Stakeholder	Significance to HIWIN	Focused Issues	Method/ Frequency	Actions
<b>28</b> Labor-management Meetings and Welfare Committee Meetings	Employees	Employees are important pillars of sustainable corporate management.	<ul style="list-style-type: none"> <li>Talent Attraction and Retention</li> <li>Safety and Health in the Workplace</li> <li>Customer Relationship and Brand Management</li> </ul>	<b>anytime</b> Employee opinion mailbox, communication and work meetings across departments, electronic bulletins, care interviews	<ul style="list-style-type: none"> <li>Promote company-related information on electronic bulletin boards as needed.</li> <li>Held 70 KPI meetings, assisting supervisors in setting key performance indicators to cultivate staff and provide precise work guidance.</li> <li>Robust compensation, welfare, retirement benefits, labor insurance, health insurance, and group insurance.</li> <li>Diverse employee communication channels and various mechanisms to ensure employee health, physically and mentally.</li> <li>Implement employee care interviews, listen to employee feedback, and take immediate action accordingly.</li> <li>Pre-training survey and communication, post-training satisfaction, and feedback.</li> <li>Talent training and development are closely linked with work, providing employees with mechanisms for sharing and exchanges as well as reward measures.</li> <li>Organize senior executive panels and growth incentive workshops as needed.</li> </ul>
<b>70</b> Departmental Communication and Work Meetings				<b>quarterly</b> Labor-Management Meetings <b>annually</b> ESG questionnaire, human rights Education & training <b>every two years</b> Engagement Survey	



Highlights	Stakeholder	Significance to HIWIN	Focused Issues	Method/ Frequency	Actions
<b>329</b> Customer Satisfaction Surveys	Customers	Customer satisfaction represents the sustainable performance of the company's operations.	<ul style="list-style-type: none"> <li>Customer Relationship and Brand Management</li> <li>Sustainable Supply Chain Management</li> <li>Social Engagement</li> <li>Safety and Health in the Workplace</li> <li>Sustainable Products</li> </ul>	 <ul style="list-style-type: none"> <li><b>anytime</b> CRM Software, Mobile APP</li> <li><b>annually</b> ESG website and report, Customer Satisfaction Survey</li> <li><b>as needed</b> Official website/technical support website updates, Product marketing/ Trade fairs</li> </ul>	<ul style="list-style-type: none"> <li>Utilize the <a href="#">global official website</a>, <a href="#">technical support site</a>, and social media platforms (LinkedIn, YouTube, WeChat, Line@, etc.) to enable customers to quickly understand products and promptly receive service information, while providing feedback to relevant departments.</li> <li>Manage and maintain customer relationship data through software, including: (1) customer visit records, (2) after-sales service information, (3) exhibition data, and (4) potential business opportunities from website inquiries. This helps understand customer needs, enhance customer relationship management, and increase customer loyalty.</li> <li>Attend over 200 exhibitions in over 30 countries each year to promote and introduce new products.</li> <li>Regularly or irregularly arrange subsidiaries/distributors for product and quality after-sales service training or hold in-house product displays at major distributors to better familiarize subsidiaries/distributors with HIWIN products, successful applications, and solutions, enhancing customer satisfaction.</li> <li>Provide product displays and applications to HIWIN partners, i.e., the Industrial Technology Research Institute, National Science and Technology Museum, and educational institutes.</li> <li>Hosted online forums for customers, allowing them to gain a deeper understanding of HIWIN products.</li> </ul>
<b>182</b> Sessions of Contractors Training	Suppliers/ Contractors	HIWIN's Partnerships for the Goals with suppliers/ contractors provides excellent products and services.	<ul style="list-style-type: none"> <li>Safety and Health in the Workplace</li> <li>Strategies for Climate Change &amp; Energy Management</li> <li>Sustainable Supply Chain Management</li> <li>Talent Attraction and Retention</li> </ul>	 <ul style="list-style-type: none"> <li><b>annually</b> ESG official website and ESG reports, Top 100 Supplier Evaluations</li> <li><b>as needed</b> Contractor Education &amp; training, contractor consultative organization meetings, supplier evaluation meetings</li> </ul>	<ul style="list-style-type: none"> <li>Encourage suppliers to reduce energy consumption and carbon emissions by participating in workshops or training courses, working together towards net-zero carbon emissions.</li> <li>Prioritize procurement from local suppliers in Taiwan to provide local jobs and employment opportunities.</li> <li>Follow the Supplier Code of Conduct and conduct ESG evaluations of suppliers.</li> <li>Conduct conflict minerals investigations.</li> <li>Identify high-risk suppliers to mitigate the risk of supply chain disruptions.</li> <li>Evaluate outstanding contractors and provide them with safety and health training.</li> <li>Hold contractor agreement meetings to promote operational safety regulations to contractors.</li> </ul>
<b>157</b> Assessments of Suppliers					
<b>2</b> Investor Conferences	Investors	Investors are the forces driving HIWIN to strive for sustainable operations and welfare for all mankind.	<ul style="list-style-type: none"> <li>Talent Attraction and Retention</li> <li>Safety and Health in the Workplace</li> <li>R&amp;D Innovation Management</li> <li>Social Engagement</li> </ul>	 <ul style="list-style-type: none"> <li><b>2-3 times/year</b> Investor conferences (as needed for special agendas)</li> <li><b>annually</b> Shareholders' meetings, annual reports, ESG Reports</li> <li><b>as needed</b> Meetings related to public policies, official correspondence, press releases</li> </ul>	<ul style="list-style-type: none"> <li>Convene at least one Board meeting each quarter to review HIWIN's management performance and discuss topics of strategic importance.</li> <li>The Board and senior executives shall explore material risks to formulate operational plans. Rigorous internal control of operational processes will help us to continuously improve.</li> <li>HIWIN's important resolutions are promptly disclosed on the TWSE Market Observation Post System (MOPS).</li> <li>Internal controls for private information and trade secrets.</li> </ul>
<b>27</b> Released Material Information Items					
<b>48</b> Conferences between the Industry, Government, and Academia	Social Group (Academia, local communities, and other stakeholders)	Integrate sectors and drive upgrades in Taiwan's industries and strengthen exchanges between the industry, government, and academia. Fulfilling social responsibilities with HIWIN.	<ul style="list-style-type: none"> <li>R&amp;D Innovation Management</li> <li>Customer Relationship and Brand Management</li> <li>Sustainable Products</li> <li>Safety and Health in the Workplace</li> <li>Sustainable Supply Chain Management</li> </ul>	 <ul style="list-style-type: none"> <li><b>monthly</b> HIWIN-CMU R&amp;D Center, Student Visiting Events</li> <li><b>quarterly</b> Admissions Briefing and Parent-Teacher Conference</li> <li><b>annually</b> ESG Official Website and ESG Reports</li> <li><b>as needed</b> HIWIN Education Foundation organizes volunteer activities, HIWIN-NTHU Research &amp; Development Center, dispatch HIWIN employees to teach at universities, correspondence, seminars, informational sessions, discussion forums</li> </ul>	<ul style="list-style-type: none"> <li>Comply with ESH laws, regulations, and other related requirements.</li> <li>Organize the HIWIN Thesis Award, HIWIN Doctoral Dissertation Award, and HIWIN Smart Robotics Contest annually.</li> <li>Assist in promoting certification exams for automation engineers and robotics engineers.</li> <li>Establish elementary school libraries and provide children's books and English courses.</li> <li>Hold industry-academia cooperation classes, industry-academia cooperation projects, and technical cooperation with specialized programs.</li> <li>Create communication and exchange platforms between teachers, students, and HIWIN professionals through school visits and lectures by HIWIN experts.</li> <li>Visit teachers annually to maintain close industry-academia relationships.</li> <li>The HIWIN Volunteer Group provides community care and supportive services.</li> </ul>
<b>124</b> Exchange Sessions between the Industry, Government, and Academia					

## HIWIN Material Topics and Risk Management

Material Topics	Potential Risks	Risk Attributes	Risk Severity <sup>Note1</sup>	Risk Occurrence Rate <sup>Note2</sup>	Risk Mitigation and Response
 Research and Innovation Management	Failure to identify and respond to external innovative technologies and new markets	Strategies/Operations	Low	Low	Increase research expenditure proportion, enhance industry-academia cooperation exchange expenses, and deepen open innovation.
	Insufficient internal innovation capability	Operations	Low	Low	Provide internal and external innovation course Education & training, interaction and communication with global R&D teams, and improve the innovation incentive proposal system.
	Inadequate protection of patents and trade secrets	Hazards	Medium	Medium	Implement intellectual property and legal education training, conduct regular internal audits of the intellectual property management system (TIPS), and develop a global patent strategy.
	Product development not fully considering low-carbon design, unable to meet carbon tariff and customer requirements	Strategies/Operations/ Hazards	Medium	Medium	Incorporate carbon footprint assessments into product development processes, add low-carbon reviews to product evaluation items, reduce material usage in product design, and lower carbon emissions during product use by customers.
 Sustainable Products	Products unable to meet market energy-saving demands, e.g., improving efficiency or reducing carbon emissions for third parties	Strategies/Operations	Medium	High	Establish the Product Environmental Performance Ratio (CPV).
	Substances used in product production pose risks to human health and the environment	Hazards	Low	Medium	Require suppliers to sign RoHS commitments and gradually implement plans to eliminate harmful substances.
	Raw material sources of products involve human rights controversies	Hazards	Low	Low	Strictly monitor mineral sources and avoid using conflict minerals.
	Products unable to meet greenhouse gas reduction regulations	Strategies/Operations	Medium	Medium	Implement systematic product carbon footprint assessments, strengthen green design manpower and capabilities, and reduce waste during production processes.
 Customer Relationship and Brand Management	Customers unable to obtain necessary product information and technical support	Operations	Low	Very Low	Utilize public websites or social media to inform customers about company products, participate in global exhibitions to provide brand tours, and arrange education and training for subsidiaries/distributors or in-house displays at major distributors.
	Product quality and sales services unable to meet customer needs in a timely manner	Operations	Low	Very Low	Conduct customer surveys, execute employee product quality education & training and technical seminars, and understand real-time customer demands through grievance channels or online meetings.
	Customer information leakage	Operations	Low	Very Low	Establish strict customer data protection policies to prevent data leaks and unauthorized use. Ask employees to sign the Declaration to Protect Trade Secrets and Non-Disclosure Agreement.
 Sustainable Supply Chain Management	Product supply chain disruption	Operations	Medium	Low	Enhance supervision and management of the supply chain to ensure suppliers meet the company's sustainability standards and requirements, and select multiple suppliers to reduce supply risks.
	Centralized procurement, supplier not meeting HIWIN or regulatory requirements	Strategies/Operations/ Hazards	Medium	High	Execute the four major policies of Sustainable Supply Chain Management: adherence to guidelines, risk assessment, audit activities, and continuous improvement.
 Climate Strategy and Energy Management	Electricity shortages or interruptions	Operations/ Hazards	Medium	Medium	Increase the proportion of renewable energy source installations, formulate energy-saving measures, and improve equipment energy efficiency.
	Increase in GHG emissions	Strategies/Operations/ Hazards	Medium	Medium	By implementing four core strategies—enhancing energy efficiency, innovating low-carbon products, reducing waste through the circular economy, and adopting renewable energy sources—we are launching our carbon reduction initiatives.

Material Topics	Potential Risks	Risk Attributes	Risk Severity <sup>Note1</sup>	Risk Occurrence Rate <sup>Note2</sup>	Risk Mitigation and Response
 Water Stewardship	Water source interruptions and shortages	Operations/Hazards	Medium	Medium	Expand the use of recycled water within factories, enforce water-saving measures, and establish water shortage response mechanisms.
	Wastewater discharges not meeting regulatory requirements	Operations/Hazards	Low	Low	Improve audit systems, enhance treatment equipment efficiency, and establish real-time monitoring systems.
 Waste Management and Reuse	Contractors failing to properly manage waste	Hazards	Low	Low	Implement mechanism for contractor factory visit, utilize machinery for real-time tracking, and assist contractors in enhancing their self-management capabilities.
 Talent Development and Retention	Challenges in recruiting and retaining talent due to changes in domestic demographics and industrial structure, and intense external labor market competition	Strategies/Operations	Medium	Medium	Recruit a diverse workforce, provide platforms for key talents through salary structures, welfare adjustments, and internal transfers, and effectively attract and retain talent.
	Talent unable to keep pace with the times	Strategies/Operations	Medium	Very Low	Offer comprehensive professional, core, and managerial competency training, create work competition platforms to encourage team participation, and adopt the Kirkpatrick Model.
 Workplace Safety and Health	Environmental deficiencies, insufficient equipment protection, and unsafe employee behaviors	Strategies/Operations/Hazards	Medium	High	Promote safety culture activities, conduct themed inspections, establish a digital occupational accident database, and assist departments lagging in safety performance.
	Hazardous chemical storage and disposal	Strategies/Operations/Hazards	Medium	Medium	Control chemical inventories, ensure the safety of process activities and raw material storage, and review emergency response measures.
 Social Engagement	Service needs of social welfare institutions not being met	Strategies	Low	Very Low	Proactively offer volunteer services, provide pre-event education and training for charity activities, enhance volunteer service quality, and seek feedback from social welfare institutions post-service to continuously improve.

Note: 1. High: Severe, requires immediate improvement; Medium: Requires control improvements or mitigation measures; Low: Safe stage, continue to maintain.

2. High: Once a year; Medium: Once every 1-5 years; Low: Once every 5-10 years; Very Low: Once every 10 years or more.





## 03

## Corporate Governance on Performance

HIWIN is committed to operational excellence and maintaining consistent profitability. We prioritize shareholder value, employee development, and regulatory compliance. We firmly believe that providing our employees with excellent job opportunities and achieving full employment and production capacity are fundamental pillars for sustainable growth and effective management.



### 3.1 About HIWIN

We market our products globally under our own brand, HIWIN. As a leading brand in motion control and system technology, HIWIN specializes in researching and developing high-precision, efficient, and environmentally friendly key components, subsystems and systems. HIWIN’s vision is to be the “Best Partner of Smart Manufacturing,” delivering added value to our customers through HIWIN’s integrated mechatronic products and global service. HIWIN is committed to ESG sustainable development, actively working to enhance our own competitiveness and drive innovation and transformation within the mechanical industry.

Basic information			
 HIWIN Technologies Corp.	Founder	Responsible Person	HIWIN Headquarters Address
	Eric Y. T. Chuo (PH.D.) Global Chairman	Eddie Chuo Chairman & CEO	No. 7, Jingke Road, Precision Machinery Park, Taichung 408208, Taiwan
	Establishment Date	Number of Employees	Capital
	Oct. 1989	4,648 [Dec. 2023] <small>Excludes headcount from subsidiaries and sub-subsidiaries.</small>	US\$ 115.23million

- **HIWIN’s Chinese name was inspired by Lao Tzu’s saying that the greatest virtue has the characteristics of water**

HIWIN has adopted this as a guideline for our management philosophies. Water is responsible for nourishing all living beings on the planet, making it a highly valuable resource. Similarly, corporate leaders have the duty to ensure the well-being of their employees and their families, promote industrial development, and contribute to their societies and countries.

#### Management Philosophy

HIWIN’s objective is to integrate global resources in order to foster continuous innovation, improve quality of life, create a better working environment, and achieve sustainable operations. HIWIN will accomplish this through the application of professional excellence, working enthusiasm, and a strong commitment to enterprise ethics and responsibility.

HIWIN’s mission, since inception, has been to enhance the quality of life and create a more conducive working environment for humanity. Furthermore, HIWIN’s business philosophy is founded on four key principles: prioritizing employees, satisfying shareholders, fostering long-term growth, and upholding corporate social responsibility.



#### Service Philosophy

HIWIN is breaking away from traditional machinery thinking by applying core technologies to various industries. These industries include optoelectronic semiconductors, transportation, intelligent automation, life sciences, energy conservation, environmental protection, and medical & welfare. And establish an industry benchmark for high-speed, high-precision, composite, and eco-friendly products.

As HIWIN’s linear motion control product line becomes more robust, and with the fruits of long-term design collaborations with major global manufacturers, HIWIN can now offer customers total solutions, including machine design services, smart automatic production line planning, and other smart manufacturing capabilities.

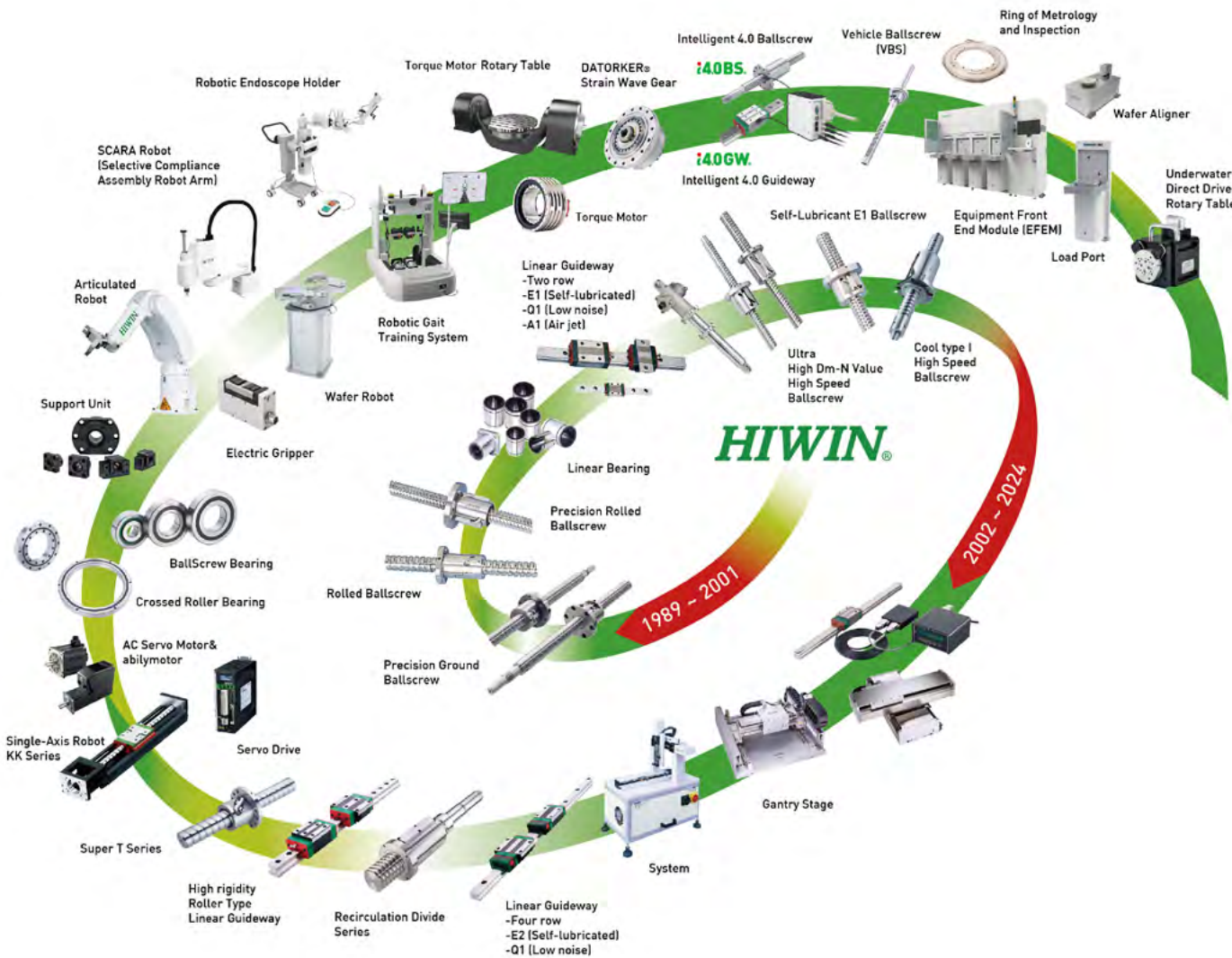
#### Main Products & Services

HIWIN is specialized in developing and manufacturing key components for linear motion products. HIWIN’s main products include ballscrews, linear guideways, industrial robots, wafer robots, torque motor rotary tables, bearings, strain wave gear, and medical robots. These products are primarily used in industries such as machine tools, industrial machinery, automation, semiconductor, optoelectronics, LED, new energy, 3C electronics, and medical equipment. Established in 1989, HIWIN has consistently invested in innovation, including production development, manufacturing processes, equipment, production capacities, sales channels, services, and talent cultivation. HIWIN expects itself to be a global leading brand in motion control and system technology.



## • Main Products & Services

HIWIN employs a differentiated approach and offers tailored services to deliver added value to our customers.



### ① Win-win collaborative design

▶ HIWIN's collaboration with customers in designing synergistic solutions has revolutionized our approach, shifting from a passive order-taking model to an interactive and transparent pre-sales service. This transformation has significantly expedited the introduction of our customers' new products to the market.

### ② Continuous innovation & manufacturing services

▶ By conducting in-house research and development, collaborating with academia and industry, and acquiring essential technologies, HIWIN has successfully expanded production lines. As a result, HIWIN is able to offer a wide range of high-quality linear motion products and smart automation services to our valued customers.

▶ We have embraced the era of smart automation, which has allowed us to create an optimal workplace for industrial manufacturing and medical workers through the implementation of comprehensive robotic production lines.

### ③ Helping customers achieve smart manufacturing

▶ HIWIN has partnered with industrial customers in Taiwan to advance smart manufacturing and smart factories, aiming to forge a new direction for the country's industries.

▶ HIWIN works closely with customers to provide smart automation solutions, saving labor costs for customers and enhancing the industry's competitiveness.

### ④ Maintaining customer relations

▶ HIWIN consistently meets customer needs for high-quality products through improvement of manufacturing processes.

▶ HIWIN establishes subsidiaries and sub-subsidiaries globally to be closer to customers and provide better services. In 2023, HIWIN had subsidiaries, sub-subsidiaries, and labs in 12 countries. We also have over 300 sales and distribution locations around the world.

### ⑤ Updating website interfaces to align with user experience

▶ HIWIN has continued to enhance the user interface of the website, focusing on providing customers with a more intuitive and efficient user experience for our products.



- **HIWIN's Critical Role in the Industry Chain**



## Global Layout

HIWIN Headquarters is located in Taichung, Taiwan, with service locations, subsidiaries, sub-subsidiaries, and R&D centers in major industrial countries, including the U.S., Germany, Japan, Italy, Switzerland, South Korea, Singapore, China, the Czech Republic, France, the U.K., and Israel, totalling 12 countries. We also have over 300 sales and distribution networks worldwide to be closer to customers and provide better services.



## 3.2 Brand Values

The brand name HIWIN is the abbreviation of “HI-TECH WINNER,” which is derived from “With us, you are a hi-tech winner.” The purpose of the HIWIN brand is that by choosing HIWIN precision motion products, subsystem and mechatronic solutions, customers can improve their products’ added value, quality, and performance, enabling them to be the winners in their industries. HIWIN strives to become a “high-tech winner,” driving industry upgrades, increasing the industry’s international competitiveness, and exerting global influence.

### CIS (Corporate Identity System)

Color - Green, Red



#### RED

As the heat of the earth’s core. Representing sincerity, positive and strong spirit of innovation.

#### GREEN

As a harmonious and thriving earth. Representing nature, environmental protection, sustainability and growth.

Green refers to harmony between all beings, signifying the idea of environmental consciousness, nature, sustainability and growth. HIWIN products can replace hydraulic and pneumatic solutions to reduce pollution and noise, and increase efficiency and precision, thereby achieving the mission to “provide a better life for mankind.” Red refers to the passion like the heat of the earth’s core, denoting enthusiasm, and strong spirit of innovation.

### 1. Brand Strategies

- ① Marketing worldwide under the HIWIN brand.
- ② With the business philosophy of “Global view, local touch,” HIWIN established global sales channels, quickly connecting to the market and providing pre-and after-sales services.

### 2. Marketing Strategies

- ① With the mission of sustainable innovation, HIWIN collaborates with customers to implement ESG tasks, including the service of components, subsystems, and system parts.
- ② Integrating mechatronic products, smart automation equipment, and system services to provide eco-friendly and efficient total solutions.
- ③ Developing and managing a wide range of products under a single brand. For example, we can apply core technologies to new fields such as healthcare and semiconductors.

### 3. Brand Management

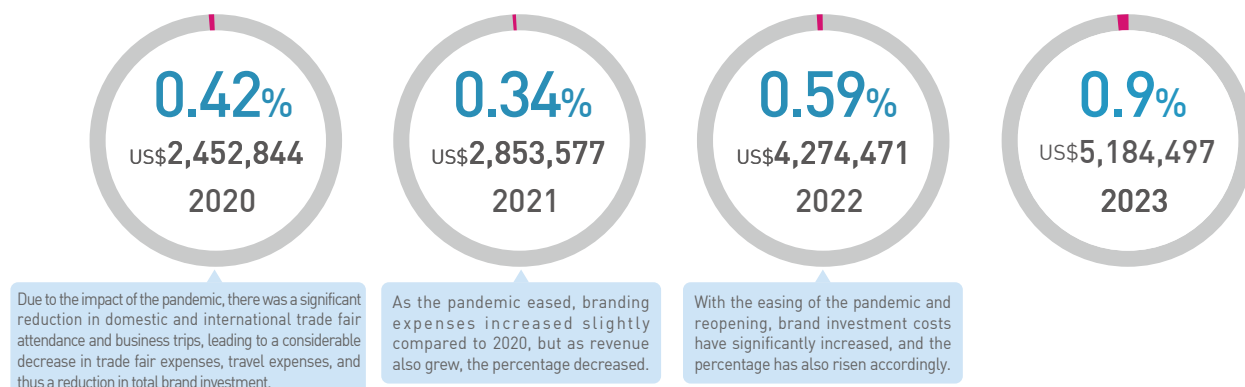
As of 2023, HIWIN has been trademarked and registered in 86 developed countries, including the U.S., Japan, and Europe. Also, trademark applications in three other countries are currently pending. The product line comprises the Ballscrew, Linear Guideway, special bearings, DT Strain Wave Gear, Torque Motor Rotary Tables, Industrial Robots, and semiconductor equipment. The HIWIN brand has a 100% utilization rate<sup>Note</sup>.

Note: “100% utilization rate” means that all products are manufactured and sold in-house, without contract manufacturing or ODM practices.

## 4. Branding Efforts

President Enid H.C. Tsai directly supervises and leads the implementation of existing programs and the launch of new ones under the HIWIN brand. The Sales Department collaborates with the Planning Section and other units to promote and implement these programs jointly. The Company maintains a consistent annual funding of approximately 1% of the yearly revenue, which may fluctuate depending on the year's global situation and economic conditions.

### Investments in brand development in 2020-2023



Note: 1. Ratio=Investments in brand development÷Total revenue.

2. Branding expenses include exhibitions, advertising, and marketing promotion activities.

The HIWIN brand has gained a formidable reputation and is now the leading brand globally for motion control and system technology.

We have long investment in marketing the HIWIN brand, through means such as:

- ① Each year, we participate in 200 professional exhibitions worldwide to directly engage with customers and potential customers, showcasing HIWIN's capability in providing integrated electromechanical total solutions.
- ② We invest significant funding in ads on web portals, professional technology forums, technology columns, professional journals, domestic/foreign magazines and digital media. (Including physical and online presentations)
- ③ We set up HIWIN ads at airports, train stations, highways, etc.



Korean magazine



Japanese magazine



Shin-Kobe Station in Japan



Shanghai-Nanjing Expressway (Shanghai-Suzhou section) in China



Taoyuan Airport



### 3.3 Corporate Governance

Led by Chairman and CEO Eddie Chuo, HIWIN’s board members are exceptional in their professional domains and also independent as they carry out the following essential duties:

Duties of the Board of Directors 1 <b>Supervision</b>	Overseeing legal compliance, financial transparency, and the timely disclosure of material information. Establishing various functional organizations to fulfill supervisory responsibilities, such as the Audit Committee, Remuneration Committee, Nominating Committee, internal audits, and internal reporting systems.
Duties of the Board of Directors 2 <b>Guidance</b>	The board hears the management team’s quarterly report on economic and corporate social responsibilities, such as relevant risk and opportunity assessments, compliance with international standards, and business ethics. The board then assesses the feasibility of corporate strategies formulated by the management team and reviews their progress. When necessary, the board urges the management team to make appropriate adjustments.
Duties of the Board of Directors 3 <b>Appointment and evaluation</b>	Appointing and dismissing managers, evaluating their performances, maintaining good communication with the management team, and generating maximum profits for all shareholders.

To enhance corporate governance and improve the board’s effectiveness, HIWIN has implemented a Key Performance Indicator (KPI) to strengthen operational efficiency. On December 27<sup>th</sup>, 2018, HIWIN established measures for evaluating board performance in accordance with letter No. 1070025395 of the Taiwan Governance Code. At the end of each year, HIWIN’s deliberative unit will ask directors to complete self-assessment questionnaires for the Board of Directors, board members, and functional committees to conduct an annual board performance assessment. The board will then review the questionnaires’ outcomes and make necessary improvements in the Q1 board meeting of the following year.

The performance evaluation score for 2023 reached above 96.7%, with evaluation results exceeding the standard and no major deficiencies or items requiring improvement. The result was submitted to the Nominating Committee and listed in the Board of Directors meeting agenda on February 27<sup>th</sup>, 2024. Currently, the performance of the current Board of Directors is not linked to Environmental, Social, and Governance (ESG) factors, and there has been no engagement with an external third-party independent organization to assess the board’s performance. However, the assessment of such practices in the future is currently being considered.

### Organization & Structure

HIWIN’s management team is committed to upholding corporate governance policies that protect shareholder equity and enhance our information transparency. Our endeavors have received extensive recognition. Main Practices:

- 1

Functional committees fulfill their respective duties to enhance the board’s functioning and implementation of corporate governance.
- 2

Establish and implement an effective internal control system with self-checking mechanisms.
- 3

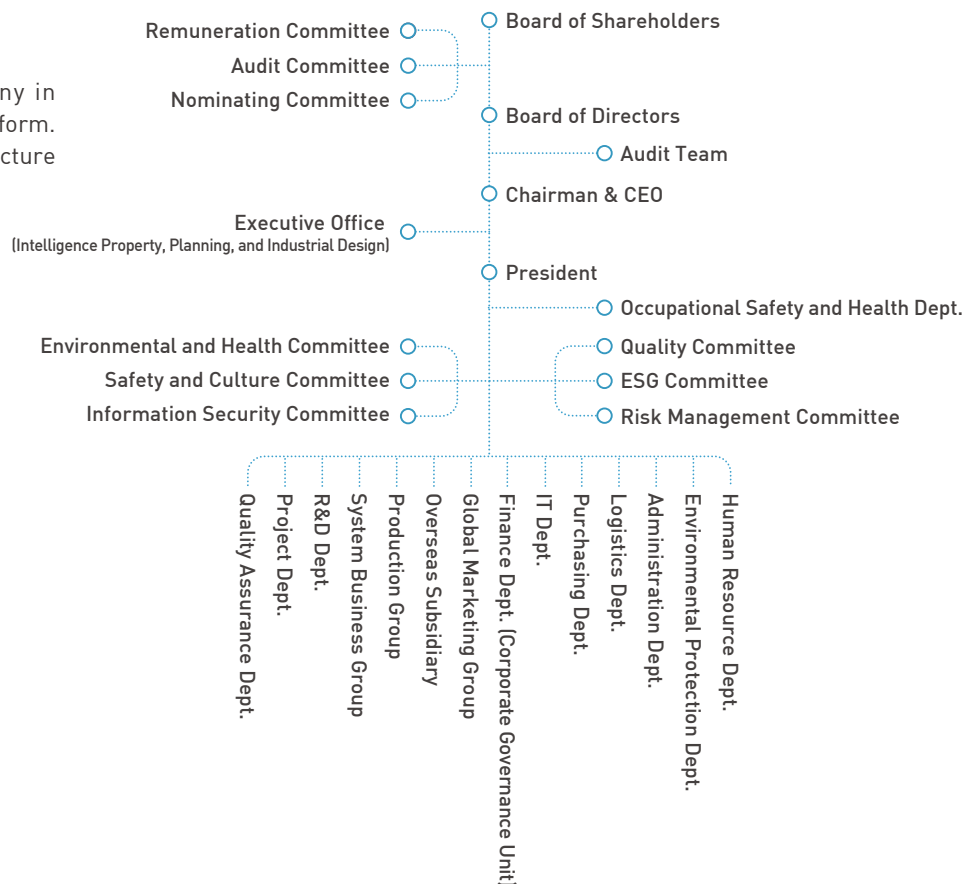
Establish a process for public information declaration to ensure that shareholders and stakeholders have a comprehensive understanding of the Company’s financial and business status, as well as the implementation of corporate governance.
- 4

The Board of Directors serves as the highest governing body, and all resolutions passed by the Board must be approved by the shareholders’ meeting. In addition to the board’s oversight, the ESG Committee focuses on matters pertaining to education, the economy, the environment, and the disadvantaged in society. The committee also reports significant matters during board meetings.

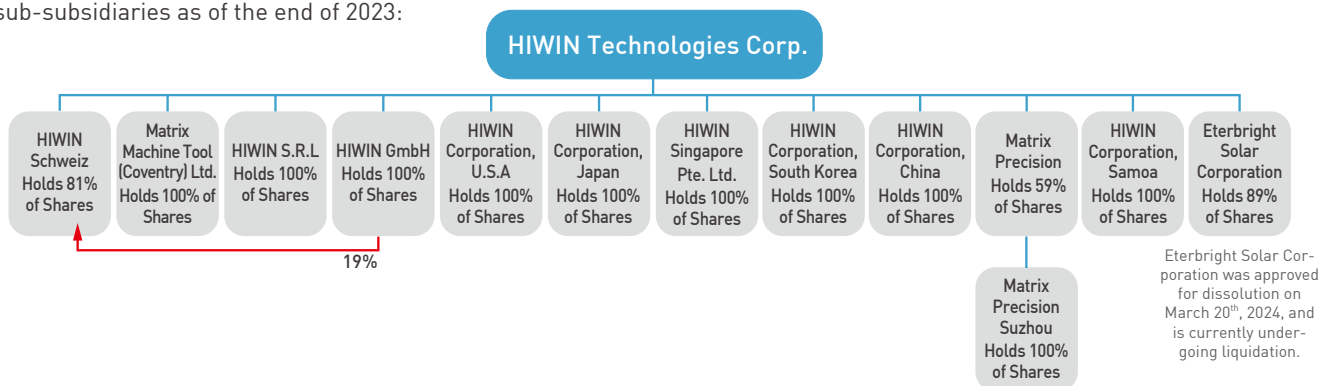


## Organization Chart

HIWIN is a joint-stock company in terms of its ownership and legal form. As of 2023, the management structure of HIWIN is as follows:



The parent company, subsidiaries, and sub-subsidiaries as of the end of 2023:



## Internal Control

The internal control system is designed by management, approved by the board, and implemented by the board, management, and employees. Its purpose is to promote efficient operations and provide reasonable assurance.



There are five components of an internal control system:



## Information Disclosure

HIWIN is committed to transparency and good faith in disclosing Company information. We provide transparent and open access to operational performances, financial reports, and ESG reports on investor service platforms and our official website. Furthermore, we announce information regarding shareholder meetings and roadshows on our website. To ensure effective communication with investors and shareholders, we have established a spokesperson system to address their queries. This system serves as a reliable channel of communication between HIWIN and our valued investors. In 2023, HIWIN released 27 items of Material Information.

## Structure of the Board of Directors

The HIWIN Board of Directors consists of 7 to 11 directors and follows the candidate nomination system outlined in Article 192-1 of the Company Act. The director nomination process is thorough, considering the candidate's professional competence, ethical conduct, and leadership reputation. Currently, HIWIN does not consider ESG background in its director nomination process. Directors at HIWIN serve a three-year term and may be eligible for re-election as per the "Procedures for the Selection and Appointment of Directors."

The 12<sup>th</sup> Board of Directors consists of 10 directors and serves from June 27<sup>th</sup>, 2022 to June 26<sup>th</sup>, 2025. Chairman & CEO Eddie Chuo leads the Board of Directors. Among the directors, 30% are independent directors, and 30% are employee directors. Our Company has not yet set specific targets for the number of employee and non-employee directors or the number of independent directors. To enhance corporate governance and address stakeholder concerns, HIWIN has established an Audit Committee and Nominating Committee, both of which are composed entirely of independent directors.

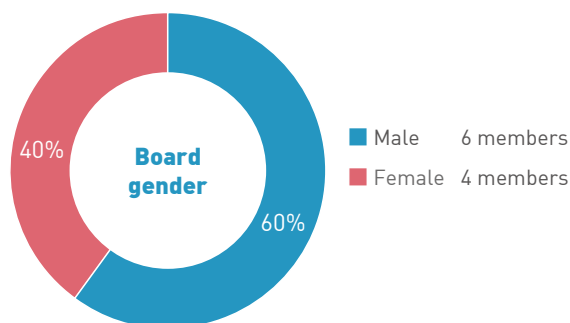
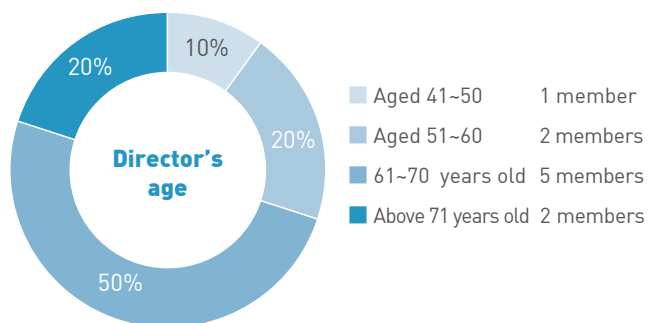
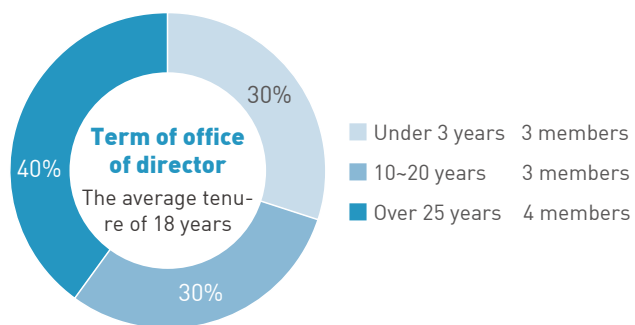
The directors of HIWIN possess extensive educational and professional backgrounds in business management, finance, engineering, and trading. In order to promote diversity, the HIWIN Board of Directors includes four female members. These directors offer valuable insights and guidance for our Company's business operations and development. Additionally, HIWIN provides liability insurance for directors and management, safeguarding them against personal liabilities and financial losses arising from third-party claims related to their duties at HIWIN.

As of the conclusion of 2023, the directors' primary educational background, industry experience, and professional expertise are outlined in the table on the right:

Title	Name	Gender	Age	Professional Qualifications and Experience	GICS Level <sup>1</sup> Note
Chairman & CEO	Eddie Chuo	Male	51~60	<a href="#">Core Expertise</a> Industry insight, operations & management, global insight, participative leadership Chairman and CEO of HIWIN Corporation. He leads the Company through changes with resilience, expertise, and gravitas, ushering in a new era of next-gen smart manufacturing.	Industry
Vice Chairman	Chin Tsai Chen	Male	71~80	<a href="#">Core Expertise</a> Accounting and financial management, industry insight, technological innovation Vice Chairman of HIWIN Corp., Group President of Namchow Holdings Co., and Chairman of WIN Semiconductors Corp. He has extensive experience in traditional and electronic industries and personally received the 15th National Outstanding Achievement Award.	Raw materials, Industry
Director	Eric Y. T. Chuo (PH.D.)	Male	Over 81	<a href="#">Core Expertise</a> Finance, industry innovation, operations & management, global insight Founder of HIWIN and HIWIN MIKROSYSTEM Technology Co., Ltd. Having a long-term dedication to Taiwan's machinery industry, he focuses on the innovative development of key components in precision machinery and establishing a world-leading brand in high-tech industrial manufacturing. He has received numerous accolades, including the National Invention Gold Medal from the Ministry of Economic Affairs, the 6th National Outstanding Achievement Award, the Order of Brilliant Star with Special Grand Cordon presented by the President in 2016, and being ranked in the top 8 of Harvard Business Review's Top 50 Taiwanese CEOs.	Industry
Director	Enid H.C. Tsai	Female	61~70	<a href="#">Core Expertise</a> Brand management, international marketing, team building, and cross-disciplinary innovation President of HIWIN Corporation. She possesses extensive industry knowledge and excellent management and leadership skills. She has been recognized as one of Forbes Asia's 50 Power Businesswomen, received the Lee Kuo-Ting Management Medal, the 30th National Outstanding Manager Award, and ranked first in the Harvard Business Review's 2nd "Top 20 Taiwan Best Listed Female CEOs."	Industry
Director	Shun Chin Lee	Male	61~70	<a href="#">Core Expertise</a> Industry insight, investment management Director at HIWIN Corporation. He has held management roles in multiple businesses and has been involved in industrial-related companies for nearly 35 years, possessing industry knowledge and investment management capabilities.	Industry
Director	Olivia S.Y. Chuo	Female	41~50	<a href="#">Core Expertise</a> Finance and financial management, operations & management, understanding of the global market Chairperson & CEO of HIWIN MIKROSYSTEM Corp. She has industry knowledge and high management capabilities and previously served as Secretary of the CFO Office at Bank SinoPac.	Industry
Director	Ching Yi Huang	Female	51~60	<a href="#">Core Expertise</a> Finance, operations & management Chairperson of Sanko Investments Ltd. Former manager of the Foreign Department at Hwatai Bank, she possesses investment analysis and communication coordination skills.	Finance
Independent Director	Cheng Ho Chiang	Male	61~70	<a href="#">Core Expertise</a> Finance, Risk Management Former Section Chief of the Investment Department at Bank of Communications, Section Chief of the Banking Bureau and the Examination Bureau of the Financial Supervisory Commission, Executive Yuan, and Chief Auditor, Board of Directors, Taiwan Financial Holdings Co., Ltd.	Finance
Independent Director	Zhen Yuan Chen	Male	61~70	<a href="#">Core Expertise</a> Financial Analysis, Investment Management, Innovation Management The current president of the China University of Technology. Former assistant manager at China Development Industrial Bank, manager at Elite Venture Capital, and the president of the National Kaohsiung First University of Science and Technology.	Finance
Independent Director	Hui Xiu Lee	Female	61~70	<a href="#">Core Expertise</a> Finance and Company Governance Former Deputy Manager at the Taipei Branch of Mega International Commercial Bank with over 40 years of service in the banking industry.	Finance

Note: The industry classification follows the first-level sector classification of the Global Industry Classification Standard (GICS).





Note: For Director information, please refer to the [HIWIN 2023 Annual Report](#).

## Independent Director

Independent directors possess professional expertise and the capacity to comprehend and evaluate financial reports. Equally important, they must possess qualities that foster independent oversight, such as integrity and fair judgment. These attributes are crucial as they execute and uphold corporate governance, fulfilling their obligations of integrity and diligence to the listed company and its shareholders. In strict adherence to relevant laws, regulations, and the Company's Articles of Association, HIWIN's independent directors conscientiously and diligently fulfill their duties to safeguard the Company's interests and ensure the legitimacy and reasonableness of minority shareholders.

Independent directors fulfill their responsibilities without being influenced by the Company's main shareholder, actual controller, or other stakeholders. They maintain objectivity and fairness, providing suggestions based on their extensive professional experience. In accordance with the general rule, HIWIN's independent directors are limited to serving on the boards of five listed companies concurrently, ensuring they have ample time and energy to carry out their duties.

The Board of Directors has established three functional committees: the Remuneration Committee, Audit Committee, and Nominating Committee. All committees consist of independent directors. The HIWIN board meets at least once every quarter to primarily review the Company's business performance and discuss important strategies.

Board of directors meeting convened in 2023

**4** meetings

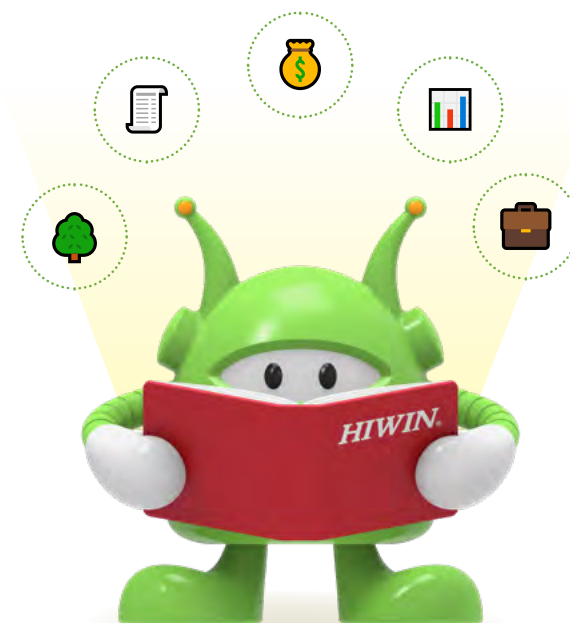
Director attendance rate

**100%**

## Director Training Programs

The board has authorized the ESG Committee to conduct performance evaluations on economic, environmental, and social dimensions. As a result, the highest governing body does not directly assess the performance of actions towards sustainable development. To enhance the highest governing body's understanding of economic, environmental, and social dimensions, directors receive training on corporate governance, sustainable development, and securities laws as necessary. Additionally, each director participates in advanced training courses for over 6 hours to strengthen their professional skills and knowledge.

These courses cover topics such as ESG, taxation, accounting, risk management, business management, and corporate governance.



## Board of directors 2023 training courses

Title	Name	Training Date	Course	Hours
Chairman & CEO	Eddie Chuo	2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/08/11	Legal Liabilities of Directors and Supervisors under ESG	3
Vice Chairman	Chin Tsai Chen	2023/03/27	Directors and Supervisors Training - Corporate Resilience & Taiwan's Competitiveness	3
		2023/04/27	Special Lecture on Corporate Governance for Directors and Supervisors (including Independent) and Corporate Governance Officers International Anti-corruption and Whistleblower Protection Practices with a Discussion on Money Laundering Prevention	3
		2023/04/28	Investment-related issues in ASEAN - Thailand, Malaysia, India, and Vietnam	3
Director	Eric Y. T. Chuo (PH.D.)	2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/08/11	Legal Liabilities of Directors and Supervisors under ESG	3
Director	Shun Chin Lee	2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/08/11	Legal Liabilities of Directors and Supervisors under ESG	3
Director	Enid H.C. Tsai	2023/02/09	31st TCCS Directors' Meeting and CEO Forum - Sustainable Development is Unstoppable.	2
		2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/10/26	34th TCCS Directors' Meeting and CEO Forum - Grasping the New Focuses of the Global Economy in 2023	2
Director	Olivia S.Y. Chuo	2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/08/11	Legal Liabilities of Directors and Supervisors under ESG	3
Director	Sanko Investments Ltd. Representative: Ching Yi Huang	2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/08/11	Legal Liabilities of Directors and Supervisors under ESG	3
Independent Director	Cheng Ho Chiang	2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/08/11	Legal Liabilities of Directors and Supervisors under ESG	3
Independent Director	Zhen Yuan Chen	2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/09/27	Empowering the Board of Directors as the Key Force Leading Sustainable Governance (First Half)	3
		2023/09/27	Empowering the Board of Directors as the Key Force Leading Sustainable Governance (Second Half)	2
Independent Director	Hui Xiu Lee	2023/08/10	How the Board of Directors Monitors ESG Risks and Builds Sustainable Corporate Competitiveness	3
		2023/08/11	Legal Liabilities of Directors and Supervisors under ESG	3

## Dividend and Compensation System

When HIWIN allocates the year-end surplus, the Company must first make up for any losses and set aside 10% as legal reserves. However, this requirement no longer applies if the accumulated legal reserves exceed the Company's total capital, and the Company must allocate (or reverse) special reserves and a 6% (or less) dividend payment per other legal provisions. According to the Company's Articles of Association, if there is profit at the end of the year, the Company should allocate ① no less than 1% for employee compensation and ② no more than 4% for directors' compensation. Employee compensation is distributed in stocks or cash as resolved by the Board of Directors, while director compensation is paid in cash.

In order to adhere to the Balanced Dividend Policy established by the Securities and Futures Bureau, HIWIN has developed a profit-sharing plan that aligns with the Company's current business climate and its commitment to sustainable management and long-term growth. This profit-sharing plan places a primary focus on cash dividends, while also incorporating stock dividends. The allocation of stock dividends is limited to a maximum of two-thirds of the total dividend and extra dividends for the year. The Board of Directors will create and present an annual profit-sharing plan to the shareholders' meeting for approval prior to distributing dividends.



## List of Major Shareholders

No.	Names of Major Shareholders	Number of Shares Held	Shareholding Percentage
1	HIWIN Investment and Holding Corp.	28,829,898	8.15%
2	Fubon Life Insurance Co., Ltd.	15,373,177	4.35%
3	Cathay Life Insurance Co., Ltd.	13,321,555	3.77%
4	Nan Shan Life Insurance Co., Ltd.	12,245,125	3.46%
5	Eric Y. T. Chuo (PH.D.)	10,990,759	3.11%
6	New Labor Pension Fund	10,549,844	2.98%
7	Lee Shun Chin	8,952,011	2.53%
8	HSBC Bank (Taiwan) Limited Trustee for Fidelity Advisor Series: Fidelity Advisor Focused Emerging Markets Fund Investment Account	7,221,159	2.04%
9	Eddie Chuo	6,845,702	1.93%
10	First Bank Trust Account under Lee Shun Chin	6,000,000	1.69%

Note: Data as of March 31st, 2024.

## Functional Committees



### Remuneration committee

The Remuneration Committee was established to assist the board with executing and evaluating the Company's overall remuneration and benefits policy and the remuneration for directors and management. In accordance with laws and regulations, the Remuneration Committee determines and approves the remuneration of senior executives, which is then disclosed in the annual report for all stakeholders.

Performance evaluations and compensation for directors and management at HIWIN are conducted in accordance with the Company's articles of association, Corporate Governance Best Practice Principles, and Procedures for Director & Management Performance Evaluations. The Remuneration Committee determines compensation based on the Company's overall business performance, future industry risks and development trends, and individual contributions to the Company's performance.

HIWIN has established a Chairman Mailbox and Independent Director Mailbox on its website, allowing stakeholders to directly communicate with the Remuneration Committee regarding the Company's remuneration. Material Topics will be included in the Remuneration Committee's meeting agenda to assess whether stakeholder proposals warrant changes to the Company's remuneration policy. For details on compensations paid to directors and major managers in 2023, please refer to the [2023 Annual Report](#).

Independent director serving as a member

**3** people

Meeting held in 2023

**2** meetings

Member attendance rate

**100%**



### Audit committee

In order to enhance corporate governance, HIWIN has established an Audit Committee to replace the previous supervisors. The Audit Committee is tasked with supervising the Company's financial reports, the independence, appointment, dismissal, and performance of CPAs, the effectiveness of internal control systems, and regulatory compliance.

Independent director serving as a member

**3** people

Meeting held in 2023

**4** meetings

Member attendance rate

**100%**



### Nominating committee

Authorized by the Board of Directors, the committee is responsible for the following functions and powers: formulating selection criteria for board members and senior executives, selecting and reviewing candidates for directors and senior executives, planning and conducting performance evaluations for the Board of Directors, functional committees, board members, and senior executives, organizing director training programs, and reviewing the organization's procedures and Corporate Governance Best Principles.

Independent director serving as a member

**3** people

Meeting held in 2023

**3** meetings

Member attendance rate

**100%**



Other Committees



Environmental and health committee

The Environmental and Health Committee focuses on the Company’s business plans and vision. They also organize training programs and make arrangements for environmental protection, occupational health and safety, and energy management. These programs ensure that employees involved in ESH work have the necessary professional knowledge to implement Company policies. On a daily basis, the committee oversees operations in various departments, holds review meetings, and provides suggestions to ensure compliance with management system requirements.



Quality committee

The main responsibility of the Quality Committee is to develop and establish product quality standards and strategies. Additionally, they are responsible for consistently monitoring and participating in a range of quality activities, including the creation, implementation, and evaluation of product quality systems. The committee also oversees the management of pre- and after-sales service quality, ensuring adherence to the PDCA (Plan-Do-Check-Act) cycle.



Safety and culture committee

The Safety and Culture Committee was established to formulate a framework for the safety management system based on HIWIN’s industry standards and production environment. The system includes safety performance, safety leadership, mechanical designs, protection measures, activity evaluation, employee conduct training, etc. The Safety and Culture Committee also regularly conducts inspections to ensure human and machine safety and sound operation.



ESG committee

Under the leadership of President Enid H.C. Tsai, the ESG Committee convenes monthly meetings to discuss the environmental, social, and regulatory dimensions of sustainable development topics (e.g. carbon reduction) and related response measures. With the ESG Committee, we hope to better manage material topics related to corporate sustainable development. The ESG Committee reports the outcomes of sustainability actions to the board at least once a year.

The directors received reports from the ESG team in Board of Directors meetings held in February, May, August, and November 2023. The agenda included the following points: ① Sustainability issues of concern and corresponding measures. ② Oversight of the implementation and execution status of sustainable business plans. If the directors provide suggestions after hearing the report, the ESG Committee will take them into consideration. Additionally, these suggestions will serve as a basis for the management team to adjust their strategies.

Senior Executives Remuneration

The remuneration of senior executives includes base salary, bonuses, dividends, and retirement benefits, among others. The related performance assessment and the reasonableness of remuneration are evaluated and reviewed annually by the Remuneration Committee and the Board of Directors. The remuneration is primarily determined by considering the achievement rates of performance targets of the responsible units, the status of ESG implementation projects, the benefits generated, and the contribution to the Company. This is also taken into account alongside the overall operational performance of the Company, potential future industry risks, and the balance between corporate governance performance and risk management. A fair remuneration is provided based on these factors. Please refer to the [2023 Annual Report](#) for compensations paid to senior executives in 2023.

Year	2023	2022
The ratio of the CEO’s average annual salary to the average employee salary	21.83	18.97
The CEO’s average annual salary increase (%) vs the average employee salary increase (%)	0.02	12.49



## Remuneration Decision Process

The remuneration payment policy and process at HIWIN are as follows:

- ① Article 31 of the Company's Articles of Association states that if the Company generates a profit in a given year, it must allocate a minimum of 1% of employee remuneration and a maximum of 4% of director remuneration. The Remuneration Committee will review this amount and present it for discussion to the Board of Directors before it can be distributed. Additionally, it must be reported to the shareholders' meeting.
- ② The Company has implemented a process for determining the compensation of directors, presidents, and vice presidents. This compensation is determined by taking into account the overall operational performance, future risks in the industry, and development trends, as well as the results of performance evaluations and contributions to the Company. The Remuneration Committee presents recommendations to the Board of Directors for approval. The compensation system is regularly reviewed to align with current operating conditions and applicable laws, ensuring a balance between sustainable business operations and risk management.

## Rigorous Control & Audit

HIWIN's operations are overseen and audited by the Remuneration Committee, internal audits, and independent directors. The Board of Directors effectively communicates sustainability topics across economic, environmental, and social dimensions. Senior executives then review and formulate operational plans to mitigate material risks. HIWIN diligently manages and controls internal processes, implementing job rotation for critical tasks, continuously improving processes, and updating documents to ensure timeliness and security. Additionally, HIWIN conducts audits and inspections as needed through auditing agencies and establishes various management and control systems to minimize the possibility of materializing risks. The Company rigorously controls and manages internal processes, implementing regular job rotations for important functions, and conducts audits and inspections through auditing agencies as needed to minimize the risks of corruption and confidential information leaks.

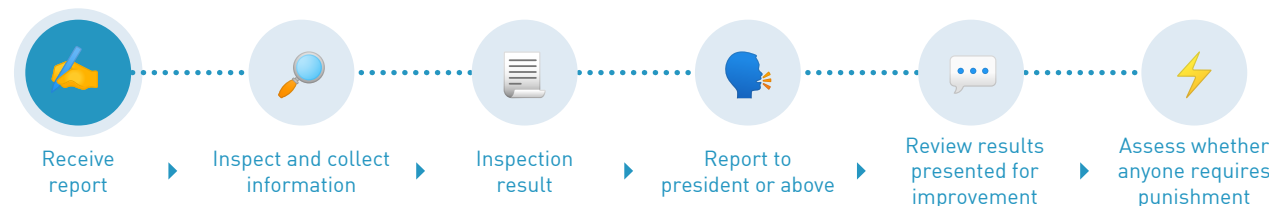
## Integrity Management

### 1 Policy and system establishment

In accordance with the Company's management philosophy and mission statement, employees are strictly prohibited from engaging in any form of bribery, kickbacks, or other corrupt practices for personal or thirdparty gain while performing their duties. To ensure compliance with our anti-corruption policies, HIWIN emphasizes its philosophies and core values during onboarding and functional training sessions. Additionally, when recruiting new employees, HIWIN carefully selects individuals who align with our Company culture. HIWIN has established an Integrity Management Code that explicitly prohibits HIWIN, directors, management, employees, and actual controllers from directly or indirectly offering, committing, requiring, or receiving any form of illegal profits from customers, distributors, contractors, suppliers, government officials, or other stakeholders in the course of their duties. We expect the Board of Directors and management team to fully adhere to our integrity management policies. The Company's business philosophy is reinforced daily, including during morning meetings, to instill these principles in our employees.

As an example of our commitment, all HIWIN locations achieved 100% compliance with anti-corruption campaigns in 2023, effectively demonstrating our core values of integrity and honesty. [The Integrity Management Code is publicly available on our website.](#)

### 2 Report process and channel



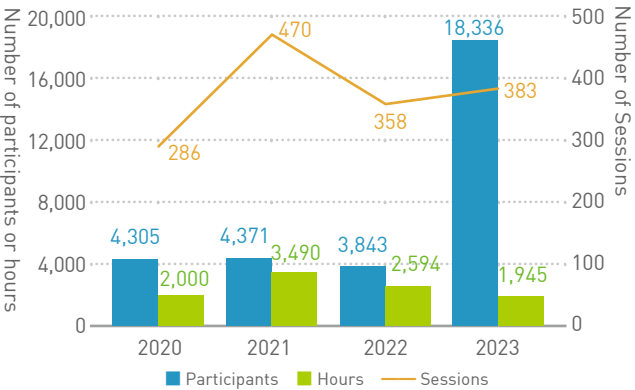
HIWIN encourages the reporting of any unethical or improper behavior. If stakeholders identify suspicious behavior by HIWIN employees or any relevant individuals that may violate the Code of Ethics, they can utilize the reporting management system. The Company will evaluate and inspect the matter and may impose disciplinary measures, including termination, for serious cases. The Company's official website has established a communication mailbox for stakeholders, and the internal website has announced an internal independent reporting mailbox or special line to encourage employees or stakeholders to express their opinions or report violations. The identity of the whistleblower and the content of the report will be kept confidential, and the whistleblower will be protected from any inappropriate actions. In 2023, HIWIN received 17 opinions and reports related to management systems, all of which have been thoroughly addressed and resolved.

Auditing agencies and HIWIN's internal control systems regularly evaluate corruption risks within the Company and formulate audit plans accordingly. The audits are then conducted in accordance with the audit plans. Results are regularly reported to the Audit Committee and Board of Directors to actively prevent corruption. There were no major instances of corruption in 2023.

3 Training outcomes

HIWIN conducts annual trainings on laws compliance for directors, managers, and employees. These trainings are conducted through monthly meetings, new hire orientations, supervisor trainings, basic trainings, and promotion trainings. The training materials are customized to cater to the different nationalities of our colleagues, with versions available in Chinese, English, and Vietnamese. These initiatives encompass a variety of methods such as online and physical courses, company websites, internal electronic announcements, and meetings. The main objective of these trainings is to promote ethical business conduct principles and disseminate the content of the “Integrity Management Code” and the “Operating Procedures and Guidelines for Integrity Management.” The trainings emphasize the importance of avoiding conflicts of interest, refraining from accepting gifts from manufacturers, preventing insider trading, protecting trade secrets, and more. The following are the relevant outcomes of these trainings:

Integrity management training



- Note:
- 1. In 2023, the integrity management training courses at HIWIN included subjects such as Case Analysis of Management and Occupational Accidents, Internal Material Information Scope, Confidentiality Procedures, Clarification of Legal Knowledge, and Business Management Meetings, among others.
  - 2. The achievement rate for anti-corruption training for employees and directors at HIWIN was 100%.
  - 3. In 2023, we adopted diverse learning methods for environmental, safety, and health-related courses, encouraging employees to engage in flexible micro-learning through digital materials. Thus, the number of participants increased.

Compliance with Regulations

HIWIN upholds strict adherence to regulatory and legal compliance as fundamental principles. We conduct regular reviews and actively monitor changes in government regulations, promptly making necessary adjustments. Through the modification of relevant documents, educational training, and issuing announcements, we ensure that all members are informed and compliant with operational laws. We also periodically organize awareness campaigns on regulations and actively monitor compliance within each department. Our efforts aim to enhance employees’ legal awareness and assist in resolving practical challenges.

Additionally, we seek guidance from consultants, lawyers, accountants, and other relevant entities regarding significant domestic and international policy and regulatory changes. When necessary, we engage their services to evaluate, suggest, and plan appropriate responses to ensure compliance with laws and mitigate negative financial impacts. Our objective is to achieve medium to long-term adherence to relevant socio-economic regulations without any major violations.

To meet customer demands and ensure timely deliveries, employees voluntarily work overtime. In order to promote work-life balance and prevent excessive work hours, HIWIN has reviewed the attendance system and implemented an overtime alert function. We also regularly advocate for compliance with overtime policies at labor-management meetings on the factory level, urging supervisors and employees to adhere to these policies.

In 2023, HIWIN encountered three disciplinary cases related to environmental, social, and economic matters. However, there were no significant disciplinary cases, which are defined as instances involving substantial fines exceeding US\$32.6 thousand.

Anti-competitive Behavior

HIWIN strictly prohibits engaging in price-fixing by fixing production volumes and sales volumes with peers and associations. The Company also strictly adheres to local and foreign regulations. In terms of organizational structure, HIWIN has implemented comprehensive internal control systems and measures, such as management policies, authorization systems, and separation of duties. These systems and measures are reinforced by internal audits to prevent any instances of corruption. In 2023, there were no legal cases related to anti-competitive practices, anti-trust practices, or monopolistic behaviors.

Conflict of Interests

Please refer to the [2023 Annual Report](#) for information on HIWIN directors serving concurrently at other companies, stakeholder shareholding, and controlling shareholders and affiliates.



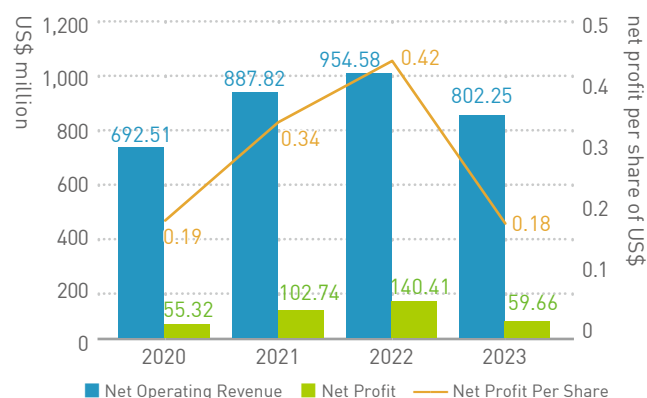


## 3.4 Business Performance

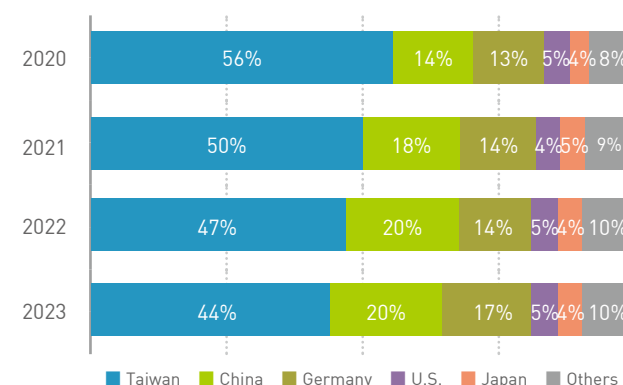
### Financial Performance

In 2023, the global economic recession, rising geopolitical tensions, ongoing inflation, and high interest rates continued to impact markets, leading to weak end demand and conservative business investment. In this challenging environment, HIWIN achieved consolidated revenue of US\$802.28 million, net profit of US\$60.25 million, and net profit per share of US\$0.2. For further details regarding HIWIN's business performance and financial information, please refer to the [2023 Annual Report](#).

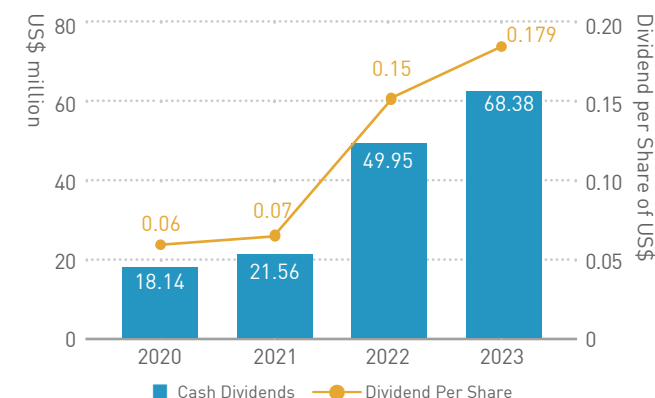
#### Financial performance (consolidated)



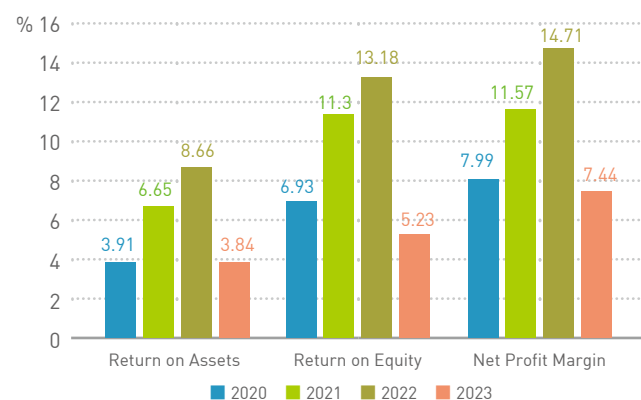
#### Proportion of operating income (consolidated) by operating location



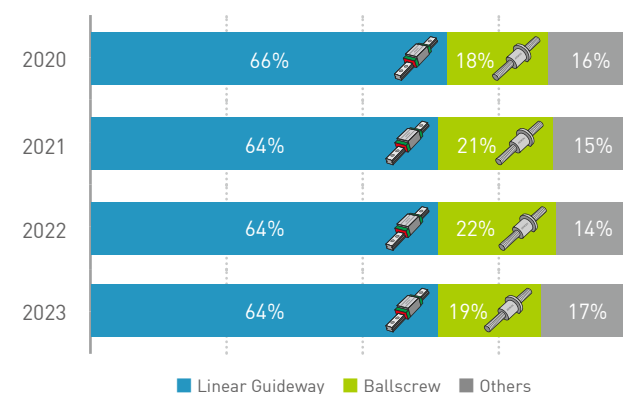
#### Dividends paid for the year



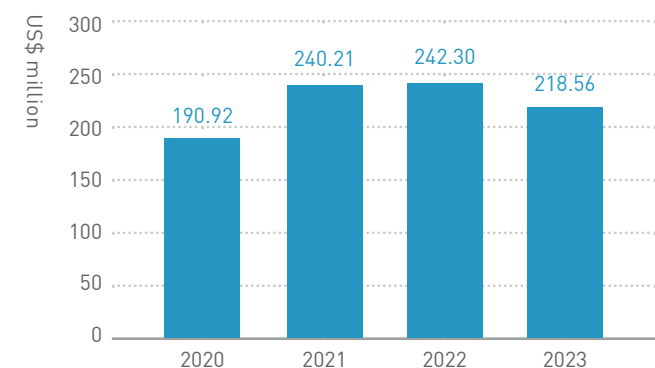
#### Income performance (consolidated)



#### Proportion of income (consolidated) by product



#### Employee remuneration and benefit



Note: Remuneration and benefits encompass various employee expenses, such as salaries, labor and health insurance premiums, pension costs, and other employment-related expenditures (including food expenses, employee benefits, training fees, and group insurance premiums, among others).

## I Tax Management

### 1 Tax policy and principle

HIWIN upholds the value of innovation and sustainable operation, committing to information transparency and sustainable development. We fulfill our social responsibilities in the regions where we operate, assume reasonable tax burdens in major operating countries, support government tax incentive policies, and contribute to local economic development and industrial innovation. We manage and formulate HIWIN's tax policies and guidelines to pursue sustainable development based on sound and reasonable principles.

#### HIWIN tax policy and principle



- ✓ Operational activities are conducted in accordance with the local tax laws and regulations of each region, and we diligently fulfill our tax obligations.
- ✓ We do not engage in transactions in low-tax countries for tax avoidance purposes.
- ✓ We do not engage in transactions for the purpose of tax avoidance.
- ✓ We do not transfer the profits to low-tax countries.
- ✓ We enhance our tax expertise through continuous talent development.
- ✓ The disclosure of tax information in financial reports is carried out in accordance with relevant regulations.
- ✓ Based on mutual trust and information transparency, we establish a relationship of mutual respect with tax authorities.

### 2 Tax governance and risk management



The Finance Section oversees the daily tax administration and management of HIWIN, with qualified and experienced personnel assisting the accounting supervisor in fulfilling tax obligations. We also engage professional tax consulting agencies to enhance our professional knowledge and assist with tax matters. Our internal audit unit conducts internal control checks to ensure compliance with the internal control system and legal requirements for accounting, tax, and financial reporting processes.

Changes in tax laws and regulations can potentially impact our operational activities. HIWIN is primarily regulated by the tax laws of the Republic of China government. To mitigate this tax risk, we closely monitor domestic and foreign policies and laws that may affect our finances. We collect information, analyze potential tax impacts, and develop countermeasures.

In line with international trends in tax governance, HIWIN adheres to tax regulations and pursues sustainable development. We comply with tax laws and regulations for declaration and payment, with each subsidiary within the group appointing its own accountant to review and verify tax matters. After verification, tax matters are reported according to internal hierarchical responsibility levels. The Finance Section serves as the tax management unit, ensuring that tax personnel adhere to internal operating procedures and tax regulations. They handle routine tax declaration and payments, provisional tax declaration, annual tax declaration and payment, as well as various types of income declaration in accordance with regulations. In the event of significant tax matters, the section reports to the Board of Directors as necessary.

### 3 Tax information

HIWIN (including subsidiaries and sub-subsidiaries) tax information for the past four years is as follows. For more detailed information on corporate income tax, please consult the [2023 Annual Report](#).

Items	Units	2023	2022	2021	2020
Income Tax Expense	US\$ million	23.09	49.04	42.98	19.70
Current Income Tax	US\$ million	21.30	42.53	46.66	15.47
Deferred Income Tax	US\$ million	1.79	6.51	(3.68)	4.23
Pre-Tax Income	US\$ million	82.72	189.45	145.72	74.99
Income Tax Rate	%	27.9	25.9	29.5	26.3
Income Tax Payment	US\$ million	18.40	45.13	36.31	13.06

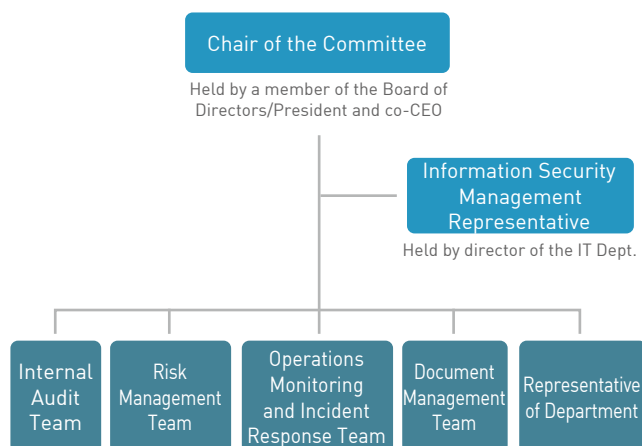
## 3.5 Information Security

### ■ Policies, Organization, and Targets

HIWIN has established and published the “Information Security Objectives and Policies” as the guiding principles for information security governance, planning, and implementation to protect the information security of customers, suppliers, and employees and ensure uninterrupted business operations. Protecting and managing information security from the perspective of corporate governance can ensure the confidentiality, integrity, and availability of the IT assets. By doing so, we fulfill the requirements of laws and stakeholders regarding responses to and handling of information security issues.

HIWIN has established the Information Security Management Committee as the designated governing body, chaired by a Director, the President, and the Co-CEO. The chairperson supervises the implementation and effectiveness of information security goals and policies and submits an annual governance report on information security to the Board of Directors.

Structure of information security committee



Within the Information Security Management Committee structure, HIWIN designates specialized groups and departmental Information Security Committee Members (principally department heads). The goal is to achieve cross-departmental integration of information security management, extend information security management measures to every employee, and cultivating a security-conscious culture.

### ■ Information Security Certification

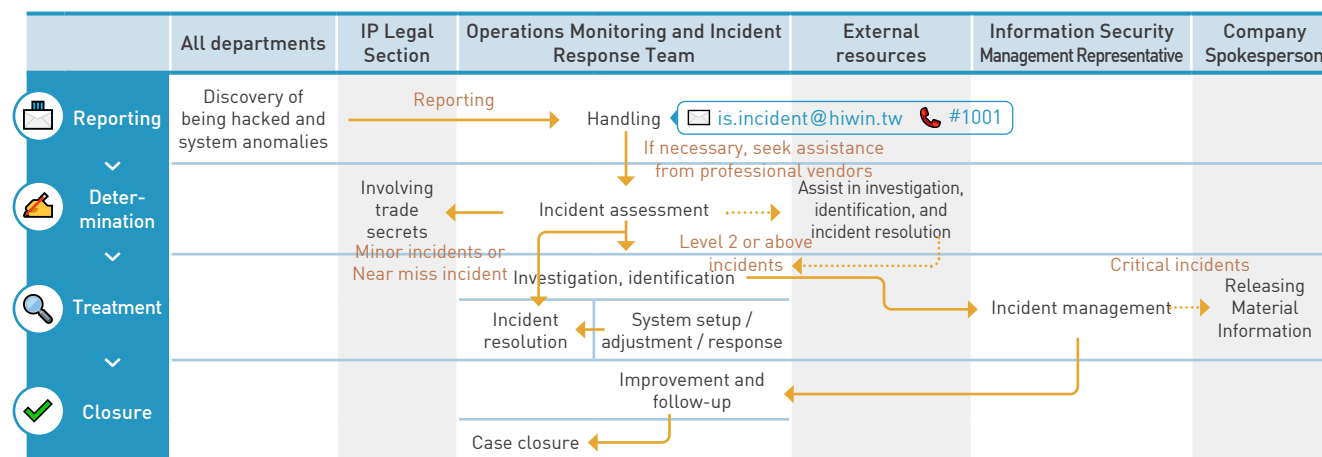
HIWIN has established numerous information security management systems and implemented systematic management tools over the years. To evaluate the effectiveness of these systems and ensure that they meet international standards, HIWIN successfully passed the ISO/IEC 27001 certification audit and obtained certificates in March 2023. The certification scope covered key personnel, systems, factories, and data centers associated with the Company's operations.

### ■ Cultivating a Security-Conscious Culture

To implement information security objectives and policies, we provide awareness training on information security to all system-using employees through training and advanced training specifically for system administrators. To cultivate a security-aware mindset, we first aligned security concepts among employees, run security awareness campaigns continuously and put information security management measures into the daily work routine of each employee.

- The training for new employees includes information security awareness and general information security management principles, ensuring that employees assimilate these concepts and attitudes after onboarding.
- Security awareness messages are continuously broadcasted through the attendance clock-in kiosks.
- When employees logon into a computer, a pop-up window automatically appears, displaying information on data protection, intellectual property rights, and basic system security management principles. This ensures that employees routinely incorporate security requirements into their daily work.
- We are committed to protecting information security, employees who violate information security or data protection rules will be subject to personnel disciplinary actions based on the severity of the violation.

Information security incident notification and handling process





## 2023 Information security training results

	Course	Hours	Target Audience	No. of Participants	No. of Participants Completing the Course	Completion Rate
1	Training for new employees - Information Security Courses <sup>Note</sup>	0.5	New Employees	341	327	96%
2	Basic training course on cybersecurity awareness	1	System Users	1,822	1,822	100%
3	Cybersecurity Awareness and Prevention of Phishing Emails	1	Those who failed the phishing drills	358	358	100%
4	Information Security System Management Practices	1	System Administrators	67	67	100%

Note: Among the new employees who failed the information security training course, those who had a system account during the year achieved a 100% completion rate in the basic training course on cybersecurity awareness.

## Information Security Measures Implemented - Items & Outcomes

### Cybersecurity control tools or systems implemented



## Results of information security efforts



## Continuous Improvement of Application System Information Security

Since HIWIN develops most of the core information application systems, continuous improvement of information security functions can help achieve the organization's information security goals and strategies. In 2023, we successfully implemented 182 application security enhancements across eight key areas, including external system protection, technical risk mitigation, system permission control, enhanced identification tracking, software development protection, data security, physical file protection, and optimization of verification mechanisms.

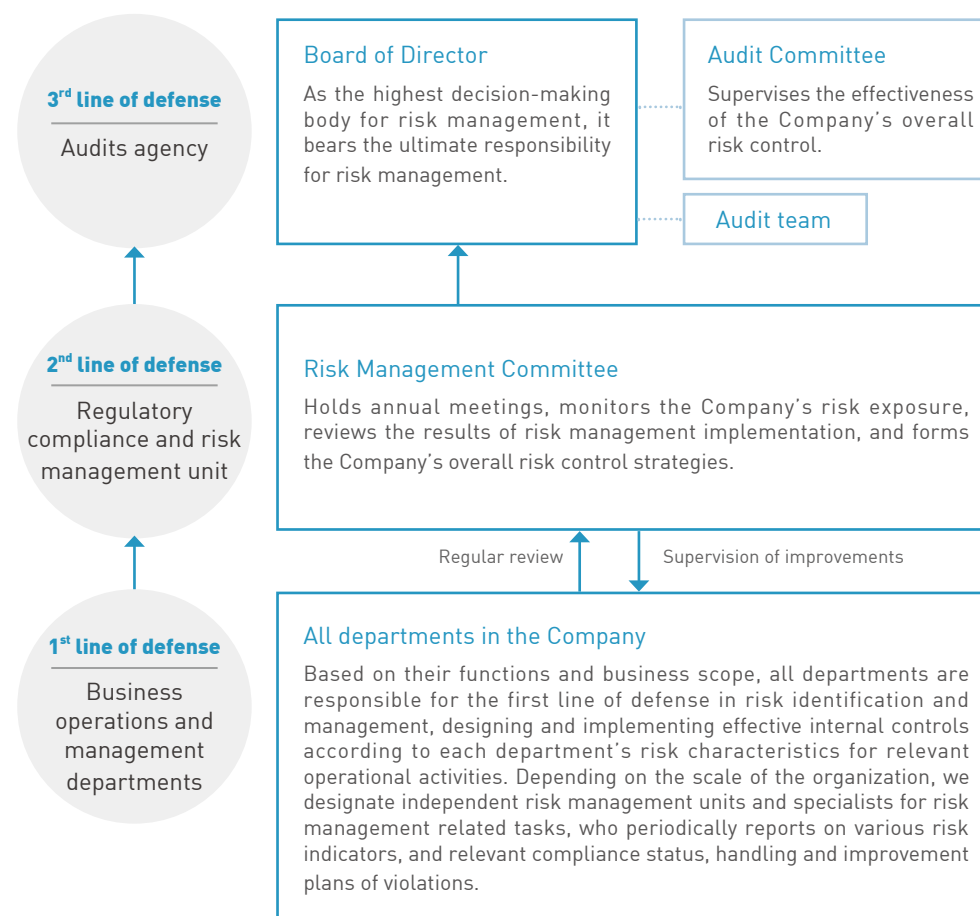
## Response to New Information Security Threats



## 3.6 Risk Management

### Risk Management Framework and Policy

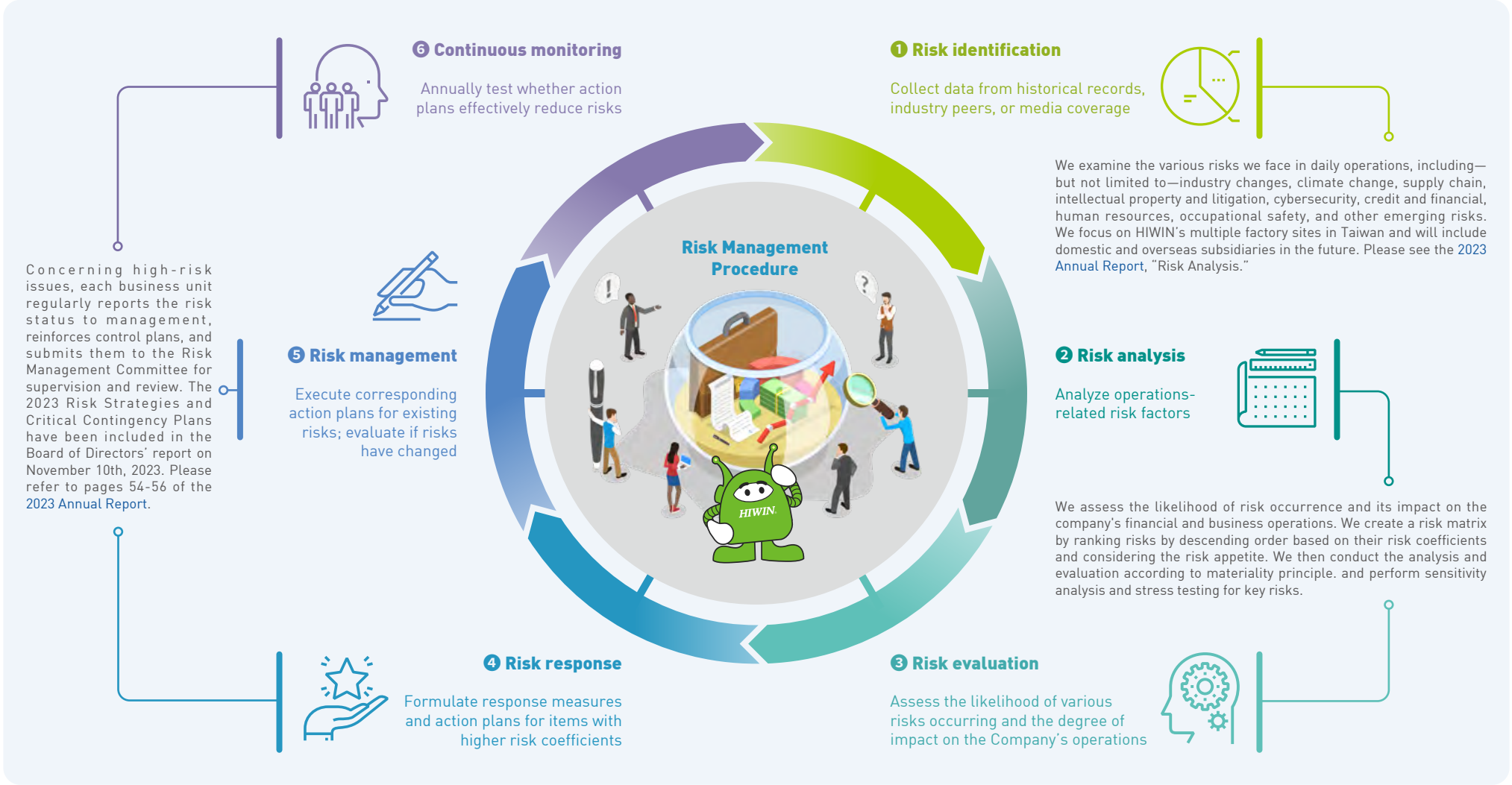
HIWIN has established Risk Management Committee responsible for risk control implementation. It adopts the Three Lines of defense mechanism of internal control to ensure the smooth operation of overall risk management.



Risk Management Procedure

HIWIN established its risk management procedures based on the ISO 31000 framework, which the Board of Directors approved in 2020. We control risks relevant to business operations by following the tiered organization and internal control systems. We commit to evaluating critical global economic, social, environmental, and innovative technology risks

by senior managers' participation. We implement six cyclical processes: identification, analysis, evaluation, response, management, and continuous monitoring of risks that could threaten the Company's future sustainable operation.










## Emerging Risk

In order to address the emerging risks that result from ongoing changes in the global economy, society, and natural environment, HIWIN has implemented a mechanism for identifying these risks. This mechanism includes identifying emerging risks, assessing their impact, and developing measures to mitigate and manage these risks. The purpose of this mechanism is to effectively identify emerging risks and propose countermeasures to ensure sustainable operations.



Emerging Risk	 Risk Description	 Potential Impact	 Countermeasures
 <p>Key Talent Risks</p>	<ol style="list-style-type: none"> <li>① The declining birthrate affects Taiwan's population structure, leading to a yearly decrease in the labor force.</li> <li>② The semiconductor industry and multinational companies are competing for talent, affecting the recruitment and retention of professionals in the precision machinery industry.</li> <li>③ Labor shortages worldwide have led governments to attract talent actively, posing challenges for employing an international workforce.</li> </ol>	<ol style="list-style-type: none"> <li>① Taiwan's changing population structure and perceptions, combined with the high salaries in the semiconductor industry attracting STEM talent, have intensified the competition for professionals in the precision machinery industry.</li> <li>② Foreign talent is also an important source of workforce for the Company. The global labor shortage has recently led various countries to adjust immigration policies to attract international talent, adding new options for labor and potentially impacting HIWIN's flexibility in staffing.</li> <li>③ The economic development in Southeast Asian countries has reduced the willingness of migrant workers to work overseas, leading to a shortage of transnational labor.</li> </ol>	<ol style="list-style-type: none"> <li>① We resort to diversified channels and matchmaking with training institutions to recruit talents more broadly. In recent years, we have actively recruited foreign white-collar professionals in business, R&amp;D, IT, and manufacturing positions to drive organizational innovation and ensure a stable talent pool.</li> <li>② We opt for rolling yearly/structural salary adjustments, care interviews, internal transfers, guaranteed annual salaries, and offering a stage for key talents to shine to attract and retain talent.</li> <li>③ Through diverse industry-academia collaboration programs, we arrange for managers, operators, and HR personnel to jointly mentor students from the industry-academia programs. We offer long-term professional training and mentorship for personal growth, helping them discover their self-worth.</li> </ol>
 <p>Geopolitical Risks</p>	<ol style="list-style-type: none"> <li>① The global economy is being disrupted by multiple factors, including the Russia-Ukraine war, the Israel-Palestine conflict, the decoupling of China and the West, the Red Sea Crisis, and cross-strait relations, which add to the difficulty of operations, business development, procurement, and distribution.</li> <li>② As investment restrictions between China and Western countries increase, M&amp;A activities and investment opportunities for enterprises in China, the U.S., and the EU decrease. Supply chain reorganization, corporate reputation risk, and ESG compliance risk increase operating costs.</li> </ol>	<ol style="list-style-type: none"> <li>① Regional cooperation may reduce globalization and free trade, potentially increasing export tariffs and raising production costs or product prices.</li> <li>② Unstable cross-strait relations and China's potential cancellation of ECFA may affect the price competitiveness and market expansion of HIWIN products in China.</li> <li>③ The U.S.-China Trade War and U.S. sanctions on Chinese semiconductors impacted China's economy, driving down the performance of the Chinese market.</li> <li>④ The Russia-Ukraine war has led to Western sanctions against Russia and its allies, which have affected our market expansion and increased costs due to material supply shortages.</li> <li>⑤ Regional warfare lengthens maritime transportation, increases shipping costs, and hampers business development.</li> <li>⑥ Geopolitical tensions trigger inflation, increase operating costs, and reduce the customers' willingness to invest and purchase.</li> </ol>	<ol style="list-style-type: none"> <li>① We focus on geopolitical concerns and supply chain reorganization. We expand localized services in Eastern Europe, Canada, Mexico, Southeast Asia, and India to diversify market risks.</li> <li>② We expanded subsidiaries' service and production scales and added new sales channels, such as distributors and system integrators.</li> <li>③ We leverage our advantages in mechatronics integration to optimize linear motion products, increase the sales percentage of new mechatronic products, and strengthen competitiveness.</li> <li>④ We develop semiconductor business opportunities in the U.S., Japan, and the EU and seize opportunities for mature manufacturing processes and wide bandgap semiconductor in China.</li> </ol>

Strengthening the Risk Culture

All members of HIWIN’s Board of Directors possess expertise in risk management. The Nominating Committee periodically assesses and designs relevant courses to ensure that all directors continue their professional development. Before making critical decisions, the management team considers various current and future risk factors and only executes after making an assessment. The performance of these decisions is reflected in the Company’s profitability. Therefore, the management team’s remuneration is linked the effectiveness of risk control. Combining the management team’s KPI goals with risk control ensures management and prevention of the risks within the scope of each executive’s responsibilities. The Company then provides reasonable remuneration based on performance evaluation results.

We continuously include risk management standards in the HR review process for employees evaluation and organize multiple courses, competitions, and activities to promote risk culture.

① Workplace Safety

We promote safety culture campaigns, formulate Safety and Health training plans, and have occupational doctors on-site regularly to provide relevant health services.

② Intellectual Property Protection

We rolled out the Taiwan Intellectual Property Management System (TIPS), implemented a trade secrets registration system, collected evidence of trademark use, and conducted training to enhance the legal and patent knowledge of managers and employees in R&D.

③ Information Security

We conduct training courses and course-end exams on information security. By disseminating information on cybersecurity through multiple channels and conducting social engineering drills for all employees, we examine the effectiveness of the cybersecurity training course in terms of the employees’ awareness and behavior, and followed by review and improvement.

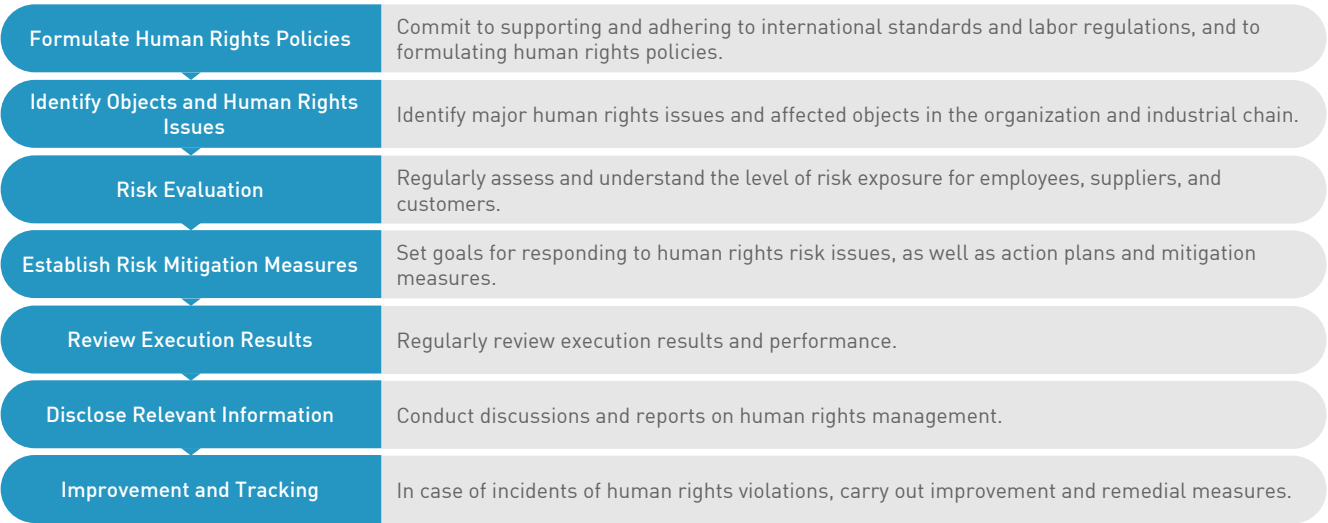
3.7 Human Rights

Human Rights Policy and Management

HIWIN supports and adheres to the Universal Declaration of Human Rights, the United Nations Global Compact, the ILO Declaration on Fundamental Principles and Rights at Work, the United Nations Guiding Principles on Business and Human Rights, and the OECD Due Diligence Guidance for Responsible Business Conduct, among other fundamental human rights principles and the laws and regulations in each of our global locations of operations. HIWIN has established a human rights policy to protect the human rights of our employees, suppliers, contractors, and communities worldwide. HIWIN not only requires compliance with labor-related regulations in our own employment practices, but also refrains from forcing unwilling employees to engage in labor practices. Additionally, through an assessment process, we evaluate suppliers’ capabilities in seven major categories based on the “Responsible Business Alliance (RBA) Code of Conduct,” which includes labor management mechanisms. This ensures that our supplier partners uphold basic human rights, protect employees’ lawful rights from unlawful infringement, and collectively implement corporate social responsibility.





HIWIN follows the Human Rights Policy and Specific Management Plan as the highest guiding principle for human rights governance work to accurately identify, prevent, and mitigate human rights-related impacts and effectively manage human rights issues. Meanwhile, HIWIN aligned with international sustainability standards by establishing a human rights due diligence process and conducting human rights due diligence in 2023.

Human rights due diligence process



## 1 Management principles

HIWIN focuses its human rights management on employees, suppliers, and the community. We aim to prevent incidents that could harm human rights through various due diligence methods and grievance channels.

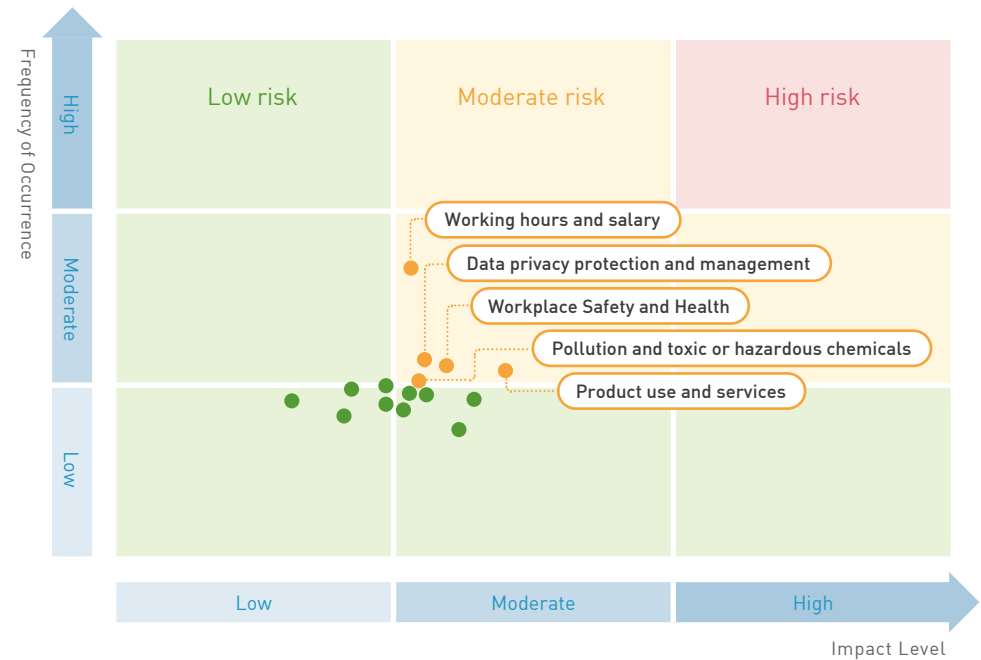
HIWIN's Role	Target Groups	Human Rights Issues	Main Policies	Responsible Unit	Due Diligence	Grievance Mechanism
 <b>Employer</b>	All employees Female employees Teenage workers Migrant workers	<ul style="list-style-type: none"> <li>Diversity, inclusion, and non-discrimination</li> <li>Sexual harassment</li> <li>Equal pay for equal work</li> <li>Working hours and salary</li> <li>Prohibition of any form of human trafficking</li> <li>Opposition to child labor</li> <li>Humane treatment</li> <li>Workplace Safety and Health</li> <li>Positive labor-management communication</li> <li>Data privacy protection and management</li> </ul>	<ul style="list-style-type: none"> <li>Human rights policies</li> </ul>	Human Resource Dept. Occupational Safety and Health Dept.	According to the United Nations Guiding Principles on Business and Human Rights, we prudently evaluate employee human rights risks and implement controls and mitigation measures to safeguard them.	Internal grievance mailbox <input type="checkbox"/> help@hiwin.tw <input type="checkbox"/> hope@hiwin.tw <input type="checkbox"/> argon@hiwin.tw
 <b>Buyer</b>	All suppliers and contractors	<ul style="list-style-type: none"> <li>Freedom to choose a profession</li> <li>Teenage workers</li> <li>Salary and benefits</li> <li>Working hours</li> <li>Humane treatment</li> <li>Non-discrimination/No harassment</li> <li>Freedom of association</li> <li>Occupational Safety</li> <li>Emergency reserves</li> <li>Health and Safety Communication</li> <li>Responsible mineral procurement</li> <li>Data privacy protection and management</li> </ul>	<ul style="list-style-type: none"> <li>Supplier Code of Conduct</li> </ul>	Purchasing Dept. Occupational Safety and Health Dept. IT Dept.	Supplier Self-evaluation Form	External Reporting Channels <input type="checkbox"/> speak-up@hiwin.tw  Audit Office, No. 7 Jingke Rd., Taichung City
 <b>Facilitator of community development</b>	Neighboring communities and the environment	<ul style="list-style-type: none"> <li>Pollution and toxic or hazardous chemicals</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Management Policy</li> <li>Occupational Health and Safety Policy</li> </ul>	Environmental Protection Dept. Occupational Safety and Health Dept.	① Environmental Impact Assessment and regular factory noise, effluent, and air pollution monitoring. ② Chemicals inventory investigation, chemical hazard assessment, and periodic environment monitoring for chemicals.	Grievance mailbox <input type="checkbox"/> safety@hiwin.tw <input type="checkbox"/> health@hiwin.tw



2 Human rights risk identification and assessment

Out of the 18 issues in the United Nations Guiding Principles on Business and Human Rights, we confirmed no violation occurred for three issues from empirical data. For the 15 remaining issues under six major categories, which are labor rights, environmental rights, freedom of expression and participation, gender equality, product development/ advertising/use and services, and governance and safety, we assessed human rights risks by questionnaire. This assessment involved 40 ESG members from various departments, including manufacturing, R&D, finance, and administration department. They evaluated the

Human rights risk matrix









Note: Risk (R)= Risk Likelihood (Likelihood)x Risk Impact Level (Impact)  
High Risk (4 points); Moderate Risk (0.67~4 points); Low Risk (0~0.67 points)

significant human rights issues for HIWIN Taiwan employees, measuring the importance and impact of each human rights indicator on the employees and the value chain from a cross-departmental perspective. We improved and implemented mitigation measures for medium- and high-risk human rights issues based on the questionnaire results. The execution results are tracked and reviewed annually. HIWIN reviews and reassesses significant human rights issues every three years based on human rights principles, labor laws, and global human rights topics.



## Risk description and mitigation measures for human rights issues

Major Human Rights Issues	Impact Target	Risk Description	Assessment Frequency	Evaluation Factors	Mitigation and Remedial Measures	
 Working hours and salary	All employees	Due to market changes and business needs, employees may have to work overtime, resulting in excessive monthly hours and a lack of work-life balance. In the long run, this could harm the employees' physical and mental well-being.	Annually	<ul style="list-style-type: none"> <li>Achievement rate of one fixed day off and one flexible rest day</li> <li>Achievement rate of daily shifts lasting no more than 12 hours</li> <li>Achievement rate of average monthly overtime being less than 46 hours</li> <li>Employee Opinions/Grievances</li> </ul> ※ Source: Working hours statistic data, grievance mailbox, labor-management meetings	Mitigation measures	① In 2023, we enhanced training for supervisors to ensure working hours management, urging supervisors to determine the reasonableness of pre-overtime applications based on the urgency and priority of the task. ② Starting in 2023, we formulate improvement plans and reaches out to employees with supervisors according to the extent of overtime work. ③ We began cultivating multi-skilled talent internally to facilitate flexible human resource deployment and ensure one fixed day off and one flexible rest day.
					Remedial measures	① Starting in 2023, we simultaneously reviewed the access time for entering and exiting the factory control and work hours to enhance work hours management, and also continually followed up until improved. ② Starting in 2023, we improved cross-plant labor dispatching system to balance the average employee workload.
 Sexual Harassment	All employees	Employees who experience sexual harassment in the workplace are unable to work comfortably, and in the long run, this may lead to physical and mental harm.	Annually	<ul style="list-style-type: none"> <li>Gender harassment grievance case</li> </ul> ※ Source: grievance mailbox	Mitigation measures	In 2023, we produced sexual harassment prevention posters using scenario-based illustrations to deepen employee impressions.
					Remedial measures	① In 2023, one incident of sexual harassment was reported. The Company immediately adjusted the wrongdoer's work area afterward and initiated the investigation process, including interviews and deliberations with relevant personnel. Based on the deliberation results, response measures were taken. ② We offered care and followed up on the claimant's physical and mental well-being, and provided counseling and other resources. ③ Subsequently, we imposed penalties on the wrongdoer and increased our efforts to raise awareness of sexual harassment prevention.
 Workplace Health and Safety	All employees	During production and manufacturing, employee operation of machinery or exposure to the work environment may result in accidents due to environmental factors, equipment safety issues, or incorrect safety awareness among personnel.	Annually	<ul style="list-style-type: none"> <li>We conduct risk assessments on unsafe behavior of personnel, equipment safety, materials safety, work methods, and environmental safety: we first determine the likelihood and severity, then evaluate the risk level according to the risk matrix.</li> </ul> ※ Source: Hazard Identification and Opportunity & Risk Assessment Table	Mitigation measures	① We established a digital occupational hazard map based on the storage and usage of hazardous materials and factory incident history for hazard awareness training, helping the workers understand the workplace's safety conditions and collaboratively create a safe working environment. ② In 2023, we set inspection topics to conduct cross-audits among facilities, hazard identification, and supervisor safety examinations. ③ All factories and facilities completed various operational risks and opportunities assessments. Based on the 2023 assessment results, we implement risk control measures for 125 operations with "unacceptable risk." ④ Starting in 2023, we promoted the Safety Moment microlearning campaign, which educates on mitigation measures by sharing stories on relevant incidents.
					Remedial measures	① We assist employees in quickly obtaining medical and wage-related compensation or pensions to alleviate their economic burden. ② We implemented a work resumption plan to help employees recover and return to work as soon as possible.
 Pollution and toxic or hazardous chemicals	All employees Community	Air pollution is a borderless public nuisance. Inaction leads to abnormal emissions, which affect the surrounding communities and residents and burden the environment.	Annually	<ul style="list-style-type: none"> <li>Particulates, sulfur oxides, nitrogen oxides, VOCs concentration</li> </ul> ※ Source: Environmental Impact Assessment	Mitigation measures	① Starting in 2023, we listed and controlled chemical substances containing volatile organic compounds. Through assessing and testing the manufacturing process, such substances were replaced with non-volatile organic compounds to reduce emissions of volatile organic compounds. ② In 2023, a chemicals review is added to the Change Assessment to Environmental Management. When adding new chemicals, we must assess and control the emissions volume of volatile organic compounds.
					Remedial measures	There were no leakage incidents in 2023. If any pollution or chemical leakage is found upon investigation, we would initiate improvement measures immediately and communicate with the community to assess compensation on a case-by-case basis.

Major Human Rights Issues	Impact Target	Risk Description	Assessment Frequency	Evaluation Factors	Mitigation and Remedial Measures	
 Product usage and services	Customers	The medical equipment products may not adequately protect the patient's private data, which can lead to leaks, infringe on patient privacy, and damage the Company's reputation.	Annually	<ul style="list-style-type: none"> <li>UL 2900-2-1:2017 Medical Equipment Cybersecurity</li> <li>IEC62304 - Medical Equipment Software Verification</li> <li>Grievance cases</li> </ul> ※ Source: grievance mailbox	Mitigation measures	① We set login accounts and passwords and restrict access to patient data. ② We conduct user operation training. ③ We conduct validity tests to ensure compliance with IEC 62304 software and cybersecurity validation for medical devices.
					Remedial measures	No incidents of personal data or privacy infringements occurred in 2023. If any such incidents are found upon investigation, they will be reviewed and improved immediately. Meanwhile, we communicate with customers and evaluate compensation measures on a case-by-case basis.
 Data privacy protection and management	All employees	The Company collects employee personal data without consent or improperly handles, stores, disposes of, or deliberately exposes employee personal information.	Annually	<ul style="list-style-type: none"> <li>Whether there are appropriate management measures for the collection, storage, use, transmission, and destruction of personal data</li> </ul>	Mitigation measures	① In 2023, we documented and improved 20 internal programs. ② We prohibit unauthorized external transmission.
					Remedial measures	① No incidents of personal data or privacy violations occurred in 2023. ② Starting in 2023, we masked the names in the testing database. ③ In 2023, we obtained ISO 27001 information security certification. ④ From 2023 onwards, we perform physical demolition when we dispose of hardware.



### HIWIN human right issues management

#### Factories and subsidiaries around the world

We prioritize the principles of equal employment, diverse hiring, and anti-discrimination, as well as the prevention of sexual harassment and power bullying, and the protection of personal privacy.

#### Related to suppliers

To pursue sustainable operations, we require critical domestic suppliers and new suppliers to sign the [HIWIN Supplier Code of Conduct](#) to ensure a safe working environment in the supply chain, assume environmental responsibility, and guarantee human rights for their employees. This Code is based on the Responsible Business Alliance (RBA) Code of Conduct and refers to international standards such as ISO 45001 and ISO 14001. The RBA guidelines set six major issues with grievance channels established for each, namely A) labor, B) health and safety, C) environmental protection, D) code of ethics, E) management systems, and F) Climate Change and disclosure.

#### Related to customers

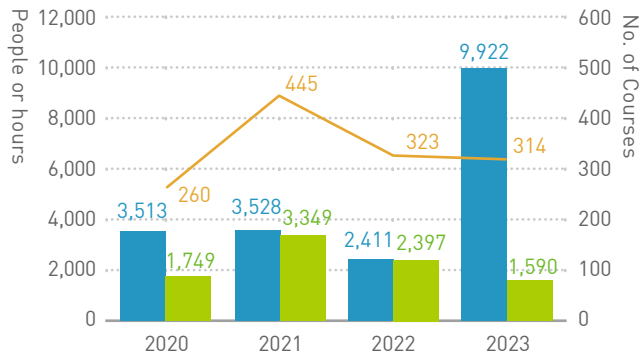
- ① HIWIN recognizes the significance of customer privacy and is dedicated to upholding the respect and safeguarding of customer privacy and confidentiality. Unless explicitly authorized or legally mandated, HIWIN will refrain from disclosing or utilizing customer privacy and confidential information for any purpose.
- ② We establish a strict customer data protection policy based on TIPS to prevent leakage or unauthorized use of customer data or information. All customer-related information, such as customer drawings, is classified as confidential. Only authorized personnel may access it and must comply with TIPS usage regulations.



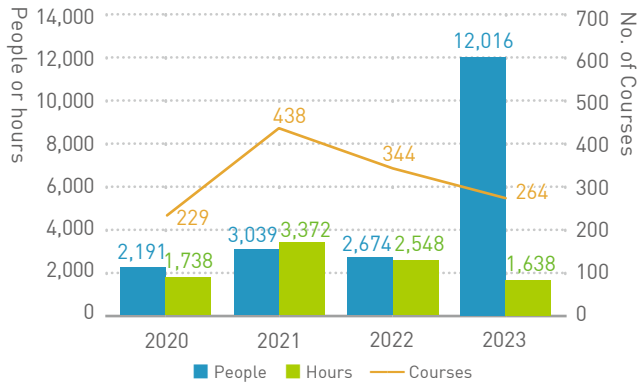
### ③ Training on human rights protection

HIWIN provides education and promotion of government policies on environmental safety and health, labor, new regulations for public companies, trade secrets, and information security through internal and external courses, as well as internal announcements. To strengthen employees' knowledge and application of laws and regulations, we integrated human rights issues into training materials to ensure an equal, friendly, and mutually respectful work environment.

#### Total number of participants and training hours in human rights training



#### Total number of participants and training hours in anti-corruption training



Note: Physical courses resumed in 2023, and paired with digital teaching materials, we want to attract more employees to participate.

## Employee Feedback Channels and Case Management

HIWIN places a high value on employee opinions and rights. Our goal is to establish effective two-way communication between employees and the Company, ensuring that employees' rights are protected and that any negative impacts are minimized. To achieve this, we have established various communication channels. In addition to regular labor-management meetings, we have created a dedicated employee mailbox and dedicated personnel in each factory to address their needs and listen to their voices. This allows us to continuously improve and create a workplace environment that is supportive of our employees.



### ① Regular labor-management meetings

HIWIN engages in two-way communication with employees by listening to their feedback during quarterly labor-management meetings. These meetings provide an opportunity for employees to express their opinions and for the Company to make subsequent improvements. Even during the pandemic, online meetings were promptly held to maintain the relationship between labor and management. In 2023, a total of 24 sessions were conducted.



### ② Employee dedicated mailbox

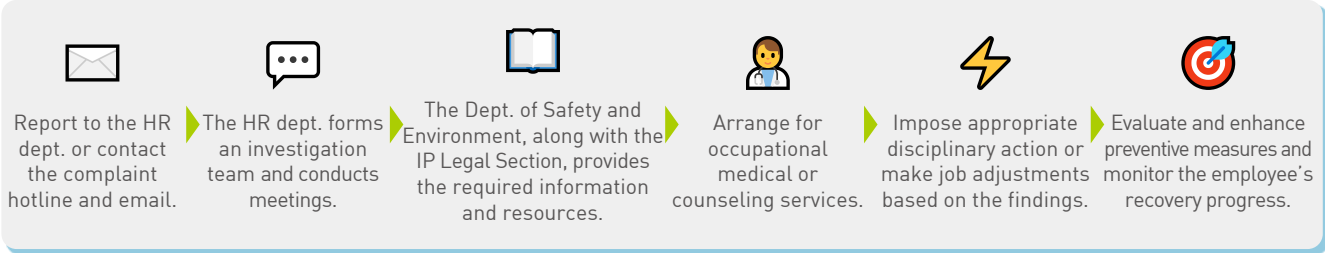
HIWIN provides three employee suggestion email addresses, allowing employees to directly send feedback to the Global Chairman, President, and Human Resources department. This ensures prompt, fair, and confidential processing of employee opinions, enabling objective and comprehensive handling. All previous complaints have been successfully resolved.

#### Feedback channels

Channels	Type	Responsible Person
argon mailbox	Exchange Channel between Global Chairman and Employees	Global Chairman
hope mailbox	Communication Platform between President and Employees	President
help mailbox	Human Resources Department Feedback Platform	Manager of Human Resources Dept.

3 Unlawful infringement, harassment, and discrimination case handling procedures

Our objective is to maintain a safe and secure working environment for employees during their job responsibilities. In the event that an employee encounters physical violence, verbal abuse, psychological threats, sexual harassment, or stalking, we are committed to upholding their gender equality, personal dignity, privacy, and mental and physical well-being. To address such cases, we have implemented the following process:



Note: If violations are found, an investigation will be initiated according to procedures. Per our company rules, we will take disciplinary action and announce the results if verified. We also deduct points for the wrongdoers during the performance evaluation process. The wrongdoer's quarterly or annual evaluation cannot be rated as excellent in case of major violations. Furthermore, the quarterly dividends, employee bonuses, and year-end bonuses will also be reduced accordingly.

4 Employee feedback cases in 2023

In 2023, we collected 20 cases of employee feedback from various channels, and each case was processed in accordance with the procedure.

Communication Channels	Genre					Completed Cases	Improvement Summary
	Management System	Unlawful infringement	Harassment cases	Discrimination cases	Employee Benefits		
Labor-Management Meetings	1	0	0	0	1	2	<div>① We classify and refer complaints by employees to the appropriate contact points.</div> <div>② We listen to and promptly address employee feedback, ensuring full communication between both parties so the employees understand the supervisors' objectives. The responsible business unit will follow up and improve the issues to facilitate harmonious labor-management relations.</div> <div>③ Besides workplace environment inspection and assessment, we also enhance security surveillance and training to prevent recurrence.</div>
Employee Dedicated Mailbox	3	0	0	0	0	3	
Other Channels	6	7	1	0	1	15	
Total	10	7	1	0	2	20	






# 04

## **An Innovator for Industrial Transformation**

HIWIN offers total solution through innovation, providing pre-sales and after-sales services, while also prioritizing the protection of customer confidentiality and proprietary information. Our commitment extends to ensuring the well-being of customers and end users, as well as fostering collaboration with our suppliers to generate value.





4.1 R&D Innovation Management

R&D Innovation Strategy

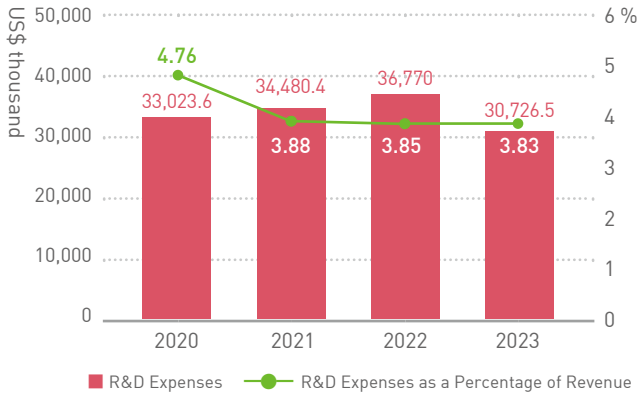
Open R&D innovation and cultivating the HIWIN brand are the cornerstone of HIWIN’s sustainable development. We actively create a learning environment that enjoys innovation. By implementing three key strategies—“cultivating an innovative culture, strengthening open innovation, and implementing intellectual property management”—HIWIN empowers and motivates its employees to enhance their innovation capabilities. This, in turn, enables HIWIN to strengthen its two core competencies: “sustainable products and smart manufacturing.” HIWIN remains dedicated to developing environment-friendly and high-value products to maintain its industry-leading position in the face of intense competition.



R&D Innovation Platform

Based on our innovation management and service mindset, HIWIN allocates 3.8%-5.8% of our annual revenue to fund R&D. We have consistently innovated our existing products to meet customer demands. In response to the energy conservation trend, we have applied our motion control technologies to achieve low energy consumption used by various industries, such as semiconductors, robots, green energy, consumer products, and the automotive industry to replace less efficient motion methods such as pneumatic and hydraulic systems. Additionally, HIWIN is actively establishing a strong presence in high-end applications, such as industrial/wafer robots, EFEM, strain wave gear, torque motor rotary tables, and intelligent motion products.

R&D expenses and percentage in 2020-2023



Note: 1. Percentage=R&D investment÷overall revenue  
2. HIWIN’s operational performance in 2023 declined compared to 2022, but the investment in R&D still reached 3.83%.



## 1 Group R&D capabilities

Innovative R&D and the HIWIN brand are our core values. Since our founding, HIWIN has drawn up a long-term development blueprint to make HIWIN the leading brand in precision linear drive components and system technology products. HIWIN has R&D centers in Taiwan, Tokyo (Japan), Offenburg (Germany), and Israel, with over 500 R&D personnel. We are dedicated to global resource integration and technological innovation. The IP Department manages and maintains the Company's IP systems, regularly reporting to the management team about IP management. Additionally, overseas R&D centers have quarterly international exchanges and product sharing with R&D personnel at HIWIN Headquarters.

After the COVID-19 pandemic restrictions were lifted in 2023, HIWIN GROUP's R&D personnel worldwide engaged in cross-regional exchanges on innovative design, process technologies, smart technology, and environmental protection. These elements were incorporated into new product development and were improved over time. We also invited members across the organization to discuss new business models and market strategies. We aim to achieve economies of scale through global deployment and regional integration, expanding product portfolios and market footprint. Our goals are to satisfy the needs of more customers and build the Company's sustainability capacity.

## 2 Internal innovation process

HIWIN fosters an innovation culture to strengthen R&D capabilities in response to changes in smart manufacturing and the industry. To encourage internal innovation and develop competitive products, we apply Synchronization Engineering (SE) to accelerate the implementation of innovative ideas. This approach helps establish a product development process that aligns with our corporate culture and values, allowing inspiration to take shape and be aligned. The synchronization spans from experience transfer, patent arrangements, and target market during the design phase to production equipment, facilities, auxiliary engineering, logistics information synchronization, and collaborative synchronization during the later stages of R&D.

HIWIN focuses its R&D services on the voices of end customers and addresses customer pain points in the product development process. Using big data analysis, HIWIN promptly rolls out new products, expands into new markets, and enhances the Company's long-term competitiveness.

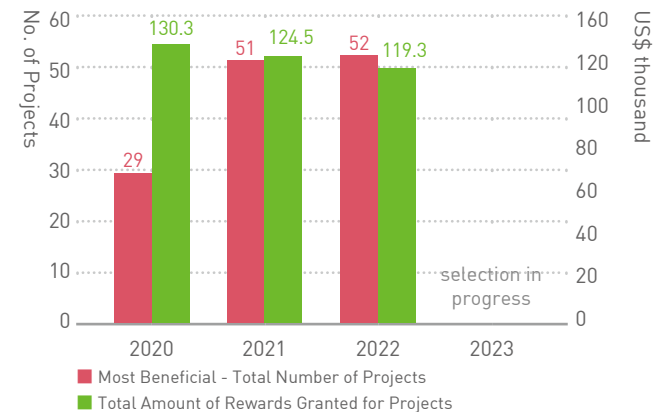


## 3 Most beneficial award

HIWIN promotes and motivates employees to implement innovative ideas in products, processes, and manufacturing through our internal innovation mechanism. This helps us establish a sustainable foundation for our organization's competitiveness. We also believe in rewarding employees who propose innovative ideas by providing them with tangible benefits.

The HIWIN Most Beneficial Award categories include Proposals for Improvement, Processes, Automation, Products, AI & Big Data, Patents, and ESG. The Award encourages employees to actively generate innovative ideas and creativity before practically implementing them for company-wide optimization and innovation, establishing a virtuous cycle within the organization.

### Bonuses awarded and number of cases in 2020-2023



R&D personnel exchange of HIWIN GROUP



Expand into new markets



Chairman & CEO presents awards to inspire the colleagues' innovation energy

## I Establishment of Innovation Culture

### 1 Strengthen open Innovation

HIWIN is committed to ongoing innovation in research and development, as well as leveraging the expertise of industry, government, and academia to strengthen Taiwan's machinery industry. To this end, HIWIN has been providing resources to domestic and overseas universities and research institutes, fostering technological advancements and educational reforms in engineering through the integration of global resources and a commitment to continuous innovation. HIWIN understands the importance of long-term R&D and has promoted open innovation in multiple aspects in 2023.

- Industry-academia cooperation

Since 2005, HIWIN has initiated industry-academia collaboration programs, dedicating itself to long-term basic research and technology development at multiple universities.

In August 2023, HIWIN GROUP signed a collaboration agreement with the College of Industry-Academia Innovation at the National Taiwan University of Science and Technology. The collaboration focuses on smart

manufacturing, artificial intelligence, and sustainable energy. We planned a twelve-year partnership with an annual investment of US\$325.7 thousand to broaden R&D avenues for faculty and students, inspire diverse, forward-looking thinking and research, and expand the innovation landscape for tech talent in Taiwan.

The two parties collaborate on core themes such as knowledge exchange, technological innovation, and talent cultivation, establishing systematic dialogue and partnership mechanisms, bridging academic research with industrial development, sowing the seeds of innovation, and strengthening Taiwan's competitiveness. This aligns with NTUST's vision of "developing an international university of applied research featuring technological innovation and industrial applications."

For our smart product, i4.0BS®, we used HIWIN's ballscrew big data. Also, we collaborated with a U.S. university team to create an AI predictive diagnostic tool for smart ballscrews employing various algorithms, including deep learning and machine learning. The diagnostic tool can handle complex conditions and massive data simultaneously, significantly reducing AI learning time, quickly responding to market demands, and enhancing competitiveness.

- Joint R&D collaboration with external partners

In response to the international trends for ESG and energy-saving, we gradually shift towards electric designs for our industrial brakes. As our critical European customers requested us to develop high-end electric actuators, we seized the opportunity, leveraging our expertise in flexible and innovative transmission machinery R&D, to collaborate with external partners in developing key components and pursuing a lightweight design with reduced volume.

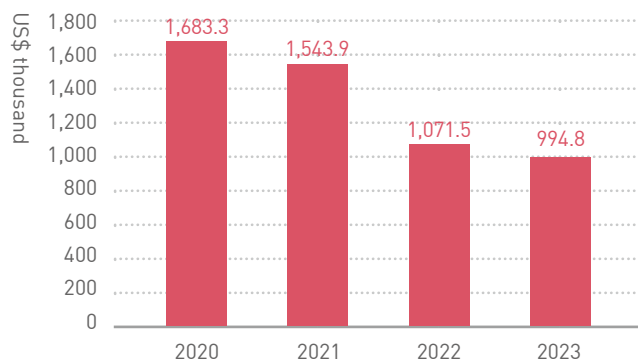
- Seminars on the value chain

To enhance the capabilities of critical manufacturing processes, HIWIN actively collaborates with suppliers to boost momentum in the overall industry chain. For example, to address issues of high sourcing costs and long lead times for rotary joints, HIWIN partnered with suppliers to develop different rotary joint modules. After a series of tests, validations, and continuous design optimizations, we successfully introduced this technology into the factory in 2023. This technology enables us to respond to the customers' special needs with great flexibility, increasing customer satisfaction and loyalty.

### 2 Innovation management

HIWIN encourages R&D activities by promoting a culture of open innovation. We also created a comprehensive review mechanism to evaluate product development and production risks. All R&D processes and outputs are controlled through the internal control document "Illustration on Failure Mode and Effects Analysis." Innovation is the source of HIWIN's competitiveness. We can minimize risks in the R&D process through effective management and supervision to ensure product quality.

Industry-academia and commissioned research spending in 2020-2023



## IP Management

### 1 IP management system

HIWIN is dedicated to integrating global resources and fostering continuous innovation. To safeguard the Company's intellectual property (IP), the Chairman's Office has established a specialized IP Legal Department. Additionally, HIWIN has implemented the Taiwan Intellectual Property System (TIPS), which formulates IP management policies and objectives centered around patents, trade secrets, trademarks, and copyrights. Corresponding implementation methods have been established for relevant departments to adhere to, with the aim of preventing any infringement of others' IP during product development or marketing. HIWIN actively encourages its colleagues to innovate and develop a comprehensive IP portfolio, thereby upholding the Company's brand image. Furthermore, effective communication channels have been established to facilitate ongoing enhancements to the IP management system.

### 2 Patent management

Since its establishment, HIWIN has prioritized the development of its patent portfolio to safeguard the company's significant R&D accomplishments. Before introducing new products, HIWIN implements a rigorous review system to evaluate the patentability and infringement risks associated with its products. The IP Legal Department conducts patent searches to enhance the quality of the patents. HIWIN encourages its employees to innovate in R&D and uphold its business philosophy of "Continuous Innovation" through a comprehensive approach that includes five stages of patent education and training for R&D personnel, a patent rewarding system, and a most beneficial patent competition.

The five stages of patent education and training are specifically designed for new R&D personnel and cover topics such as introduction of patent specification and patentability, patent searches in different countries, drafting of patent proposals, defense against patent rejections, and identification of patent infringement. This systematic course arrangement enables the Company to cultivate the fundamental patent knowledge of new R&D personnel, improve the quality of patent proposals, and mitigate the Company's risk of infringement.

HIWIN has consistently received significant patent awards, as indicated in the table below, establishing itself as a technology leader in the industry. In response to the growing emphasis on ESG, HIWIN has developed numerous green patents focused on environmental protection and energy conservation. These patents encompass various technologies, including temperature detection, reduction in the use of parts and materials, noise reduction, oil leakage prevention, and improvement in lubrication effectiveness.



Policy | **Respect others' IP**

Goal | Avoid infringing others' IP

Implementation Methods

- ① IP and legal education and training
- ② Patent infringement identification and design around
- ③ Pre-disclosure review of new products
- ④ Patent mapping

Policy | **Continuously innovate and develop our own IP**

Goal | Encourage innovation and strengthen IP portfolio

Implementation Methods

- ① Patent proposal review
- ② Patent rewarding system
- ③ Organize the most beneficial patent competition
- ④ Patent/trademark search service
- ⑤ Trade secret registration

### IP management

Policy | **Use IP to protect the legal interests of the Company**

Goal | Take legal action for counterfeits and protect the Company's brand

Implementation Methods

- ① Infringement investigations
- ② Counterfeit administrative investigation
- ③ Infringement litigation
- ④ Revocation of counterfeiters' patents and similar trademarks

Policy | **Continuously improve the IP management system**

Goal | Improve the quality and efficiency of IP management

Implementation Methods

- ① IP management system
- ② Contract review system
- ③ TIPS internal audit
- ④ Pre-use review open source software



Important patent layout

By the end of Dec. 2023  
a cumulative total of  
patent applications

**3,492** applications

A total of patent applications  
worldwide in 2023

**72** patents

Patents have been  
granted globally<sup>Note1</sup>

**2,958** patents

A total of green patent applications  
worldwide in 2020-2023

**185** patents

Patent licensing  
rate<sup>Note2</sup>

**89%**

Note: 1. Patents granted includes patents both lapsed and not lapsed.

2. Patent granting rate = Number of patents approved ÷ (number of patents granted + number of patents rejected) × 100%



Major patent awards

In 2009, 2011, 2018, 2022  
Employees of the Company awarded

**National Invention and Creation Awards**

Gold & Silver

2001 till 2023  
for 23 consecutive years

**Taiwan Excellence Awards**

Gold & Silver

3 Trade secrets management

To maintain our Company’s competitive advantage in the industry and safeguard HIWIN’s process technologies, we have built upon our experience of implementing the Taiwan Intellectual Property Management System (TIPS) from 2014 to 2017. We have formulated relevant systems based on recommendations from a third-party verification agency and continuously improved our existing practices.

Currently, we have implemented a trade secret registration system within the relevant departments to ensure proper retention of our selfdeveloped technology know-how. The supervisor at the manager level of the registered unit serves as the manager for the trade secret. The IP Legal Department conducts audits on managers throughout the entire factory. Additionally, access to the area where the trade secret is located is strictly controlled. We have established a reporting and penalty mechanism to address any unauthorized personnel entering the controlled area.

Since 2018, we have expanded the system at not only HIWIN Headquarters in Taichung but also factories in Taichung, Yulin, and Chiayi. Every year, internal audits and management review meetings are conducted to ensure the effective implementation of our management system across all units, thereby preventing the leakage of confidential information, such as manufacturing processes.

Furthermore, the IP Legal Department provides legal courses to HIWIN’s managers annually and offers IP training to new employees. This training enhances employees’s legal and IP awareness, thereby maintaining our competitiveness in the industry.



4 Trademark management

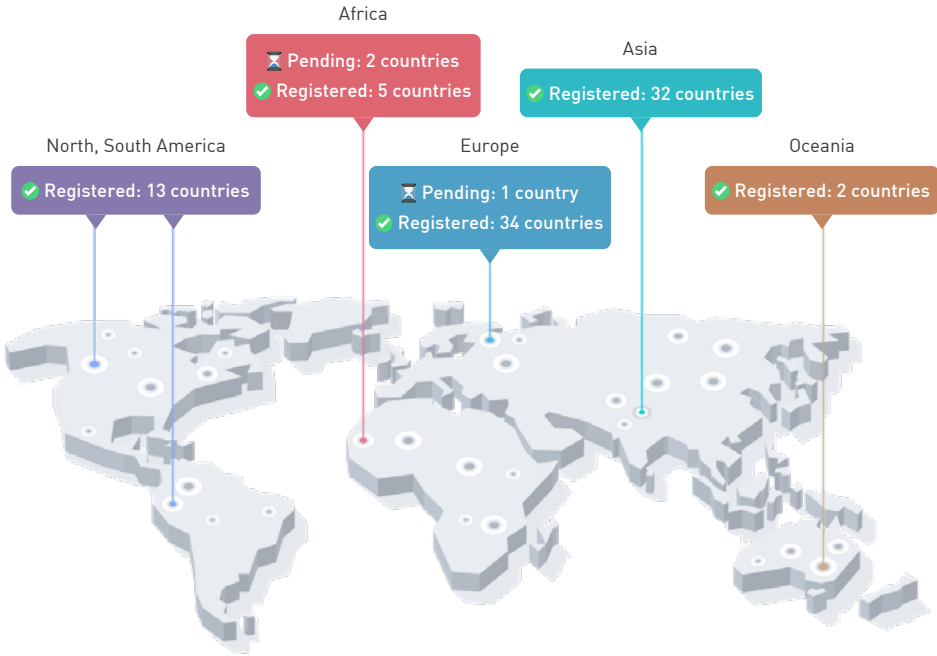
HIWIN has successfully established a global presence with its renowned brand. With over 30 years of dedicated brand marketing, “HIWIN” has become the second largest brand in the global linear motion products industry.

By the end of Dec. 2023  
trademark (registered)

86 countries

By the end of Dec. 2023  
trademark (pending)

3 countries







HIWIN’s market share in China has been increasing yearly, and it has already become a well-established brand for linear motion products in China. The status has led illegitimate Chinese companies to produce and sell counterfeit HIWIN products, exploiting HIWIN’s brand visibility. To stop counterfeit products from recurring, which may damage HIWIN’s brand image, we registered the “HIWIN” trademark in China. Besides, we actively applied for multiple color combination trademarks (non-traditional trademarks) which have been granted for registration in China. The above trademarks can help us combat counterfeit manufacturers and prevent customers from purchasing low-quality counterfeit products.



Following rigorous crackdowns on counterfeit products in China and, thankfully, with strong support from Chinese law enforcement department in protecting the HIWIN brand image, we have uncovered 79 counterfeit manufacturing factories and 524 counterfeit sellers, along with the seizure of 520,509 counterfeit sliders and 12,078 counterfeit slider packages as of the end of December 2023. In order to prevent counterfeiting, HIWIN diligently pursues trademark infringement lawsuits against counterfeit manufacturers, ensuring the protection of customers's rights and interests. HIWIN remains unwavering in its commitment to upholding the esteemed brand image of HIWIN and defending its exceptional quality.

#### List of HIWIN color combination trademarks

No.	Trademark Icon	Trademark No.	Note
1		24542227	Red/Green/Gray combination trademark
2		18961112	Red/Green/Black combination trademark
3		18961115	
4		14320371	Red/Green combination trademark
5		18961113	Red/Green combination trademark for packaging box
6		18961114	

Additionally, we discovered a counterfeit factory in Dongguan City, Guangdong Province, that seriously infringed our brand, seizing approximately 300,000 counterfeit blocks. This case marked the first criminal prosecution based on a color combination trademark. The two main defendants were sentenced to five years and three years in prison, respectively, while in the civil lawsuit, the defendants were ordered to compensate HIWIN RMB\$ 2 million. This case can deter counterfeit manufacturers and demonstrates our determination to uphold the HIWIN brand image.

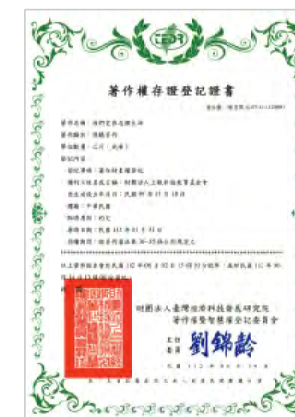
#### 5 Copyright management

HIWIN's IP Legal Department reviews all works before publication to check for potential infringements. Important works are registered with relevant authorization departments for copyright protection, documenting the date of completion and the process of creation. In recent years, HIWIN has copyrighted HIWIN Ambassadors, product catalogs, software interfaces, and the Ecological Education Film "We Love Living Here" to add an additional layer of copyright protection to trademark protection and further protect our brand image.

To protect HIWIN's copyrights and prevent the circulation of counterfeit products in the market, HIWIN has taken action against counterfeiters in the following ways: ① Several Taiwanese manufacturers published counterfeit HIWIN product catalogues on their websites. After receiving a warning letter, the counterfeiters removed the infringing links, paid damages, and issued an apology in newspapers. ② Infringement lawsuits were filed against two counterfeiters of HIWIN product catalogues in China. The initial courts ruled in favor of HIWIN, and the defendants were ordered to pay penalty for violation of HIWIN IP.

In addition, HIWIN has implemented an open-source software pre-use review mechanism to minimize the risk of violating open-source software licensing terms when using open-source code to assist in software development. This allows the Company to provide customer services with better efficiency and legitimacy, enhancing its long-term competitiveness.

In summary, HIWIN's works are original. If illegitimate companies attempt to enhance the value of their products through counterfeiting, HIWIN will uphold the spirit of continuous innovation and actively take legal action against such behavior to protect the Company's intellectual property and brand image.

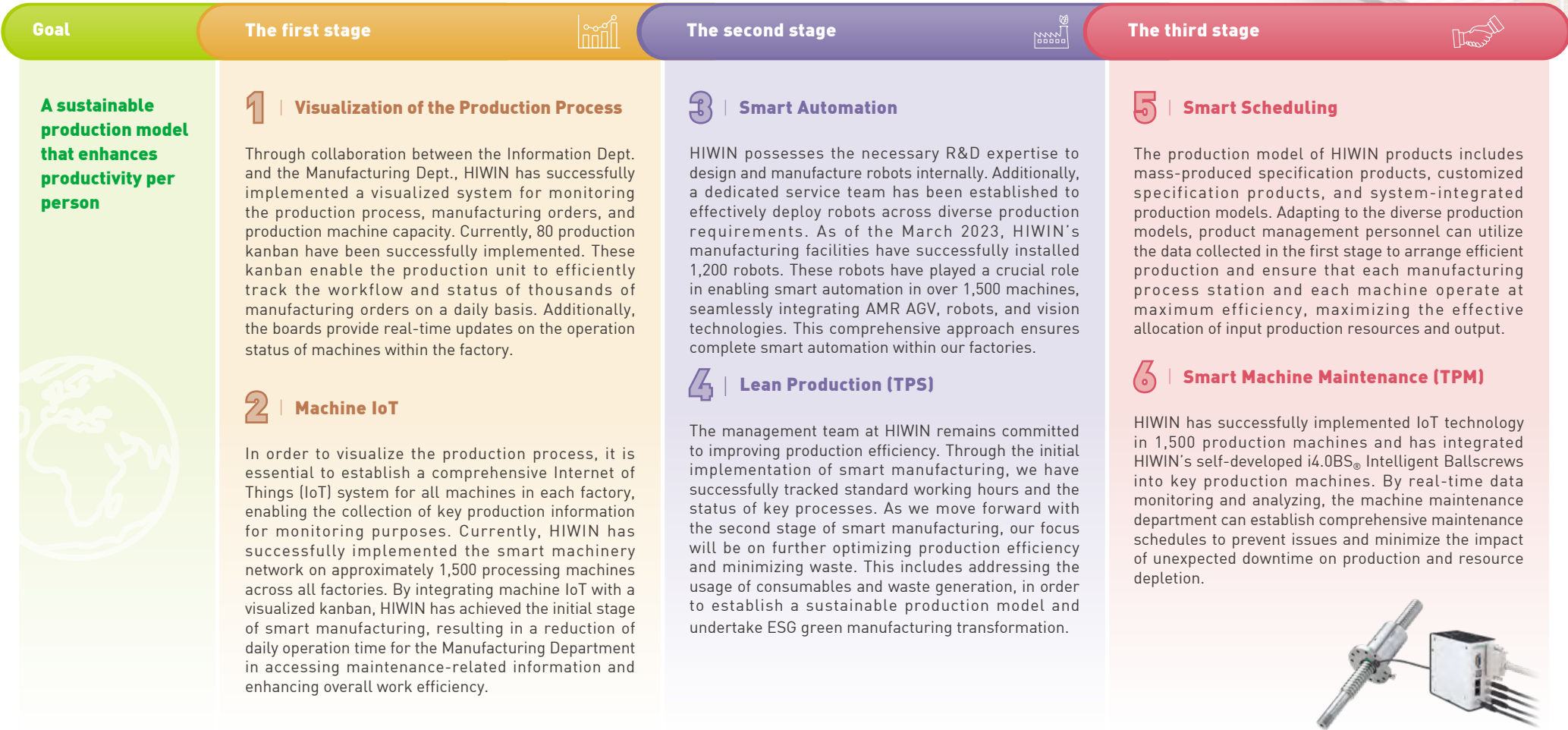


"We Love Living Here"  
Taiwan audiovisual  
copyright certificate

## 4.2 Smart Manufacturing

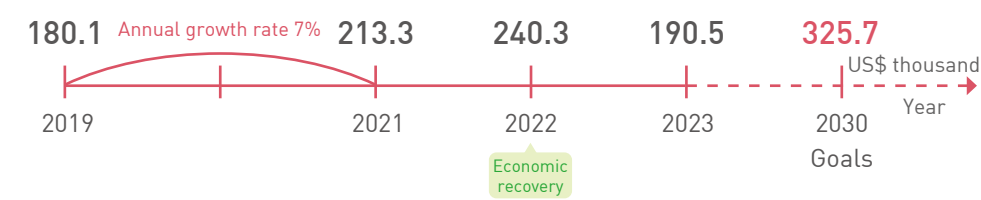
HIWIN aims to be the leading partner in smart manufacturing. HIWIN proactively incorporates sustainable production methods into its operations to address climate change. Additionally, various smart manufacturing initiatives are being implemented across our factories. To establish a sustainable production model that enhances productivity per person and minimizes environmental impacts, we have devised development strategies in six areas and three stages.

### Smart manufacturing stages and goals



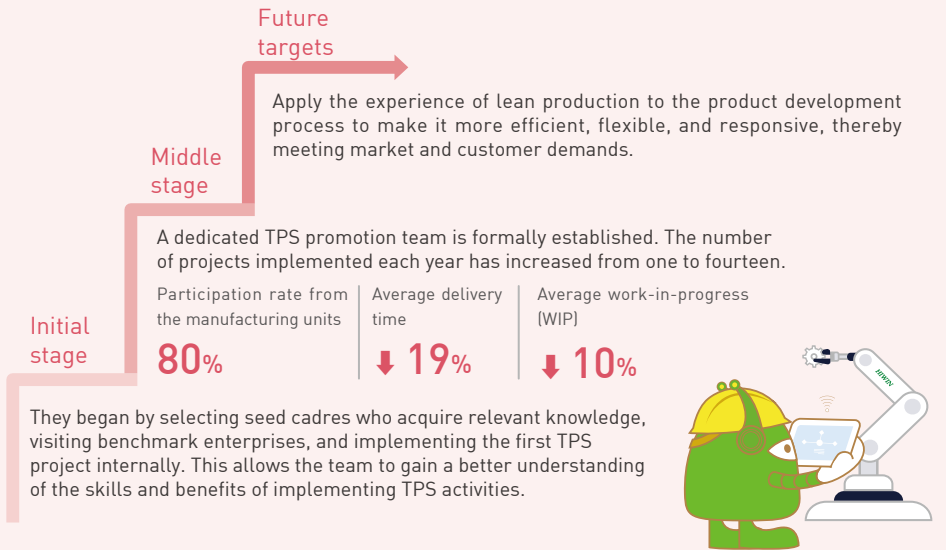
Moving forward, HIWIN team will expand the scope of smart manufacturing and leverage the mechanisms of the first and second stages of smart manufacturing. This will enable them to consistently receive production data and continuously strive for improvement. Through digital transformation in manufacturing, HIWIN can achieve efficient and sustainable production and manufacturing practices. By employing brand strategy, innovative design, and smart manufacturing techniques, HIWIN can maintain its corporate competitiveness. In response to the growing importance of corporate sustainability and ESG, HIWIN has developed a unique smart production model that prioritizes both efficiency and sustainable competitiveness.

Output value per capita



Case - Lean Production(TPS)

HIWIN's lean production activities are led by Chairman & CEO Eddie Chuo and his team. Most importantly, it has made lean production the common language of the production units and instilled a habit of waste reduction in all operation employees.



### 4.3 Sustainable Products

HIWIN is committed to green manufacturing and sustainable development through technological innovation and product design. By integrating green design and manufacturing in each stage of the product life cycle, we can fulfill sustainable product liability and reduce environmental impact. Additionally, HIWIN upholds the principles of sustainable development by ensuring compliance with health and safety laws and regulations throughout the product life cycle. We prioritize the well-being of our customers and end-users, as well as environmental protection. Our raw materials and contents adhere to relevant health and safety requirements, including EU RoHS, REACH, and other regulations.

#### Green Product Design Strategy






To achieve sustainable production, HIWIN employs the Life Cycle Assessment (LCA) for green product design. This involves systematically analyzing products at every stage, from raw material acquisition to manufacturing, assembly, sales, transportation, use, and final disposal. We identify the environmental impacts at each stage and conduct carbon inventory using ISO 14067:2018. In 2023, we completed the carbon footprint calculations for HG25 and R40-16-BD6.35, with verification expected to be finished in 2024.

Throughout the product life cycle, HIWIN integrates environmental protection into product development and design. We adopt green manufacturing methods such as energy conservation, carbon reduction, and resource reuse. We continuously strive for improvements to achieve product sustainability. Environmental protection is a core aspect of HIWIN's corporate social responsibility, and we will continue to minimize environmental impacts at all stages of the product life cycle to achieve sustainable development.



HIWIN is dedicated to promoting ESG sustainable development. In addition to reduce the carbon footprint of our products through various measures such as carbon footprint calculation, establishing a carbon management platform, integrating green product development processes, and using low-carbon materials, we have also developed smart products to assist customers in energy conservation and carbon reduction. We have shared these experiences with our overseas subsidiaries. Moving forward, we will continue to promote low-carbon products, facilitate green recycling design, improve product energy efficiency, and reduce environmental impact. Our ultimate goal is to achieve net zero carbon emissions by 2050.

## HIWIN's green product design goals and strategies

Life Cycle	 Raw Materials		 Manufacturing	 Downstream Transportation	 Product Use	 End of Life Processing
Disclosure Items	Local procurement ratio	Implementation ratio of low carbon raw materials	Overall product manufacturing energy intensity base year: 2021	Waste resource utilization ratio	Energy efficiency of mechatronic products base year: 2021	Recycling rate for domestic wooden packaging materials base year: 2021
2023 Achievements	74.5%	15.4%	↑ 1.6% (48 GJ/ US\$ million)	80%	↑ 9%	↑ 4%
2024 Targets	70%	18.5%	↓ 25%	81%	↑ 7.5%	↑ 5%
2030 Targets	70%	20%	↓ 54%	83%	↑ 20%	↑ 20%
Development Strategies and Practices	Local procurement and management <ul style="list-style-type: none"> <li>• Low-carbon materials</li> <li>• Avoiding the use of hazardous substances</li> <li>• Assisting suppliers with energy management</li> </ul>		Green manufacturing <ul style="list-style-type: none"> <li>• Energy conservation, carbon reduction</li> <li>• Energy management</li> </ul>	Green packaging <ul style="list-style-type: none"> <li>• Packaging circularity</li> <li>• Waste reduction</li> </ul>	Sustainable design guidelines <ul style="list-style-type: none"> <li>• Increasing product energy efficiency</li> <li>• Decreasing product wastes</li> </ul>	Green recycling guidelines <ul style="list-style-type: none"> <li>• Product disassemble instructions</li> <li>• Product recycle instructions</li> </ul>

## Product life cycle liability

Items	Units	2020	2021	2022	2023
Product disassemble and recycle instructions - Percentage of applicable products	%				88
Percentage of products made from recycled materials	%	0	2	26	32

Note: 1. Product disassemble and recycle instructions: help customers disassemble and recycle products after the end of their lifecycle.

2. We have gradually introduced recycled materials into production since 2021. The calculation basis = revenue from products using recycled material ÷ total revenue of the year.





## Green Products

HIWIN is dedicated to enhancing the energy efficiency of its products and has created a range of environment-friendly and energy-saving products to support customers and end-users in their pursuit of reducing carbon emissions and promoting sustainable development. These energy-saving products encompass crossed roller bearings, strain wave gear, underwater direct drive rotary tables, wafer robots, industrial robots, cool type ballscrews, intelligent ballscrews, and other related products. Furthermore, energy conservation is accomplished through the implementation of innovative process technologies, such as new energy-saving process technologies, plastic recycling and waste reduction, process efficiency enhancement, and recycling of medical equipment packaging.

### Environmental benefits of products in 2023

Category	Products	Environmental Benefit Practices	2023 Carbon Reduction Volume (tCO <sub>2</sub> e)	Overall Achievements in 2023
Energy-saving products	Wafer Robots	Following the principle of "Optimization," we implement design measures to reduce waste and wiring, digitize product manuals, and reclaim wooden packaging materials.	110	<p>① Accounts for 32% of the total shipments in 2023</p> <p>② The total carbon reduction is approximately 6,204.5 tons CO<sub>2</sub>e</p>
	Industrial Robots	We comprehensively implemented modular design and local procurement. We also introduced weight reduction design and measures such as process digitization, manual digitalization, and wooden crate packaging materials recycling.	7.3	
	Heavy Load Series Ballscrew	The products allow customers to replace traditional hydraulic systems to reduce energy consumption.	160	
Plastic circularity and waste reduction products	Linear Guideway	We established a process for plastic recycling through product design, manufacturing process improvement, and waste reduction technology.	2,390.9	
	Intelligent Ballscrew	The sensor and expert algorithm technologies allow the customers to conserve power consumption.	139	
Energy-saving manufacturing	Linear Guideway	We improved the new manufacturing process and green design controls to achieve waste reduction, recycling, and low energy consumption.	400.3	
	Ballscrew	Continuous improvement in the manufacturing process to reduce processing time and machine power consumption.	2984.3	
Circularity and recycling	Medical Equipment	We reduce waste generation by recycling and reusing wooden crate packaging materials.	5.1	
	Torque Motor Rotary Table Rotary Joint Module	Development of adapter modules reduces the carbon footprint from overseas procurement and the additional emissions from maintenance services.	7.6	

Note: Calculate the reduction based on the latest carbon emission factor announced by the Bureau of Energy, Ministry of Economic Affairs.

### Case



Raw Materials



#### ① Wafer Robots

In response to the recent increase in demand for wafer robots in the semiconductor industry, optimization has become our principle for green products. In 2023, we reduced carbon emissions by approximately 260 kg for the new standalone machine by reducing waste, wire materials, digitizing product manuals, and recycling wooden crates packaging materials. The same year, we assisted the semiconductor industry in reducing emissions by at least 110,000 kilograms of CO<sub>2</sub>e. HIWIN's new green products have become a mainstream in the market. Additionally, customers are very satisfied with the latest machine's functional specifications and sustainability performance.

Carbon emissions volume of the optimized standalone machine in 2023

↓ 260 kg

Case

Raw Materials

»

Manufacturing

»



### ② Industrial Robots

In 2022, HIWIN continued to provide automation solutions to support industrial upgrades. Our new industrial robots feature a modular design, resulting in a reduced number of parts. To further promote sustainability, we collaborated with suppliers and local partners to implement green procurement practices and a unified outsourcing process. These efforts have led to a decrease in transportation distance and carbon emissions. The product underwent a weight reduction design. By comprehensively digitizing drawings and product manuals and using reusable wooden crate packaging, we reduced total carbon emissions and increased the reuse rate of wooden crates.

We reduced product weight without affecting the mechanical structure

↓ 30%

Energy use during product operation decreased

↓ 30%

In 2023, the carbon emissions of the new model decreased compared to the 2021 prototype of the same specifications

↓ 406.2 kg



### ③ Linear Guideway Sustainable Utilization and Waste Reduction

A Plastic Recycling

HIWIN's sustainability strategy aims to reduce carbon emissions and achieve a circular economy by incorporating waste reduction techniques and establishing plastic recycling processes in the product design and manufacturing stages.

In 2023, material saved totaled

↓ 67.1 t

Carbon emissions reduced

↓ 400.3 t



### ① Energy Conservation in the Ballscrew Manufacturing Process

HIWIN has implemented ongoing enhancements to the manufacturing process of ballscrews in order to decrease processing time and machine power consumption.

The power consumption of the new manufacturing process for each ballscrew is reduced

↓ 147 kWh

Carbon emission reduced

↓ 72.8 kg



### ② Energy Conservation in the Linear Guideway Manufacturing Process

B Improvement in energy efficiency in the new manufacturing process

HIWIN has made significant efforts to optimize the manufacturing process, resulting in enhanced energy efficiency. This optimization has led to reductions in material procurement, manufacturing costs, waste disposal costs, and carbon emissions during the manufacturing process.

Materials saved

↓ 172.1 t

Annual electricity saved

↓ 2.26 million kWh

Carbon emission

↓ 2,356 t

C Green design and manufacturing process optimization

By modifying component configurations and optimizing manufacturing processes, HIWIN reduces raw material usage and avoids energy consumption caused by replacing production tools.

Introduction of product specifications

17

Materials saved

↓ 21.3 t

Carbon emission

↓ 34.9 t



### ① Medical Equipment

We use simple packaging for domestic shipments, whose materials can be recycled and reused, effectively reducing carbon emissions.

The volume of wood incinerated was reduced    Carbon emission in 2023

↓ **3,100 kg**    ↓ **5.12 t**

By promoting the recycling and reuse of packaging materials used by product cover suppliers and the packaging bags used for storage and transportation of distribution materials, we can reduce carbon emissions from incineration and combustion.

Annual reduction of plastic packaging materials    Annual carbon emissions reduction from packaging recycling

↓ **19 kg**    ↓ **38 kg**



### ① i4.0BS® Intelligent 4.0 Ballscrew

Incorporates specialized sensors and algorithms for real-time performance monitoring and remote machine condition monitoring.

Lifetime predictive diagnosis

Increases machinery utilization, prevents unexpected downtime, and reduces power consumption from changes of production line.

Annual carbon emissions reduced

↓ **8~24 kg**

Temperature notification

Reduces warm-up time.

Power use per warm-up    Annual carbon emissions

↓ **50%**    ↓ **60~107 kg**

Smart lubrication

Annual carbon emissions reduced

↓ **180~280 kg**



Awarded Gold Label by TMBA in 2024  
ENERGY SAVING CERTIFICATION FOR  
MACHINE TOOL INDUSTRY



### ② DATORKER® Strain Wave Gear

The DATORKER® Strain Wave Gear Heavy Load Series was launched in 2023. It features high torque, high precision, and zero backlash. Energy-saving and emission-reducing as the Standard Series reducers, the DATORKER prolongs the product service life and reduces waste, making it suitable for processing equipment, automation, and semiconductors.

Compared to the standard series of strain wave gear in same sizes

Bearing torque load    Product life

↑ **30%**    ↑ **43%**

### ③ Heavy-load Ballscrew

Heavy-load ballscrews have the capability to replace conventional hydraulic systems, resulting in energy conservation. This product not only promotes energy conservation but also contributes to minimizing the environmental impact, making it a significant contribution towards green development.


Helped customers to save power


↓ **3.2 million kWh**

Equivalent to carbon emissions

↓ **160 t**

Case

End of Life Processing



① Torque Motor Rotary Table Rotary Joint Module

The Torque Motor Rotary Table initially used imported rotary joint modules produced abroad, which required long-distance transport to Taiwan. If maintenance issues arose, the parts had to be returned to the original manufacturer for repair. This process inadvertently increased carbon emissions, directly impacting the environment. Therefore, HIWIN developed rotary joint modules in-house and produced them locally, which match the imported ones in terms of performance and eliminate transport emissions, achieving carbon reduction and improving environmental impacts.

Materials used are locally sourced in Taiwan

Carbon emissions reduced from transportation activities

100%





↓ 53%

Hazardous Substance Management

① Hazardous substance management and product environmental impact assessment

HIWIN markets its products worldwide. To guarantee compliance with customers’ and international laws and regulations, such as the EU REACH and RoHS, suppliers must sign prohibition clauses and provide detailed information to confirm that their products are free from environmentally hazardous substances. HIWIN will systematically implement an auditing and inventory system to ensure that suppliers consistently deliver safe and reliable materials.

Hazardous substance management policy

 Understanding Regulatory Trends	 Hazardous Substance Management System	 Regular Audit and Inventory	 Hazardous Substance Disclosure
In light of our diverse product development and global trade relations, HIWIN remains committed to adhering to the applicable laws and regulations in every country and product category.	All HIWIN suppliers must sign clauses prohibiting the use of hazardous substances. In the future, a system for managing hazardous substances will be implemented to ensure the safe use of materials throughout the design and procurement processes.	In the future, we will gradually implement an audit system and an inventory system to ensure suppliers’ compliance with the prohibition clauses.	In accordance with the EU REACH, RoHS, etc., we disclose hazardous substances in response to HIWIN’s diversified product development.

② Hazardous substance elimination program

HIWIN will gradually develop a comprehensive mechanism for managing hazardous substances, in accordance with international regulations. This mechanism will include activities such as material declaration, supplier evaluation, product testing, and hazardous substance information management. We conduct regular investigations, screenings, audits, and information collection to ensure that the materials used in our products comply with environmental laws and regulations, as well as meet the needs of our customers. Additionally, we regularly update the information on hazardous substances in our products and conduct the necessary screenings and evaluations for new materials.

and product certifications. HIWIN has already obtained several international certifications and is currently working towards obtaining the IECQ QC080000 Hazardous Substance Management System Certification. Additionally, HIWIN is dedicated to researching and producing green products, with all of its products currently meeting the environmental protection requirements of RoHS, REACH, and other regulations. Moving forward, HIWIN will continue to promote the development and certification of green products, further refining the environmental indicators of its products. This will provide consumers with increased confidence in choosing HIWIN’s products, as we work towards jointly building a green and sustainable future.

③ Product certification

With the increasing global focus on environmental issues, customers are now more concerned about purchasing green products. HIWIN has always prioritized the development and promotion of green products. To ensure compliance with international standards and regulations, HIWIN has actively pursued international certifications

Compliance with international safety standards and environmental standards

Regulatory Directives / Signs / Declarations	Content	HIWIN’s Products (2023)
EU RoHS Directive	Control of Environmentally Hazardous Substances	All Products 100% Compliance
Conflict Minerals	Conduct surveys on upstream suppliers	All Products 100% Compliance



## 4.4 Customer Relations and Brand Management

### Customer Service and Satisfaction

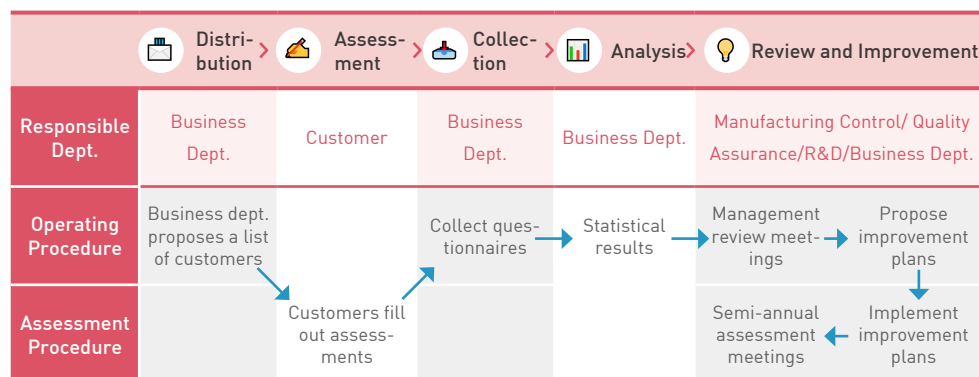
Customer satisfaction is the fundamental obligation of business operations, and it serves as a potent marketing tool and communication medium. HIWIN has successfully achieved customer satisfaction through surveys, regular interactions, and exceptional pre-sales and after-sales services. This has not only propelled HIWIN's continuous advancement but has also enhanced the competitiveness of our customers products in the global market.

#### 1 Implementation methods

HIWIN provides customers with the highest quality services through excellent products, high-performance services, reasonable ontime delivery rates, and diversified product categories. Additionally, HIWIN assists customers in gaining a comprehensive understanding of the characteristics and specifications of our products. We collaborate with customers in developing end-user products and technologies, respond promptly to customer feedback, and carefully listen to and understand their needs. This approach enhances our R&D capabilities, manufacturing quality, and customer satisfaction.

HIWIN Headquarters annually issues a customer satisfaction survey to key customers, subsidiaries, and distributors. We gather customer feedback from the surveys, note issues, and propose solutions after interdepartmental discussions. We also regularly review the progress and results of the improvement measures.

Customer satisfaction survey flowchart



#### 2 Cross-departmental communication

The marketing team at HIWIN collects customer needs, suggestions, and feedback through various communication methods such as the official website, service hotline, business mailbox, and interactions between sales personnels and customers. They provide relevant departments with information through written reports and presentations, proposing new product development or improvements to existing products. Additionally, they hold regular quality management meetings to discuss areas for improvement in manufacturing processes.

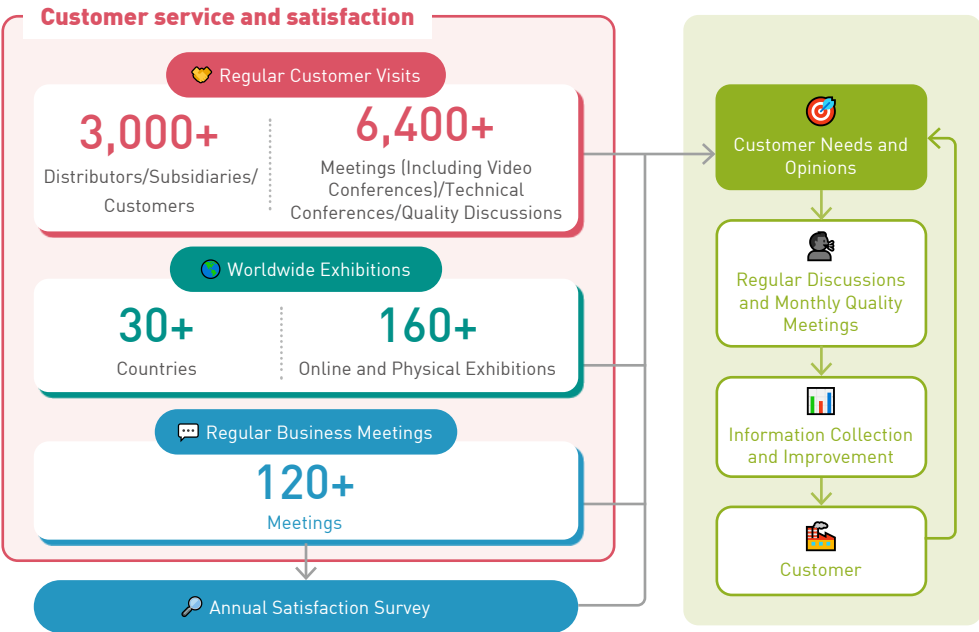
The business department and the manufacturing department also have regular meetings through the production and sales coordination meeting. This allows them to promptly address customer delivery requirements and the status of materials preparation on the production lines. The production department facilitates two-way communication and provides real-time information to effectively control the production schedule. This ensures that product lead times are met, customer requirements are satisfied, and the efficiency is enhanced throughout the supply chain.



3 Market communication

HIWIN is a global leading brand in motion control and system technology. Our products are sold worldwide under the HIWIN brand. HIWIN consists of several key teams: the Global Marketing Business Group, responsible for product sales and marketing; the Industrial Design Team and Planning Team, focused on corporate identity and branding; and the IP Team, dedicated to ensuring product designs comply with regulations and preventing the sale of prohibited or controversial items.

At HIWIN, we highly value customer feedback and suggestions. To facilitate this, we offer various communication channels for customers to provide their input. Additionally, we regularly visit customers, organize business meetings, and conduct satisfaction surveys to gather information and analyze areas for improvement. A customer's score of 70 or above is considered satisfactory in the satisfaction survey. If the score is below 70, we deem the customer dissatisfied and follow up with the customer to address the issues. We aim to enhance service satisfaction continuously.



4 Management performance

- Outcomes of customer satisfaction surveys

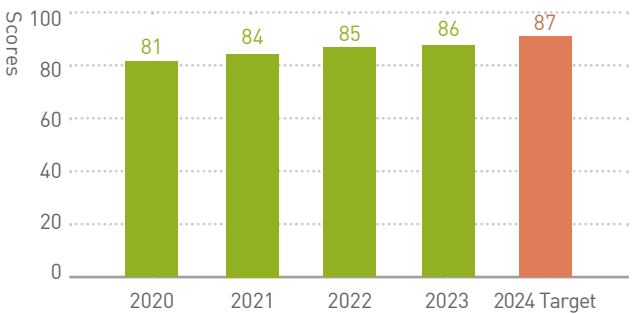
The 2023 Customer Satisfaction Survey covered key customers in Taiwan and overseas, achieving a customer satisfaction rate of 87%. A total of 370 questionnaires were distributed among subsidiaries, distributors, and end customers, with 329 recovered, yielding a recovery rate of 89%.

The survey results for 2023 showed consistent improvement in production lead time, business services, and after-sales services compared to 2022. This indicates that HIWIN has successfully met customers' needs in terms of delivery management, product education and training, after-sales technical support, and comprehensive product consulting services.

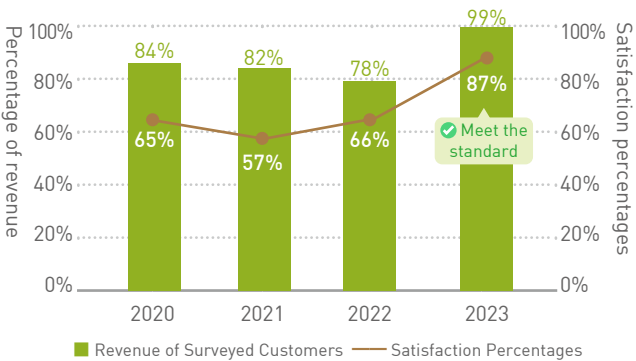
Furthermore, the quality of our products has improved compared to the past three years. Moving forward, we will continue to enhance quality and lead time through process refinement, aiming to provide even greater value and meet customers' expectations.



Customer satisfaction



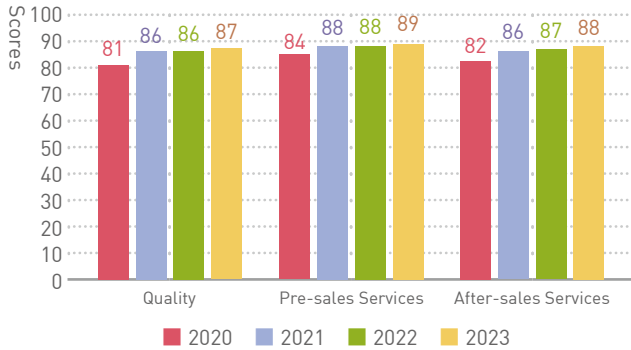
Revenue and satisfaction percentages of surveyed customers



Note: 1. The satisfaction rate target for 2023 is 70%.  
2. Percentage of surveyed customers' sales revenue = Sales revenue of survey respondents ÷ HIWIN's total revenue (including subsidiaries, distributors, and end customers).

- Improvement measures

### Customer satisfaction scores



**1** Based on data collected from the customer satisfaction survey, HIWIN will continue to improve in all areas, such as increasing the content on our technical website and providing more immediate and convenient pre-sales services. In response to the continuous introduction of new products, we will strengthen the professional knowledge and service capabilities of employees in our global subsidiaries and distributors through product training, exhibition visiting, and technical seminars. We aim to improve the quality of pre-sales and after-sales services by listening and providing real-time feedback on customer needs.

Note: Pre-sales services, such as establishing a dedicated technical website, enable customers to quickly access various services, including product selection and life calculation, from their own perspective.

**2** We proactively gain insight into our customers' trouble and expectations through pre-sales and after-sales services. By providing solutions and innovative services, we create added value for our customers. Furthermore, we continuously optimize internal processes and improve manufacturing processes, which are implemented in our daily operations. This proactive approach allows us to offer customers greater differentiation and competitiveness, from quality assurance to quality enhancement.

- Specific actions taken by HIWIN

### Frequency of customer satisfaction surveys

Customer satisfaction is a comprehensive measure of a Company's performance in terms of products, sales activities, and service support. Utilizing customer satisfaction levels as a key indicator of corporate competitiveness can also contribute to sustained profitability. Customer satisfaction surveys are conducted annually, aligned with implementation projects and department operations. These surveys are completed within the project year to obtain data for comparison and analysis.

### Customer satisfaction tracking system

The Business Department will internally review and address any reports of customer dissatisfaction and suggestions through management review meetings. The responsible unit will analyze the root cause of the issue, propose corrective actions, and monitor progress towards improvement.

### Customer satisfaction process flow

01

Propose an improvement plan according to the outcomes of customer satisfaction surveys.

02

After proposing improvement plans for all indicators, the Business Department, Quality Assurance Department, R&D Department, and Manufacturing Department will collaborate together to roll out improvement plans.

03

Use milestones to measure progress.

04

Ensure the Business Department, Quality Assurance Department, R&D Department, and Manufacturing Department collaborates to discuss and adjust improvement plans.

### Short- and long-term targets

Customer Satisfaction	2021	2022	2023	2024 target	2030 target
Score	84	85	86	87	89

### Customer feedback system

Implement a customer satisfaction feedback system to consistently monitor levels of customer satisfaction. Utilize survey data to establish goals, drive continuous improvement, and establish milestones for measuring progress. These milestones will also aid in adjusting targets and strategies as needed.

### Survey method standards

HIWIN conducts a customer satisfaction survey at the end of each year. Samples are collected from the date of survey to one year ago. Once the samples are collected, we compile an analysis report based on the data obtained. The survey primarily focuses on: ① Product Quality ② Pre-sales Services ③ After-sales Services

Product Quality

HIWIN adheres to the PDCA management cycle. Following our business philosophy of customer service and continuous improvement, we strategically manage the entire quality system, encompassing raw material procurement, product design, development, manufacturing, inspection, transportation, storage, pre-sales, mid-sales, and after-sales services. Internal audits are conducted to ensure the active involvement of all employees in achieving our goal of total quality management.

Establishing a culture of quality

HIWIN implements the Total Quality Management (TQM) model based on ISO 9001. Through continuous improvement, regular supplier assistance, standardization efforts, and quality system audits, we enhance product quality, strengthen personnel training, and promote a safety culture to provide a good working environment. We implement TPM activities to maintain proper equipment operation and make TPS activities the core of the production management system. We comprehensively integrate the efforts stated above, which apply to all

business tasks, to improve product quality and customer satisfaction.

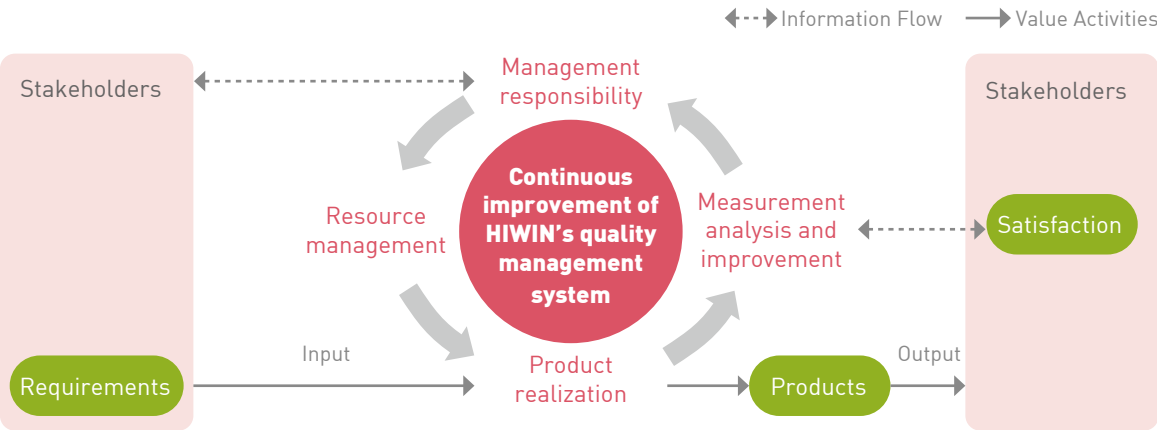
HIWIN also assigns material topics as “Quality Improvement Activities” or “Quality Control Circle Activities” to promote them. This helps address quality issues and enhance the customers’ and suppliers’ understanding of the quality system. By utilizing scientific analytics and tools, including the Taguchi Methods, Seven Basic Tools of Quality, and Eight Disciplines of Problem-Solving (8D), we continue improving quality through the PDCA cycle, making the TQM internalized in every employee’s mindset and workflow.

In line with our commitment to continuous improvement, HIWIN encourages all employees to submit improvement proposals to enhance the quality and efficiency of HIWIN. Additionally, we organize the annual QCC achievements presentation contest to actively promote quality and innovation among employees. Chairman & CEO Eddie Chuo personally evaluates the results of these improvement efforts, aiming to shape the quality of MIT and our branding paradigm.

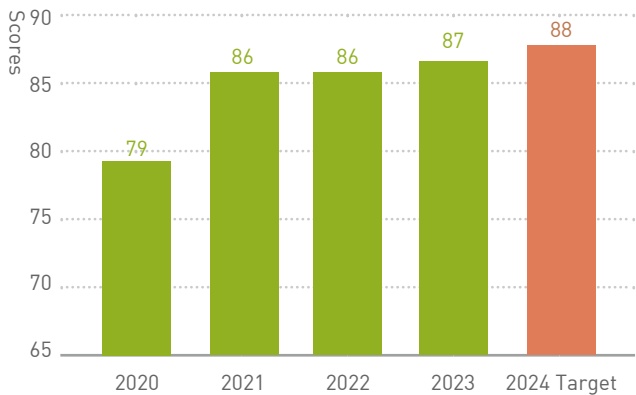
HIWIN actively listens to customer feedback on product quality, striving for continuous improvement. In the annual customer satisfaction survey, feedback regarding product quality and the impact of products and services on health and safety are documented for improvement. We track the progress of improvement and respond to the customers. In 2023, none of HIWIN’s products violated health and safety-related issues.

Through the distributor management process, we actively promote ISO 9001 Quality Management System (QMS) certification for distributors. In 2023, the ISO 9001 certification rate among distributors was 24%, with a target to increase to 30% by 2024. The Business and Quality Assurance departments collaborate as teams, conduct on-site visits, and hold occasional quality seminars and training courses for distributors. Through audits and guidance, we aim to enhance distributor service quality, resolve end-customer issues, and ensure quality consistency.

Customer satisfaction scores for product quality have been consistently improving yearly, and the product quality satisfaction scores in 2023 have met the target. We aim to improve further in 2024 with a target score of 88.



Product quality satisfaction





## Customer Privacy

### 1 Privacy policy

To safeguard the privacy of our employees, customers, suppliers, contractors, and website visitors, HIWIN has developed a privacy policy that adheres to the Personal Data Protection Act and the Information Security Policy.

To protect personal information, HIWIN employs multiple layers of encryption for its website registration data. Additionally, our website host is equipped with a firewall and anti-virus system. HIWIN has implemented internal procedures for confidential document control (TIPS) to ensure that all information, regardless of its format, necessary for maintaining the confidentiality of the Company's operational data or documents held by external organizations (such as public agencies, schools, and corporate bodies), is covered by this privacy policy.

2 Unless authorized or legally required, HIWIN strictly prohibits the disclosure or use of customer privacy and proprietary customer information in any situation.

3 To prevent any leaks of proprietary information resulting from employee behavior, all HIWIN employees are required to sign a "Declaration to Protect Trade Secrets" and a "Non-Disclosure Agreement." In order to safeguard customer interests and prevent unauthorized disclosure of customer information, HIWIN has implemented stringent measures to protect customer data. We emphasize the importance of safeguarding customer information and proprietary data, and have implemented an access system based on authorized permissions. Additionally, we have engaged an independent auditor to conduct internal audits, further enhancing our control and management of customer privacy and trade secrets.

4 HIWIN has established an Information Security Committee, consisting of supervisors from each unit at the managerial level. This committee holds an annual meeting to discuss and establish information security

protocols. The Information Department is responsible for developing and enhancing regulations related to network security, the use of Company email, and reporting violations. Additionally, they actively promote the certification of the ISO 27001:2013 information security management system. To enhance employees' understanding of occupational ethics and information security, we regularly organize training sessions and conduct phishing email tests to evaluate their awareness of information security protection.

Note: For information on security policies, please refer to Chapter 3.5, Information Security.

### 5 Training

1 » We introduced the Taiwan Intellectual Property Management System (TIPS) and established procedures for managing confidential documents. We provide relevant training in IP courses for new employees and the annual TIPS internal auditor training courses. In 2023, 151 participants passed the TIPS internal auditor training course.

2 » The IP courses for new employees offer examples of relevant infringement cases. We also provide annual training on patent infringement assessment for new R&D personnel.

### 6 Privacy leakage handling process

1 We have implemented regulations regarding penalties for violations related to the unauthorized disclosure of confidential documents and trade secrets. Disciplinary actions, such as admonishment and demerits, will be imposed based on the specific circumstances.

2 In the case of a breach of confidentiality and subsequent disciplinary action, a proposed improvement plan must be submitted within 3 days.

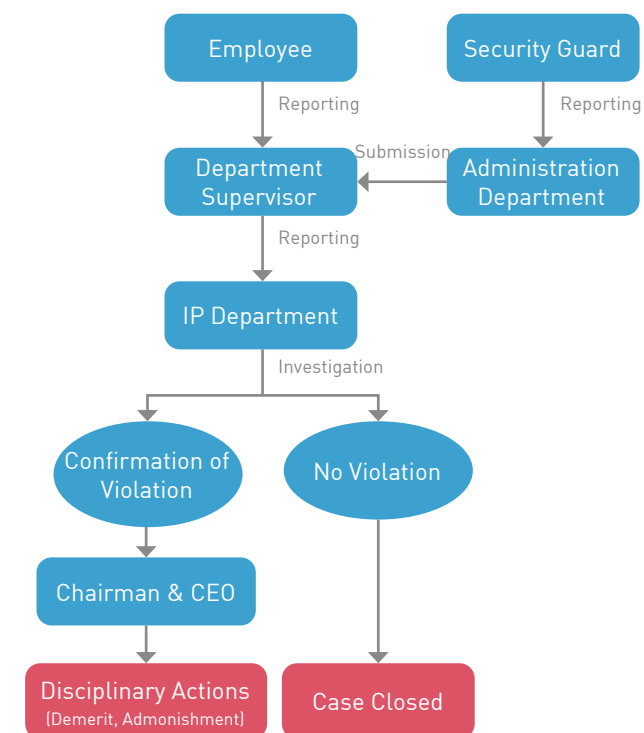
3 The Business Dept., IP Legal Dept., and Information Dept. can collaborate to discuss and determine feasible solutions for the improvement plan.

4 Specific targets will be established at each stage to measure the results of the improvement efforts.

### 7 Privacy leakages & disciplinary actions

0	0
Disciplinary actions from regulatory authorities in 2023	Reports of suspected customer data leakages in 2023
0	0
Incidents of confirmed customer data leakage, theft or loss in 2023	Lawsuits for infringement of customer privacy in 2023

### Handling procedures of privacy incidents

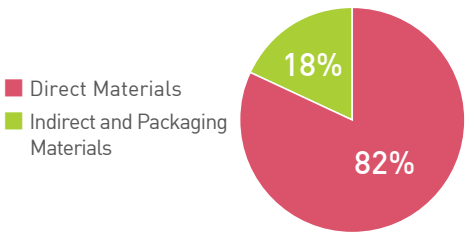


# 4.5 Sustainable Supply Chain Management

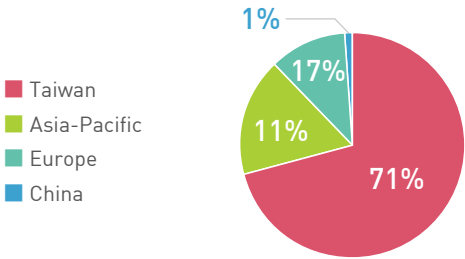
## HIWIN's Supply Chain

HIWIN is a professional manufacturer in global motion control and system technology product. In terms of procurement practices, HIWIN classifies raw material suppliers, which have the most significant impact on daily operations and production, into two categories based on supplier attributes: direct materials (materials directly related to production) and auxiliary materials (materials not directly related to production or packaging materials). Depending on their level of operational importance, different degrees of requirements and management systems are established to enhance supply chain resilience.

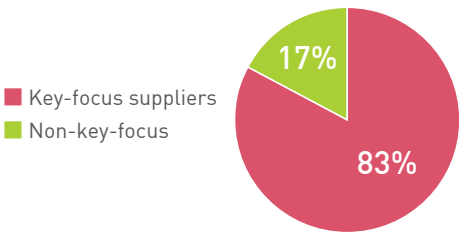
Materials supplier categories in 2023  
(by annual purchase amount)



Distribution of materials suppliers  
by region in 2023  
(by annual purchase amount)

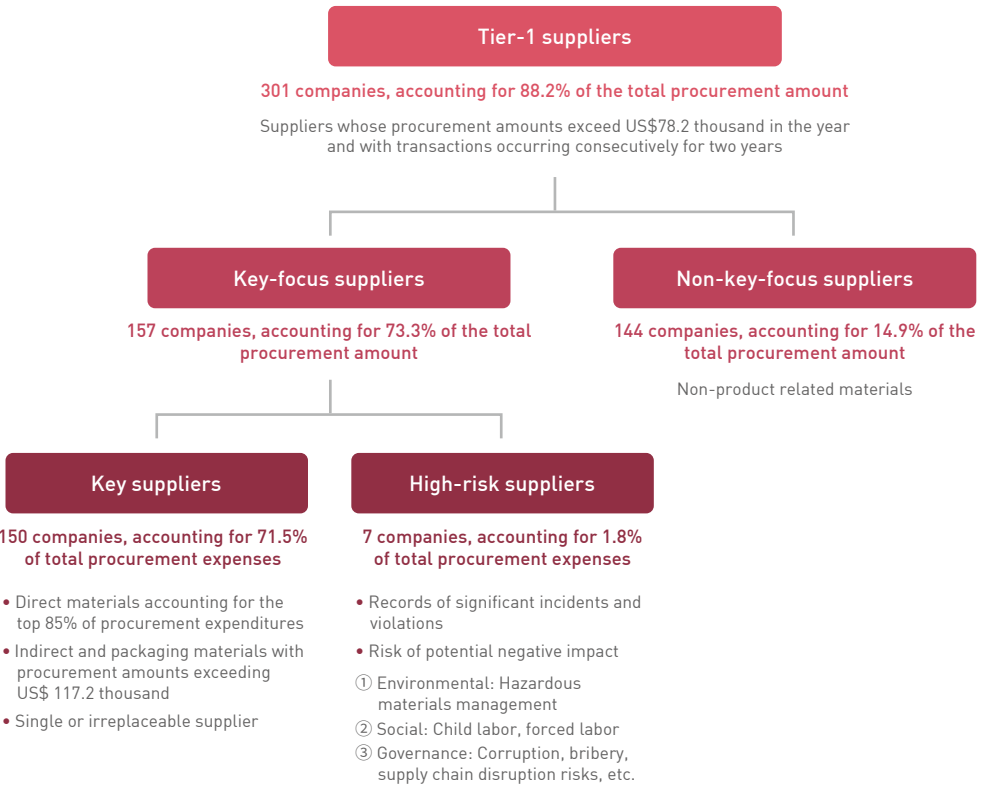


Key-focus and non-key-focus in 2023  
(by annual purchase amount)



To maximize resource management efficiency, we focus on raw material suppliers which has regular collaboration with us. Those with a certain annual purchase amount or above and have continuous transactions with us will be regarded as first-tier suppliers. Afterwards, we manage the supplier's environmental, social, and governance performance according to the industry and business attributes. To effectively control supply chain risk, we list suppliers with annual procurement amounts reaching a certain threshold and suppliers involved in significant incidents or legal violations as suppliers requiring a key focus, enhancing guidance and control.

HIWIN has expanded sustainable risk management beyond Tier-1 suppliers to mitigate the supply chain's overall risks continuously. In 2023, we obtained information on seven non-Tier-1 suppliers and conducted preliminary risk assessments based on their geographical locations, the types of materials they supply, incident records, and potential negative impacts. HIWIN will continue to monitor these suppliers' status and implement more proactive risk control measures.



## I Sustainable Supply Chain Management

### 1 Supplier management policy

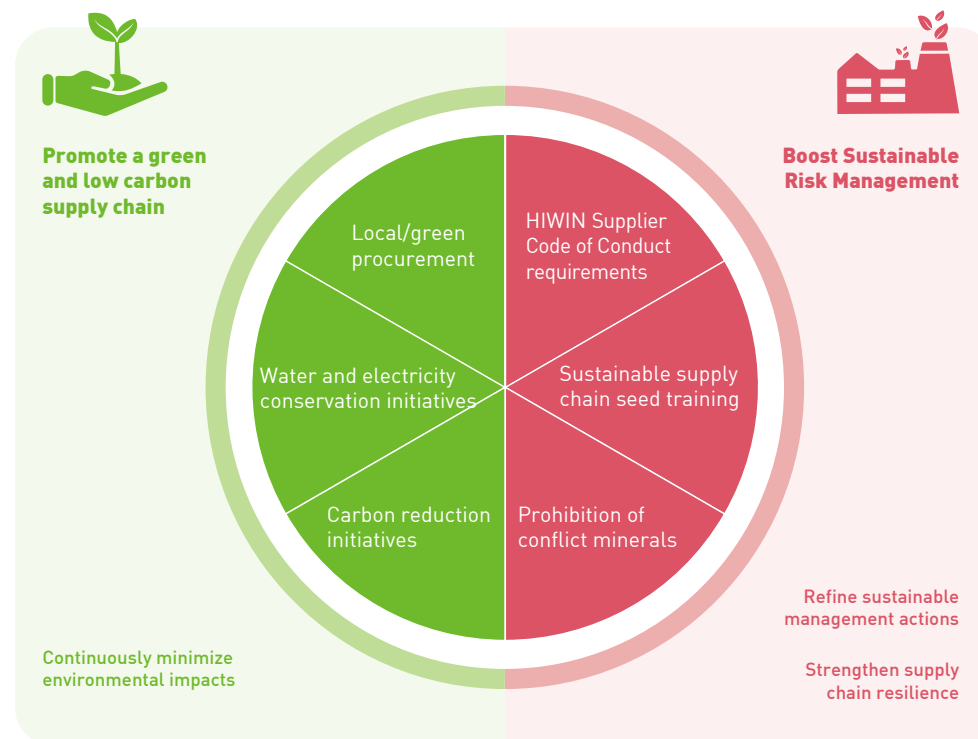
To communicate the management requirements of the supply chain and ensure the achievement of sustainable targets, HIWIN formulated sustainable supply chain management strategies and mid- to long-term targets, which were implemented after senior management decided on supply chain-related plans and were disclosed on HIWIN's website. We aim to exert a positive influence on the supply chain of the precision machinery industry, advocate for building a sustainable supply chain with our suppliers, and commit to responsible procurement and developing the supply chain's technical capabilities. This is to provide our customers with continuous, responsible, and quality services. For relevant information, please refer to [ESG Committee Structure](#) and ["Supplier Management Policy."](#)

### 2 Supplier code of conduct

HIWIN is committed to enhancing the sustainable development of the precision machinery industry by integrating ESG issues into its sustainability management. We aim to reduce environmental impacts, external costs and risks, and we actively advocate for suppliers' waste and carbon reduction targets to mitigate the overall industry's impact on climate change and resource depletion. In 2023, we continued to use the two strategies, "enhancing sustainable risk management" and "promoting green and low-carbon supply chain," as our guidelines for supply chain management. We have revised the "HIWIN Supplier Code of Conduct" and will continue to require suppliers to comply with this Code. Suppliers must also convey the Code to lower-tier suppliers and monitor compliance. This approach aims to foster safe working environments, ensure dignity in labor relations, ethical operations, and comprehensive environmental protection measures, heading towards continuous reduction of operational disruption risks. In 2023, over 94% of key suppliers signed and returned the ["Supplier Code of Conduct,"](#) totaling 149 suppliers. We plan to achieve a 100% signature and return rate from tier-1 suppliers by 2024.

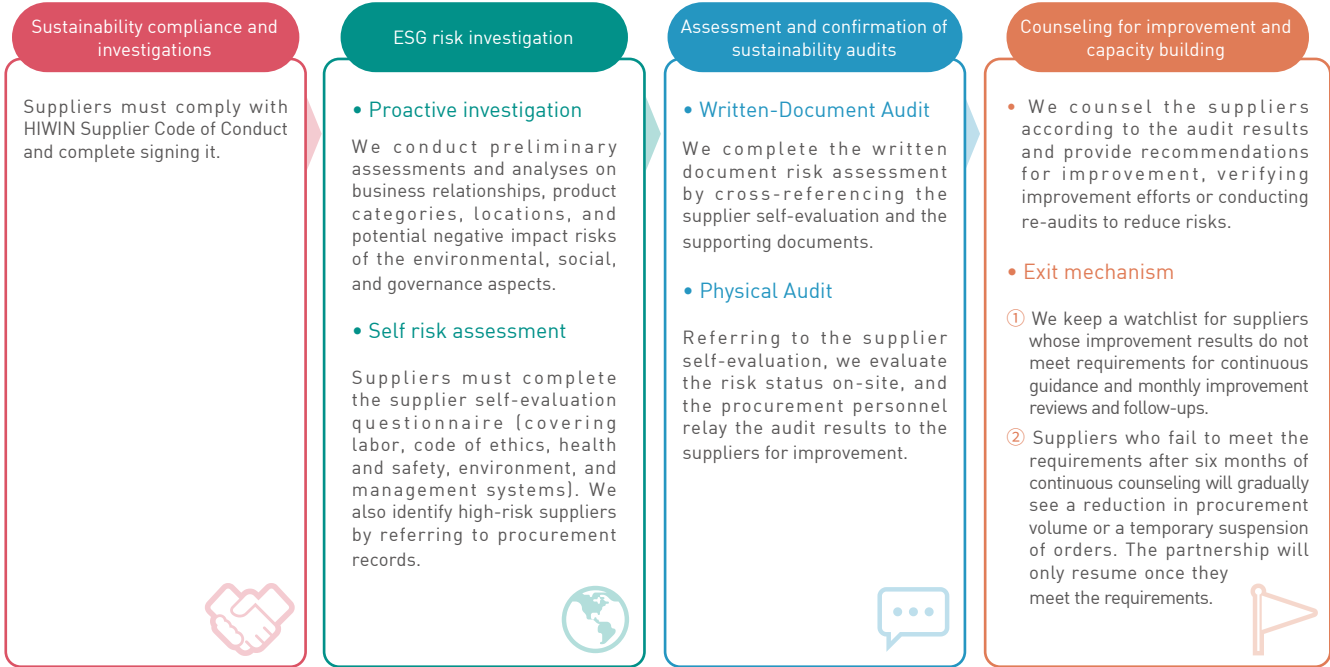
HIWIN is committed to green manufacturing and aims to reduce environmental impacts across the supply chain. To do so, we mapped a path toward achieving net zero emissions and urged the supply chain to implement ESG practices. We also seek to provide suppliers with relevant resources to take scientific, data-driven, and empirical approaches to reduce carbon and mitigate climate change's impact on society. This anchors the supply chain's sustainable development and demonstrates multiple added values.

### 3 Supplier sustainable management framework

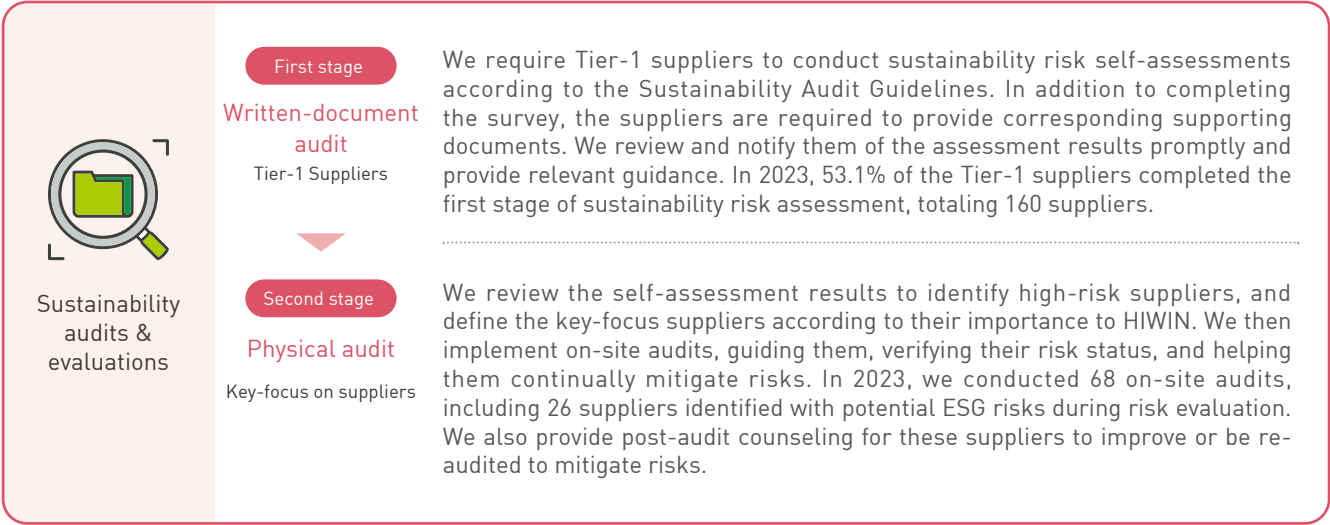


### 4 Four major implementation guidelines of sustainable supply chain management

HIWIN maintains close cooperation with its suppliers by adhering to four key implementation guidelines: compliance, risk assessment, audit activities, and continuous improvement. These guidelines aim to support suppliers in making ongoing improvements and commitments, as well as proactively initiating sustainability actions with their own upstream suppliers. To foster the growth of our global supplier partners, HIWIN has established "SCM Platform," a supply chain management system. This platform consolidates supplier communication channels, facilitates information exchange and feedback, and enables us to monitor the sustainable development concept and progress of our supply chain.



Audit process



Supplier screening criteria

Factors	Screening Criteria
Extent of Business partnership	We assess this dimension based on the procurement amount, taking the industry category into account. (Including Direct, Auxiliary Materials, and Equipment & Engineering)
Environment/ Society/ Governance	① Records of major incidents and violations in governance, environmental, and social aspects. ② Risks of potential negative impacts - Environmental: management of hazardous substances - Social: child labor, forced labor - Governance: corruption, bribery, supply chain disruption risks
Product Features	We screen critical materials according to their material properties, such as those containing heavy metals or hazardous substances.

Audit results

① 2023 Key-focus suppliers at HIWIN Headquarters.

Number of supplier	Self-assessment questionnaires evaluated	
157 companies	143 suppliers	
Survey response rate	On-site audits	Achievement rate
91.1 %	68 companies	100%

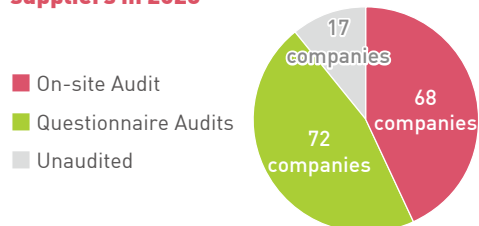
② We refer to significant incident records to determine risks. In 2023, we evaluated the environmental and social impact of 157 key-focus suppliers. Among them, 3 suppliers had violations in the Environmental aspects and 1 in the Social aspect. We will continue to follow up and audit these suppliers, requiring them to submit corrective plans and conducting on-site audits to ensure improvement. We plan to establish an elimination mechanism in 2024.



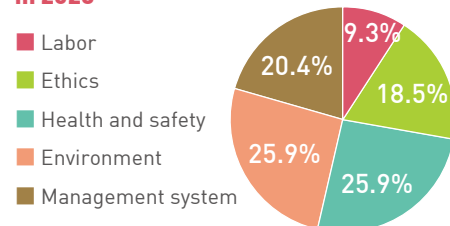
## Major sustainability risk factors for suppliers in 2023

Category	Main Deficiencies	
Labor	Labor standards	No labor risk management or relevant regulations
Code of Ethics	Human rights management	No policy or regulation for human rights management
Health and Safety	Occupational health	No risk assessment process for employee health
	Occupational Safety	No relevant drills or response procedures were executed or documented
Environment	Carbon emission management	No GHG or carbon inventory mechanism
	Water management	No water resources reduction targets or measures
Management system	Management of personal data and privacy rights	No privacy or personal data risk control procedures
	Information security management	No information security management or employee training
	Sustainability management of suppliers	No sustainability risk management procedures

### Audit status for key-focus suppliers in 2023



### Supplier audit deficiencies in 2023



## 5 Sustainable supply chain seed training

To raise awareness and enhance procurement personnel's sustainability capability, we conduct systematic training that conveys our annual targets and critical projects to suppliers, ensuring that procurement personnel are able to effectively communicate supply chain policies and strategies in their routine procurement activities. Through training and interactive activities, we built a platform for procurement personnel and suppliers, which fosters a corporate culture of sustainable development. In 2023, we held 24 training sessions for procurement personnel, totaling 48 hours, with 16 participants. The training topics included the circular economy, Code of Conduct policies, conflict minerals policies, and the implementation outcomes of sustainable management goals.

## 6 Sustainable supply chain training program

HIWIN believes that enhancing suppliers' sustainability awareness and capabilities is critical to ensuring the sustainable development of the supply chain. By disseminating sustainability concepts, securing government resources, implementing capability-building projects, organizing ESG workshops, and providing systematic training, we provide suppliers with relevant resources and information that strengthen our partnership. We can enhance our capabilities in responding to risks with the suppliers. In 2023, HIWIN proactively organized sustainability training with a total of 134 suppliers and 232 participants.

Category	Title	Target Audience	2023 Participation	Content
Training	Sustainable Education - Low-Carbon Living Starts from Everyday Life	Tier-1 suppliers	105 companies	<ul style="list-style-type: none"> <li>Global warming, climate change, and their impacts</li> <li>How companies adapt to global warming and the climate crisis</li> <li>How to live a low-carbon life</li> </ul>
Government Resources	Brand Associations - Carbon Reduction Sustainability Workshop	Key-Focus suppliers	12 companies	<ul style="list-style-type: none"> <li>The development of domestic and international carbon markets / Applying carbon reduction tools</li> <li>ISO-14064 Analysis and Practical Training</li> <li>Information sharing on carbon reduction tools in the industry and government resources</li> <li>Introduction to Corporate Carbon Reduction Strategies</li> </ul>
	ITRI - Seminar on Carbon Footprint Inventory Practices	Key-Focus suppliers	53 companies	<ul style="list-style-type: none"> <li>ISO articles on product carbon footprint</li> <li>Execution process of the product carbon footprint</li> </ul>

## Reducing Environmental Impacts

Through effective leadership and precise requirements, HIWIN collaborates with suppliers to build a workplace environment where "labor is dignified, and business is ethical." We encourage suppliers to develop materials and processes that reduce environmental impacts, conserve energy, and reduce carbon emissions in their manufacturing process. We aim to optimize the manufacturing processes, improve quality, and pay more attention to environmental issues, including climate change and biodiversity. We conduct comprehensive partnerships by engaging closely with suppliers to establish an continuous green supply chain.

### 1 New suppliers evaluation mechanism

HIWIN promotes a virtuous cycle in the industry and supply chain by establishing supplier management procedures and conducting Environmental and Social investigations on new suppliers. The completion rate in 2023 was 100%.

## 2 Sustainability capacity building plan

HIWIN assesses the product attributes and supplier capabilities during the supplier screening process. In 2022, HIWIN collaborated with 7 suppliers of raw plastic raw and steel factories to develop a recycling program, which turns scrap materials into raw materials again to achieve a PIR circular economy. We aim to reduce overall Scope 3 emissions and lower relevant costs, achieving circularity and emission reduction.

## 3 Manufacturing process quality guidance

- To pursue stable product quality, HIWIN reviews supplier quality monthly, provides guidance and corrective measures to the top 10 suppliers with the highest defect rates, and if the defect rate occurs 4 times in 6 months, reduces or suspends orders. Partnership can be resumed based on the effectiveness of improvements through cross-departmental collaboration.
- In 2023, we counseled 38 suppliers, 5 among which had their orders reduced or temporarily suspended, and 1 was re-evaluated and met quality requirements. The remaining 4 are still under counseling and will be re-evaluated based on their progress in improvement.

## 4 Continuously reducing environmental impacts

HIWIN has set targets for energy conservation, water conservation, waste reduction, and carbon reduction and has counseled suppliers to take these efforts seriously. In 2023, we audited the suppliers' energy-saving efforts, introduced energy-saving equipment to 4 suppliers, evaluated the installation of solar panels at 5 suppliers, and conducted carbon audits for 4 suppliers.

## 5 Conflict minerals procurement management policy

HIWIN supports the procurement of conflict-free materials and requires suppliers to procure non-conflict materials. In 2023, HIWIN required suppliers of products containing tantalum, tin, gold, and tungsten to follow the responsible mineral procurement policy and sign the responsible

minerals declaration. More than 85% of the Tier-1 key-focus suppliers, totaling 135 companies, have completed this requirement.

### HIWIN conflict minerals management process



## 6 Promote local supply chain

HIWIN classifies its suppliers into three main categories: production-related direct raw materials, non-production-related indirect materials, and labor, and other categories. To foster strong relationships with local partners, promote local socio-economic development, and minimize CO<sub>2</sub> emissions in manufacturing and transportation, HIWIN is committed to building a green supply chain through the implementation of a local procurement strategy.

## 7 Green procurement

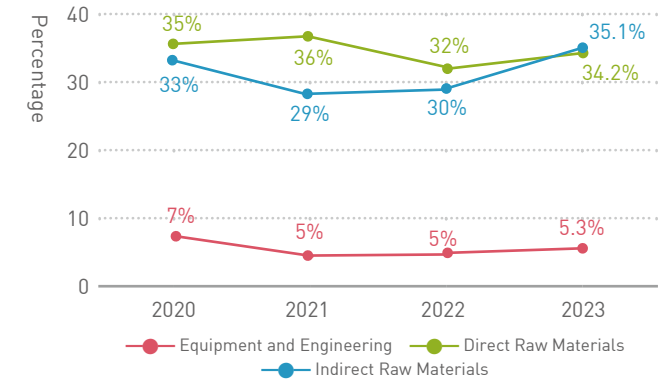
HIWIN is dedicated to integrating the ESG concept into our management philosophy. Our objective is to advance green procurement and foster the notion of resource value and environmental sustainability.

Green Procurement Results in 2023	Percentage of Annual Procurement Amount	Achievement Rate
US\$ 14.27 million	7.3%	100%

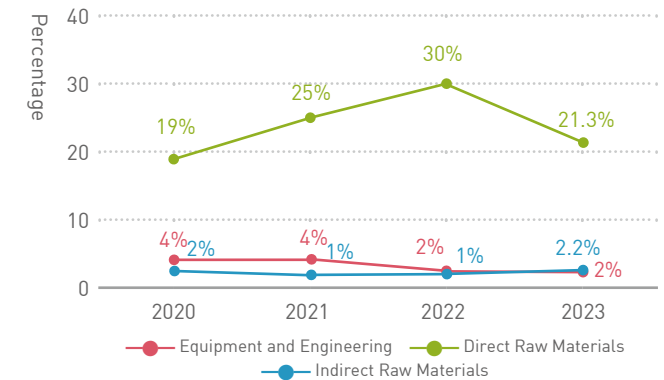
## 8 Promotion method of low carbon supply chain

We formulated a roadmap to net zero, urged the supply chain to implement ESG, and sought relevant resources for suppliers. Supported by diverse material sourcing plans, in 2023, the percentage of low-carbon materials procurement was 15.4%, with an achievement rate of 83.2%.

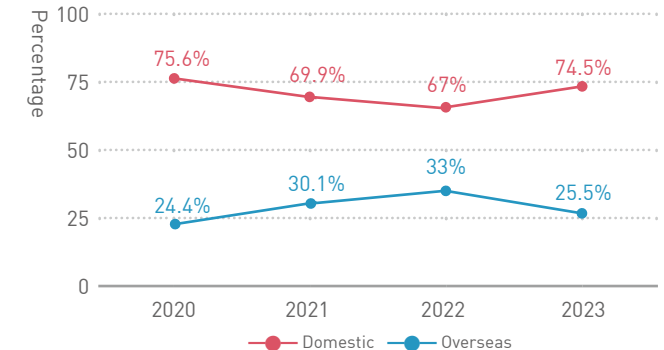
### Percentage of procurement by category - domestic



### Percentage of procurement by category - overseas



### Local procurement ratio







# 05

## A Practitioner of Green Manufacturing

HIWIN is committed to reducing carbon emissions, pollution, and waste from the production process, seeking to fulfill our vision for a green and sustainable environment through recycling and reusing.



## 5.1 Climate Strategy and Energy Management

### Climate Change Management & Strategies

HIWIN places significant emphasis on the efficacy of corporate energy conservation and carbon reduction. For the past decade, the Company has consistently disclosed its energy management policies and utilization performance in its sustainability reports. Since the

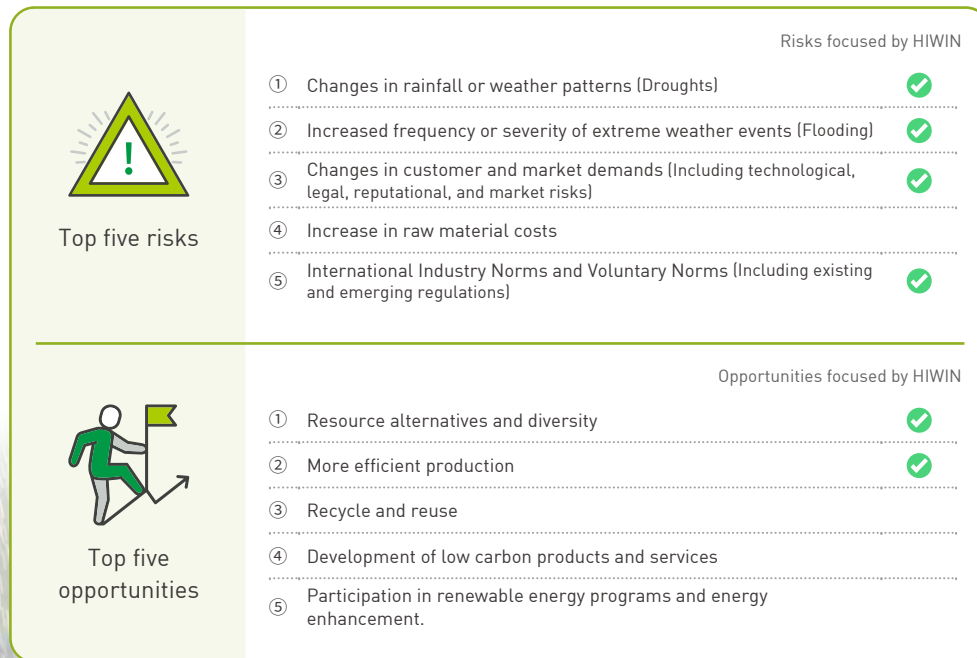
introduction of the FSB's TCFD in 2017, HIWIN has actively engaged in internal and external expert reviews and consulting systems to explore and plan accordingly. As a result, HIWIN has become a TCFD supporter and will include its first disclosure in the 2021 report. In 2022, HIWIN further enhanced its inventory and review mechanism, providing regular updates to the Chairman of the ESG Committee. This allows for a comprehensive evaluation of the risks and opportunities faced by the enterprise, along with the corresponding responses and guidance measures.

Guiding Principles	Specific Actions	Achievements
1 Governance	<ol style="list-style-type: none"> <li>The Chair of the ESG Committee reports the action plans addressing material risks and opportunities to the Board of Directors four times a year, based on the progress made.</li> <li>The ESG Committee conducts various risk and opportunity assessments, identifying material risks and opportunities through risk exposure analysis and evaluating potential impacts through climate risk analysis to ensure rigorous mechanisms are in place to manage risks to company operations.</li> </ol>	<ol style="list-style-type: none"> <li>The HIWIN Board of Directors expresses concern regarding the potential influence of climate change on our business operations. In light of the ESG Committee's report, the Board provides recommendations on risk and opportunity management, as well as resource allocation.</li> <li>The executive secretary of the ESG Committee provides monthly updates to the Chairman regarding the targets and current status of implementation for the upcoming month.</li> <li>Monthly meetings are scheduled to assess the progress of strategy implementation and target achievement. The outcomes are reported to the Board of Directors on an annual basis.</li> </ol>
2 Strategies	<p>Conduct simulations using RCP2.6 and IEA SDS scenarios to identify short-term (0-3 years), mid-term (3-5 years), and long-term (5-30 years) climate risks and opportunities. Present the simulation and results to the president for decision-making. Relevant risks and opportunities are as follows:</p> <ul style="list-style-type: none"> <li>International industry norms and voluntary norms</li> <li>Changes in customer and market demands</li> <li>Changes in rainfall or weather patterns</li> <li>Increased transition risks due to the frequency or severity of extreme weather events</li> <li>Resource alternatives and diversity</li> <li>More efficient production</li> </ul>	<ol style="list-style-type: none"> <li>Introduction of smart automation to enhance productivity in the factories producing ballscrews and linear guideways.</li> <li>The total capacity of the photovoltaic site is expected to reach 7,543 kW by the end of 2024, with a cumulative capacity of 10,478kW.</li> <li>Periodically assess climate variability and the development of renewable energy policies, and adjust renewable energy procurement strategies on a rolling basis.</li> <li>Exploration of new materials or alternative sources of materials to enter the European smart automation market.</li> <li>Development of molds to minimize mechanical processing, waste disposal, and promote recycling.</li> </ol>
3 Risk Management	<p>The ESG Committee establishes a process to identify climate risks in compliance with policies and regulations, explores the resulting opportunities, formulates action plans, and establishes a mechanism.</p> <ol style="list-style-type: none"> <li>The procedure for identifying risks and opportunities involves evaluating 15 risks and 13 opportunities, either potential or previously encountered.</li> <li>Experts across different departments convene during the TCFD Workshop to deliberate on material risks and opportunities based on likelihood and level of impact. In addition, they conduct monetization analysis on material risks and opportunities to assess their level of financial impacts.</li> <li>The Risk Management Committee integrates relevant material risks and opportunities to conduct risk assessment items and formulate major response plans.</li> </ol>	<ol style="list-style-type: none"> <li>Based on the interdepartmental discussions in the TCFD workshop, HIWIN has prioritized four significant risks and two major opportunities. Each of these has been thoroughly examined to develop action plans, establish management measures, and allocate budgets.</li> <li>During the TCFD workshop, the Company identified risks and opportunities for monetization analysis. The percentage of annual revenue associated with each opportunity and risk was estimated.</li> <li>To further evaluate the financial impact, the Company selected a specific business product. The financial impact on the income statement and balance sheet was calculated for this product.</li> </ol>
4 Indicators and Targets	<p>Formulate action plans for climate change to reduce carbon emissions year by year. This includes action plans for renewable energy use, energy conservation measures, water recycling, and emergency response for climate risks. Continue to obtain third-party verification statements for ISO 14064-1:2018. In 2023, HIWIN completed the CDP survey and leveraged the opportunity to disclose material climate risks and opportunities, monetization analyses, corporate carbon management performances, and engagement with suppliers and the value chain as we strive toward a net zero future.</p>	<ol style="list-style-type: none"> <li>The ESG Committee's monthly progress report is utilized to present the outcomes of electricity and water conservation, establish annual carbon reduction targets, and assess the results for each production department.</li> <li>Based on the findings from the ISO 14064-1 inventory and CDP questionnaire assessment, we have conducted a thorough examination of emission hotspots, made adjustments to enterprise quality, and implemented ISO 50001:2018 energy conservation project management.</li> <li>Present to the Chair of the ESG Committee and decide on strategies for the 2023-2050 net zero roadmap. To align with the SBTi, HIWIN has set 2021 and 2022 as the base year for Scope 1&amp;2 and Scope 3 emissions, respectively. The company's goal is to reduce 42% Scope 1&amp;2 emissions and 25% Scope 3 emissions by 2030, eventually achieving net zero by 2050.</li> </ol>

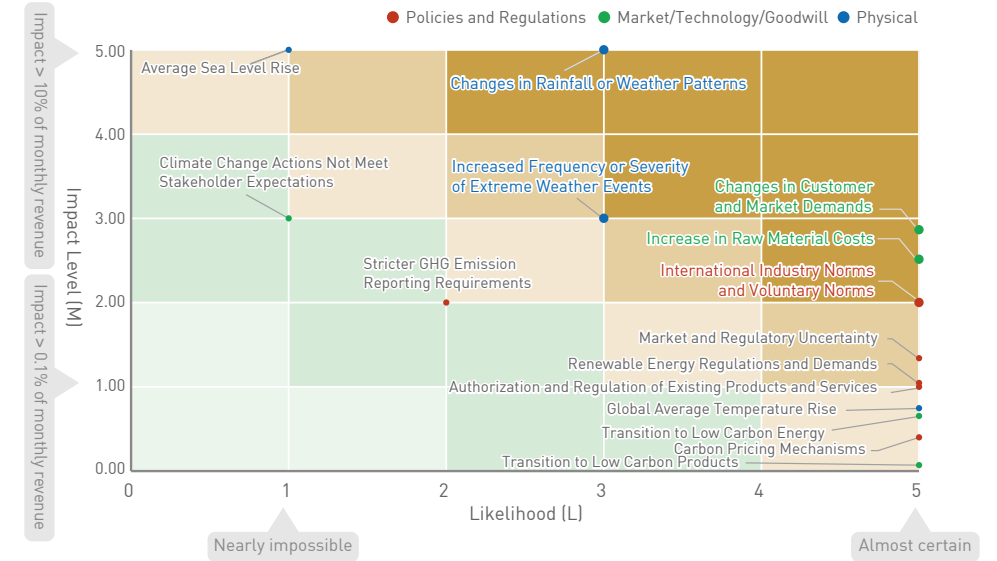


## • Climate risk and opportunity identification and assessment

In line with the TCFD framework, HIWIN convenes regular workshops to identify climate risks and opportunities, bringing together department managers and external consultants. We focus on eight major risk categories, including existing and emerging regulations, technological, legal, market, and reputational risks, as well as immediate and long-term physical risks. These risks encompass our operations, upstream and downstream activities, and customer activities. During the workshop, various groups engage in in-depth discussions on the likelihood and impact of these risks and opportunities and map out a risk and opportunity matrix. We then prioritize the top five risks and opportunities based on their dimensions and scores. The ESG Committee then reports the results to the president. The risks and opportunities are analyzed according to their potential revenue impacts, feasibility, and effectiveness. Resulting decisions are as follows.

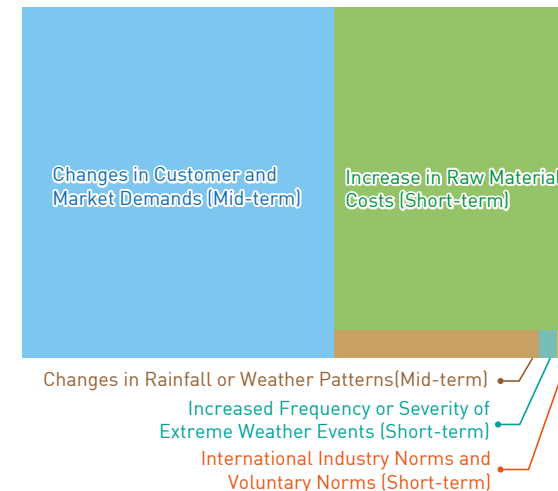


## Matrix of financial impacts from climate risks



Financial impacts are classified by percentage of revenue impacted. The diagram outlining the financial impacts of risks and opportunities is presented below:



## Financial impact diagram of climate risks



Monetization Analysis of Physical Risks

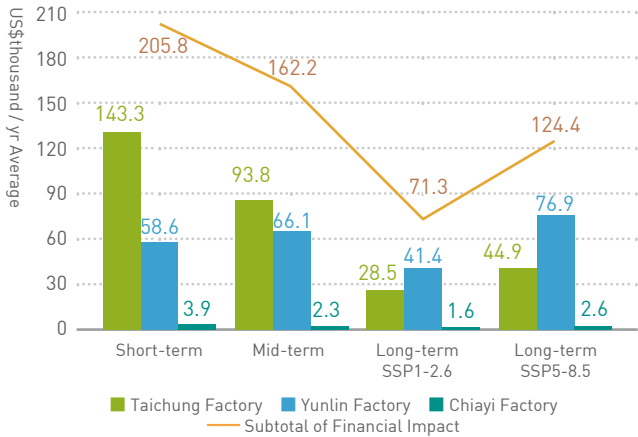
With climate risk assessments and the risk impact matrix, we’ve identified flooding and drought risks as having potential impacts to our operations. We’ve combined these findings with a physical risk analysis model to estimate potential losses.

Physical risk items and financial impacts

Risk Items	Potential Impacts	Financial Impacts	Management Costs
 Increased transition risks due to the frequency or severity of extreme weather events (Flooding)	Large-scale flooding can cause employees to be absent and result in a failure to produce or deliver products as usual by raw material suppliers, posing a risk of operational disruption.	Operational disruption affects revenue.	Procurement of sand bags and property insurance
 Changes in rainfall or weather patterns (Droughts)	A water shortage can lead to higher production costs or pose a risk of operational disruption.		Establishment of water conservation measures and water truck dispatch mechanisms

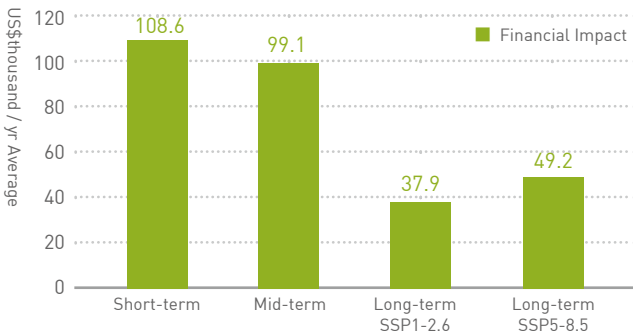
Regarding the monetization analysis of flood risk, HIWIN utilizes rainfall observation and scenario simulation data to determine the duration of operational disruptions caused by flooding in each factory under various scenarios. Based on the revenue data of each factory, the losses attributed to flood risk are estimated. Analysis conducted in 2022 reveal that, under various scenarios, the financial impacts of floods remain far below 1% of our annual revenue. In 2023, HIWIN experienced no instances of floods, and this does not constitute significant financial impacts.

Monetization analysis of physical risks of flooding in each factory

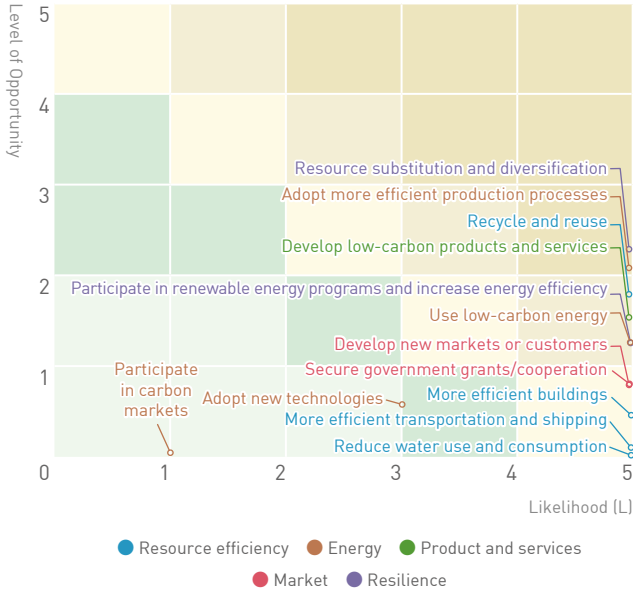


In 2021, Taiwan faced a significant drought. To ensure the quality of our products, HIWIN took several measures, including purchasing water storage equipment, deploying water trucks for backup, and implementing other water stewardship initiatives. These actions resulted in additional management costs. To assess the potential impact of future droughts, HIWIN used drought indicators and management costs from 2020 to 2021. By analyzing these data, we estimated the trend of drought risk changes in future climate scenarios and projected the potential management costs that may arise. Using the Taichung Factory in 2023 as an example, our analysis revealed that the additional management costs caused by droughts, under all scenarios, amount to less than 1% of our annual revenue. Therefore, these costs do not pose a significant financial impact.

Monetization analysis of physical risks of droughts in HIWIN’s Taichung factory



Matrix of financial impacts from climate opportunities



## Climate Risks and Opportunities Management

In line with the TCFD identification and assessment process, we focus on both transition and physical risks and opportunities. Transition risks include international industry regulations and voluntary standards as well as changes in customer and market demand. For example, rising raw material costs could drive up operational expenses while shifts in demand might lead to revenue declines or profitability challenges. Both examples could have significant impacts on HIWIN's operations. Physical risks include the rising occurrence of extreme weather events and changes in rainfall and weather patterns, which could disrupt production continuity and consistency, leading to disruptions in our

operations and shipping (related action plans will be implemented within the next five years). Additionally, international regulations, such as the EU's tax on plastic packaging and mandatory disclosure of product carbon footprints, pose minor impacts on our operations and management costs. Opportunities focus on more efficient production processes as well as resource substitution and diversification. HIWIN will engage in preliminary investments in the short-term and generate more opportunities in the long-term to capitalize on climate opportunities and increase our revenue. For example, in 2022, we increased the energy efficiency of production processes by 10% to save electricity expenses. In 2024, we started generating solar energy for self-use to save electricity expenses and carbon fees, while further advancing energy efficiency of production processes to contribute to revenue.

Type	Evaluation Items	Scenario	Location of Impact	Estimated Time of Occurrence	Existing Control Measures	Action Plans	Financial Impacts
Transition Risks	International industry norms and voluntary norms	Carbon inventory and product carbon footprint are mandatory information, and commitments have been made toward decarbonization goals relating to SBTi, green energy, and low-carbon equipment, materials, and products.	Self-operation	Short-term (0-3 years)	<ul style="list-style-type: none"> <li>Product carbon footprint verification (2 specifications)</li> <li>Research substitute materials to reduce product carbon footprints</li> </ul>	<ul style="list-style-type: none"> <li>Train carbon footprint specialists for various products</li> <li>Complete annual product carbon footprint assessments based on scheduled plans</li> <li>Implement product carbon footprint training and guidance for the supply chain</li> </ul>	<0.2 %
	Changes in customer and market demands	Confronted with increasing demands for low-carbon products, HIWIN fails to meet customer demands with existing development timelines for low-carbon products.		Mid-term (3-5 years)	<ul style="list-style-type: none"> <li>ISO 14067 product carbon footprints</li> <li>Low-carbon product R&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>Establish carbon footprint inventory and low carbon supply chain</li> <li>Define low-carbon products &amp; introduce low-carbon materials</li> </ul>	<15%
Physical Risks	Increased frequency or severity of extreme weather events	Floods from extreme weather events may lead to the following: <ol style="list-style-type: none"> <li>Employees may be unable to attend work, affecting production.</li> <li>Raw material suppliers may be unable to produce or deliver products.</li> <li>Delays in R&amp;D projects could damage our reputation.</li> </ol>	Self-operation	Short-term (0-3 years)	<ul style="list-style-type: none"> <li>Emergency response procedures</li> <li>Procurement procedures</li> </ul>	<ul style="list-style-type: none"> <li>Establish emergency response measures for labor shortages</li> <li>Stockpile materials in advance</li> <li>Assess drought/flood risks at factories, develop and implement risk mitigation measures</li> </ul>	<1%
	Changes in rainfall or weather patterns	Estimations based on a scenario derived from the 2021 drought in central Taiwan are as follows: <ol style="list-style-type: none"> <li>During the harshest period of the drought, a three-day-on, four-day-off water supply schedule was enforced, with average reservoir levels supporting only two days of operation, resulting in a two-day shutdown.</li> <li>A consecutive two-day water outage at the Yunlin factory will also result in a two-day shutdown.</li> </ol>		Mid-term (3-5 years)	<ul style="list-style-type: none"> <li>Introduction of ISO 46001 water efficiency management system</li> <li>Procurement of water storage equipment and water trucks, and signing of supply contracts</li> </ul>	<ul style="list-style-type: none"> <li>The water conservation program achieved a water recycling rate of 13.7% in 2023</li> <li>Installation of smart water meters and integrated energy monitoring</li> <li>Derivation of water storage expenses and replenishment expenses</li> </ul>	<0.2%
Opportunities	More efficient production	Proactive planning to ensure future demands for low-carbon materials can be fulfilled: <ol style="list-style-type: none"> <li>Scenario 1: Anticipate potential increases in raw material prices to reduce operating costs.</li> <li>Scenario 2: Develop a robust supply chain to prevent disruptions in the supply chain and increase percentage of local procurement.</li> </ol>	Self-operation	Short-term (0-3 years)	<ul style="list-style-type: none"> <li>ISO 14067 product carbon footprints</li> <li>Increase the use of renewable energy and enhance energy efficiency</li> <li>Implement smart manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>Establish carbon footprint inventory and low carbon supply chain</li> <li>Continue to purchase renewable energy and use self-generated solar power</li> <li>Ensure better coordination across factory equipment</li> </ul>	<1%
	Resource alternatives and diversity	As a response to net zero and decarbonization trends, HIWIN is called to reduce carbon emissions across the product life cycle, introduce new technologies and carbon management platforms, increase productivity, reduce energy consumption, decrease operating costs, and increase productivity.		Short-term (0-3 years)	<ul style="list-style-type: none"> <li>Supplier assessment</li> <li>Cooperation programs (customers, suppliers, researchers, schools)</li> </ul>	<ul style="list-style-type: none"> <li>Regularly convene meetings to identify demand for raw materials</li> <li>Research low-carbon materials and processes and recycle sludge mixtures</li> </ul>	<4%

Striving for Net-Zero Emissions

In 2023, HIWIN signed the Science Based Targets initiative (SBTi) and set the following goals, committing to becoming a company that achieves SBTi Net Zero by 2050. We plan to submit for SBTi review within the next two years.

Scope 1 & Scope 2	Scope 3
Base Year <b>2021</b> for 2030, absolute reduction of <b>42%</b>	Base Year <b>2022</b> for 2030, absolute reduction of <b>25%</b>
Scope 1&2&3 for 2050: Absolute reduction of <b>90%</b> , with the remaining <b>10%</b> offset by carbon credits.	

To realize our goal of net-zero emissions by 2050, we have developed four core strategies: enhancing energy efficiency, innovating low-carbon products, reducing waste through circular economy practices, and adopting renewable energy. Additionally, we are implementing Internal Carbon Pricing (ICP) to influence internal behavior, improve energy management efficiency, and accelerate low-carbon investments.

Based on global carbon market prices and Taiwan’s carbon trading regulations, we have set a shadow price of US\$50 per metric ton. This shadow price will be first introduced in HIWIN locations in Taiwan, for which we will map out Scope 1&2 decarbonization plans and conduct regular reviews and updates based on carbon price trends.



HIWIN Chairman & CEO Eddie Chuo signing the SBTi commitment with our ESG team

GHG Inventory & Reduction

HIWIN is actively promoting greenhouse gas inventory policies across our production sites. In line with relevant guidelines and regulations issued by the Ministry of Environment, we define organizational boundaries based on operational control. We use the 2021 Global Warming Potential (GWP) values from the IPCC AR6 and the national emission coefficients announced by the Ministry of Environment and obtain third-party verification each year.

Scope 1 and 2 GHG inventory and intensity in 2020-2023

Items	Units	2020	2021	2022	2023
Direct GHG (Scope 1)	tCO <sub>2</sub> e	9,196.2857	10,063.1760	10,101.1485	6,219.0261
Energy Indirect GHG (Scope 2)	tCO <sub>2</sub> e	121,866.4180	151,143.6737	139,912.2048	115,638.4641
Operating Revenue	US\$1 million	589.29	831.14	726.64	575.09
Emission Intensity	tCO <sub>2</sub> e/US\$1 million	222.40	193.96	206.45	211.89

Note: 1. Emission sources include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O).  
2. No ozone depleting substances were used or emitted.  
3. Emission Intensity = GHG emissions (tCO<sub>2</sub>e)÷Operating Revenue (US\$1 million), covering Scope 1 and Scope 2.  
4. Source of emission coefficients: Product Carbon Footprint Information Platform, Ministry of Environment.

Due to structural changes in the reporting boundary or organizational boundary in 2023, we adjusted the baseline year for ISO 14064 greenhouse gas inventory for Scopes 1, 2, and 3 to 2023, selecting this year because it provides representative data for our organizational activities.

Direct and indirect emissions

In 2023, the total direct emissions (S1) and energy-related indirect greenhouse gas emissions (S2) across all production sites amounted to 121,857.4902 tCO<sub>2</sub>e. The primary source of carbon emissions was indirect energy emissions from electricity use, accounting for 95% of total Scope 1 & Scope 2 emissions. All electricity came from local grids, with no renewable energy used. Therefore, the S2 greenhouse gas emissions were calculated using both Location-Based and Market-Based methods, which yielded identical values. In 2023, total emissions decreased by 18.8% from the previous year, mainly due to continued implementation of energy management strategies and management of standby energy consumption.





## 2 Other indirect emissions

HIWIN conducted a comprehensive greenhouse gas inventory for major production sites in accordance with ISO 14064-1:2018 standards and revised the baseline year to 2023. We included emissions from upstream procurement, transportation and distribution, product processing, fuel and energy-related activities, solid and non-solid waste disposal, and emissions from the end-of-life stage of products, covering eight categories in total. Future details will be disclosed in the future. The organization's external energy consumption totaled 855,014GJ.

### Scope 3 GHG Inventory and Intensity in 2020-2023

Items			Units	2020	2021	2022	2023
Category 3	Upstream transportation and distribution		tCO <sub>2</sub> e	-	-	-	3,149.6306
	Downstream transportation and distribution of products and waste			15,817	4,672.3541	3,152.5921	732.0179
Category 4	Procurement of goods and services	Raw materials	tCO <sub>2</sub> e	33,118	47,793.7410	17,897.2145	75,466.9359
		Product processing		-	-	-	10,348.4070
	Fuel and energy-related activities			27,008	28,816.4369	25,819.9135	24,015.3242
	Capital goods			-	-	-	14,459.3015
	Manufacturing waste disposal			1,334	3,523.0962	1,017.0229	551.8563
Category 5	Product end-of-life treatment		tCO <sub>2</sub> e	-	-	-	2,402.2160
Emission Intensity			tCO <sub>2</sub> e/US\$1 million	131.13	102.03	65.90	228.01

Note: 1. Source: Ministry of Environment's Product Carbon Footprint Information platform and the life cycle analysis software SimaPro.  
 2. Emission Intensity = Emissions (tCO<sub>2</sub>e)÷Operating Revenue (US\$1 million).  
 3. For raw materials, we used ISO 14064:2018 to conduct an inventory for the procurement of 95% of the types of raw materials to verify two subject products of RGW45 linear guideways and R16 ballscrews.

4. "-" indicates no data was disclosed for the year.  
 5. The intensity of emissions significantly increased in 2023 due to the addition of upstream transportation and distribution, procurement of goods and services, product processing, capital goods, and product end-of-life treatment.

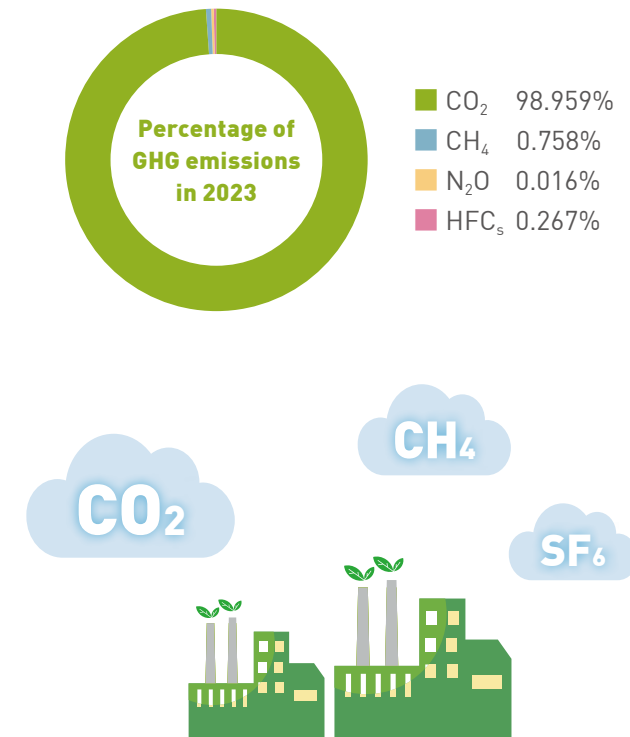
## 3 Reduction plan and achievements

Energy performance is a key management indicator at HIWIN. Carbon reduction measures include implementing energy-saving improvements in processes and machinery, reducing use of compressed air, and enhancing heat dissipation in cooling towers. These efforts collectively reduced emissions by 20,425.47 tCO<sub>2</sub>e. Moving forward, we remain committed to promoting the ISO 50001 energy management system to further enhance energy conservation and reduce carbon emissions in our processes.

## Energy Management

### 1 Energy usage

In 2023, HIWIN's energy calculations encompassed the Taichung, Yunlin, and Chiayi factories, achieving full coverage. HIWIN's primary energy consumption in 2023 totaled 855,014GJ, with 98% sourced externally. At present, we do not utilize any renewable energy sources. Energy usage decreased by 15% in 2023 from 2021, yet energy intensity increased by 7.5% from 2022. We will continue to review related efforts. In 2024, HIWIN will establish an Energy Conservation and Carbon Reduction Committee, forming a team of experts to develop strategies aimed at further enhancing energy efficiency.



## Energy consumption in 2020-2023

Items	Units	2020	2021	2022	2023
Purchased Non-renewable Electricity	MWh	239	301	275	234
	GJ	862,079	1,084,094	989,734	841,159
Natural Gas	GJ	36	56	51	59
Diesel	GJ	14,942	9,570	12,710	10,726
Gas	GJ	2,942	2,437	2,704	3,070
Acetylene	GJ	0	0	0	0
Total Energy Usage	GJ	879,999	1,096,156	1,005,199	855,014
Energy Intensity	GJ/US\$1 million	1,493.32	1,318.86	1,383.36	1,486.75

Note: 1. The calorific value for natural gases is 8,825 kcal, diesel:8,400 kcal, gas: 7,800 kcal, acetylene: 12,800 kcal, purchased electricity: 860 kcal.

2. GJ = Energy Usage x Calorific Value÷10<sup>6</sup>×4.1868.

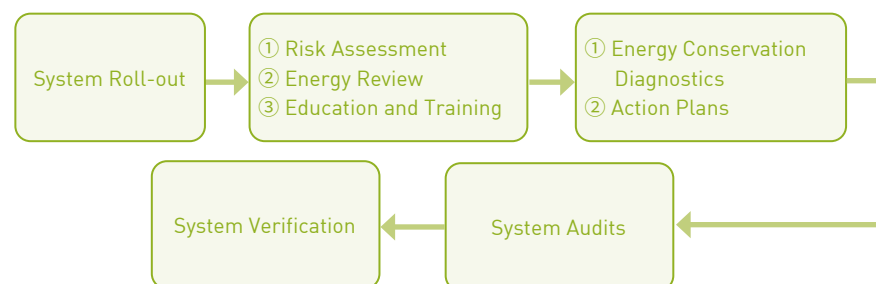
3. Energy Intensity = GJ÷US\$1 million.

4. Calorific values are cited from the "2021 Energy Statistics Handbook" issued by the Bureau of Energy, Ministry of Economic Affairs.

## 2 Energy conservation actions

The ISO 50001:2018 energy management systems were implemented at HIWIN factories beginning in 2014. In 2023, we successfully completed verification at eight HIWIN locations. (Headquarters, Factory 2, Jingke Factory 2, Yunlin Factory 1, Yunlin Factory 2, Yunlin Factory 3, Dapumei Factory 1, Dapumei Factory 3).

## Verification process for energy management systems

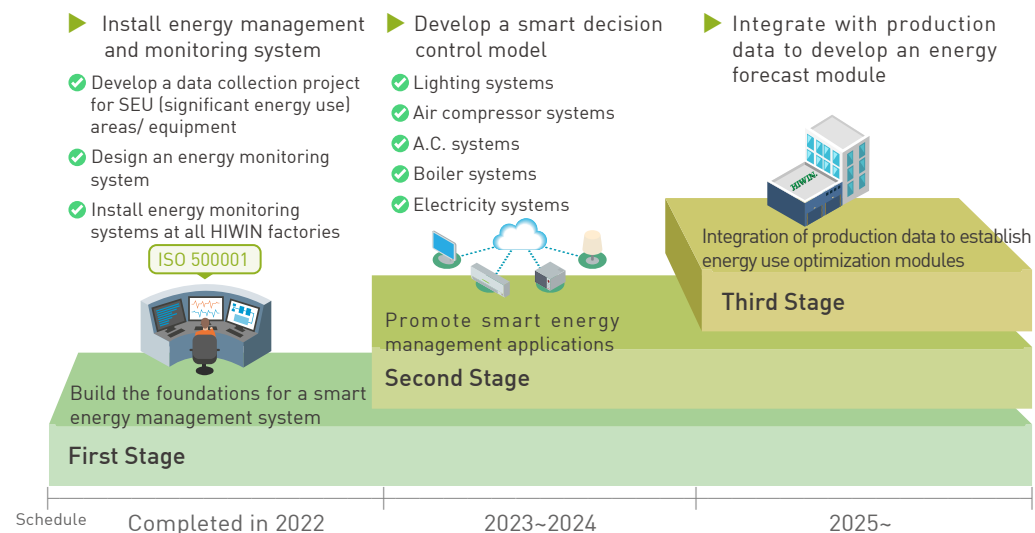


HIWIN has successfully implemented scientific basic energy management through smart energy management strategies. We have established an energy baseline and Energy Performance Indicators (EnPIs), and utilized visualization and systematic diagnosis to identify major energy consumption hotspots for effective management and energy conservation solutions. Our three-stage action plan is as follows:

The first stage, which involved building the foundations for a smart energy management system, has already been completed. Each year, we conduct energy diagnostics on the system using precision measurement tools and energy conservation technologies. This allows us to analyze energy loss and assess potential for improvement, enabling us to develop more effective energy conservation plans.

In the second stage, we will continue to promote the application of smart energy management and the establishment of systematic smart decision-making. This stage is expected to be completed by 2024. We will progressively construct visualization monitoring systems for major energy-consuming equipment such as air compressors, air conditioners, and electricity. We will also collect big data on energy consumption for statistical analysis. Additionally, we will establish a smart energy decision-making digital model, which will serve as the foundation for the development and optimization of the third stage of the energy management optimization module. The third stage consists of completing the optimization of our energy management.

## Energy monitoring systems at HIWIN headquarters



## Technical diagnostic tests and improvement methods in 2023

Diagnostic Items	No. of Abnormalities	Improvement Methods
Air Compressor Efficiency	75	<ol style="list-style-type: none"> <li>Review the equipment replacement mechanism and gradually decommission air compressors with low efficiency. Adjust the operational model to use variable frequency as the primary unit and fixed-frequency units for rotation.</li> <li>Turn off any remaining dryers.</li> <li>Adjust the pressure settings of the air compressors, switch to a heavy load operational unit, and ensure heavy vehicles maintain low load operation of the frequency conversion unit.</li> <li>Perform maintenance on the inverter and adjust the air compressor pressure settings to minimize power consumption of idle air compressors.</li> <li>Minimize unnecessary power consumption of air compressors.</li> </ol>
Cooling Machine Efficiency	24	<ol style="list-style-type: none"> <li>Modify the operation settings of the inverter.</li> <li>Integrate energy efficiency standards into procurement regulations and replace equipment that consumes high levels of power.</li> <li>Routinely clean cooling water towers and enhance water quality management to prevent scaling and optimize the cooling efficiency of the towers.</li> <li>Acquire an extra packaged air conditioner equipped with an independent cooling water pump, ice water pump, and cooling water tower.</li> </ol>
Lighting Efficiency	10,033	Replace LED lighting.
Packaged Air Conditioner	58	Replace equipment on an annual basis.
Boiler Combustion Efficiency	4	Adjust piping to minimize unnecessary heat loss and improve boiler efficiency.

HIWIN is committed to energy management and anticipates numerous challenges in this field in the future. Consequently, we are dedicated to effectively managing energy consumption, enhancing energy efficiency, assuming a proactive stance in energy management, generating energy, and refining our energy management system and smart monitoring systems to maximize power generation advantages. In 2023, we launched 24 energy-saving projects and plan to implement 29 in 2024. These projects include efficiency upgrades for equipment and standby energy management, and have an estimated carbon reduction of 3,780 tCO<sub>2</sub>e and an estimated electricity savings of 7,637,000 kWh. Additionally, we have installed solar power generation, with a cumulative capacity of 2,934.715 kW from 2016 to 2023. By leveraging our distinctive competencies and expertise, we unlock boundless opportunities for energy conservation across various domains.

## Achievements in energy conservation in 2020-2023

Items	Units	2020	2021	2022	2023
Cases	No.	19	18	19	24
Annual Energy Savings	kWh	3,819,993	3,264,199	7,428,231	10,532,571
Annual Energy Savings	US\$ thousand	365.4	312.6	667.5	1,245.1
Carbon Reduction	tCO <sub>2</sub> e	1,944	1,639	3,781	5,214
Energy Performance Indicators	(EnPI)%	1.7	1.1	2.9	4.7

Note: 1. The electricity emission factor adopted by Energy Administration announcement. The energy saving in 2020 was 0.509 kg CO<sub>2</sub>e/kWh. 2021 was 0.502 kg CO<sub>2</sub>e/kWh. 2022 was 0.509 kg CO<sub>2</sub>e/kWh. 2023 was 0.494 kg CO<sub>2</sub>e/kWh.

2. Energy Performance Indicator (EPI)(%) = Energy savings ÷ (Energy savings + Total energy use).

## Achievements of reduction programs in 2023

Energy Conservation Topics	Number of Projects (cases)	Annual Energy Savings (1,000 kWh)	Annual Energy Savings (US\$ thousand)	Actual Carbon Reduction (tCO <sub>2</sub> e)
Air Compressor Systems	9	1,159	137.1	574
Air Conditioning Systems	3	1,416	167.4	701
Process Improvement	4	298	35.2	148
Standby Energy Conservation	8	7,659	905.4	3,791
Total	24	10,532	1,245.1	5,214



3 Green energy development

To support the government’s listing of carbon reduction as a key policy, HIWIN has been installing solar power systems, a source of renewable energy since 2016. By 2023, we had reached an installed capacity of 2,934.715 kW. Starting in 2024, we will gradually introduce green energy at all our production sites, and we estimate that we will be able to use 3,668,394 kWh of self-generated green energy each year.

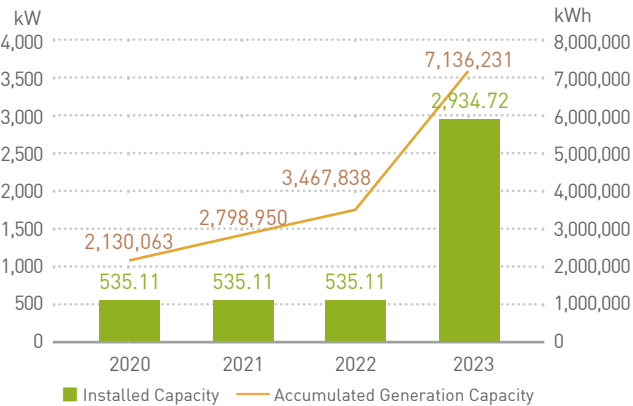
Between 2024 and 2025, we plan to invest approximately US\$4.23 million to install an additional 2,689.65 kW of solar capacity, bringing the total installed to 5,624.365 kW. This will enable us to generate approximately 7,030,456.25 kWh for green electricity for internal use annually. In the future, we will continue to plan and install solar power systems on our buildings.

In 2023, the Chiayi County Government and Wepower signed an MOU to establish a Green Energy Bank. HIWIN was among the first to sign a PPA for 1.2 MW of locally produced renewable energy, securing approximately 1,500,000 kWh of renewable energy each year, starting from 2024.

HIWIN also participated in Taiwan Power Company’s small-amount green electricity sales pilot program, securing 250,000 kWh of renewable energy per year for five years, starting from 2024.

Beginning in 2024, HIWIN will assess green power plants across Taiwan and invest in feasibility studies for the procurement and wheeling of renewable energies. This includes biodiversity assessments alongside evaluations of conservation corridors listed by the Taiwan Ecological Network to ensure the procurement of green energy does not negatively impact the environment.

Installed renewable energy capacity & power generation capacity in 2020-2023



4 International environmental protection day activities

To enhance employees’ environmental awareness, promote environmental action in alignment with the UN Sustainable Development Goals (SDGs), and maintain focus on promoting diverse green sustainability initiatives, HIWIN regularly organizes a range of activities in observance of International Environment Day. In 2023, we facilitated three events, World Water Day, Earth Hour, and Earth Day, inviting employees to participate and show their support.



HIWIN supporting Earth Day



In 2023, HIWIN President and the ESG team supported Earth Hour, turning lights off at HIWIN for one hour

World water day

The rapid advancement of global technology has resulted in swift changes in the global climate, leading to a crisis of water shortage. With the Day for Water initiative, we aim for employees to cultivate the practice of water conservation and contribute to the UN SDGs through tangible actions.

Earth day

Earth Day is observed annually on April 22 as a day of environmental advocacy and awareness. In support of this global movement, HIWIN hosted an Ecological Education Film screening of “We Love Living Here” at the Sunrise Movie Theater in Taichung, inviting participants concerned with ecological conservation and the Earth’s environment to join us. Attendees who participated in the feedback survey received a limited edition reusable shopping bag.



## Earth hour

The Earth Hour initiative is a global voluntary program aimed at conserving energy and reducing carbon emissions. In 2023, HIWIN’s Chairman and President have personally led senior executives and employees in participating in a photo shoot activity. Various HIWIN Group operating sites, including 10 factories in Taiwan, HIWIN Mikrosystem Corp., Matrix Precision Co., Ltd., as well as subsidiaries in Japan, Korea, and China, responded to this event.

HIWIN Group’s goal is for everyone to contribute to the planet by making small changes in their lives. Therefore, employees and their families were actively invited to participate in the lights-off activity for one hour. On the day of the event, participants took creative photos of the lights-off situation, uploaded them to HIWIN’s ESG website, and wrote a 100-word description of the event for a chance to win a gift. In 2023, HIWIN reduced 41.34kg of CO2e by supporting Earth Hour. This is our second year taking part in Earth Hour. We expect to continue the practice in 2024 and will invite suppliers to take part in Earth Hour as well.



## 5.2 Environmental Management Systems

HIWIN is committed to promoting eco-friendly initiatives, energy conservation efforts, and decarbonization actions, and has obtained ISO 14001:2015 Environmental Management System certification. This certification follows the systematic PDCA (Plan-Do-Check-Act) management approach, ensuring consistency between environmental protection goals and implementation strategies. We have also established mechanisms for pollution prevention and mitigation to strengthen our impact on environmental protection. This involves support and participation from the executive level; compiling and planning internal and external issues; assessing stakeholder needs and expectations; evaluating environmental considerations; ensuring effective consultation, communication, application of environmental performance indicators; and evaluation of corrective and preventive measures. Opportunities for environmental improvements are identified through management reviews, internal audits, and environmental inspections, ensuring the system’s principles are effectively implemented at the management level.

Among our 13 operational sites in Taiwan, eight have obtained ISO 14001 certification, covering 62% of the sites (HIWIN Headquarters, Jingke Factory 2, Yunlin Factory 1, Yunlin Factory 2, Yunlin Factory 3, Yunlin Factory 4, Dapumei Factory 1, Dapumei Factory 3). The remaining five sites, which have yet to obtain certification, are undergoing internal audits. In 2024, we will continue to increase ISO 14001 management system certification coverage to over 75% of HIWIN locations in Taiwan.



### Environmental Management System Achievements

Category	Units	2020	2021	2022	2023
Record of non-compliance with environmental laws and regulations	cases	2	2	2	3
Penalties for non-compliance with environmental laws and regulations	US\$	2,247.2	3,452.2	5,862.2	390.8
Outstanding penalties for non-compliance with environmental laws and regulations	US\$	0	0	0	0

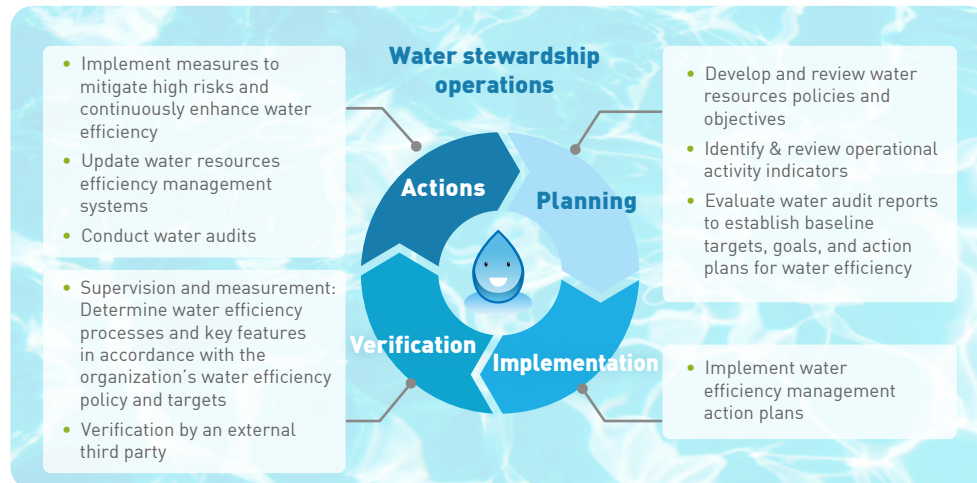
Note: In 2023, there were no instances of penalties exceeding US\$10,000.

## 5.3 Water Stewardship

Water is a vital natural resource to our daily lives. In 2021, Taiwan experienced a once-in-a-century drought. Since then, water shortages have become a major issue impacting company operations. HIWIN values water resources and is actively conserving water. To mitigate water shortage risks, we have adopted the PDCA management system to increase the efficiency of water recycling and formulated water risk management policies to achieve a balanced use of water and ensure sustainable production.

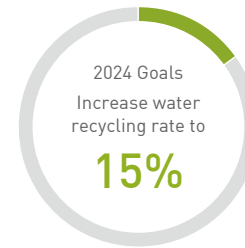
HIWIN obtained verification for ISO 14046:2014 water footprint. This certification allowed us to assess the rational use of water in our manufacturing processes and identify opportunities for water recycling, thereby reducing our reliance on tap water. Additionally, HIWIN Headquarters received ISO 46001:2019 certification for water efficiency management systems in August 2022. This certification, provided by the Taiwan Green Productivity Foundation, has enabled HIWIN to enhance our water efficiency performance by establishing management indicators. In 2023, we continued to obtain TÜV Rheinland verification.

HIWIN is committed to a systematic approach in water management, as demonstrated by the establishment of ISO 46001:2019 water efficiency management systems. These systems outline our organization's water use requirements and provide recommendations to guide our water usage practices. This includes the establishment of operational activity indicators and water use efficiency indicators, as well as practical actions such as supervision, measurement, documentation, reporting, design, and procurement. The ultimate goal is to improve the efficiency of water equipment, systems, processes, and personnel training, in order to achieve optimal water use efficiency.



### Related plans

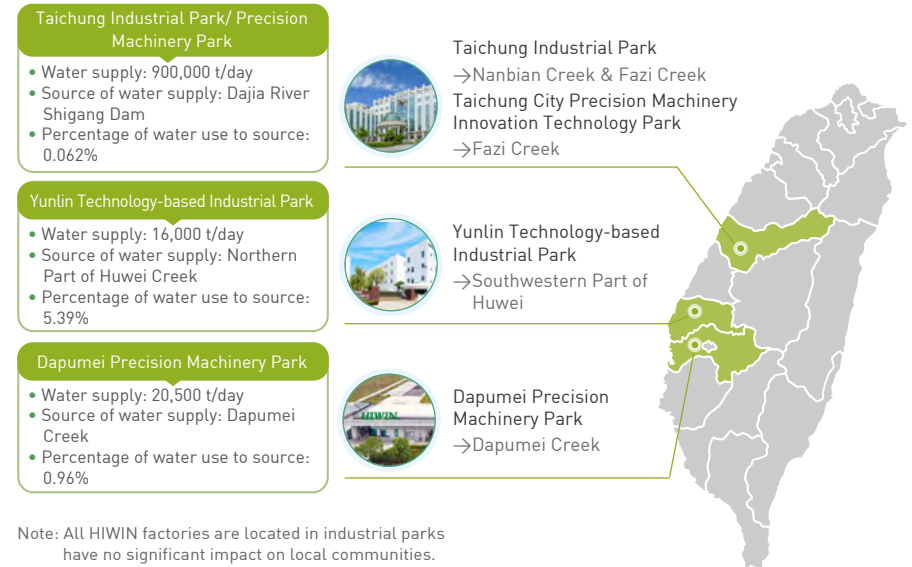
- ① Establish annual maintenance schedules for wastewater and recycling facilities.
- ② Conduct daily equipment inspections to ensure operational efficiency.
- ③ Analyze water recycling data and address any abnormalities.
- ④ Continue consulting with external experts to review and improve water recycling strategies.
- ⑤ Introduce water recycling systems at Factory 1 and Factory 2.



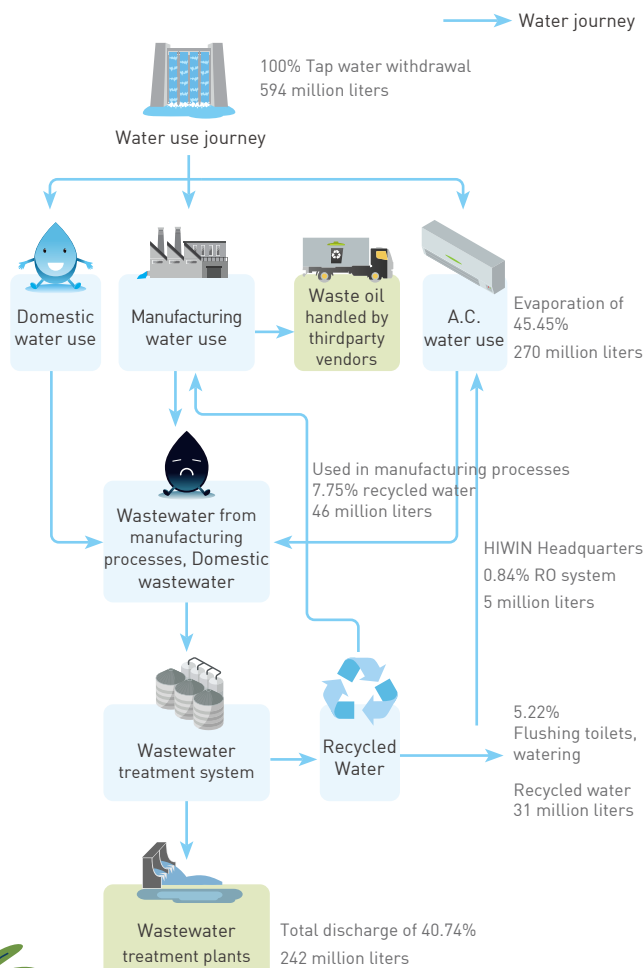
## Water Resource Structure and Risk Management

In 2023, HIWIN consumed a total of 594 million liters of water, sourced exclusively from local water companies as tap water. To assess water risk levels in areas where HIWIN operates, we utilized the Aqueduct tools provided by the World Resources Institute (WRI) and Taiwan's water distribution data. It is worth noting that all HIWIN factories are strategically situated in regions with minimal water stress risks.

### Percentage of supplied water & final destination

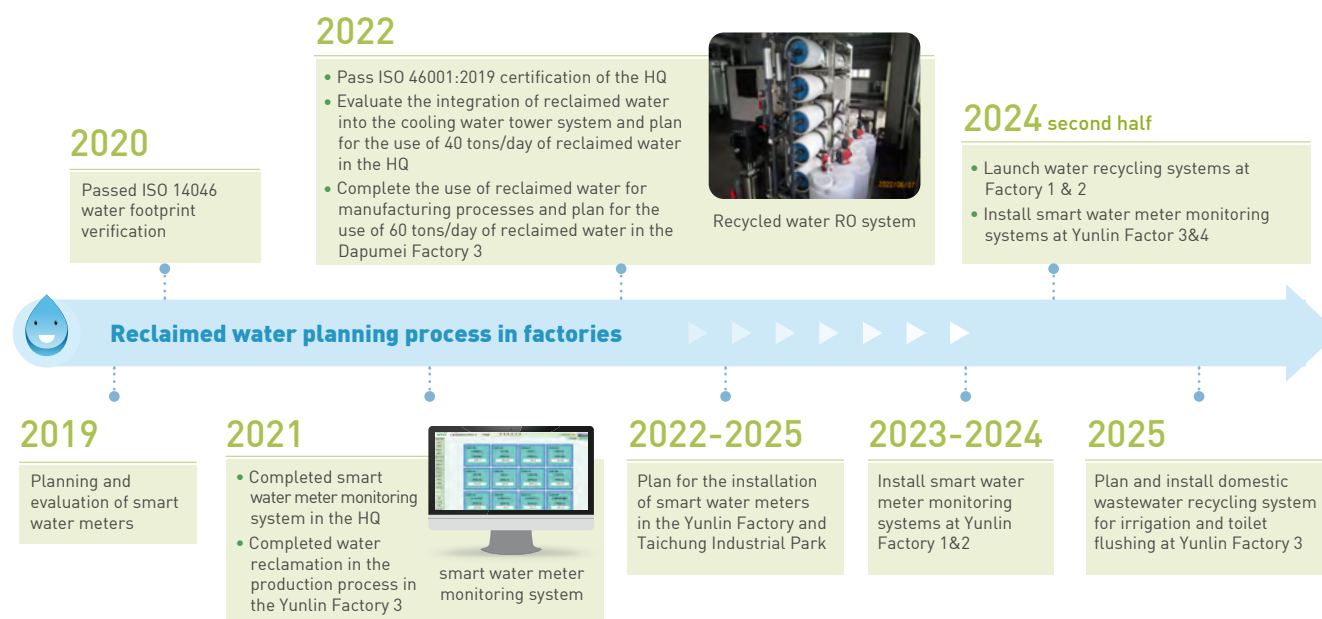


## Water flow



## Water Recycling Planning and Water Efficiency Management

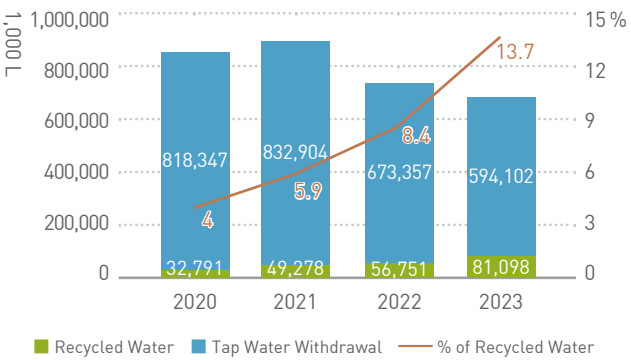
HIWIN has implemented internal water stewardship measures to actively conserve water and improve our water recovery systems, with support from industrial parks and in alignment with government initiatives. In 2023, our water recycling rate reached 13.7%, with recycled water usage covering HIWIN Headquarters, Jingke Factory, Yunlin Factory 1–3, and Dapumei Factory 3, reflecting a 5.4% increase compared to 2022. To effectively manage and monitor water consumption in our factories, we are gradually installing smart water meters. This installation has been completed at HIWIN Headquarters and Dapumei Factory, and will be extended to Yunlin Factory 1 and 2 in 2024. By 2025, we plan to have smart water meters installed in all our factories. These meters can be integrated with our energy monitoring systems to track water flow, detect equipment abnormalities or malfunctions, and enable immediate adjustments when necessary.



HIWIN primarily withdraws tap water and fresh water ( $\leq 1,000\text{mg/L}$  total dissolved solids) for its various needs. The Company has a total water storage capacity of 16 million liters, which represents the change in water storage from the beginning to the end of 2023. This water storage is primarily utilized for air conditioning cooling purposes.

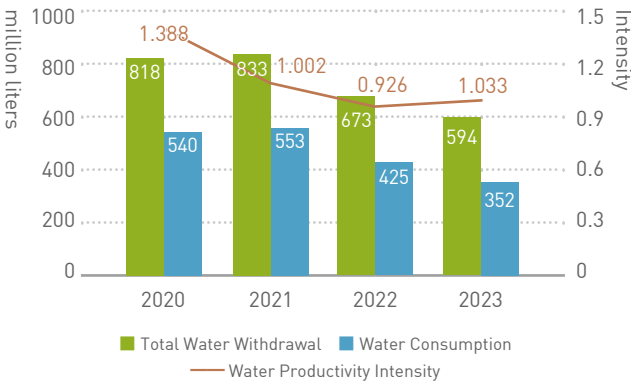
The water intensity in 2023 was 1.033 (million liters/US\$1 million), representing a 13.3% enhance compared to 2022. Total water consumption representing a 17.4% decrease compared to 2022. In 2024, we will continue to reduce water use.

Water recycling & reuse in 2020-2023



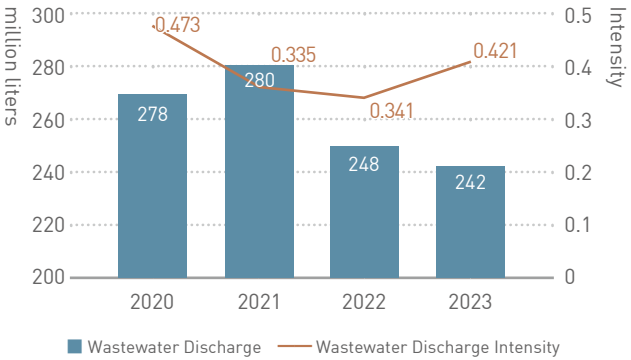
Note: HIWIN locations include Headquarters, Jingke Factory 2, Yunlin Factory 1, Yunlin Factory 2, Yunlin Factory 3, Dapumei Factory 3.

Water withdrawal, water consumption, and water intensity in 2020-2023



Note: 1. Water productivity intensity (WPI) = total water withdrawal (1 million liters)÷operating revenue (US\$1 million).  
2. Water consumption (million liters) = total water intake - total drainage.  
3. The 2021 water consumption has been revised from 554 million liters to 553 million liters.

Wastewater discharge intensity in 2020-2023



Note: Wastewater discharge intensity=wastewater discharge(1 million liters) ÷ operating revenue(US\$1 million).

Water Pollution Prevention and Control

All HIWIN factories have submitted Water Pollution Control Measure Plans and Permit Applications in accordance with regulations. The majority of water used for cooling towers, domestic purposes, and industrial processes is sourced from tap water.

Wastewater discharges at all locations are treated by the factories’ wastewater treatment equipment to meet the required discharge standards. Prior to discharge, the wastewater is further treated by the industrial park or service center’s wastewater treatment center. HIWIN has established laboratories to monitor and regularly test water quality in real-time, ensuring compliance with the discharge standards set by the industrial parks. Additionally, we have engaged an EPA-authorized testing agency to conduct on-site inspections of our wastewater discharge, as well as a dedicated vendor to manage wastewater generated from manufacturing processes. All monitored values for wastewater discharge were found to be in compliance with legal standards.

Description of emissions of substances of priority concern in 2023

unit: mg/L

Factory	COD		SS	
	Standard	2023	Standard	2023
HIWIN HQ	300	26~148	250	32~215
Factory 7		4~33		20~31
Factory 1	480	71.3~106	320	8~14.7
Factory 2		72.2~301		7.2~12.8
Jingke Factory 2	250	27.3~35	200	9.2~13.4
Yunlin Factory 1	480	33.55~70.3	320	3.85~7.1
Yunlin Factory 2		7.5~29.05		3.75~4.1
Yunlin Factory 3		9.75~18.3		2.1~5.8
Yunlin Factory 4		5.7~40.8		3.4~6.8
Yunlin Factory 5		12.1~123		3.6~14.6
Dapumei Factory 3 <sup>Note</sup>	400	6.5~80	200	0.8~2.7

Note: Dapumei Factory 1 is connected to Dapumei Factory 3 with regard to discharge control.





## 5.4 Waste Management and Recycling

HIWIN is dedicated to preventing, reducing, and reusing waste, and has incorporated recycling goals into its procurement, product design, and manufacturing processes. By conducting regular waste project meetings and actively promoting the ISO 14001:2015 environmental management systems, HIWIN consistently evaluates strategies for reducing waste at its source and develops plans for waste reduction. The ultimate objective is to achieve zero waste by effectively managing and continuously reducing waste through enhanced recycling and reuse practices.

HIWIN handles both general and hazardous business waste and follows a waste management procedure-based control system. The Company's long-term vision is to strengthen recycling and reuse efforts, thereby achieving efficient waste management and ongoing waste reduction to facilitate resource reuse. Additionally, HIWIN has adopted the five major principles of waste management to minimize waste production, lower carbon emissions, and work towards the long-term goal of zero waste.

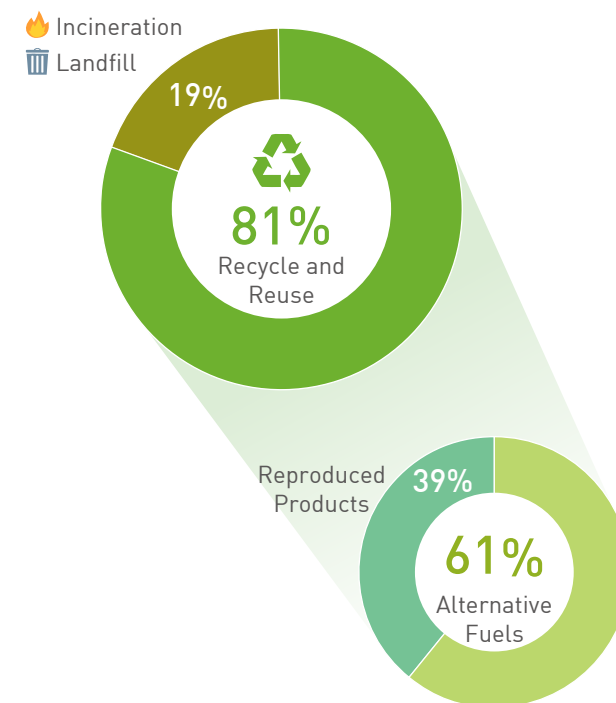
### Waste Resources

In 2023, HIWIN generated a total of 10,069 t of waste, consisting of 9,594 t of general industrial waste and 475 t of hazardous industrial waste. The waste generated was managed through recycling, reuse, and direct treatment methods such as incineration and landfill. Specifically 8,169 t of general industrial waste were treated for reuse, accounting for 81% of total waste generated. This improvement is due to the reduction of sludge mixtures and scrapped grinding wheels being sent to landfills or for incineration and being recycled instead. Additionally, we improved the storage classification of furnace dust and established control measures. As a result, the reuse rate increased by 4% compared to 2022.

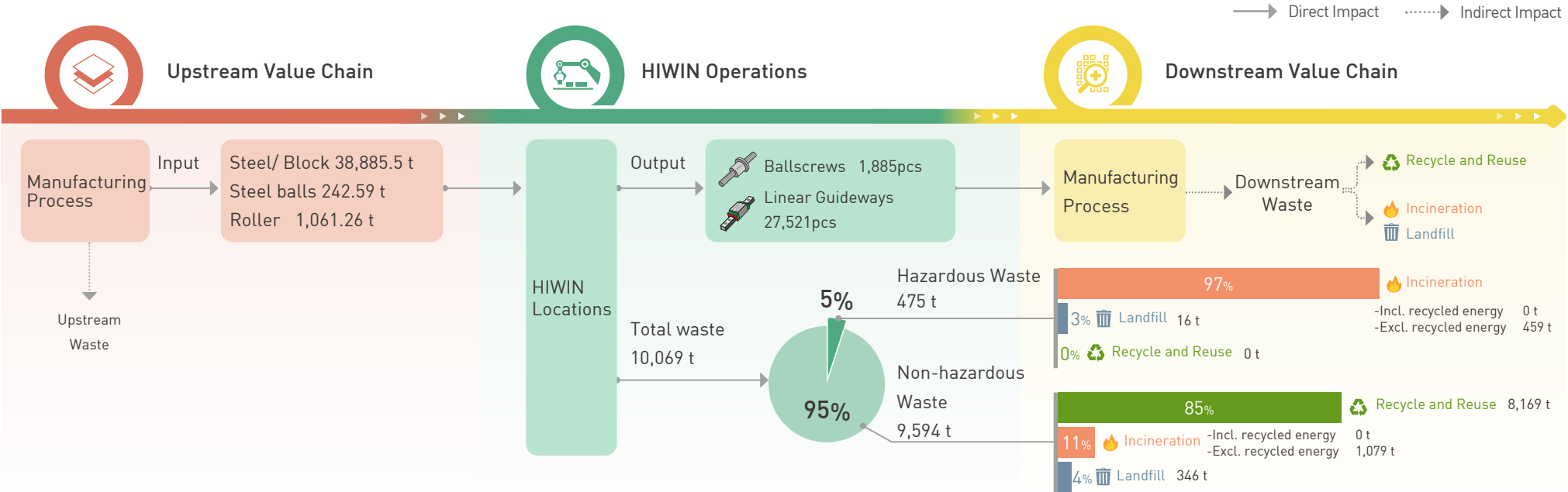


The intensity of general industrial waste in 2023 increased by 0.04% compared to 2022, while the total volume decreased by 13.2% compared to the previous year. We plan to continue improving waste reduction efforts in 2024, with the introduction of sludge dewatering equipment in the second half of the year to further reduce waste. The intensity of hazardous industrial waste in 2023 increased by 50% compared to 2022, with the total volume also rising by 36%. This was primarily due to the delay in installing hazardous waste acid treatment equipment, which is now expected to be completed and operational in the first quarter of 2024. Once operational, it is anticipated to reduce the total volume of hazardous industrial waste by approximately 60%.

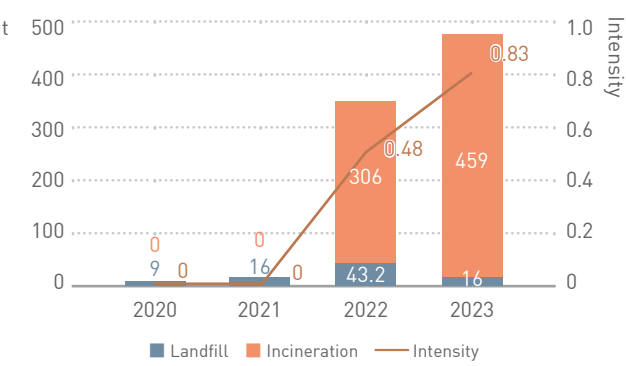
### Percentage of waste resource recycling in 2023



Significant Impact from Waste Input, Activities, and Output in 2023

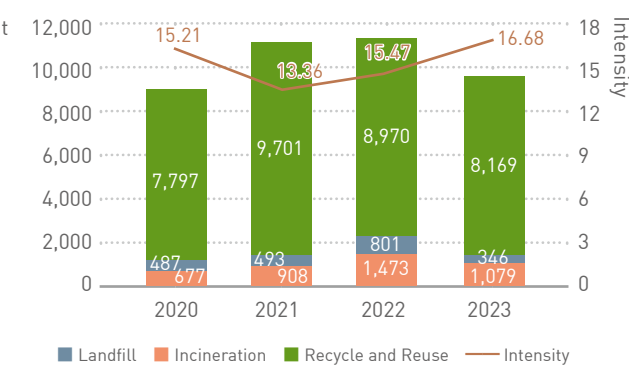


Total Output of Hazardous Industrial Waste in 2020-2023



Note: 1. Hazardous industrial waste includes electroplating sludge, ammonium sulfate, and other waste containing toxic heavy metals.  
2. HIWIN does not import or export any hazardous waste.  
3. Intensity = Total Output of Hazardous Industrial Waste (t) ÷ operating revenue (US\$1 million).

Total Output of General Industrial Waste in 2020-2023



Note: 1. General industrial waste includes household garbage, waste wood, scrapped oil mixtures, scrapped lubricating oil, sludge mixtures, scrapped grinding wheels, non-hazardous furnace dust, waste fiber, waste activated carbon, waste container, and waste gypsum.  
2. Intensity = Total Output of General Industrial Waste (t) ÷ operating revenue (US\$1 million).



## Source Reduction Measures

At HIWIN, waste management adheres to the principles of recycling and reusing. We regularly conduct life cycle assessments for various stages, including raw materials, products, shipping, packaging, etc., to prevent ineffective waste treatment caused by environmental impacts.

### Highlight case ① Reduction of packaging materials

In 2019, we received client' feedback concerning about the environmental impact and lack of effective recycling options for the foaming agents used in our packaging materials. Following an internal review and improvement process, the HIWIN has made the switch to using EPE (Expandable Polyethylene) plastic pads and paper pads as alternatives to the foamed material for packaging. In the second half of 2023, we fully implemented the use of vacuum packaging machines and paper pads combined with EPE foam to strengthen cardboard boxes.



### Highlight case ② Reduction of wastewater sludge

In order to reduce the sludge produced by wastewater treatment equipment, HIWIN has invested in relevant equipment to reduce the volume since 2019, and has achieved benefits of more than 50% every year. In 2019, we reduced wastewater sludge by 43 t and have reduced a total of 208 t since 2023. In 2024, we will continue to adopt related equipment to reduce waste at the source.

Waste disposal in 2023 Annual cost savings

↓ 50% US\$ 14,386.6

#### Wastewater sludge reduction achievements in 2020-2023

Item	Unit	2020	2021	2022	2023
Reduction Achievements	t	49	56	25	35



Sludge treatment equipment

### Highlight case ③ Process improvement & raw material reduction

To support energy conservation and carbon reduction, we conducted a comprehensive review of surface treatment processes and changed the type of abrasive used to reduce raw material consumption. During this process, we considered different processes and gained customer recognition and support. The benefits included not only raw material and waste reduction but also reduced dust hazards during manufacturing, resulting in products with a more lustrous appearance.

Raw material reduction in 2023

↓ 510t

Process Waste

↓ 125t

### Highlight case ④ Plastic reduction in packaging materials



We selected paper-based cushioning materials to replace plastics and achieved the same cushioning effect in product packaging. The paper-based cushioning material is made from recycled cardboard boxes, which are easy to obtain and recycle, making it the best eco-friendly cushioning material.

## Circular Economy Promoting

The circular economy is one of the key environmental issues of global concern, with major companies introducing strategies to spearhead their transition toward a circular economy. As HIWIN promotes source reduction and resource recycling projects, we also require our suppliers to set targets for waste reduction and recycling.

### Highlight case ① Waste reuse

Scrapped grinding wheels	Sludge mixtures	Non-hazardous furnace dust	Waste oil mixtures
Brick Mixtures Cement Mixtures	Asphalt Cement Mixtures Cement Products	Cement Products Cement Mixtures	Recycled Oil Auxiliary Fuel Products
Reuse in 2023	Reuse in 2023	Waste Outsourced for Solidification Treatment	Waste Outsourced for Reuse
143.06 t	1,820.96 t	935.18 t	4,433.96 t

Waste Vendor Audits and Guidance

HIWIN’s operational waste has consistently been outsourced to government-qualified vendors selected by our Environmental Protection Department and Purchasing Department, based on six key screening criteria. After contract signing, these vendors handle waste removal, processing, and flow management. Only vendors scoring 60 points or above in our evaluation are added to the list of qualified vendors. In 2023, we added six new vendors, bringing the total to 16. Of these, four were rated as average and 12 as excellent.

In 2023, all waste disposal personnel from HIWIN’s qualified vendors received in-house contractor training for entering HIWIN facilities. Waste disposal is reported in accordance with the regulations of the Ministry of Environment. Within our facilities, we have an audit system, and each department is responsible for sorting and transporting waste to designated storage areas. Qualified waste removal vendors are then notified by designated personnel to clear and remove the waste from HIWIN facilities.



Waste Removal Audit



Waste treatment vendor management in 2020-2023

Items	Units	2020	2021	2022	2023
Qualified Vendors	Companies	13	20	20	20
Qualified Vendor Personnel	People	51	18	36	42
Violations	Cases	3	5	1	2

Note: In 2023, a violation was recorded for not wearing personal protective equipment correctly when operating machinery. The violation has since been addressed and improved.

5.5 Air Pollution Prevention and Control

Air pollution is a pervasive public health issue that transcends borders, resulting in heightened environmental strain and worsened climate change. HIWIN has successfully acquired emission permits for all of its factories and has implemented robust measures to prevent and control air pollution, building upon existing air pollution control practices. In accordance with regulatory mandates, we conduct regular emissions testing, ensuring that all air pollution emissions remain below the standards set by the EPA.

Types and sources of major air pollutants in HIWIN’s factories

Major Air Pollutants	HIWIN HQ	Jingke Factory 2	Yunlin Factory			Dapumei Factory	
			Factory 1	Factory 2	Factory 3	Factory 1	Factory 3
Particulate Matter	✓	✓	✓	✓	✓	✓	✓
Sulfur Oxides	✓	✓					✓
Nitrogen Oxides	✓	✓		✓	✓		✓
VOCs	✓	✓	✓	✓	✓	✓	

Note: Factories not shown in the table recorded no sources of emissions.

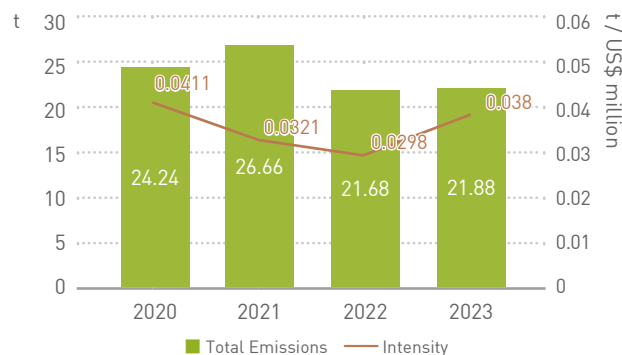
In 2023, the intensity of total VOC emissions increased by 71.4% compared to 2022, primarily due to process changes and the addition of new production lines. In 2024, we will continue to focus on reducing VOC emissions. The emission of particulate matter has been decreasing since 2022, with a reduction of 0.96 t in 2023 compared to 2022. Sulfur oxides (SOx) and nitrogen oxides (NOx) emissions decreased by 2.92 and 1.85 t, respectively, in 2023 compared to 2022. The main reason for this decrease is that certain process equipment within HIWIN plants use electric heating, and after reviewing regulations, it was determined that SOx and NOx emissions did not need to be calculated.

Total emissions of air pollutants from factories in 2020-2023

Major Air Pollutants	Unit	2020	2021	2022	2023
VOCs	t	18.42	17.37	14.51	20.43
Sulfur Oxides		2.48	4.15	2.94	0.02
Nitrogen Oxides		3.34	5.15	2.71	0.86
Particulate Matter		0.5	0.14	1.53	0.57



## Total emissions and intensity of air pollutants in 2020-2023



Note: Emission Intensity = VOC Emissions (t) ÷ Revenue (US\$1 million)

HIWIN's preventive equipment is managed by dedicated personnel who regularly outsource monthly maintenance and testing. They also conduct inspections and regular audits internally. The sources of air pollution in our facilities are the process machines and gas boilers listed in the environmental protection regulations. HIWIN Headquarters, Jingke Factory 2, Yunlin Factory, and Dapumei Factory are among the factories that require the installation of preventive equipment. Based on the characteristics of our manufacturing process, we have implemented water washing, dust collection, and other air treatment equipment for pre-treatment. Moving forward, we will continue to enhance our existing equipment and treatment efficiency to further increase the reduction rate.



## Air pollution prevention and handling procedures



## Air treatment equipment and facilities of factories

Process Type	Target Pollutant	Control Technology	Reduction Rate	Monitoring Parameter
Metal Heat Treatment Process	Particulate Matter	Filter	> 64.7%	Furnace temperature, differential pressure gauge
		Pulse-jet bag dust collector	> 95%	
		Scrubber tower	> 65%	
		Wet cyclone dust collector	> 65%	
	Sulfur Oxides	Scrubber tower	> 20%	Furnace temperature, PH value, flow meter, differential pressure gauge, water meter
	Nitrogen Oxides		> 10%	
	Organic Gases		> 10%	
	Hydrochloric Acid		> 95%	
Metal Surface Treatment Process (Dapumei Factory 3)	Hydrochloric Acid	Scrubber tower	> 95%	Furnace temperature, PH value, flow meter, differential pressure gauge, water meter
	Phosphoric Acid		> 50%	
	Particulate Matter		> 65%	

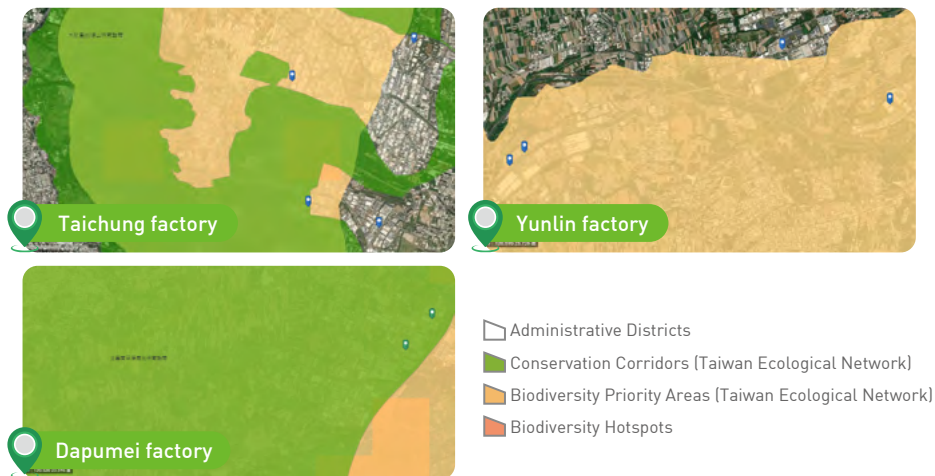
## 5.6 Biodiversity

### Biodiversity Assessments

Biodiversity supports all life systems on Earth. HIWIN fully recognizes the importance of protecting biodiversity for ecological and climate stability. In 2023, we used the TNFD's LEAP framework to assess nature-related risks and adopted the Taiwan Ecological Network established by the MOA Forestry and Nature Conservation Agency to evaluate whether HIWIN's factories and their locations have an impact on biodiversity in the area.

The results show that, of our 10 factory locations in Taiwan, three are situated in general administrative districts; four are located in areas identified as biodiversity priority areas by the Taiwan Ecological Network, which may be biodiversity hotspots for wildlife, critical habitats for endangered and threatened plants, or locations of significant biodiversity concerns; and the remaining three factories are located within conservation corridors that prioritize habitat restoration. The three factories in conservation corridors are Dapumei Factory 1 & 3 in a conservation corridor on the Chianan Plain and Jingke Factory in the low-altitude mountain conservation corridor of the Dadu Plateau. Therefore, we have included ecological items relating to factory development and surrounding areas in our assessment, developed various measures to mitigate negative natural impacts, and will be identifying opportunities for positive environmental impacts.

#### HIWIN factories overlapping with the Taiwan ecological network



Note: Source of images and legends: Taiwan Ecological Network

### Ecology Education Promotion

#### 1 Ecological education film - "We Love Living Here"

Global Chairman Eric Y. T. Chuo (PH.D.), the founder of HIWIN, not only prioritizes the production and operation of our factories, but also places great emphasis on the landscape and green design of our facilities to create a welcoming environment. During the construction of Yunlin Factory 1, HIWIN took the initiative to adopt 12 native species of camphor trees from Laoshu Mama in 2010. This not only provided a new home for these old trees, but also created green spaces for our employees to relax and rejuvenate. With the dedicated care of our employees, these camphor trees have flourished, attracting birds to make HIWIN their home and reproduce.

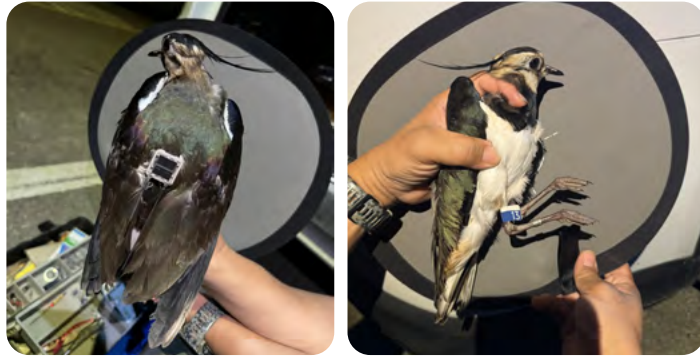
Driven by curiosity and a love for nature, Enid H.C. Tsai, the President of HIWIN, invited Director Yu Shu Liu to lead the Hytree Studio team in exploring and documenting the diverse bird species in this small forest. In January 2021, the HIWIN Education Foundation commissioned the expert bird photography team from Swarovski Optik Taiwan to begin an ecological record of the birds in the old tree area of Yunlin Factory. This film tells the story of how 12 old camphor trees attracted a large number of birds, leading to an abundance of birdlife that caused significant inconveniences to the company's employees due to bird droppings. The technology factory, by "thinking outside the box," turned this situation into a documentary, helping us understand the story of the birds and how to develop empathy for coexisting with nature while protecting the "biodiversity" environment.

In 2023, the documentary premiered in Taipei and Taichung, drawing large audiences to our ecological education events. The overwhelming positive feedback led to an additional screening, bringing the total number of attendees to 548. HIWIN later partnered with Taiwan Television Enterprise and TaiwanPLUS, established by the Public Television Service Foundation, to air the film both in Taiwan and abroad. The film was widely promoted in HIWIN to raise employee awareness of ecological protection. The film reached 96.8% of employees, with 3,656 of HIWIN employees watching it across 80 screenings. At HIWIN, we hope that ecological conservation and environmental sustainability begins with you and me and we strive to create a better and more sustainable future for Taiwan.



The date of the Taichung premiere was selected to coincide with Earth Day

## 2 Traces of northern lapwings



Tagging northern lapwings with leg bands and satellite transmitters  
(Photo: Chung Han Wu)

Yunlin County, one of Taiwan's largest agricultural counties, boasts fertile soil that yields high-quality agricultural products. In the neighboring farmland of HIWIN's Yunlin Factory, a group of northern lapwings migrates here to spend the winter. These birds, often referred to as "peanut birds," have a tendency to rest in peanut fields. However, due to the expansion of modern intensive agriculture, many of the areas where the northern lapwings used to land are now facing pollution and fragmentation. Furthermore, the lack of knowledge about the species' habits among farmers has led to their eviction, further impacting their survival. A survey conducted by BirdLife International reveals a declining trend in the population of northern lapwings. In 2016, the International Union for Conservation of Nature and Natural Resources (IUCN) upgraded the status of the northern lapwings from a least-concern species (LC) to a near threatened species (NT).

Starting from December 2022, the HIWIN Education Foundation has partnered with the Wild Bird Society of Changhua, the Wild Bird Society of Yun-Lin, and Swarovski Optik Taiwan to develop the "Traces of Northern Lapwings" program. Under the initiative, we successfully tagged nine northern lapwings with satellite transmitters in 2023, allowing us to track their migration routes and learn about their ecological habits and habitat distribution. In doing so, we aim to promote eco-tourism in Yunlin, designate indicator species, develop eco-friendly agriculture, and conduct ecological education activities at nearby Yuan Chang Elementary School and Pinghe Elementary School. These efforts are designed to spread awareness of conservation and emphasize the importance of preserving our natural environment and biodiversity.

## 3 Ecological education volunteer activities



Children learning about jacanas and the challenges confronting their survival



Children observing bats in bat houses at the Formosan Golden Bat's Home

The HIWIN Volunteer Group is committed to upholding corporate social responsibility and has continued to take action to give back to society. In recent years, there has been an increasing focus on ecological issues. As such, we have organized "ecological education" tours, inviting underprivileged children (and their parents) to step outdoors and connect with nature. These educational activities are our way to give back to the community with love and action. In 2023, we held two events, with 24 volunteers participating and benefiting 78 individuals.

In July 2023, in collaboration with the Jacana Ecological Education Park in Guantian District, Taiwan, we led a group of children Family & Children Center in Yunlin through games to explore the impact of human activities on the environment and ecology, experience the challenges and crises faced by jacanas, develop birdwatching skills by observing bird habitats and behaviors at the park, and become citizen scientists.

In November 2023, in partnership with the Formosan Golden Bat's Home in Shulin Township, Yunlin County, we worked with the Family & Children Center in Beigang to provide local students with a deeper understanding and appreciation of their local ecology and Taiwan's vulnerable species. Together, we created and donated six bat houses to the Home for placement in National Forest Recreation Areas and other monitored locations. Through these volunteer activities and guided tours, children learned about the ethics, knowledge, mindsets, and values needed to protect and strengthen our environments.





## 06

## A Builder of Diversity Workplace

HIWIN adheres to the principle of equal pay for equal work, ensuring that there is no discrimination based on gender or ethnicity. The Company is dedicated to safeguarding the well-being and safety of its employees, offering comprehensive benefits and long-term development training opportunities.



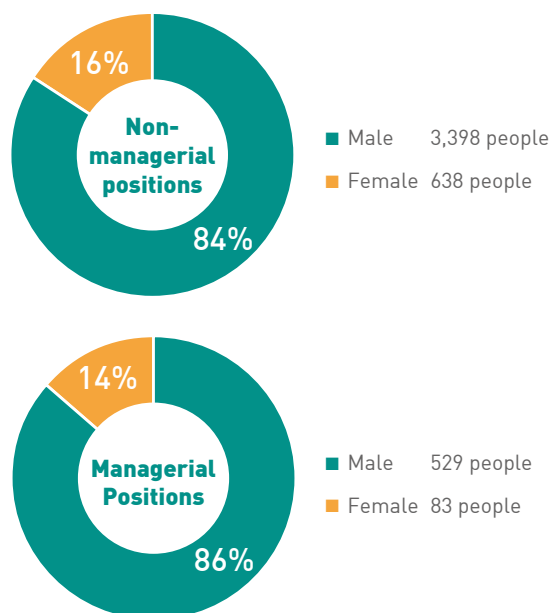


## 6.1 Employee Diversity and Inclusion

### Employee Composition and Diversity

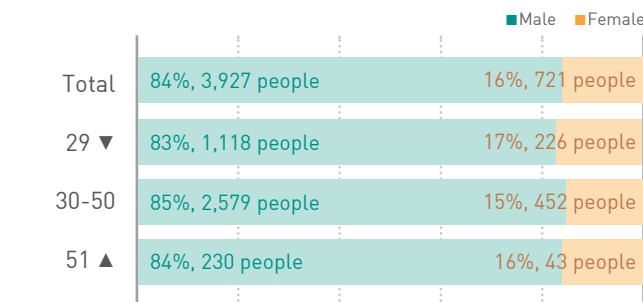
As of December 31, 2023, HIWIN Taiwan had a total of 4,648 employees. The workforce is predominantly composed of individuals aged 30-50, with the majority of managerial roles also filled by those within this age range. We employ 4,646 regular employees, including 486 industry-academia students, and two non-regular employees. Additionally, for non-employee workers at HIWIN locations, we have 13 outsourced security guards and 27 outsourced cleaning personnel. HIWIN does not employ any dispatch workers.

#### Employee demographics by gender in 2023



- Note:
1. Non-managerial Positions: This includes professional and technical personnel, production line workers, and support staff who are not in managerial roles.
  2. Managerial Positions: This includes both junior and mid-to-senior level managers in professional, technical, and administrative units.

#### In-service employee composition in 2023



Note:

1. Gender Ratio in Employment Status = Number of Male and Female In-Service Employees ÷ Total Number of Employees.
2. Gender Ratio in Employment Status for Each Age Group = Number of Individuals of Different Genders in Employment Status for That Age Group ÷ Total Number of Individuals in Employment Status for That Age Group.

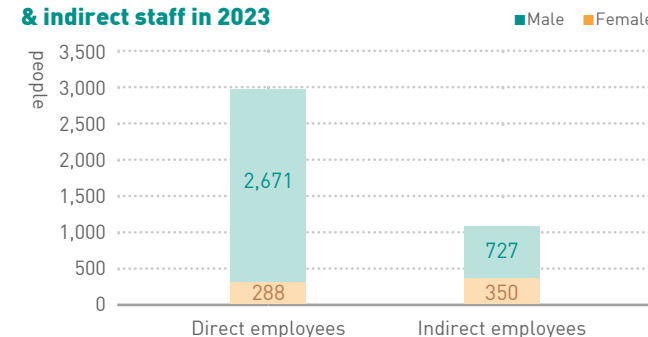
#### Job title structure of in-service staff in 2023

Position	People	Gender	Age	Gender Ratio
Management	612 (13%)	529 people 83 people	29 ▼	88%, 21 ppl 12%, 3 ppl
			30-50	86%, 427 ppl 14%, 68 ppl
			51 ▲	87%, 81 ppl 13%, 12 ppl
R&D	373 (8%)	305 people 68 people	29 ▼	81%, 149 ppl 19%, 36 ppl
			30-50	83%, 152 ppl 17%, 31 ppl
			51 ▲	80%, 4 ppl 20%, 1 ppl
Manufacturing	3,333 (72%)	2,948 people 385 people	29 ▼	91%, 916 ppl 9%, 94 ppl
			30-50	88%, 1,906 ppl 12%, 270 ppl
			51 ▲	86%, 126 ppl 14%, 21 ppl
Administrative	330 (7%)	145 people 185 people	29 ▼	26%, 32 ppl 74%, 93 ppl
			30-50	53%, 94 ppl 47%, 83 ppl
			51 ▲	68%, 19 ppl 32%, 9 ppl

Note:

1. Proportion of Each Position = Number of Individuals in That Position ÷ Total Company Headcount.
2. Gender Ratio for Each Age Group in Each Position = Number of Individuals of Different Genders in That Age Group and Position ÷ Total Number of Individuals in That Age Group and Position.

#### Gender distribution of non-managerial direct & indirect staff in 2023



Note:

1. Direct employees: production line workers directly involved in manufacturing.
2. Indirect employees: personnel indirectly involved in production, including research and development, sales, and support staff.

#### HIWIN Taiwan's distribution of job positions by nationality in 2023

Nationality	Administrative	R&D	Manufacturing	Total	Percentage of Total Employees	Percentage in Managerial Positions
Taiwan	477	499	2,929	3,905	84.01%	99.67%
Philippines	0	0	650	650	13.98%	-
Vietnam	0	1	73	74	1.59%	-
India	2	4	0	6	0.13%	0.33%
Malaysia	0	4	2	6	0.13%	-
Indonesia	2	2	0	4	0.09%	-
Belarus	1	0	0	1	0.02%	0.16%
Brazil	1	0	0	1	0.02%	-
South Korea	1	0	0	1	0.02%	-

Note:

1. Administrative staff: refers to management professionals or engineers who are indirectly related to production activities, such as sales personnel, IT personnel, and others.
2. Manufacturing personnel: refers to individuals directly involved in production activities, such as production technicians, quality inspectors, and others.
3. Research and development (R&D) personnel: refers to individuals engaged in substantial improvements to technology, products, and services, such as research and development engineers.

## Distribution of contract types by gender & region in 2023

Contract Types	Gender			Region of Taiwan			Total
	Female	Male	Other	North	Central	South	
Number of employees	721	3,927	0	11	2,729	1,908	4,648
Number of permanent employees	721	3,925	0	11	2,727	1,908	4,646
Number of temporary Employees	0	2	0	0	2	0	2
Number of employees without guaranteed working hours	0	2	0	0	2	0	2
Number of full-time employees	721	3,925	0	11	2,727	1,908	4,646
Number of part-time employees	0	2	0	0	2	0	2

Note:

1. Other: categories defined by the employee.
2. Permanent employees: full-time or part-time employees who have signed an indefinite (i.e., permanent) contract without a fixed term.
3. Temporary employees: employees who have signed fixed-term contracts with specific end dates. The contracts expire at the designated time or end upon the completion of specific tasks or events with evaluation timelines (such as the conclusion of a work project or the return of an employee to their original position).
4. Employees without guaranteed working hours: employees who are not guaranteed a minimum or fixed number of working hours per day, week, or month.
5. Full-time employees: Employees whose weekly, monthly, or yearly working hours comply with the legal and practical definitions of full-time employment set by the country's relevant labor laws and practices.
6. Part-time employees: Employees whose weekly, monthly, or yearly working hours are fewer than those of full-time employees.

## Deep-rooted Culture, Promotion of Local Talent

HIWIN originated in Taiwan, and has since expanded its global presence. The Company has successfully established subsidiaries in multiple countries, including Japan, the United States, Germany, Switzerland, Italy, South Korea, Singapore, China, and other locations. This strategic expansion allows HIWIN to actively contribute to local economies and gain valuable insights into local requirements. Moreover, HIWIN demonstrates its dedication to global integration by engaging local talent as collaborative partners in its subsidiaries, thereby effectively harnessing global resources.

Note:

1. Management level refers to supervisors at the team level or above.
2. Local Management Ratio=Local Managers (hired from the host country)/Total Managers in Subsidiaries.

Area/Subsidiaries		Percentage of Local Managers
Taiwan	HIWIN	99.5%
	Matrix	100%
	eterbright	100%
China		71%
Germany		98%
U.S.		100%
Japan		80%
Italy		82%
South Korea		65%
Singapore		57%
Switzerland		20%
U.K.		50%

## Respect and Equality

HIWIN upholds the principles of gender equality, treating all individuals impartially, irrespective of their gender, religion, race, nationality, or political affiliation. The Company also values diverse professional talents and ensures a fair and uniform salary structure, accompanied by a range of benefits.

### 1 Hiring people with disability & disadvantages

HIWIN's commitment to diverse employment is an integral part of its sustainable strategy. The Company strictly adheres to government regulations regarding the employment of individuals with disabilities, following a quota system. Furthermore, HIWIN values and respects the distinct cultures of ethnic minorities, providing employees of indigenous identity with an annual "festival holiday." In 2023, HIWIN employed a total of 40 employees with disabilities and 30 indigenous individuals. There were no reported instances of discrimination within the organization.

### 2 Cultural integration, friendly and caring

To support the adjustment of our foreign employees to both work and life in Taiwan, HIWIN has developed a handbook entitled "Foreign Employee's Living Guide." Furthermore, we conduct individual care interviews with our foreign colleagues to better understand their living needs and provide them with information on relevant regulations. Additionally, we offer the opportunity for foreign colleagues to reside in our Company-built dormitories, which boast facilities and environments comparable to those of five-star dormitories. To ensure a comfortable and enjoyable living experience, we have dedicated dormitory management personnel in place. Our foreign colleagues greatly appreciate the welcoming dormitory environment and often share their positive experiences with family and friends in their home countries through social media, thereby encouraging others to join HIWIN, a reputable and high-quality enterprise.

### 3 Women in Tech

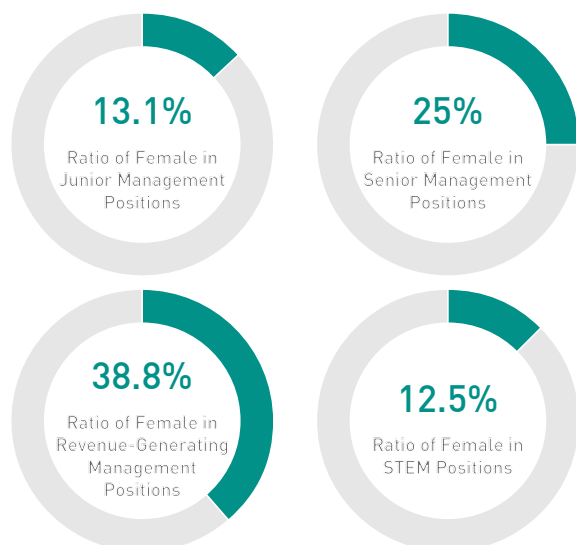
From its inception, HIWIN has placed great emphasis on embracing diversity and fostering innovative thinking. In addition to encouraging engineering talents to enter the field of smart machinery, the Company also envisions the involvement of the new generation in interdisciplinary learning. Global Chairman Eric Y. T. Chuo (PH.D.), the founder, firmly believes that women possess resilient and delicate qualities that can contribute to inspiring more innovative thinking and adopting softer management approaches in the field of smart machinery. HIWIN is actively recruiting women for R&D and technical roles. In 2023, women made up 15.5% of the total workforce, with 12.5% of STEM positions held by women. HIWIN aims to increase the proportion of women in STEM roles to over 15% by 2030.



Furthermore, HIWIN is dedicated to creating a workplace that promotes respect and harmony. The Company implements various high-quality and employee-friendly initiatives, such as providing designated parking spaces for pregnant employees, establishing lactation rooms, and conducting sexual harassment prevention courses.

HIWIN treats its employees with fairness and objectivity, providing equal opportunities and resources to female colleagues and offering them the same development platforms as their counterparts. In 2023, there were 83 female colleagues in managerial positions at HIWIN. Over the past four years, female employees in managerial roles accounted for 13.0% of the total female workforce. HIWIN aspires to drive the machinery industry to create more opportunities for women's development and increase the number of women contributing to the industry, ultimately enhancing the industry's overall value.

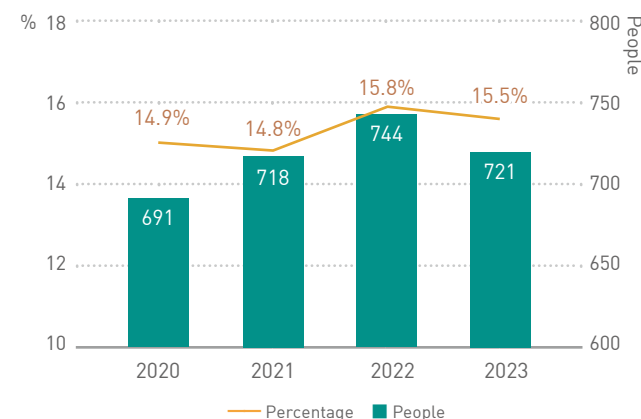
### Female Employees in 2023 by job position



Note:

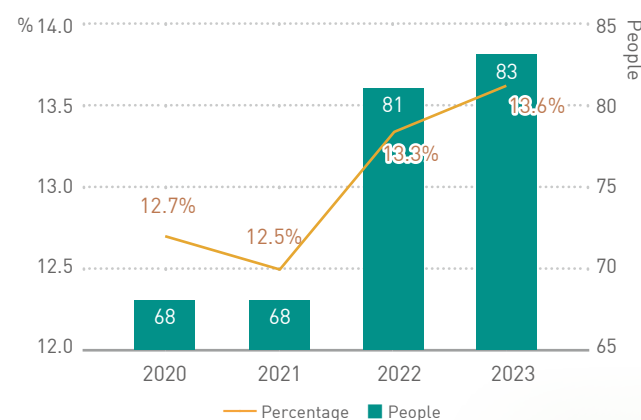
1. Junior management positions include team leaders and section heads; middle management positions include department heads; senior management positions are vice president positions and above.
2. STEM [Science, Technology, Engineering, Math] positions include roles in R&D, manufacturing, finance, accounting, IT, safety and health, and environmental protection.

### Percentage of female employees overall in 2020-2023



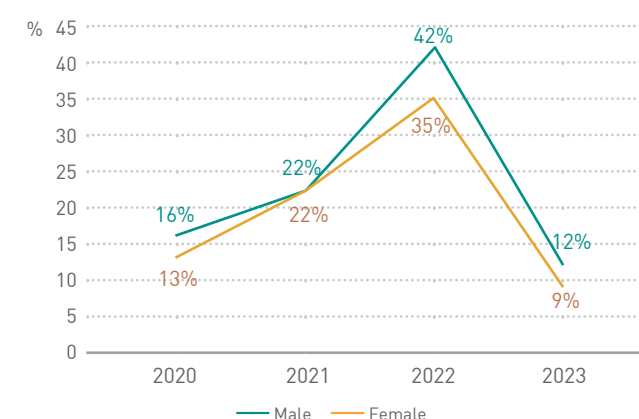
Note: Percentage of female employees = number of female employees ÷ total number of employees.

### Percentage of women in management in 2020-2023



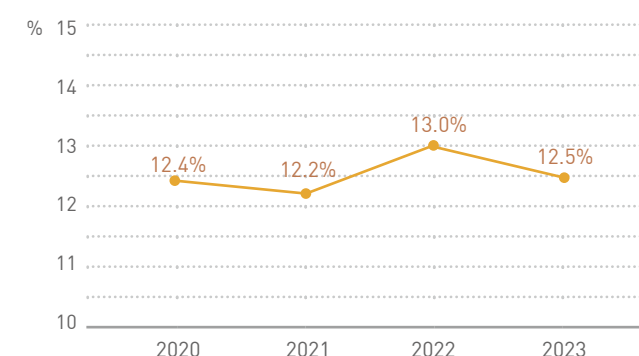
Note: Percentage of women in management = number of female supervisors ÷ total number of supervisors.

### Male to female promotion ratio in 2020-2023



Note: Promotion rate = the number of promotions for this gender ÷ the total number of people of this gender.

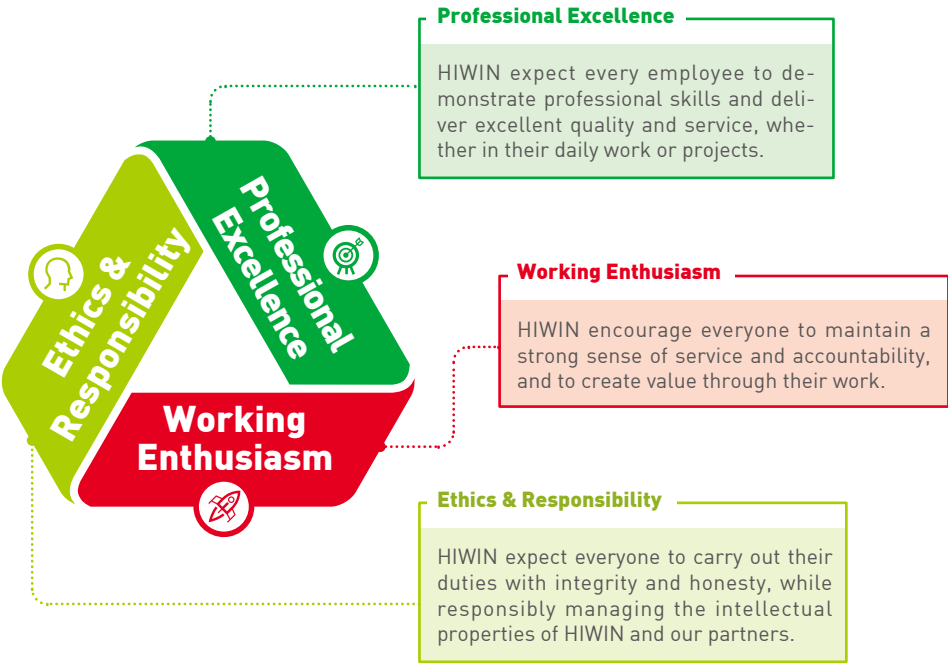
### Ratio of female in STEM positions in 2020-2023



Note: Ratio of Female in STEM Positions = Female in STEM positions ÷ total number of employees in STEM positions.

## 6.2 Talent Attraction and Retention

Talent is crucial for the sustainable development of an enterprise. HIWIN adheres to the principles of “Professional Excellence, Working Enthusiasm, Ethics & Responsibility” in its management philosophy. The Company fosters a diverse, inclusive, respectful, and supportive work environment that promotes employee self-improvement. This approach attracts talented individuals from various disciplines who align with HIWIN’s organizational culture and values.



HIWIN’s recruitment and retention policy is centered around “cultivating talent in the precision machinery field.” All human resources systems and work environment plans are executed in line with this principle. From the first day of training, new employees are clearly informed of HIWIN’s core philosophy. This philosophy is continuously reinforced through employee badges, monthly meetings, training newsletters, and on-the-job training. We aim for employees to internalize and align with HIWIN’s values, ensuring they feel secure in their roles while continuously learning and growing at HIWIN.

### Talent Acquisition Strategy

Since our establishment, HIWIN has continued to grow. As such, we must consider future organizational needs when hiring new employees. All employees are hired directly, and no temporary employees are employed through dispatch agencies. We strictly prohibit the hiring of child labor and only accept applicants aged 16 and above. For workers aged 16-18, we provide free transportation to and from work or accommodations. Employees hired through a rigorous interview process must submit complete onboarding documentation to ensure nothing is overlooked. HIWIN also employs on-site nurses for factories and regularly brings in occupational physicians. In addition, we regularly inspect workplace environments and audit processes to ensure the physical and mental health and safety of our employees, allowing them to focus on their work.

HIWIN recruits top talents through online platforms and college job fairs for overseas Chinese and international students. We focus on hiring foreign professionals in areas such as sales, R&D, IT, and manufacturing to foster an innovative organizational culture and maintain a stable talent pool for global market expansion. This approach helps build a diverse and inclusive workplace. Additionally, we participate in campus recruitment events across Taiwan, offering resume reviews and career counseling to help students transition smoothly from schools to employment and realize their professional aspirations. We also collaborate with the Ministry of Labor’s Employment Ultimate Program and the Workforce Development Agency’s skill training classes to provide job opportunities for young people.

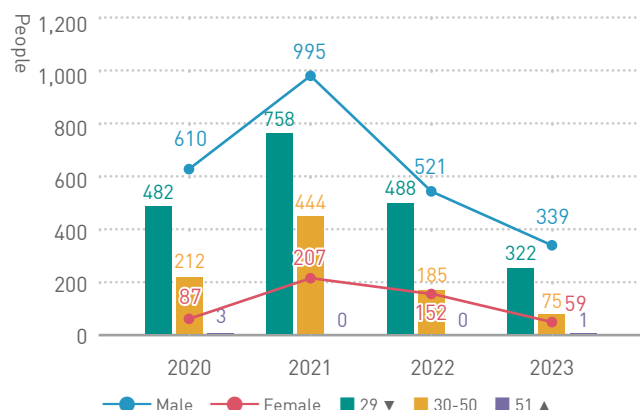
In response to the post-pandemic era, we have integrated sustainable and digital recruitment strategies, including online job fairs for recent graduates, the Line@ digital recruitment platform, online resume systems, and remote video interviews. These initiatives remove geographical and time constraints, providing job seekers with a more convenient and diverse job-hunting experience.

When screening candidates, HIWIN believes and upholds a fair, just, and transparent selection process. In 2023, 85% of new hires were male and 15% were female, with most new employees being under 30 years old. In 2023, to align with HIWIN’s goals of advancing smart automation and production technology, focusing on the digitization, predictive capabilities, and human-machine collaboration within the global industrial supply chain, we adjusted our recruitment criteria in 2023 to attract a younger, more innovative, and diverse talent pool to support future growth.

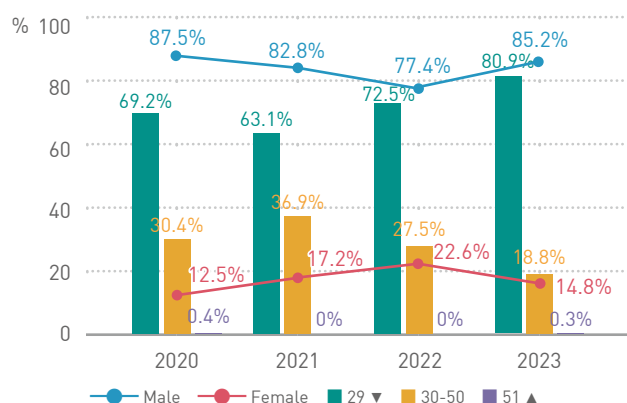




### Total number of new hires in 2020-2023 (by age & gender)

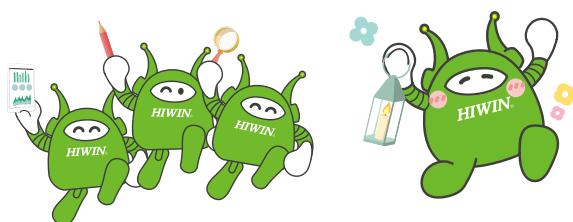


### Percentage of new hires in 2020-2023 (by age & gender)



Note:

1. The gender ratio of new recruits = number of individuals of different genders ÷ total number of new recruits.
2. The proportion of new recruits in each age group = number of individuals in each age group ÷ total number of new recruits.



### Gender composition of new employees in 2023

		Male		Female	
Types	Items	Gender composition			
Total	Number of people	85%, 339 ppl		15%, 59 ppl	
	29 ▼	84%, 272 ppl		16%, 50 ppl	
Age	30-50	88%, 66 ppl		12%, 9 ppl	
	51 ▲	100%, 1 ppl		0%, 0 ppl	
Nationality	Taiwan	83%, 286 ppl		17%, 59 ppl	
	Philippines	100%, 50 ppl		0%, 0 ppl	
	Vietnam	100%, 1 ppl		0%, 0 ppl	
	Malaysia	100%, 1 ppl		0%, 0 ppl	
	Indonesia	100%, 1 ppl		0%, 0 ppl	

Note:

1. The gender ratio for each employment status = number of individuals of different genders in that employment status ÷ total number of individuals in that employment status.
2. The gender ratio for each age group in each employment status = number of individuals of different genders in that age group and employment status ÷ total number of individuals in that age group and employment status.
3. The regional ratio of new recruits = number of new employees working in different regions ÷ total number of new employees.
4. The regional ratio of new recruits in each age group = number of new employees in that age group working in different regions ÷ total number of new employees in that age group.

### New entrants of both genders by age group in 2023

Age	New Hires		On-the-Job Employees		Onboarding Rate	
	Male	Female	Male	Female	Male	Female
29 ▼	272	50	1,118	226	24.3%	22%
30-50	66	9	2,579	452	2.6%	2%
51 ▲	1	0	230	43	0.4%	0%

Note: New entry rate = number of new recruits in different gender and age groups ÷ total number of employees in different age groups.

### Internal hiring rate & average recruitment costs in 2020-2023

Items	2020	2021	2022	2023
New Employees (ppl)	697	1,202	673	398
Internal Placement Rate (%)	53.0	58.3	78.6	62.8
Average Recruitment Cost (US\$)	347.7	233	440.2	928

Note:





1. Starting in April 2022, the employee salary structure was adjusted for an average increase of approximately 6% to 16%, leading to a higher retention rate of key talents, decreased turnover, and a more stable recruitment process.
2. Internal Placement Rate = (Number of internal candidates transferred to fill internal vacancies + promotions) ÷ (Internal vacancies + promotions throughout the year).
3. Recruitment costs include personnel expenses, advertising, and recruitment events. Due to intense competition in the labor market, we have upped our efforts to enhance our reputation as an employer, which has resulted in higher recruitment costs.

## Competitive Salary & Benefits

HIWIN determines salary and benefits based on employees' education, experience, and the position they are applying for, without any gender or ethnic disparities. Both female and male employees receive equal starting salaries and equal pay for equal work, which surpass the minimum wage mandated by law. Additionally, HIWIN offers quarterly bonuses, employee compensation, and year-end bonuses that are contingent upon HIWIN's performance and employees' individual accomplishments. For example, engineers at HIWIN earn more than twice the minimum wage. In 2023, the hiring registration rate for R&D engineers reached 60%. The annual income for HIWIN employees is consistently ranked above the industry average (according to information disclosed on the Market Observation Post System), and starting salaries for new employees in Taiwan and globally exceed local minimum wages.

HIWIN implements a comprehensive performance management system that includes goal management, team evaluations, multi-dimensional assessments, and agile processes to review employee performance. Employees are encouraged to set ambitious, challenging goals, and management is encouraged to provide real-time feedback

and recognition to effectively enhance our organizational performance. Senior executives and department heads regularly align departmental KPIs with the company's strategic goals. These KPIs are reviewed by senior management, ranked, and assigned ratings, which serve as the basis for bonuses, promotions, and salary adjustments. A distinctive feature of HIWIN's rewards program is the allocation of bonuses based on employee performance. For instance, under the royalty system, employees whose research and development efforts yield new technologies that generate profit for the company receive regular bonus payments, akin to royalties, allowing them to share in the long-term success of their innovations.

Type	System	Audience	Schedule	Implementation	Performance Coaching Measures
 Target Management	Performance Review	All staff	quarterly annually	<ol style="list-style-type: none"> <li>Department heads set annual and quarterly goals (including work performance, competency, and participation) for both the department and individual roles based on the company's strategic objectives.</li> <li>Employees collaborate with their immediate supervisors to align on work goals and measurable KPIs to produce performance outcomes.</li> <li>Supervisors monitor performance through daily management, identifying gaps between targets and progress, and providing timely guidance and feedback.</li> </ol>	The unit supervisor conducts care interviews and formulates performance coaching improvement measures to consistently monitor the progress of improvement.
	New Assessment	New hires	1 <sup>st</sup> month 3 <sup>rd</sup> month	Supervisors establish performance targets, execution plans, and competency expectations for new employees, and offer assignment recommendations based on their performance.	
 Team	Performance Review	All staff	quarterly annually	<ol style="list-style-type: none"> <li>Department heads set annual goals for the department and individual team members based on the company's strategic objectives.</li> <li>Department heads communicate these goals to ensure clarity among team members, producing performance outcomes through teamwork and cross-departmental collaboration.</li> <li>Senior executives assess department and individual performances based on KPIs.</li> </ol>	
 Multi-Dimensional	Competency Evaluation	Key supervisory roles	annually	Evaluates key supervisors through feedback from direct supervisors, colleagues from other departments, and subordinates to objectively assess performances in cross-team cooperation, innovative management, and strategic planning. Note: HIWIN launched planning for multi-dimensional assessments in 2023, which are expected to be implemented in 2024.	
 Agility	Monthly Review	Manufacturing staff	monthly	Dynamically monitors organizational productivity by assessing employee performance each month and providing real-time feedback to keep track of performances in the workplace.	

HIWIN has a robust financial system and follows the Employee Retirement Regulations based on the Labor Standards Act and Labor Pension Act. We have established a stable retirement fund allocation system and payment plan to ensure secure retirement benefits for our employees. Actuaries are appointed to conduct regular actuarial calculations and provide retirement pension reports, ensuring adequate provisions and safeguarding employees' rights to receive retirement benefits in the future.



#### HIWIN Long-term Incentive Program

- In accordance with HIWIN's Employee Stock Subscription Plan for Capital Increase, 10% of new shares issued during a capital increase are reserved for employee subscription.
- This plan advocates for Employees Owning Shares, rewarding employees with outstanding performance, seniority, certain levels, and contributions with the right to subscribe to HIWIN shares, allowing them to share in our operational success.
- HIWIN evaluates capital increase plans each year and implemented these plans in both 2020 and 2022. In 2022, 609 out of 4,714 employees were eligible to participate, with 492 actually subscribing to shares.



Exemplary Employee in 2023

#### Ratio of HIWIN's average income to local minimum wages in 2023

Region/Subsidiary		Male	Female
Taiwan	HIWIN	1.2	1.2
	Matrix	1.2	1.2
	eterbright	1.1	1.11
China		1.4	1.39
Germany		1.34	1.46
U.S.		1.46	1.45
Japan		1.3	1
Italy		1.08	1.07
South Korea		1.29	1.23
Singapore		N/A	N/A
Switzerland		1.05	1.15
U.K.		1.05	1.03

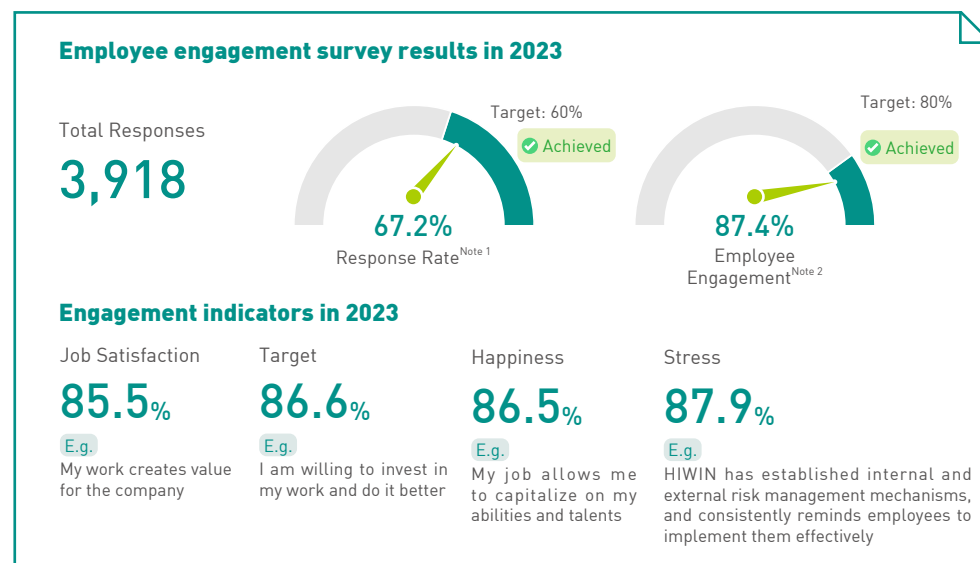
Note:

- The salary definition is based on HIWIN Technology's average fixed monthly salary for entry-level employees in that region.
- Ratio=the ratio of the salary of entry-level employees÷the local minimum wage.
- In Singapore, there is no legislated minimum wage.

## Employee Engagement Survey

Starting from 2023, HIWIN aims to conduct an employee feedback survey every two years to understand the importance employees place on management and work-related issues. This initiative allows us to listen to employees' voices and opinions, using their suggestions to improve management practices and foster a harmonious work environment.

The 2023 survey was structured around our core business philosophies, covering areas such as the HIWIN brand, Professional Excellence, Working Enthusiasm, Ethics & Responsibility, continuous innovation, and sustainable development.



Note: 1. The response rate statistics include overseas subsidiaries of HIWIN.

2. 87.4% of the people chose positive feedback with a score of 4 or above on the five-point scale.

### • Optimization actions

HIWIN places great importance on employee feedback, conducting regular and ad-hoc interviews with, among others, key talents and employees eligible for retirement, to better understand their thoughts and suggestions and strengthen communication between labor and management. Additionally, we work closely with department heads to support new employees in their adaptation process, helping them quickly integrate into the HIWIN family, align with our goals, and excel in their roles.

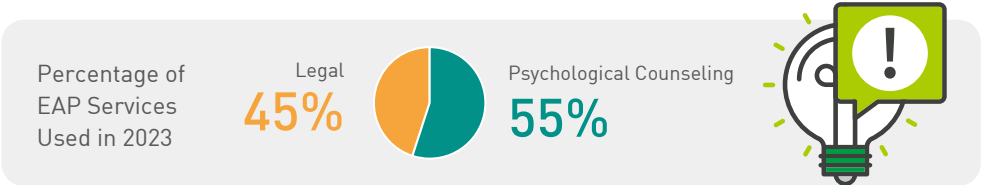
## Benefits Policy

We have put great care in designing our benefits policy to ensure that employees can focus on their work without other concerns.

Benefits	Items
1 Employee Assistance Programs (EAPs)	<ol style="list-style-type: none"> <li>Four types of consulting services               <ol style="list-style-type: none"> <li>Psychological counseling: in cooperation with 7 counseling offices, employees can receive free counseling services.</li> <li>Healthcare and medical services: regular in-house medical clinics, health education consultations, and medical treatment services provided by occupational physicians.</li> <li>Legal assistance (including debt disputes): assisting in providing lawyer resources and legal aid channels.</li> <li>Tax consultation: assisting in providing government agency consultation channels for tax-related matters.</li> </ol> </li> <li>In work, health, and life aspects, we carry out various project plans, activities, and training courses with employees as the starting point, aiming to help them strike a balance between physical and mental development.</li> <li>We actively cultivate EAP (Employee Assistance Program) seed personnel in each department, enabling them to promptly identify situations and provide proactive assistance.</li> </ol>
2 Insurance/Healthcare	Group insurance, regular check-ups.
3 Comprehensive Employee Insurance Plan	HIWIN ensures that each employee is covered by labor insurance and National Health Insurance. Additionally, to provide further security for employees and their families, the Company has added group insurance coverage for medical, accident, and major illness for both employees and their dependents.
4 Employee Dormitory	In order to address the accommodation expenses and safety issues faced by employees from out of town, HIWIN has taken the initiative to offer reasonably priced and well-maintained employee dormitories. These dormitories are equipped with a comprehensive safety management system, including round-the-clock security guards and regular disaster drills. Additionally, our dormitory supervisors are dedicated to providing care and support, ensuring that employees can live with peace of mind.
5 Dining Support	Each quarter, we provide subsidies for departmental gatherings to encourage team bonding, strengthen teamwork, and bring employees closer.
6 Club Activities	Employees are encouraged to establish and participate in clubs to promote better health and shared interests, fostering closer relationships among employees.
7 Wedding and Funeral Support	Employees are eligible for wedding allowances, which vary from US\$117 to US\$1,954, based on their position and length of service. In the event of an employee's or their dependent's unfortunate demise, a condolence allowance ranging from US\$101 to US\$3,583 is granted.
8 Childcare Support	<ol style="list-style-type: none"> <li>HIWIN encourages employees to have children and provides a childcare subsidy of US\$5,862 for each child over three years.</li> <li>A childbirth allowance of 200 euros is provided for the birth of the first child (in some overseas subsidiaries).</li> </ol>
9 Work from Home	In response to the pandemic, we offer flexible remote work options to ensure the health and safety of our employees.
10 Family Support	<ol style="list-style-type: none"> <li>Employees can take Parental Leave for Education to attend their children's school activities, strengthening parent-child relationships.</li> <li>Employees who are only children can take up to five days of paid leave annually to care for hospitalized parents over 60 years old.</li> <li>Male employees are granted 15 days of paid leave following the birth of their child to support and care for their family.</li> <li>Employees with family members requiring long-term care can apply for reduced work hours to better care for their loved ones.</li> <li>HIWIN offers one to five days of leave to support grieving employees through their loss.</li> </ol> <p>※ Items 2-5 are applicable to some overseas subsidiaries.</p>
11 Additional Benefits	Annual leave for first-year employees (10 days), employee cafeteria, employee parking, free meals and snacks during overtime, year-end parties, travel subsidies, festival bonuses, birthday bonuses, discounts at partner stores, sports competition prizes, massage services, cultural activities, and a wide range of wellness activities.

1 Employee assistance programs (EAPs)

Since 2022, HIWIN has implemented Employee Assistance Programs (EAPs) to provide systematic professional services, plan initiatives, and offer resources aimed at preventing and resolving issues that could hinder employee productivity, ensuring that employees can maintain their mental and physical health and enabling them to fully engage in their work. To provide timely support to employees in need, HIWIN offers a direct communication channel through the 8085 hotline (which translates to “help you, help me” in Mandarin) or by emailing eap@hiwin.tw. Dedicated personnel are available through these channels and will provide immediate response to any concerns raised by employees, removing factors that may interfere with their work and allowing them to commit to their work.



Through EAP services, employees have access to professional assistance for relief from work stress, reducing workplace distractions and increasing job engagement. In 2023, sensitivity training were conducted to help HR and department representatives become more sensitive to the emotional responses of their colleagues and to report any potential crises.

2 One stop contact and optimizing employee care

HIWIN is committed to creating a secure and supportive work environment, actively assisting employees facing attendance issues, medical leaves, and major illnesses. Starting in 2022, HIWIN introduced the Employee Care Reporting initiative, which assembles a care team of unit supervisors, occupational health nurses, and HR personnel to thoroughly analyze employees’ work conditions, workplace environments, and past health records Upon identifying the need of employees, the team then arranges resources such as hospital visits, occupational health consultations, return-to-work plans, and psychological counseling. They also assist employees and their families in applying for relevant welfare benefits and insurance claims to support them through difficult times. In 2023, a total of 76 employees, including eight foreign employees, received assistance from the care team, demonstrating HIWIN’s commitment to employee well-being.



Supporting employees and families through difficult times

In July 2022, a HIWIN employee experienced a heart attack at home. After emergency treatment, the employee fortunately regained consciousness but remained in critical condition and was transferred to a long-term care facility for continued care. Known for their dedication and strong sense of responsibility, this employee was highly trusted by both supervisors and colleagues. Upon learning of the heart attack, the department head regularly checked in on the employee at the hospital.



The family thanked HIWIN in a heartfelt card.

As the employee was the primary breadwinner for their family and had two young children, HIWIN stepped in to alleviate the family’s financial burden by assisting with insurance claims and providing a special condolence fund from the global chairman. Additionally, an internal fundraising campaign was launched to ensure the employee and their family was supported through this challenging time.



Charity beyond borders

In June 2023, a foreign employee at the Yunlin Factory fell unconscious in their dormitory and, despite medical efforts, sadly passed away. The employee had come to Taiwan in hopes of improving their family’s circumstances.

Recognizing the potential financial strain on the family due to the high costs of repatriating the body, HIWIN, in the spirit of humanitarian aid, quickly raised donations from colleagues within 10 days and provided an additional bereavement fund from the global chairman, spreading warmth across borders. To further ease the family’s financial burden, HIWIN assisted in securing insurance claims that will provide a survivor’s pension to the family until their children reach adulthood.

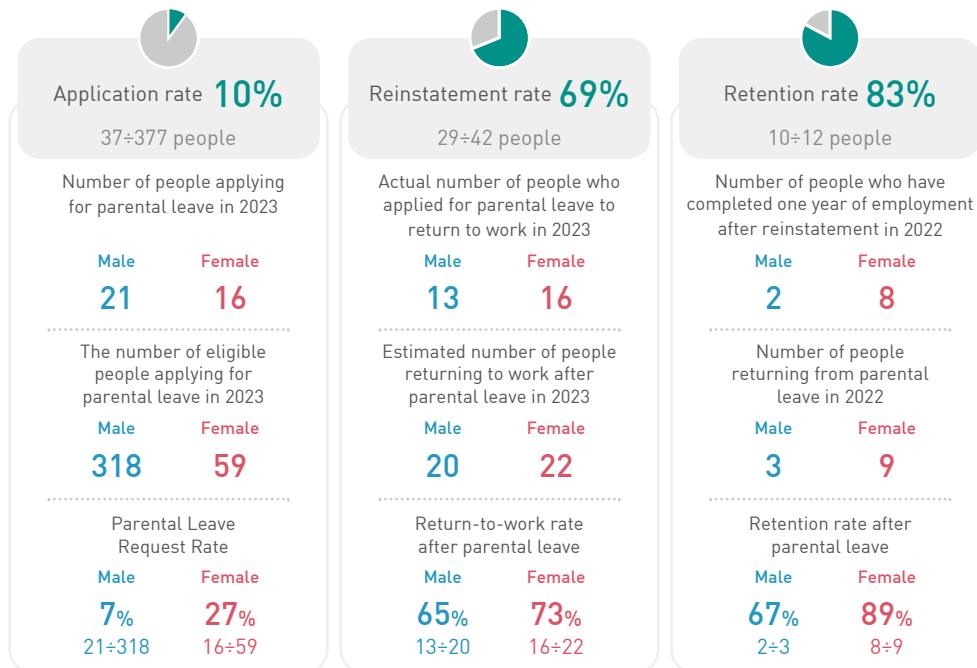
At HIWIN, we ensure that both local and foreign employees are given the same care and support. In September 2023, the labor division head and overseas compatriot officer from the Philippine Representative Office in Taiwan visited the Yunlin Factory to express their gratitude to HIWIN for taking good care of Filipino nationals as they work in Taiwan.



### 3 Childcare support

Since 2013, HIWIN has been promoting the “Childcare Support” policy to enhance Taiwan’s birth rate. This policy encourages employees to have children and share the burden of childcare expenses. HIWIN provides a subsidy of US\$ 5,862 per child for a duration of three years. In the case of twins, the subsidy is doubled. If an employee needs to apply for parental leave without pay during the subsidy period, they are not required to return the received subsidy and can continue to receive it after resuming work. HIWIN respects labor rights and understands the challenges of caring for young children. As such, all employees, male or female, are eligible for parental leave according to relevant regulations. In 2023, 37 employees applied for parental leave, and 42 employees were scheduled to return during the year. The actual number of employees returning was 29, which is a return rate of 69%. Among employees who returned to work after taking parental leave in 2022, 10 out of 12 were still employed at the end of 2023, reflecting a retention rate of 83%. Approximately 60% of all parental leave applications were from male employees, demonstrating a commitment to gender equality and shared family responsibilities. Our supportive welfare measures empower employees to return to the workplace and realize their own values.

#### Applications for parental leave in 2023



Note: Employees who are eligible for parental leave but did not apply for it can still receive the Childcare Support provided by the Company, which amounts to a total of US\$5,861 per child for a period of three years.



Accumulated Childcare Subsidy Recipients as of End of 2023

**1,478** individuals

Return Rate of Employees After Parental Leave in 2023

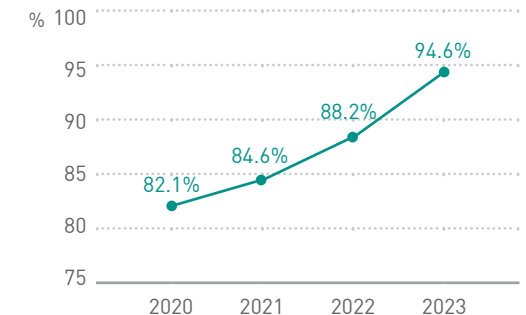
**85%**

### Retention Rate

HIWIN is committed to providing comprehensive training resources and ensuring that employees are placed in roles that align with their talents and abilities. This approach enables employees to thrive in suitable positions and grow alongside the Company. HIWIN upholds principles of fairness and objectivity in all aspects of talent acquisition, employment, development, and retention. HIWIN offers equal opportunities and resources to all employees. Through retention policies such as competitive compensation and benefits, training and development opportunities, employee health management, effective communication, and family-oriented activities, HIWIN ensures that every employee can work with peace of mind, unleash their potential, and experience continuous career growth.

The HR Dept. at HIWIN follows the PDCA management approach, which involves setting goals at the beginning of the year, conducting mid-year (quarterly) reviews and adjustments, and performing year-end evaluations and feedback. This creates a positive cycle of continuous improvement. To retain talents in key positions, HIWIN holds regular interviews with these talents to identify potential reasons for resignation and take proactive measures to retain them. In 2023, the retention rate for key talents was 94.6%.

#### R&D key talent retention rate



Note:

1. Key Talent: employees in the R&D department with at least two years of tenure and a performance rating of B+ or above.
2. Retention rate = (initial headcount - number of departures) ÷ initial headcount.

#### Organic personnel mobility

When an employee applies to resign, their supervisor and the HR department will conduct separate exit interviews to understand the true reasons behind the departure, triggering a mechanism to reassign or retain the employee when possible. HIWIN also regularly analyzes reasons for resignation to develop response measures. In 2023, we strengthened our care interviews and employee engagement surveys to monitor employee intentions,

understand their thoughts, and offer assistance where needed. As a result, the turnover rate decreased to 10% in 2023, down 4% from 2022. HIWIN firmly believes in maintaining a continuous influx of new talent and promoting organizational renewal. Therefore, we encourage appropriate personnel mobility to continually welcome like-minded partners. HIWIN strictly adheres to the regulations of the Labor Standards Act when handling cases involving employees deemed unfit for their roles, violations of Article 12 of the Labor Standards Act, or termination of employment contracts due to organizational operational changes.

### Employee turnover rate in 2020-2023

Turnover Statistics and Distribution		2020	2021	2022	2023
1 Gender	Female	19%	17%	15%	12%
	Male	16%	17%	14%	10%
2 Age	29 ▼	29%	28%	23%	18%
	30-50	11%	12%	11%	7%
	51 ▲	5%	8%	6%	2%
3 Position	Senior Management	10%	9%	0%	0%
	Mid-Level Management	6%	7%	5%	5%
	Junior Management	5%	4%	5%	4%
	Non-managerial Positions	18%	18%	16%	11%
4 Nationality	Taiwan	16%	16%	13%	9%
	Philippines	18%	18%	21%	15%
	Vietnam	24%	31%	23%	27%
	India	0%	0%	17%	0%
	Malaysia	0%	0%	17%	17%
	Indonesia	0%	0%	50%	25%
	Brazil	-	-	-	100%
5 Cause for Turnover	Voluntary Resignation	16%	16%	13%	10%
	Forced Resignation	1%	1%	1%	0%
6 Overall Turnover Rate		17%	17%	14%	10%

Note: 1. Excludes employees who left within three months of joining.

2. Turnover Rate = (Total Number of Departures) ÷ (Average Number of Employees at the Beginning and End of the Period).

## 6.3 Talent Capital Development

### Talent Cultivation

To maintain a long-term competitive advantage and improve the capabilities of our employees, HIWIN has implemented a comprehensive education and training system, fostering an environment conducive to learning. This system encompasses various types of training, including orientation for new employees, core functional training, professional skill development, managerial skill enhancement, and external training opportunities. Our employees have access to a wide range of training options, such as classroom sessions, digital learning, on-the-job training, external courses, study groups, lectures, exhibition visits, academic pursuits, job rotations, and project assignments. The training content and methods are diverse and abundant, providing employees with ample opportunities for development. In 2023, as the pandemic subsided, HIWIN resumed in-person training while integrating digital learning materials to offer greater flexibility, attracting more employees to participate in training and ensuring that all employees had opportunities to receive training.

### Average employee training hours in 2020-2023 (gender, age, employee type)

unit: US\$

Year	Gender		Age			Employee Type	
	Male	Female	29 ▼	30-50	51 ▲	Direct Employees	Indirect Employees
2020	25.37	25.07	13.40	27.61	57.90	18.97	36.7
2021	18.83	17.71	15.79	16.75	24.53	13.22	26.12
2022	16.89	18.98	21.43	15.62	16.70	10.68	30.92
2023	23.16	21.26	27.30	21.01	22.86	17.72	33.23

Note: Training hours include classroom training and external training hours, but do not include others such as job coaching and job rotations.

### Training expenses and hours in 2020-2023

Year	Total Training Expenses (US\$ thousand)	Total Number of Trainees (ppl)	Total Training Hours (hrs)	Average Training Hours per Employee (hrs)
2020	670.6	23,777	119,473.8	25.69
2021	375.7	16,237	81,356.5	16.79
2022	341.9	15,814	81,178.8	17.22
2023	433.2	21,889	103,971.6	22.37

Note: 1. Training hours include classroom training and external training hours, but do not include others such as job coaching and job rotations.

2. Due to the 2020-2021 pandemic situation, interactive and experiential in-person courses were temporarily suspended.

Annual Investment in Employee Education and Training

US\$ **325.7** thousand +

### Employee education and training in 2023

Average Training Expenses per Employee

US\$ **65.1** +

Total Training Hours

**103,000** hours

Total Number of Trainees

**21,000** individuals

Average Training Hours per Employee

**22.37** hours

Participation Rate

**87.54%**

Satisfaction Score

**4.59**

Completion Rate of Key Courses

**89.6%**



HIWIN is an organization that prioritizes learning and development. We not only invest in the professional skills of our employees but also organize various activities to promote their overall well-being. These activities include health seminars, volunteer training, service events, cultural enrichment, parenting workshops, legal seminars, and more. Our goal is to foster a culture of lifelong learning and ensure a balanced development of our employees' work capabilities.

Growth Rate of New Generation Talent

**36.05%**

Subsidies to Outstanding Employees for Degree Programs or Continuing Education

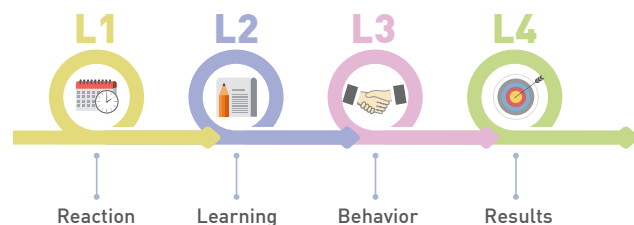
**US\$ 133.3 thousand for 30+ employees**

Incentives Awarded in 2023

**US\$ 57.3 thousand**

※ Starting from 2021, HIWIN has been providing learning incentives or project bonuses for application of training into their work to encourage employees who complete training and meet relevant criteria.

### Training efficiency tracking



In 2023, we continue to plan our training initiatives with a focus on Smart Manufacturing, Quality Improvement, and Enhanced Management. To evaluate the effectiveness of our training programs, we utilize the Kirkpatrick Model's four-level training evaluation framework, which includes Reaction, Learning, Behavior, and Results. This approach allows us to validate the outcomes of our annual key training and development projects. In 2023, we produced a total of 266 post-training projects/work reports, resulting in a combined financial benefit of US\$ 8.63 million.

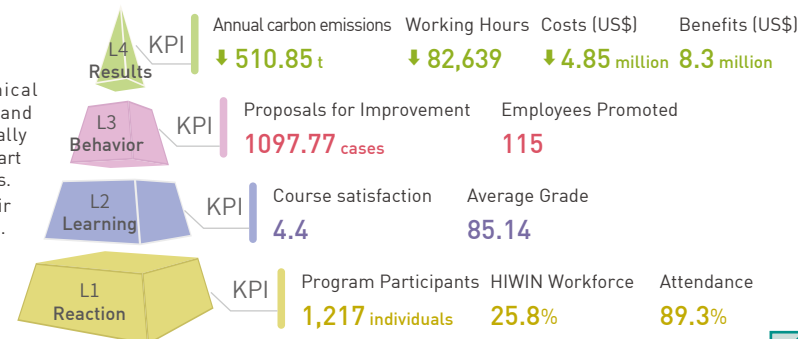
### Smart manufacturing talent development program

#### Course focus

- ① The primary focus of the program is on mechanical structures, with secondary focuses on automation and AI courses. The program is designed to systematically enhance the knowledge of employees in the field of smart manufacturing by combining their practical experiences.
- ② Their outcomes in the program are reflected in their annual performance evaluations and promotion results.

#### Target audience

Production, Quality Assurance colleagues.



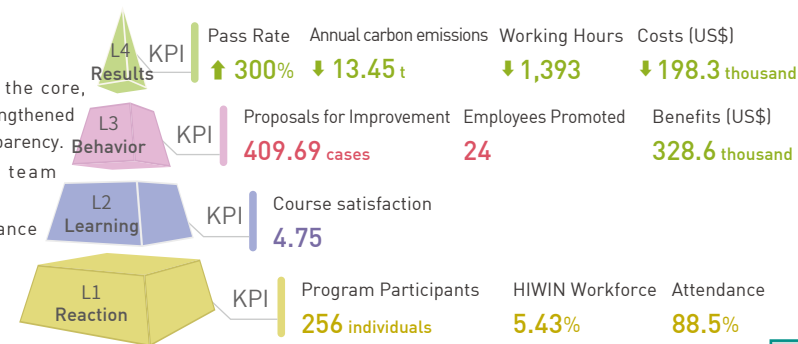
### Quality control circle & 8D training program

#### Course focus

- ① Continuous improvement and quality control are at the core, enhancing production efficiency and quality through strengthened process management, integrated information, and transparency.
- ② Cultivating problem-solving skills to enhance team performance.
- ③ Applying a scientific approach for validation to enhance product performance and generate company revenue.

#### Target audience

Production, Quality Assurance, R&D, and indirect dept. colleagues.



### Return on investment in human capital

	Items	Units	2020	2021	2022	2023
a	Total Revenue	US\$ million	606.3	831.1	726.6	575.1
b	Total Operating Expenses	US\$ million	64.7	76.1	78	41.2
c	Total Employee-Related Expenditures (incl. payroll and benefits)	US\$ million	136.1	178.9	161.4	124.9
	HC Human Capital ROI (a - (b-c)) ÷ c	%	4.98	5.22	5.02	5.27
	Total Number of Employees	people	4,650	4,846	4,714	4,648

Note: According to the definitions provided by the Dow Jones Sustainability Index, activities are categorized as one-time investments or business-related activities, and all investments are converted into monetary values (in US\$) to calculate the ratio. As such, the outcomes are presented in terms of the total number of unique trainees, non-unique trainees, and training hours.

## 6.4 Workplace Safety and Health

HIWIN prioritizes the physical and mental well-being, as well as the safety management, of its employees and contractors. In addition to adhering to legal regulations, the Company also promotes safety awareness among employees and implements various healthcare measures. Its goal is to create a secure and healthy work environment, prevent occupational accidents and illnesses, and establish a comprehensive Safety and Health Mutual Protection Circle.

### Promotion of Safety Culture

In 2017, HIWIN, led by President Enid H.C. Tsai, launched a joint declaration of safety culture activities among department managers. This initiative promoted active employee involvement in identifying hazards, reporting incidents, and suggesting innovative improvements. Furthermore, the Company implemented a rewards system to foster a safety and health mindset as an integral part of every employee's DNA. HIWIN's safety culture encompasses three key dimensions: policy, management, and individual aspects.



In 2023, every department conducted self-assessments and discovered a total of 523 hazards through independent inspections and regional activities, and 1,274 potential hazards were discovered during regional joint prevention activities were identified and addressed. Beginning in 2022, a quarterly analysis of weaknesses in safety culture promotion across different processes has been implemented. This includes the planning of relevant educational training, which has effectively improved the effectiveness and results of safety culture promotion.



## 1 Achievements in promoting safety culture in 2023



## 2 Occupational health and safety performance indicators

HIWIN employs a four-level indicator system (Safe, Caution, Careful, Dangerous) to assess Occupational Health and Safety performance. This system incorporates both proactive and reactive indicators within the framework of our safety culture. Proactive Indicators: Encourage employees to actively participate in safety and health activities and offer suggestions to improve safety; Reactive Indicators: Include the number of occupational injuries, incidents, and participation rates in environmental, safety, and health training. To create a safe and friendly working environment where employees can work with peace of mind, we focused on analyzing weaker departments with lower performance scores in 2023. Through targeted training and on-site audit guidance, we effectively reduced the "Dangerous" and "Careful" indicators. The proportion of these indicators across departments was 4.1%, a 19.3% reduction compared to 2022.

To enable employees to learn from the safety performance and practices of units with outstanding safety culture, HIWIN promoted safety culture activities in 2023 through the execution of four evaluation criteria:

- ① Safety Moment Micro-Learning Activities: Sharing incidents to reverse-engineer improvement measures.
- ② Occupational Safety and Health Guidance: Providing guidance based on management goal achievement, recurrence rate of deficiencies, and management performance.
- ③ Development of a digital occupational injury map for hazard awareness training
- ④ Establishment of inspection topics to cross-audit, identify hazards, and conduct supervisor-level safety observation across factories.

### Proactive Management Performance Indicators

- Occupational disaster prevention improvement
- Safety and Health Activities
- Contractor management
- Near miss incident reporting

### Reactive Management Performance Indicators

- Enforcement of occupational safety and health rules and regulations
- Safety and health training
- Safety and health meeting attendance rate
- Injuries/Equipment Accidents
- Lack of internal and external safety and health audits



Safety Performance Indicators	Performance Scores
Safe	≥ 91
Caution	≥ 86
Careful	≥ 81
Dangerous	< 81

## Occupational Health and Safety

HIWIN adheres to the ISO 45001:2018 Occupational Health and Safety Management System standards, which were issued in March 2018. By utilizing the PDCA framework, HIWIN has made modifications to the existing OHSAS 18001 regulations. These modifications include expanding the standard to involve support and participation from leadership levels, as well as the collection and planning of internal and external issues. Additionally, HIWIN addresses stakeholder needs and expectations, identifies and assesses risks, consults and communicates with non-management personnel, applies performance indicators, and evaluates the effectiveness of corrective and preventive measures. Safety concerns and improvement opportunities are identified through mechanisms such as management reviews, internal audits, automatic inspections, and safety and health inspections. This ensures that the principles of the system are effectively implemented at the management level.

Furthermore, HIWIN recognizes its employees as a crucial core competency and is dedicated to enhancing their knowledge, attitudes, and qualities regarding safety and health. In 2019, HIWIN became the first domestic precision machinery manufacturer to receive ISO 45001:2018 certification. HIWIN consistently maintains this certification on an annual basis, covering all employees and contractors. In 2023, HIWIN Headquarters, Jingke Factory 2, Factory 2, Yunlin Factory 1, Yunlin Factory 3, and Dapumei Factory 1 also obtained CNS 45001:2018 certification, earning the "Taiwan Occupational Safety and Health Management System" (TOSHMS) certificate.

Note:

1. ISO 45001:2018 certification has been successfully obtained for the Headquarters, Jingke Factory 2, Factory 2, Yunlin Factory 1, Yunlin Factory 2, Yunlin Factory 3, Dapumei Factory 1, Dapumei Factory 3.
2. Factory 1 was relocated and merged with Factory 3 in August 2023. As such, a separate ISO 45001:2018 certification was not pursued. However, the management system remains operational.

### Occupational health and safety scope



### 1 Workers covered by the Occupational Health and Safety Management System

As of the end of 2023, the workforce at HIWIN can be categorized as follows: employees [4,648 individuals, 80.5%], contractors [1,073 individuals, 18.7%], outsourced cleaning staff [27 individuals, 0.5%], outsourced security personnel [9 individuals, 0.2%], and non-formal employees such as research grant recipients and part-time staff [2 individuals, 0.1%].

### 2 Efficacy & outcomes of internal audits

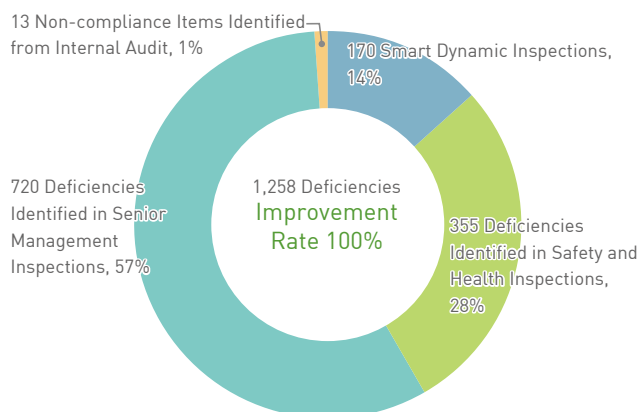
To ensure that all operational procedures are implemented in accordance with regulations and to comply with the ISO 45001:2018 management process, HIWIN conducts at least two internal audits annually. In 2023, the internal audit results identified a total of 1,418 compliance items (95.17%), 13 non-compliance items (0.87%), and 59 recommendations (3.96%). Upon further analysis, the non-compliance items and recommendations were primarily related to document management, risk and opportunity identification, and fire emergency management. In compliance with audit regulations, these issues were resolved within one month with a 100% improvement rate.

To maintain safety and health in operational sites, routine Safety and Health Inspections and Dynamic Inspections are consistently held across all HIWIN factories to identify unsafe behaviors, environments, and equipment; ensure ongoing safety and health improvements in each factory; prevent occupational accidents; and protect the safety and health of our

workplaces and workers. Additionally, all HIWIN factories are required to undergo quarterly Senior Management Inspections, where senior management from each site conduct safety and health inspections with personnel of all levels, demonstrating a commitment to safety culture and ensuring operational safety and health at all levels.

In 2023, a total of 525 deficiencies were identified through safety and health inspections and dynamic inspections. During the quarterly senior management inspections, 720 deficiencies were also identified. The three most common categories were operational management (24%), use of safety protection equipment (21%), and automatic inspections (10%). All factories are required to confirm and rectify any similar deficiencies uncovered in internal inspections and implement on-site management, personnel safety and health training, improvement suggestions, and safety culture activities to instill safety and health practices at all levels and thereby reduce the likelihood of recurring deficiencies. By the end of 2023, all 1,259 deficiencies identified in internal audits had been successfully resolved and tracked.

### Summary of internal audit results in 2023



### 3 Participation, consultation, and communication on occupational health and safety issues

HIWIN has established Occupational Health and Safety Committees at each operational location to create a comfortable and safe environment and facilitate communication between labor and management. The committees consist of supervisors from various levels, safety personnel, and labor representatives, with a total of 261 members. Of these members, 97 are labor representatives, accounting for 37% of the total. Regular quarterly meetings are held to collectively provide input on the Company's safety and health policies, as well as to review, coordinate, and advise on safety and health-related matters. Simultaneously, quarterly meetings are held to make collective decisions on the planning and operation of the safety and health system. To further enhance communication, a safety and health consultation mailbox has been established, and occasional electronic surveys are conducted for employees to provide feedback.



### Hazard Identification, Risk Assessment, and Accident Investigation

HIWIN has implemented protocols for identifying hazards, assessing risks, and evaluating opportunities. A thorough hazard identification is conducted for both routine and non-routine activities, with regular reviews and revisions conducted annually. Prior to making any changes to processes, equipment, raw materials, or work environments, hazard identification is performed, taking into account chemical, physical, human factors engineering, biological, and other hazards. Personnel responsible for conducting hazard identification, risk assessment, and opportunity evaluation are required to undergo a minimum of two hours of training in risk assessment. Enhancing hazard identification capabilities to reduce operational risks.

### Hazard identification and risk & opportunity assessment process



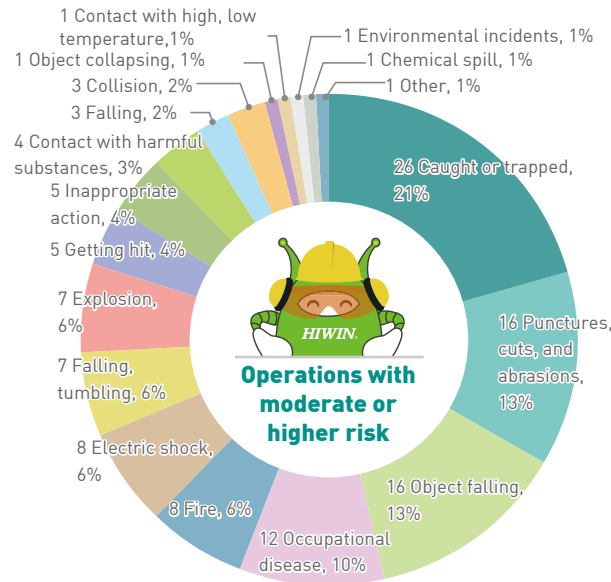
All HIWIN units classify operational activities, environmental equipment, or manufacturing processes and conduct job and task audits based on potential hazards. In alignment with each unit's operational procedures, every operational step is documented in the Hazard Identification, Risk Assessment, and Opportunity Evaluation Form. Hazards are then ranked according to severity and likelihood, with risk levels determined using the Safety Risk Assessment Matrix. Targeted improvement plans are implemented for high-risk hazards identified in the year as a way to continually reduce operational risks, ensure a safe working environment for workers, and minimize the likelihood of occupational disasters.

In 2023, each factory has completed various operational risk and opportunity assessments. There are 125 operations with moderate risks listed as “unacceptable risks,” and risk control measures have been implemented. 23 of them have also been listed in the 2024 target management plan. For the highest proportion of “human hazards” operational risks, the main improvement measures are to replace improper actions and force with labor-saving tools and changes in related mechanisms.

The Safety and Health Work Guidelines, as well as the Contractor Safety and Health Management Manual, clearly state that “Employees (contractors) who encounter an immediate danger have the right to retreat. They may stop work and retreat to a safe place without endangering the safety of other workers. They must promptly report to their immediate supervisor (or the supervising unit) and are not subject to dismissal, reassignment, withholding of wages during the stoppage period, or any other disadvantageous actions.” to protect the rights and interests of workers.

#### • Hazardous chemical management and operation environment monitoring

Hazardous chemicals used in various stages of each plant’s processes are stored in designated areas and managed accordingly. The storage locations and containers are labeled in accordance with the Hazardous Chemical Labeling and Communication Rules and the GHS (Globally Harmonized System of Classification and Labelling of Chemicals) Regulations. Safety Data Sheets (SDS) are also placed in visible areas for easy access by operating personnel, enabling them to review them at any time and implement relevant emergency response measures. We also developed Hazard Identification Cards (H-Cards) for chemicals used throughout factories to help identify the storage locations of chemicals, providing crucial information during disaster response and preventing further risks as emergency procedures are activated.



#### Newly hired personnel (handling hazardous chemicals)

- ▶ Upon joining HIWIN - receive general education and training on the hazardous chemicals.

#### Current employees

- ▶ Every three years - undergo on-the-job education and training to ensure their awareness and understanding of chemicals.

#### Employees performing tasks with specific health hazards

- ▶ Accordance with the Regulations on Labor Health Protection - specialized physical examinations and health assessments are conducted.
- ▶ If a health abnormality is identified - an immediate assessment of job suitability will be conducted. If necessary, the worker’s exposure time may be reduced or they may be reassigned to another position to prevent further adverse effects on their health.

HIWIN also adheres to the Implementation Measures for Occupational Work Environment Monitoring and contracts qualified agencies to conduct regular operational environment monitoring every six months. In 2023, the monitoring covered 56 items, including noise, CO<sub>2</sub>, dust, comprehensive temperature heat index, oil mist, xylene, and ethanol. A total of 2,113 monitoring points were inspected (covering both areas and personnel). Of these, 13 noise points, 5 illuminance points, and 2 comprehensive temperature heat index points exceeded permissible standards, and improvements were made through engineering adjustments, administrative management, or the use of protective equipment.

## Contractor Occupational Health and Safety

HIWIN holds an annual meeting for contractor agreement organization to promote, consult, and communicate occupational health and safety regulations. In 2023, a total of 206 contractors participated. Before contractors enter HIWIN factories, they undergo contractor safety training and testing. In addition to occupational safety and health personnel auditing the safety of contractor operations, HIWIN has implemented measures to enhance safety management, encouraging all employees to actively participate in safety oversight and immediately uncover and eliminate any safety risks. Employees that identify a safety hazard in contractor operations can report it to the Occupational Safety and Health Department and the contractor management unit. In 2023, audits of contractor operational safety identified 66 potential hazards, which were mainly in the categories of safety and health management (22%) and protective equipment management (18%). Contractors were required to address and correct these hazards within a specified timeframe.

To simplify and streamline the process for contractors to complete environmental, safety, and health procedures before entering HIWIN factories and strengthen communication with contractors to prevent violations or occupational accidents, HIWIN took the following actions in 2023:



- ① Establishing a Contractor Section on the HIWIN Website: Designs were completed in 2023 but require further adjustments, which are expected to be completed in March 2024.
- ② Developing a Contractor Environmental, Safety, Health, and Energy Handbook: The handbook, with texts and graphics, is based on the Contractor Safety, Health, Environmental, and Energy Management Manual to help contractors better understand the Manual. The framework was completed in 2023, and designs are expected to be completed in March 2024.
- ③ Creating a Contractor Management Q&A Webpage: The content is ready and the webpage is expected to be operational by March 2024.
- ④ Implementing a Contractor Access Control System: The system is expected to be completed by April 2024.

#### Contractor management process



## Occupational Accident Improvement

To effectively reduce occupational accidents, HIWIN has developed 42 safety objectives management plans for 2023, in addition to promoting safety culture activities. The Company is also dedicated to ongoing safety projects aimed at enhancing operational safety. Furthermore, HIWIN aims to foster safety leadership among its supervisors through a newly established training roadmap for safety and health courses for newly promoted supervisors.

In the section on accident-related improvements and prevention, HIWIN emphasizes the sharing of safety and health insights or preventive measures related to industry/news incidents through Safety Moments. This initiative encourages self-reflection among employees and promotes mutual advocacy, reinforcing safety and health concepts and awareness.

In 2023, HIWIN's various factories implemented the Safety Moment micro-learning course design. These courses, lasting 3-5 minutes, focused on the execution of safety practices and awareness. The content covered hazard prevention in the workplace, prevention of different hazard types, disaster case studies, and comparisons between safe and hazardous operations to ensure employees clearly understood hazard factors, thereby reducing the likelihood of occupational accidents. In total, 464 Safety Moment sessions were held across factories in 2023, with 14,563 participants.

In the event of an occupational accident, it will be evaluated using the PDCA (Plan-Do-Check-Act) management system approach. Source control measures will be implemented, and immediate actions for improvement will be taken to prevent similar issues from recurring. No significant penalties related to occupational safety were incurred in 2023.

To ensure the safety and health of workers, HIWIN conducts safety audits on all procurement items before raw materials are stocked. In accordance with relevant occupational safety and health regulations and risk assessment methods, HIWIN has established 116,552 procurement material codes, categorized into five main types: engineering, general goods, production machinery, non-production machinery, and others. Additionally, HIWIN has formulated the Environmental, Safety, Health, and Energy Equipment Procurement Specification, which is incorporated into procurement contract reviews as an acceptance standard. This specification is regularly reviewed and updated based on occupational accident case studies in order to strengthen the prevention of occupational risks and ensure the safety and health of workers.



Safety Moment in 2023

## Program results in 2023

### ① Implementation of 42 Risk Reduction Objectives Management Plans

- A total of 37 objectives were successfully completed, with 5 objective extended to 2024 for completion.

### ② Hazard Identification and Risk Assessment & Safety Operation Standard Review Project

- A total of 186 operations were identified and inspected based on the risks and opportunities of hazards in each factory area, of which 60 operations resulted in a total of 125 unacceptable risks. The operation hazard inventory and operation process review were completed, and 334 safety operation standards were reviewed and revised.

### ③ Dynamic (Surveillance Camera) Inspections

- A total of 179 deficiencies were identified, and caring interviews and preventive measures have been completed.
- Based on the results of dynamic inspections, 73 high-risk area maps were created.

### ④ Hazard Factor Identification Project

- Occupational safety personnel, in collaboration with the manufacturing unit, proactively identified 523 hazard factors. Based on the statistical results, we established a system for the safety acceptance of purchased or self-manufactured machinery. We also revised safety operating standards and risk assessments to enhance personnel safety during operations.

## Procedure for incident investigation and handling



In 2023, there were 28 occupational accidents (excl. traffic accidents during commutes). The most common types of incidents involved punctures, cuts, abrasions, falling objects, and being caught or entangled. By promoting safety culture, mitigating hazard factors on-site, conducting dynamic (surveillance camera) inspections, customizing safety operation standards, and enhancing our production department's the occupational safety and health performance, we achieved a 76% decrease in the disabling injury frequency rate (F.R.) and a 67% decrease in the disabling injury severity rate (S.R.) from 2022. In 2023, we continued our comprehensive approach to injury prevention, with a focus on promoting a safety culture among all employees and enhancing proactive safety measures to achieve our goal of reducing incidents year by year.

In terms of contractor operations, due to the implementation of strict construction safety controls and supervision systems in 2023, there were no incidents of minor or disabling injuries.

## Employee occupational injury statistics

Year	Total Work Hours	Minor Injuries (cases)	Incapacities (cases)	Deaths (cases)	Major Injury Rate	Recordable Injury Rate	Fatality Rate of Occupational Accidents
2020	9,391,952	37	5	0	0	4.4	0
2021	9,432,304	34	9	1	0	4.6	0.1
2022	9,448,624	35	6	0	0	4.3	0
2023	9,233,752	26	2	0	0	3.0	0

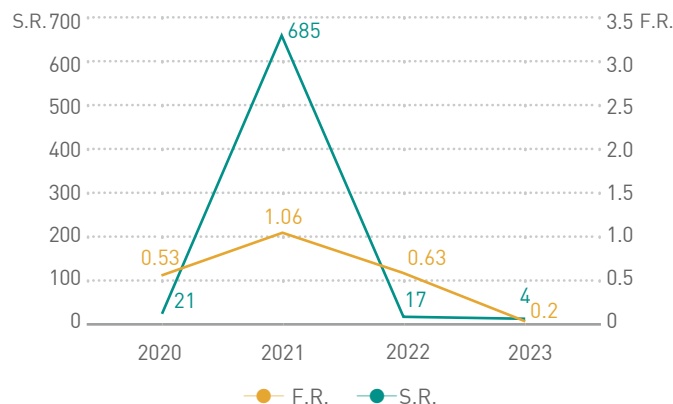
## Occupational accident statistics of contractors

Year	Total Work Hours	Minor Injuries (cases)	Incapacities (cases)	Deaths (cases)	Major Injury Rate	Recordable Injury Rate	Fatality Rate of Occupational Accidents
2020	194,359	0	0	0	0	0	0
2021	413,898	0	0	0	0	0	0
2022	195,175	0	0	0	0	0	0
2023	198,869	0	0	0	0	0	0

Note:

- As of the end of fiscal year 2023, neither HIWIN nor its contracted vendors have reported any cases of occupational diseases, occupational accidents, or fatalities.
- Recordable Occupational Injury Rate: Recordable Occupational Injury Count ÷ Total Work Hours × 1,000,000.
- Serious Occupational Injury Rate (excluding fatalities)=Number of Serious Occupational Injuries (excluding fatalities) ÷ Total Work Hours × 1,000,000.
- The Fatality Rate due to Occupational Accidents= Number of Deaths due to Occupational Injuries ÷ Total Work Hours × 1,000,000.
- A disabling injury refers to a situation where an injured worker is unable to continue his/her normal work duties and needs to leave the workplace, with this loss of work time extending beyond one day, including weekends, holidays, or any days when the business is not operating. The worker is temporarily unable to resume their tasks.
- The 2022 data for F.R. and S.R. have been updated to reflect adjustments in total recorded working hours.

## Occupational accident statistics in 2020-2023



Note: 1. Disabling Injury Frequency Rate (F.R.) = Number of Disabling Injuries x 1,000,000 ÷ Total Exposure Hours. The calculation is equivalent to Lost Time Injury Frequency (L.T.I.F.R.).

2. Lost Time Injury Frequency Rate (L.T.I.F.R.) = (Number of lost-time injuries x 1,000,000) ÷ total working hours. LTIFR represents the number of lost-time (disabling) injuries per one million working hours.

3. Disabling Injury Severity Rate (S.R.) = Number of Days Lost Due to Disabling Injuries x 1,000,000 ÷ Total Exposure Hours.

In order to consistently improve employee operational safety, HIWIN has been collecting historical data on occupational hazards. As a result, we are developing initiatives to enhance workplace safety, which include:

- ① Reducing disabling injury frequency rate (F.R.) and disabling injury severity rate (S.R.): Implement safety culture projects, conduct safety knowledge and skills accreditation, and compile a risk map to reduce risks of relevant occupational disasters.
- ② Supporting weaker units through cross and dynamic inspections, providing guidance on addressing deficiencies, and offering quarterly educational training.
- ③ Conducting internal and cross-audits spotlighting key regulations, increasing the completion rate and depth of regulation identification, reducing the risk of violations, and improving regulatory compliance.

## ① Voluntary reporting of near miss incidents

HIWIN has implemented a standard operating procedure to address near miss incidents. This procedure allows all employees to proactively report such incidents and provide specific improvement suggestions through an online system. When a near miss occurs, the responsible units are promptly notified to confirm and conduct an investigation. Immediate measures are taken to prevent the incident from escalating. We continuously strive to enhance workplace safety through initiatives such as environmental optimization, safety promotion, and regular inspection of protective equipment. Near miss incidents are considered as indicators of our occupational health and safety performance and are integrated into our assessment and rewards mechanism. In 2023, a total of 6 near miss incidents were reported, resulting in a Near Miss Frequency Rate of 0.01<sup>Note</sup>.

Note: Near Miss Frequency Rate (NMFR) = (Number of near miss incidents x 200,000) ÷ Total work hours.

## ② Safety and health education and training

Each year, HIWIN develops a safety and health education and training plan to enhance employees' knowledge and skills in these areas. In 2023, a total of 9 internal educational training courses were conducted, consisting of 206 sessions, with a participation of 9,654 employees. HIWIN offers 19 different types of external training programs for professional qualifications and certifications. In 2023, we held 307 sessions for a total of 2,512 participants and a combined training time of 4,157 hours. The average participant satisfaction rating for these training courses was over 4.5 out of 5.

To ensure that contractors are well-versed in occupational safety and health before entering factories and that related workers' health and safety are protected, HIWIN has strengthened hazard notification training for contractors since 2021. HIWIN has developed training materials and provided access to the Ministry of Labor's Online Occupational Safety and Health Digital Learning Platform, empowering contractors to conduct internal training. After completing the course and passing the contractor's exam, participants receive an entry certification. By the end of Dec. 2023, a total of 1,073 individuals had completed this training.

In 2019, HIWIN installed electricity leakage detection boxes in various factory areas. They also provided training to internal employees on how to inspect equipment brought in by contractors. This initiative not only strengthened contractor management within the facility but also contributed to the overall safety of contractor operations. As of the end of 2023, under the consistently strict safety management of contractors, there were no reported occupational accidents related to inadequate machine protection.

## ③ Emergency response drills



Fire Emergency Response Drill Workplace Violence Emergency Response Drill

In addition to regular safety and health education training, HIWIN conducts annual emergency response drills. These drills are based on current events, occupational hazard scenarios, and the results of hazard identification, risk assessment, and opportunities evaluation for issues categorized as moderate risk and above. The purpose of these drills is to educate personnel on activating emergency response mechanisms, reporting to relevant individuals, evacuating to safe zones in potentially harmful or hazardous situations, and reviewing process details and protocols with colleagues after the drill. Contractors are also invited to participate in these drills and are provided with information about potential hazards upon entry. If there is an immediate danger, contractors are allowed to cease their operations and move to a safe location without endangering other workers. In 2023, HIWIN conducted 59 emergency response drills, covering scenarios such as fire emergencies, chemical leaks, high-risk operations, and workplace violence incidents. A total of 3,443 participants took part in these drills.

## Health-Friendly Workplace

HIWIN prioritizes the overall growth of its employees, focusing on their physical and mental well-being. To accomplish this, HIWIN follows a thorough five-step health management approach. This approach encourages employees to adopt proactive health habits, improves their performance at work, and collaborates with them to create a workplace environment that promotes good health.

### Five-step health management model



### 1 Workplace health management

HIWIN employs a comprehensive management approach to employee care, focusing on three main areas: "Occupational Injury and Illness Prevention, Healthcare, and Health Promotion." These efforts are carried out through five major steps: "Assessment, Diagnosis, Plan, Implementation, Evaluation," systematically manage employees of all categories and protect employee health.



### 2 Occupational injury and illness prevention

To prevent occupational injuries and diseases, HIWIN is targeting five hazards, related actions are as follows:

#### Physical Aspect

Measures have been implemented to exceed regulatory requirements. When on-site noise operations reach 80 decibels or above, employees receive hearing protection education to explain the potential damage caused by noise. Additionally, guidance and audits are conducted to ensure the correct usage of soundproofing and protective equipment.



Advocating for hearing protection

**Achievement** ▶ Hearing Protection Program, with a total of 3,351 individuals participating.

#### Chemical Aspect

3 steps to check the fit of gas masks and masks:

- ① Educate employees on the correct selection and usage of protective equipment.
- ② Employees' physical conditions are verified to determine the suitability of cup-shaped masks or gas masks.
- ③ Check to ensure the masks are an appropriate fit.

#### Achievement

- ▶ Personal Protective Equipment management, involving a total of 2,535 individuals.
- ▶ Respiratory protective equipment assessment and management, involving a total of 333 individuals.

Before testing



Confirm colleague's mask is fitting

During detection



Respiratory protective equipment fit testing

#### Human Factors Aspect

Three-layer Mechanism to Assist Employees Mitigate Occupational Injuries:

- ① Employees who report a score of 3 or higher on the MNQ (Musculoskeletal Questionnaire) for work-related musculoskeletal discomfort will undergo an evaluation of their work hours, workstation, work processes, and posture. After identifying individuals at moderate to high risk, unit management implements administrative measures (such as adjusting work hours, workstations, or workflows) or engineering improvements (such as adding fixtures or adjusting workstation components).
- ② Teaching simple stretching exercises to alleviate muscle fatigue and providing protective aids like wrist supports, back belts, and knee pads.



- ③ Assist employees with competency evaluation and offer advice on job redesign or adjustments for any hazards that they may potentially face and are required to evaluate.

#### Achievement

- ▶ Musculoskeletal Hazards Prevention Management, involving a total of 100 individuals.
- ▶ 84 ergonomics evaluations
- ▶ 149 individuals assessed for return to work



**Before Improvement:** Sheet metal parts were stored flat and would potentially lead to strains or injuries due to improper lifting posture during transportation.

**After Improvement:** Sheet metal parts are now stored vertically so that workers will no longer have to bend down to lift or place the parts, eliminating risks from improper postures.

#### Biological Aspect

In response to infectious diseases, relevant health education information and guidance are provided. In 2023, a comprehensive approach was planned to address the COVID-19 pandemic, covering five aspects of prevention and control, including the management of confirmed cases, close contacts, and individuals under self-management.

**Achievement** ▶ Emerging Infectious disease prevention and control management, involving a total of 1,491 individuals.



Health ads on HIWIN computers

#### Social/Psychological Aspect

We provided care to employees with special conditions, offering health education to ensure they can lead safe lives.

- ① Provided one-on-one health consultations for pregnant and postpartum employees, including instructions on breastfeeding and healthy eating.
- ② Managed and controlled health risks for employees showing symptoms such as abdominal obesity, high blood pressure, elevated fasting blood sugar, high triglycerides, and low HDL cholesterol, especially if three or more of these symptoms are present.
- ③ Managed high blood pressure, diabetes, and excessive workload in affected employees.

#### Achievement

- ▶ Maternal Health Protection, involving a total of 95 individuals.
- ▶ Metabolic Syndrome Personnel Management, involving a total of 281 individuals.
- ▶ Cardiovascular and Cerebrovascular Disease Prevention Management, involving a total of 556 individuals.

#### Highlighted Cases

HIWIN confirms that 3.6 out of every 10 middle-aged individuals in Taiwan suffer from metabolic syndrome, resulting in a high mortality rate of 31.9%. In response, HIWIN has launched the “Embrace a Healthier Life by Improving Metabolic Syndrome” campaign. This initiative includes:

- ① Managing the health of individuals with metabolic syndrome.
- ② Developing an informative metabolic syndrome passport that covers its risk factors, complications, preventive measures, treatment approaches, and guidelines for monitoring blood pressure. The aim is to enhance employees’ awareness and promote self-protective consciousness.

**2021** A total of 295 individuals were diagnosed with metabolic syndrome. HIWIN encouraged employees to exercise and improve their daily routines by managing their overtime hours, providing occupational health consultations, and offering health education by occupational health nurses. Improvements were seen in a total of 73 employees, with an improvement rate of 25%.

**2022** A total of 226 individuals were diagnosed with metabolic syndrome. In addition to the measures implemented in 2021, new initiatives were introduced. These included increased health check frequencies for individuals with metabolic syndrome and group activities focused on managing metabolic syndrome. These efforts involved monitoring and adjusting colleagues’ diets and sleep habits, as well as enhancing physical activity. As a result, 77 individuals achieved improvement, resulting in an improvement rate of 34.1%.

**2023** A total of 257 individuals were diagnosed with metabolic syndrome. Beyond consultations with occupational physicians and overtime management, we also launched a Metabolism Improvement Program to spotlight awareness, diet, exercise, and follow-up assessments. The Program was supported by a company-wide point system, collected in a health passport, to boost participation, aiming to regulate abnormal blood sugar and blood pressure levels. Improvements were seen in a total of 135 employees, with an improvement rate of 52.5%, marking an 18.4% increase in effectiveness compared to 2022.

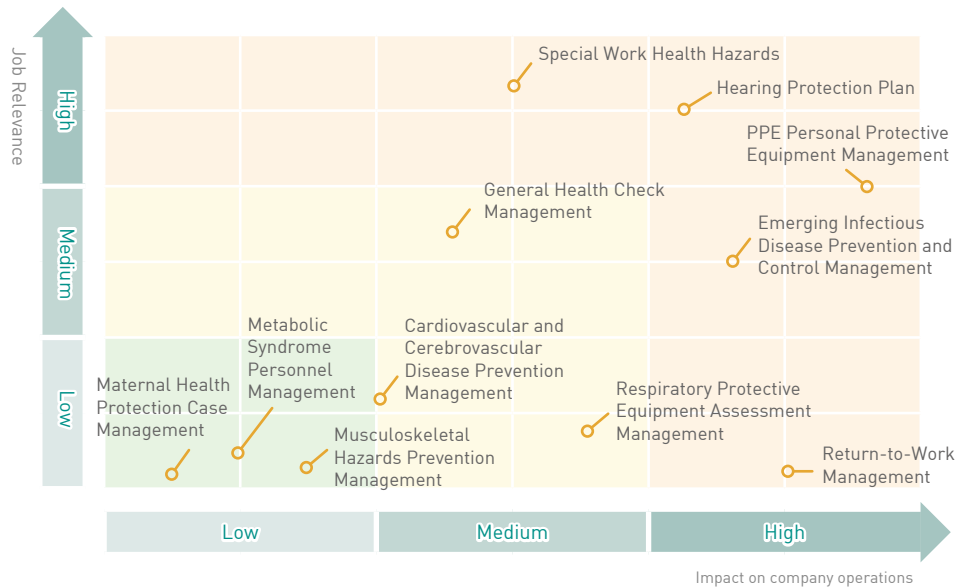


Management of Metabolic Syndrome, Metabolic Syndrome Gathering Events, and Occupational Health Consultations

### ③ Health risk assessment map

To effectively implement workplace health management, we prioritize specific groups. We accomplish this through the use of questionnaires or assessment analyses, considering the relevance to job responsibilities and the impact on company operations. Health Risk Assessment Map is as follows.

#### Employee health risk map analysis



Based on the 2023 Health Risk Map, the high relevance of special health check hazards to workplace activities indicates that PPE management could potentially have a significant impact on company operations. In response to this risk, HIWIN has implemented an integrated management approach that includes providing occupational health consultations and health education based on different health classifications, developing PPE management protocols according to

operational hazard assessments and workplace environmental monitoring data, and ensuring the appropriate PPE use through proper application processes and periodic audits to confirm employees are wearing PPEs correctly, effectively mitigating the potential impacts of these risks on our company operations.

### ④ Healthcare

HIWIN implements a variety of health examination programs, including regular employee health checks and specialized assessments for tasks involving specific hazards, on an annual basis. In compliance with regulations, HIWIN organizes occupational health consultations and offers health education guidance through occupational health physicians and nurses. Healthcare related actions:

- ① Conducting employee health checkups based on age and years of service, going beyond legally required frequency.
- ② Implementing hazard management for personnel involved in environmental operations, addressing health risk factors such as dust and hazardous substances.
- ③ Offering monthly consultations for employees on illnesses, return-to-work assessments, and health check results.
- ④ Developing monthly health education themes to promote employees' health awareness.
- ⑤ Providing support for employees with occupational injuries.

In 2023, HIWIN conducted cancer screenings as part of a Taichung City government initiative, meeting requirements for cancer screening in the workplace and securing the Healthy Workplace Enterprise Award.



#### Health promotion achievements in 2023



Employee Health Check  
**1,723** people

Nurse Consultation & Follow-up  
**1,289** individuals

Health Hazard Management  
**3,531** individuals

Ultrasound  
**463** individuals

Occupational Physician Services  
**1,464** individuals

Cancer Screening  
**209** individuals



2023 Health Check



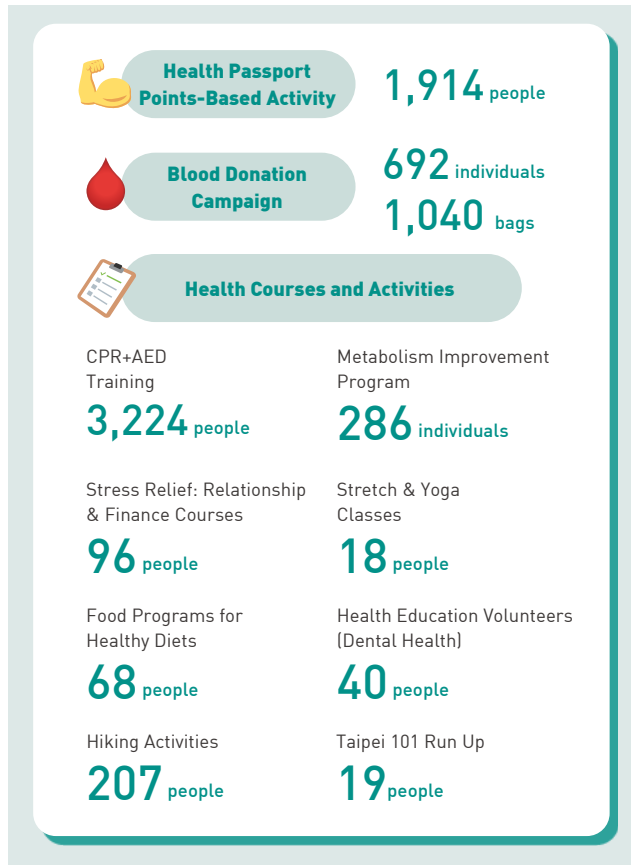
Employees and contractors undergoing cancer screening



Ultrasound

## 5 Health promotion

### Health promotion achievements in 2023



Mt. Jade Main Peak Climbed Successfully

Taipei 101 Run Up

### Highlighted Cases

Heart disease and stroke are the primary risk factors for cardiovascular diseases. As HIWIN places great emphasis on the health of its employees, in 2023, we encouraged employees to actively participate in the Health Promotion, Heart Protection Initiative, which focuses on building healthy habits through knowledge of health diets, exercise, and first aid training. Additionally, employees were trained in two critical life-saving techniques, CPR and AED, and we installed AEDs in all factory areas and employee dormitories. In 2023, a total of 3,224 employees completed CPR and AED training and 1,914 engaged in the health passport (point collection) campaign.



AEDs in factories

AEDs in employee dorms

### Highlighted Cases

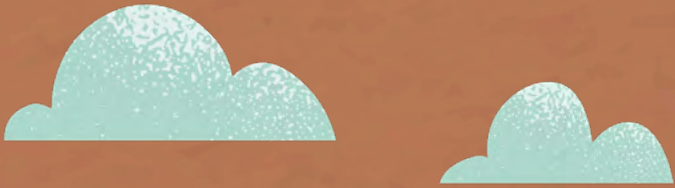
HIWIN have actively promoted the Workplace Exercise GO Points Collection campaign to encourage employees to engage in voluntary physical activities and participate in health-related events. In 2021, a total of 627 people participated, resulting in a participation rate of 14%. In 2022, we introduced several new initiatives, including online health education courses, an enhanced points reward system, and sports clubs. These efforts attracted 939 participants, representing a 6.23% increase from 2021.

In 2023, we continued to refine our programs and promotions to further boost participation and make it easier for occupational nurses to track points. We partnered with RUNNii tech's Walkii application to offer a variety of exercise options that allow employees to share photos, sync data from wearable devices, and participate in both individual challenges and team competitions. This has encouraged employees to exercise regularly and cultivated a healthy workplace. These initiatives drew 1,914 participants, raising the participation rate to 40.93%, a 20.7% increase from 2022.



2023 Health Passport Points Collection Campaign Poster and Colleague Fitness Points Accumulation record





# 07

## An Achiever of Common Good in Society

HIWIN integrates its core competencies with social welfare to embody the principle of social engagement.



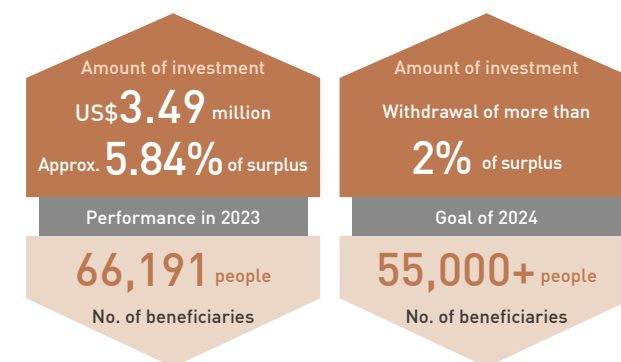


# 7.1 Social Impacts

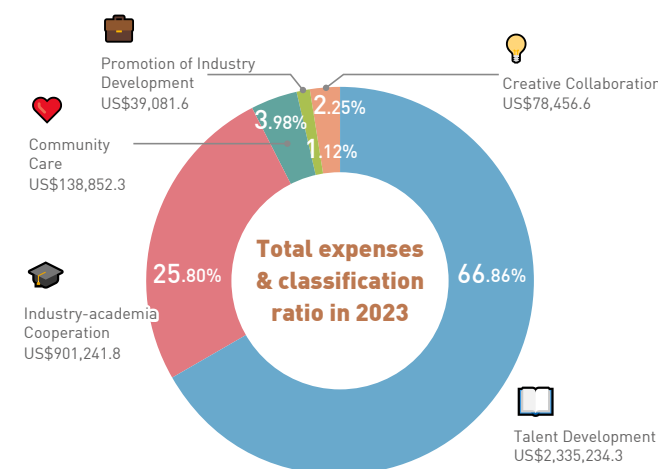
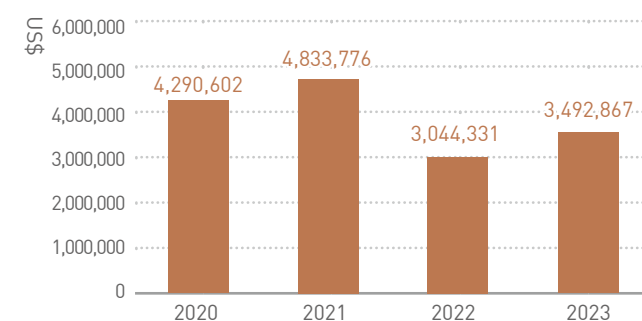
Since its inception, HIWIN has made corporate social responsibility one of the cornerstones of its business operations. We actively engage with the communities surrounding our factories, fostering a sense of mutual goodwill and extending our care and support to the wider world. Our efforts are focused on five key areas: talent development, industry-academia cooperation, community care, industry advancement, and creative partnerships with the community and relevant stakeholders. Through these initiatives, we aim to drive behavioral and knowledge changes, as well as enhance skill efficiency.

As the saying goes, "It takes ten years to nurture a tree, but a hundred years to train a man." Education is a long-term commitment, and the establishment of the HIWIN Education Foundation plays a crucial role in cultivating precision mechanical talents and injecting fresh impetus into industry development. Our dedicated HIWIN Volunteer Group takes proactive steps to support the underprivileged, ensuring they receive the appropriate assistance and resources they need. Through creative collaborations, we foster a dialogue between technology and art, igniting sparks of creativity and promoting cultural and creative industries. Furthermore, HIWIN is committed to deepening our social impact by aligning with the United Nations Sustainable Development Goals (SDGs). We have made significant progress in achieving SDG4, which focuses on improving the quality of education, as well as SDG8, which aims to enhance decent work and economic growth. Additionally, we actively pursue SDG17 by forming multiple partnerships to drive sustainable development.

	Talent Development	Industry-academia Cooperation	Community Care	Promotion of Industry Development	Creative Collaboration
Vision	Long-term development of talent in the precision machinery industry.	Fostering key competitiveness for sustainable business.	Creating a better society through caring volunteer services.	Integrating resources to drive industrial transformation and upgrading.	Fostering technological innovation and encouraging the cultural and creative industries.
SDGs	4 QUALITY EDUCATION	8 DECENT WORK AND ECONOMIC GROWTH	15 LIFE ON LAND	17 PARTNERSHIPS FOR THE GOALS	17 PARTNERSHIPS FOR THE GOALS
Driving Force	Engages in various educational programs and sponsorship activities aimed at enhancing the quality of precision machinery talents and fostering international talents.	Engages in industry-academia cooperation projects and partners with universities on scientific and technological initiatives. This collaboration allows for the exchange of resources and expertise between academia and the enterprise, fostering R&D.	HIWIN extends its efforts beyond the Company's operational locations to the surrounding communities. We invest corporate resources and dedicate volunteer efforts to support community development and assist vulnerable groups.	HIWIN is actively involved in public association operations, with a focus on resource integration and enhancing overall effectiveness. Through strategic partnerships with like-minded organizations, HIWIN aims to foster a robust industrial ecosystem.	HIWIN's ongoing participation in innovative and inspiring cross-sector collaborations fuels Taiwan's soft power and fosters the development of cultural and creative industries.
Target	Elementary school, junior high school, high school, university, and graduate students; doctoral candidates	Schools, college students, professors	Charity organizations, community organizations	37 public associations	Artists, arts and cultural organizations, schools, museums
Social Impact	Attract talents to invest in the field of precision machinery.	Industry and academia work closely together to shorten the last mile of employment.	Invest in love and care to create a better society.	Promote industrial transformation and upgrading, and enhance overall competitiveness.	Encourage the cultural and creative industries.






Total expenses in 2020-2023



## 7.2 Talent Development

In addition to developing the brand and advancing core technologies, HIWIN has increased its involvement in talent development initiatives within the precision machinery industry as operating profits have grown. Through recognizing mechanical pioneers, identifying industrial talents, and nurturing international talents, we strive to achieve a synergistic effect that drives innovation, integrates resources, and enhances our capabilities, thereby contributing to the creation of a society focused on learning and growth. In various public welfare projects, we employ multiple investment methods, including leading participation, project-based participation, and resource sponsorship, to enhance the quality of education.

Engage way	Project	Sustained Benefits
 Lead and Participate	Elementary school libraries, children's books	Cultivate good reading habits in children from an early age.
	Elementary School English Course	Develop confidence in speaking English.
	STEAM Education Demonstration	Inspire the ability to solve life problems by doing so from an early age.
	HIWIN Smart Robotics Contest	Utilize robots to enable young students to unleash their potential and creativity to embrace a smart future.
	HIWIN Thesis Award	Inject endless research and development energy into Taiwan's industry.
	HIWIN Doctoral Dissertation Award	Enhance the status of Chinese in the field of machinery industry.
 Project Participation	Promote Automation Engineer and Robotics Engineer license exams	Give people a measurable benchmark and shorten the gap between learning and practice.
	Taiwan Robotics Industry-Academia Alliance	Promote the development of Taiwan's robotics industry.
	Ministry of Education Technical Competition	Facilitated the addition of the "Industrial Robots Technology" category as the 29 <sup>th</sup> skill set in the industrial skills competition organized by the Ministry of Education.
	Mechanical Camp for High School Students	Encourage high school students to study precision machinery.
	HIWIN Scholarship	Encourage college students with solid professional foundations and innovative spirits.
 Resource Sponsorship	Jiunyi School of Innovation	Connecting the local advantages of Taitung, "Art and Humanities" and "Natural Ecology, " as the main axes of learning, shaping a multicultural and internationally-minded learning campus.
	Taichung Huei-Ming School for Blind Children	Help children with visual impairments and multiple visual disabilities from all over the country by providing them with a suitable environment for education and living.
	Tsing Hua University's Rising Sun Project	Assists outstanding students with relatively disadvantaged socio-economic backgrounds and limited resources, providing them with the opportunity to receive education at National Tsing Hua University.
	Boyo Social Welfare Foundation	Help disadvantaged children in remote areas break the cycle of poverty through education and counseling. Each year, it improves the academic performance of 3,000 children, enabling them to be more competitiveness in society.
	Sponsored institutions include the Fair Winds Foundation, Taiwan Instrument Research Institute, AOIEA AOI Forum and Exhibition, Annual Meeting of the Chinese Society of Mechanism and Machine Theory, Annual Meeting of the Chinese Society of Mechanical Engineers, Chinese Business Ethics Education Association, Taiwan Tribology Association, Singshan Social Welfare Foundation, and International Skills Development Association.	

### Cultivate Future Talents, Starting from Young Age

Global Chairman Eric Y.T. Chuo (PH.D.), the founder of HIWIN, firmly believes that those who are less fortunate have limited resources, but knowledge is a valuable asset. As a result, HIWIN is dedicated to multiple facets of talent development, including community outreach and support for grassroots education. This is a significant and enduring social responsibility that is worth our investment.

#### 1 Elementary school libraries, children's books

HIWIN, situated in various counties and towns across Taiwan, conducts visits to local school libraries, where they assess the facilities, book collections, and reading environments. The Company aids the schools in developing improvement plans and offers financial assistance to upgrade both hardware and software. Furthermore, HIWIN consistently donates books to enhance the libraries.

In 2023, HIWIN sponsored US\$ 129,067.5 for library equipment and book donations, including 980 books benefiting 2,305 students at Liu-Jia Elementary School in Hsinchu, Cih-Tong Elementary School in Yunlin, and Sun-Hope Elementary School in Chiayi, fostering good reading habits and critical thinking skills in children from an early age.

#### 2 Elementary school English course

Recognizing the importance of language as a vital tool for active engagement on the global stage, HIWIN endeavors to establish a strong English foundation for children, nurturing their speaking skills and bolstering their confidence. Since September 2010, we have provided sponsorship for the implementation of the "English Curriculum" program and related activities in Liu-Jia Elementary School in Hsinchu. Starting from January 2014, HIWIN has expanded its sponsorship to include Cih-Tong Elementary School in Yunlin. In 2023, HIWIN invested US\$ 211,423.7 in the program and 1,502 students participated.



### 3 STEAM education demonstration

In response to the implementation of the 2019 Curriculum Guidelines, Liu-Jia Elementary School aimed to promote STEAM education. With strong support from the HIWIN Education Foundation, the STEAM Education Demonstration was launched in 2019. A STEAM classroom was set up in the Chuo Yung-Tung Memorial Library at Liu-Jia Elementary School in Hsinchu. A professional organization was also commissioned to assist the school in conducting STEAM teacher training courses. These initiatives were carried out in phases, allowing students to experience and unleash their imagination and creativity in STEAM, integrating and applying their knowledge of mathematics and science to solve real-life problems. In 2020, Political Deputy Minister of Education Mon Chi Liu led a delegation to visit the Liu-Jia Elementary School for on-site inspections. The foundation's implementation team also presented the project's highlights to Minister of Education Wen Chung Pan, receiving high recognition from the Ministry of Education. Starting in 2022, STEAM education was extended to Cih-Tong Elementary School in Yunlin. The HIWIN-sponsored STEAM Education Demonstration Base Project received a total of US\$ 17,879.5.



Liu-Jia Elementary School has achieved impressive results in various STEAM-related competitions. In the 2022 National Technology Education Creative Practical Competition, Liu-Jia Elementary School's project "Smart Bathroom Assistant" stood out among more than a hundred teams, winning the silver medal in the elementary school group. Additionally, the school excelled in the 2022 National Elementary School Mathematics Literacy Learning Achievement Exhibition—Fermat's Classroom competition, securing both first and second place.

## Commending Mechanical Pioneers, Driving Innovation

HIWIN aims to leverage the synergy between academia and industry to foster a culture of continuous self-improvement among young students. By nurturing their capabilities and integrating theoretical knowledge with practical skills, HIWIN strives to drive research and development innovations in the engineering sector. This collaborative approach ultimately enhances the industry's core competitiveness.

### 1 HIWIN Smart Robotics Contest

Year	2020	2021	2022	2023
Participating Teams	93	Event Canceled due to Pandemic	157	152
No. of Participants	432		796	762
No. of Winning Awards	125		139	62



Robots play a crucial role in smart manufacturing, making them an essential capability. In order to advance the technology and value of Taiwan's robot industry, as well as to identify talented individuals for related fields, HIWIN established the "HIWIN Smart Robotics Contest" in 2008. By 2023, a total of 15 competitions have been held, with 689 participating teams, 199 award-winning teams, and 1,267 award-winning teachers and students. The total investment for the 15th installment was US\$ 73,798.9. A total of 152 teams from 64 schools participated, with 6 awarded teams (30 individuals) in the "Application and Billiards Group" and 7 awarded teams (32 individuals) in the Technical and Vocational Group. The intense competition drew a large audience and generated significant attention and response.

### 2 HIWIN Thesis Award

Year	2020	2021	2022	2023
Total of Submissions	102	86	96	90
No. of Winning Entries	15	13	16	13
No. of Awarded Advisors and Students	30	28	34	26



In line with our commitment to cultivating exceptional mechanical engineering talent for the industry, HIWIN introduced the HIWIN Thesis Award in 2004. The objective is to leverage the collective expertise of industry and academia to advance research and development, enhance product value, and bolster the industry’s core competitiveness. 2023 marks the 20<sup>th</sup> anniversary of the HIWIN Thesis Award, which has seen an annual investment of US\$ 325 thousand. Over the past two decades, the award has received 1,927 submissions, with 300 winning entries and 636 award recipients among teachers and students. This year, HIWIN organized three study trips to Japan, including visits to the MECT Nagoya Machine Tool Exhibition, iREX Robot Exhibition, and SEMICON Semiconductor Exhibition. These trips offered the winning teachers and students the opportunity to explore these exhibitions, tour world-class industrial companies, experience local culture, and engage in exchanges that sparked innovative ideas. It was a chance for them to broaden their horizons and gain valuable insights. The HIWIN Thesis Award has served as a catalyst for the establishment and organization of similar accolades by other companies. It has garnered significant acclaim and admiration from both the domestic mechanical industry and academic community, earning the distinction of being hailed as the Nobel Prize of the mechanical industry.

3 HIWIN Doctoral Dissertation Award

Year	2020	2021	2022	2023
Total of Submissions	132	134	152	152
No. of Winning Entries	25	24	25	26
No. of Awarded Advisors and Students	57	59	61	67



the 12<sup>nd</sup> HIWIN Doctoral Dissertation Award

HIWIN encourages young scholars from both sides of the Taiwan Strait and around the world to participate in research and innovative applications in the field of mechanical engineering and automation. Our objective is to cultivate talented individuals in mechanical engineering who possess core competencies, foster collaboration between the business and academic sectors, promote technological advancement and innovation, and elevate the global standing of the Chinese mechanical industry. Since 2011, HIWIN has allocated an annual budget of approximately US\$ 651.4 thousand for the HIWIN Doctoral Dissertation Award, which is organized by the Chinese Mechanical Engineering Society (CMES) in Beijing. In the first 13 editions, we have received a total of 1,639 submissions, with 323 winning entries and 736 students and professors receiving awards.

Hand in Hand, Developing Smart Manufacturing Talent

“If you want to go fast, go alone. If you want to go far, go together.” HIWIN collaborates with schools and businesses from different regions through alliances, working together to integrate resources and cultivate talents for smart manufacturing. This initiative establishes a strong foundation for interdisciplinary talents in the mechanical field and enhances the industry’s competitiveness.

1 Leading the promotion of automation engineer and robotics engineer certification examinations

Year	2020	2021	2022	2023
No. of Registrants	1,521	1,151	1,195	1,163
No. of Registrations	2,784	2,095	2,182	2,207
Campus tours	29	40	45	33
No. of Certified Individuals	581	244	486	345

HIWIN makes significant efforts to align learning with industry demands and ensure that talent is recognized based on their capabilities. We invest both funds and human resources to integrate the strengths of academia and industry, collaborating with the Taiwan Automation Intelligence and Robotics Association (TAIROA) to organize the Automation Engineer certification

exam. This initiative involves the participation of approximately 500 faculty members from mechanical-related universities and top colleges nationwide, who contribute to question setting and review. Since the certification’s preparation period in 2006, HIWIN has been actively involved in building the question bank, and from 2009 onwards, our planning team has provided ongoing support for campus promotion and the production of promotional materials. This effort continues to this day. As of 2023, we have successfully conducted 28 sessions of the Automation Engineer certification exam and 14 sessions of the Robotics Engineer certification exam (2016 to present). A total of 39,246 individuals have registered for these exams, resulting in the awarding of 10,902 certificates.

2 Full support for the Taiwan Robotics Industry-Academia Alliance

In August 2020, HIWIN took the initiative to support the establishment of the Taiwan Robotics Industry-Academia Alliance by TAIRQA, with the aim of promoting the development of Taiwan’s robotics industry.

By the end of 2023  
members of the alliance

115 units

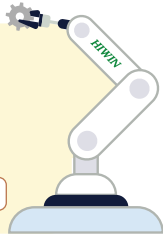

Certified venues for certification  
tests and training bases

10

By the end of 2023  
sponsored a total of

94 industrial robots

Value nearly US\$ 1.3million







2020.12.08

#### South Region Smart Manufacturing Education Alliance

Kun Shan University collaborates with 16 senior high schools and vocational schools

2021.04.14

#### Taipei Industrial Robot Technology Education Center

Education Department, Taipei City, Songshan Vocational and Technical High School collaborates with 6 senior high schools and vocational schools, Taiwan University of Science and Technology, HIWIN, and Taiwan Automation Intelligence and Robotics Association

2022.10.25

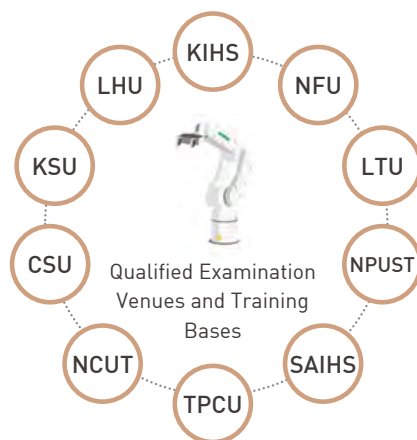
#### Taipei Industrial Robot Alliance

Education Department, New Taipei City, Taipei City University of Science & Technology collaborates with New Taipei San-Chung Commercial and Industrial Vocation High School, New Taipei Municipal Tamsui Commercial Industrial Vocational Senior High School, New Taipei Municipal Jui-Fang Industrial High School

2022.12.16

#### Central Taiwan Smart Manufacturing Industry-Academia Alliance

Ling Tung University collaborates with the Central, Changhua, and Yunlin-Taichung-Chiayi Regional Branches of the Workforce Development Agency, Precision Machinery Research & Development Center, Intelligent Automation Association, and an integrated strategic alliance of senior high schools and vocational schools



## 2023

2023.9.14

#### Kaohsiung-Pingtung Robotics Alliance

Education Bureau of Kaohsiung City Government, Kaohsiung Municipal Kaohsiung Industrial High School, Kaohsiung Municipal Chung-Cheng Industrial High School, National Fongshan Senior Commercial & Industrial Vocational School, Pingtung Industrial Vocational High School, National Nei-Pu Senior Agricultural-Industrial Vocational High School, National Pingtung University of Science and Technology, Cheng Shiu University.

2023.10.28

#### Smart Manufacturing Industrial Robots Alliance in Taoyuan, Hsinchu, Miaoli Area

Taoyuan Department of Education, Long Tan Senior High School, Taoyuan City Daxing High School, Lio Ho High School, Chih Ping Senior High School, St. Aloysius Technical School, National Taipei University of Technology Affiliated Tao-Yuan Agricultural & Industrial Senior High School, National Hsinchu Industrial High School, National Miao-Li Agricultural and Industrial Vocational High school, and Chun-I Senior High School. National Taipei University of Technology, National Tsing Hua University, National Yang Ming Chiao Tung University, Lunghwa University of Science and Technology.



### 3 Facilitating the addition of the 29<sup>th</sup> “industrial robots technology” category in the Ministry of Education’s industrial skills competition



HIWIN, in collaboration with TAIROA, jointly promoted the inclusion of the “Industrial Robots Technology” category in the national skills competition for high school students in the industrial sector. Through official letters and visits, they garnered the support and signatures of 55 principals, directors, and teachers from technical high schools. The application was submitted in December 2022. HIWIN’s leadership believes that promoting this category will aid Taiwan’s industrial upgrade and fully supported the effort. HIWIN provided 30 industrial robots and electric grippers free of charge for the competition site. In May 2023, the addition of the “Industrial Robots Technology” category was successfully approved!

November 2023 marked the inaugural “Industrial Robots Technology” competition, with a total of 27 teams and 54 participants. HIWIN not only provided free training courses for the participants but also offered prizes for the top teams. The top three schools received an articulated robot, and the fourth-place team received an electric gripper.



### 4 Sponsoring high school mechanical camps

HIWIN sponsored mechanical camps organized by prestigious universities, including National Taiwan University, National Chung Hsing University, Tamkang University, and National Chung Cheng University, in order to promote the participation of high school students in the precision machinery field and enhance their understanding of mechanical engineering. These camps provide students with the opportunity to acquire knowledge on mechanical-related subjects and foster a sense of teamwork through carefully designed courses and activities. Additionally, students gain valuable insights into the wide-ranging practical applications of mechanical engineering in everyday life, as well as its integration with artificial intelligence trends. By engaging in these camp activities, HIWIN aims to ignite the interest of young students in the machinery field. In 2023, we sponsored US\$ 9.8 thousand.


National Taiwan University  
Mechanical Engineering Camp

National Chung Hsing University  
Mechanical Engineering Camp

Tamkang University Mechanical  
Engineering Camp

## 5 HIWIN Scholarships

Since 2012, HIWIN has implemented the HIWIN Scholarship program at Dalian University of Technology, granting selected students a scholarship of RMB\$ 6,000 each. The primary objective is to incentivize students who possess a strong professional foundation and demonstrate innovative thinking. In 2014, the HIWIN Elite Student Scholarship was introduced to recognize exceptionally outstanding students. Recipients of this scholarship are awarded a bonus of RMB\$10,000 and RMB\$30,000 for training expenses related to international exchange visits. Starting from 2017, the scholarship program was also extended to Xi'an Jiaotong University. In 2023, a total of 60 students were awarded the HIWIN Scholarship, bringing the cumulative number of awardees to 540. Additionally, 20 students received the HIWIN Elite Student Scholarship in 2023, making the total number of awardees 170.

## Contributing to Building a Learning Society

HIWIN is actively involved in supporting underprivileged and rural education through the initiation of innovative educational programs and sponsorship of activities that promote a positive learning environment. The Company is dedicated to contributing to the development of a society that prioritizes education.


Jiunyi School of Innovation Elementary  
School Harvesting Course

Huei-Ming School for Blind Children  
Occupational Therapy Course

## 1 Jiunyi School of Innovation

HIWIN provides an annual sponsorship of US\$65.1 thousand to support Chairman Stanley C.S. Yen in leading The Alliance Cultural Foundation and the Jiunyi School of Innovation. The main mission is to create a platform for resource integration, making Jiunyi the first bilingual school in Hualien and Taitung to adopt an inquiry-based teaching approach. Over six years, through middle and high school, Jiunyi School of Innovation focuses on enhancing students' English proficiency, concentration, teamwork, and ability to explore their talents and strengths. The aim is to prepare students to face the world and to spread the school's educational philosophy across Taiwan, setting a new standard and value for Taiwanese education.

## 2 Long-term sponsorship of Taichung Huei-Ming School for Blind Children

HIWIN provides an annual sponsorship of US\$32.6 thousand to support the educational assistance program at the Taichung Huei-Ming School for Blind Children. This sponsorship enables the school to implement a balanced and adaptive learning development for students, while also promoting the concept of safe and barrier-free campuses, professional growth for teachers, and inclusive community-school integration.

## 3 Tsing Hua University's Rising Sun Project






Since 2013, Tsing Hua University has implemented the Rising Sun Project, which aims to support students from socioeconomically disadvantaged backgrounds who have limited access to educational resources but demonstrate potential and a commitment to excellence. The project seeks to offer these exceptional students the opportunity to pursue a university education. From 2015 to 2018, HIWIN sponsored the project with an annual donation of US\$32.6 thousand. However, due to the impact of the COVID-19 pandemic in 2021, scholarship contributions decreased. In response, HIWIN has reinstated the sponsorship program in 2022, and provided US\$32.6 thousand in 2023 to assist financially challenged and exceptional students in pursuing higher education without financial concerns.

## 4 Boyo Social Welfare Foundation

Professor Jia Tong Lee, the founder and honorary chairman of the Boyo Social Welfare Foundation, has long been concerned about Taiwan's severe educational disparities. He noticed that most children from underprivileged families often struggle academically, leading to a lack of competitiveness in their adulthood, exacerbating the issue of wealth inequality in the country. Since 2015, HIWIN has been sponsoring US\$16.3 thousand annually to support Boyo Social Welfare Foundation free remedial education to underprivileged children. The goal is to prevent them from falling into a cycle of perpetual poverty and offer personalized teaching to give these children a chance to start from scratch and acquire essential skills, thus enhancing their competitiveness.

## 7.3 Industry-academia Cooperation

Since 2011, HIWIN has been actively involved in several industry-academia cooperation programs initiated by the government. Our objective is to nurture and educate students, promoting the seamless integration of theoretical knowledge and practical application. This approach enables us to develop skilled individuals with professional expertise and a strong theoretical foundation, who will serve as the next generation of leaders.

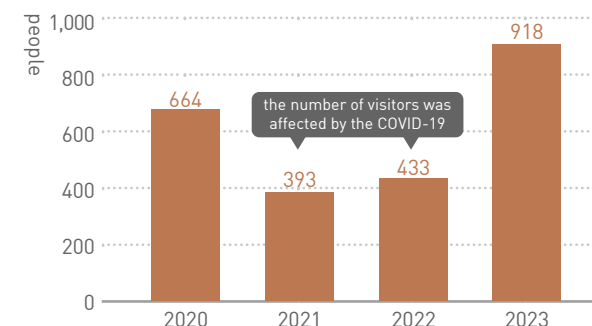
Target	Projects	Sustained Benefits
 Exploring smart manufacturing, envisioning the future	Visiting HIWIN	<ul style="list-style-type: none"> <li>Enables visitors to explore HIWIN's research, innovative applications, and gain insights into future industry trends.</li> <li>Cumulative total of 3,141 visits between 2019 and 2023.</li> </ul>
 Creating a cross-disciplinary learning environment	Lectures	<ul style="list-style-type: none"> <li>Enriches students' knowledge of mechanical subjects and inspires their exploration of career development opportunities.</li> <li>Total lecture hours from 2019 to 2023: 437 hours, with 164 industry experts participating.</li> </ul>
 Supporting the development of industry-academia students based on their aptitudes	Industry-Academia Student Development	<ul style="list-style-type: none"> <li>Provides a platform for industry-academia students to develop their potential and find their self-worth in life.</li> <li>Nurtured 908 ambitious students from 2019 to 2023; 76 continued their graduate school studies.</li> </ul>
 Mechanical expertise driving medical engineering	HIWIN-CMU Joint Research and Development Center	<ul style="list-style-type: none"> <li>Medical research highlights: Robotic endoscope holder, Robotic gait training system.</li> <li>Deep involvement in smart healthcare technologies, with 22 clinical research projects, 21 participating professors, 36 doctors, and 291 therapists/nursing staff.</li> </ul>
 Developing professional talent	Asia University Accounting Elite Cultivation Program	<ul style="list-style-type: none"> <li>Enhances students' accounting proficiency, improves their employability, and significantly boosts their motivation to obtain professional certifications.</li> <li>A total of 4,489 students have participated.</li> </ul>
	Tamkang University Professional Certification Guidance Program	<ul style="list-style-type: none"> <li>Commit to training digital professionals or interdisciplinary talents to enhance their employability and cultivate a culture of self-disciplined learning among students.</li> <li>A total of 5,472 students have participated.</li> </ul>

## Exploring Smart Manufacturing, Envisioning the Future

Embark on a journey to explore the sustainable future of smart manufacturing with a visit to HIWIN! Since its establishment, HIWIN has been globally marketing its products under its brand, consistently innovating with an ESG (Environmental, Social, and Governance) mindset, and developing components, systems, and comprehensive machine services.

Customized product tours and interactive activities annually inspire students and industry groups to visit the factory. These visits not only showcase HIWIN's research capabilities and innovative applications but also challenge preconceived notions of the mechanical industry, enabling visitors to anticipate future advancements in the field.

Number of visitors in 2020-2023



Teachers and students from Dajia Industrial Senior High School visited HIWIN

Visiting event-HIWIN product tour

## Creating Interdisciplinary Learning Environment

### 1 Guiding students in exploring industrial knowledge

HIWIN prioritizes knowledge sharing and is committed to guiding students in understanding the smart mechanical industry. We provide customized curriculum materials and classroom activities that cater to various educational levels, including high school, vocational school, and university. Our research and development executives and engineers visit campuses to share product knowledge and industry trends, enriching students with mechanical-related knowledge and inspiring their career development exploration.



## 2 Pre-employment training seminar for tailored programs

Before students begin their internships during the third year of high school, we offer simple and easy-to-understand courses to help them realize that the key components, which may seem unfamiliar, are actually applied in various aspects of daily life, including food, clothing, housing, transportation, education, and entertainment. Through group activities, students build team cohesion, learn workplace communication skills, and cultivate a spirit of mutual support and cooperation, which also aids in their transition to internships in the future.

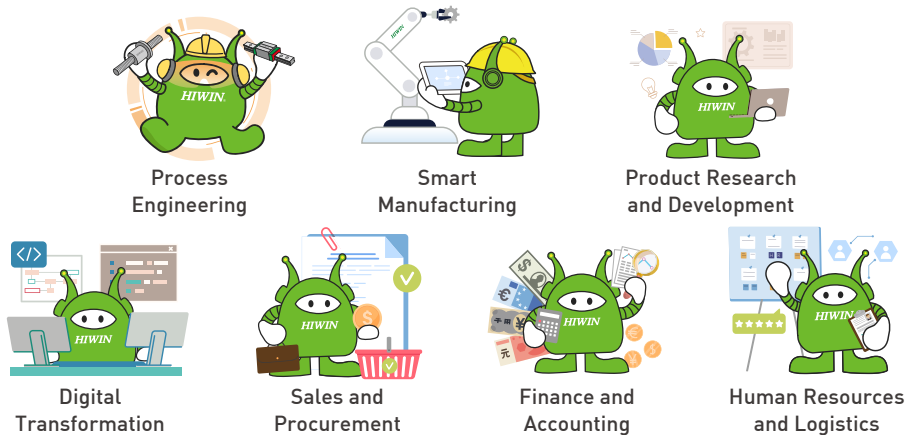
- ✓ Total lecture hours: 32 hours, with 272 participants
- ✓ 16 students are currently interning at HIWIN

## 3 Engineering leadership in education

HIWIN is dedicated to nurturing talent in the engineering field, with teachers playing a crucial role as mentors in students' career exploration. By sharing industry trends and product knowledge, high school and college educators can break through traditional perceptions of precision machinery, expanding their understanding and inspiring new ways of thinking about industry development. This, in turn, empowers educators to encourage students to engage in cross-disciplinary learning and broaden their horizons. Through diverse educational approaches, teachers can guide students in exploring future career paths, attracting more students to the field of precision machinery.

- ✓ Total lecture sessions: 4 sessions, with 51 participants

HIWIN provides a wide range of internship opportunities that enable students from different fields to apply their theoretical knowledge in practical settings. These internships allow students to gain valuable insights into the professional world and establish connections with the industry.



## Supporting the Adaptive Development of Industry-Academia Students

HIWIN has actively promoted industry-academia cooperation for over a decade. Each year, we prioritize selecting underprivileged students for educational opportunities through these collaborative programs. For these students, this becomes a pivotal moment as they acquire academic qualifications and gain access to career prospects. Whether they are enrolled as students or interns, they receive the same salary and benefits as regular employees, which not only improves their family's economic situation but also provides stability for their loved ones.

Throughout their time as industry-academia students, they are guided by supervisors, mentors, and HR professionals. They receive support in developing job-specific skills, personal growth, and overall well-being. HIWIN's industry-academia students are not restricted by age or qualifications; instead, their advancement opportunities are based on their abilities, performance, and efforts. Over the years, these students have grown from small saplings to become the backbone of our Company, assuming key positions in various departments. Within five years after graduation, they have achieved significant success, establishing their families and finding fulfillment in life. They stand alongside us, dedicating themselves to nurturing the next generation of students, passing on their knowledge and commitment.

- ✓ Cultivated 908 talented students in 2019-2023
- ✓ 76 university graduates have continued their postgraduate studies



Chairman & CEO Eddie Chuo, along with executives, congratulates graduating industry-academia students, encouraging them to continue shining at HIWIN



Hosting the graduation appreciation ceremony for industry-academia students: teachers and parents witness growth and achievement together



President Enid H.C. Tsai shares experiences and engages in discussions with retained industry-academia students



## Driving Medical Engineering with Mechanical Expertise

HIWIN-CMU Joint Research and Development Center, established by HIWIN and China Medical University (CMU), is dedicated to conducting research in healthcare, advancing technology development, exploring interdisciplinary applications, and nurturing high-level talents in medical engineering. Since 2015, an annual investment of US\$325.7 thousand has been made to synergize industry and university expertise, propelling Taiwan's medical engineering to new milestones.



Foreign medical personnel visited the HIWIN-CMU medical automation system

In 2023, the R&D center conducted two clinical collaboration projects, including the technical development of surgical robots and the medical automation system verification. Through clinical verification, product improvement suggestions were obtained. For example, the usability test of surgical robots improves the ease of control for robotic arm, ensuring that both surgeons and assistants have a good operating experience, thereby enhancing the quality of surgery. Furthermore, the

Joint R&D Center periodically organizes the "Broad View on HealthCare" Forum and satellite conferences on international geriatric medicine research. Esteemed experts are invited to analyze long-term practices, thereby enhancing the healthcare knowledge of professionals and the general public. In 2023, we invited Professor Shi-Ching Chen, CEO Ren-Hao Pan, and General Manager Tsui-E Lin to deliver a series of lectures. They shared insights on various topics, including how assistive technology can enhance the life quality for the disabilities and the elderly, the digital health provides solution healthcare inequality, and the use of AI in combating dementia. These discussions helped attendees understand how to utilize the latest technology and knowledge to tackle the challenges of caring for an aging population and the growing number of individuals with disabilities.

## Developing Professional Talents

HIWIN is a global enterprise that has positioned Taiwan's intelligent machinery industry at the forefront of the international stage. By implementing a range of innovative educational programs and sponsoring activities, the Company cultivates a favorable learning environment for students, while also enhancing their professional skills and practical abilities.

### 1 Accounting elite cultivation program (Asia University)

Since 2013, HIWIN has sponsored the Accounting Elite Tutoring Program offered by the Department of Accounting and Information Systems at Asia University. The program aims to enhance students' accounting expertise and improve their employability. It emphasizes developing students' communication, analytical, and expressive abilities, as well as broadening their international perspectives. The program assists top-performing students in becoming accounting elites. Since the inception of this program, 4,489 students have participated in the program, significantly increasing their desire to obtain professional certifications and fostering a culture of continuous learning. Evening tutoring sessions have become highly popular among students. Moreover, the majority of students are aware of the importance of early careers planning, indicating that the program has achieved its intended results.

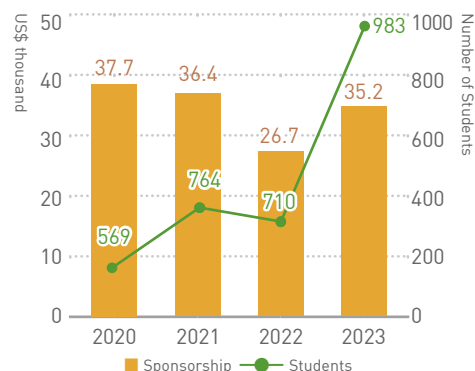
- ✓ In 2023, 983 students participated in the program, with sponsorships totaling US\$ 35,235.4.
- ✓ Select 2 outstanding students to participate in HIWIN internship.

### 2 Professional certification guidance program (Tamkang University)

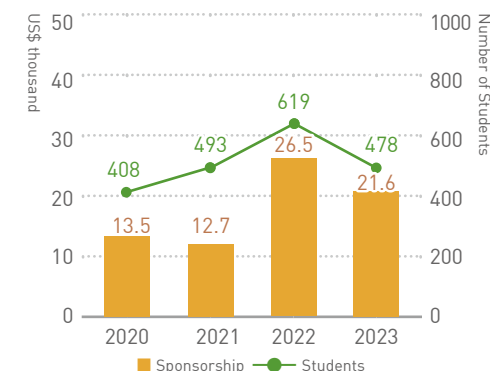
Since 2011, HIWIN has sponsored the Department of Accounting at Tamkang University to establish a strong foundation in professional subjects and offer training for digital professionals and interdisciplinary talents. The Company actively encourages students to obtain accounting and computer auditing certifications, which assists them to be prepared for the digital transformation trends in the accounting profession driven by technological advancements and to enhance their employability in the job market. To date, a total of 5,472 students have participated in this program. Students have developed a self-disciplined learning approach that distinguishes them from other departments, earning commendation from the university.

- ✓ In 2023, 478 students participated in the program, with sponsorships totaling US\$ 21,574.2.

#### Accounting elite cultivation program in 2020-2023





#### Professional certification guidance program in 2020-2023



7.4 Community Care

HIWIN actively participates in community care initiatives in the areas where the Company operates. By leveraging corporate resources and the dedication of HIWIN volunteers, we strive to make meaningful contributions to society.

Category	Program	Sustained Benefits
 HIWIN Volunteer Team	Long-term stationed volunteer service	Provides continuous support to service organizations in various tasks.
	Educational Volunteer Service	Offers comprehensive education activities for children from underprivileged families, experiences the joy and sense of achievement of hands-on crafts, and provides firsthand natural experiences, fostering respect for the environment.
	Community Care and Social Inclusion	Supports and provides employment and vocational training opportunities for underprivileged groups, assists small local farmers in promoting agricultural products, increases exposure, enters the community, and conveys the importance of environmental protection.
	Charitable Donations, Charity Sales, and Material Fundraising	Allows love to circulate and delivers kindness to those in need, promotes environmental reuse, and extends the life of items.
 Community Care	Donation of Hygiene System	Donated Hygiene System to Min Dao Home in Chiayi County to show our support and care for the disadvantaged.
	HIWIN GmbH (Germany)	Engaged local community care and education activities in Germany.

HIWIN Volunteer Team Services

The HIWIN Education Foundation established the HIWIN Volunteer Team in June 2012, with a primary focus on education and community services. The objective is to provide internal care and support services to Company employees, while also engaging in external educational and social public services. This aligns with the Company’s vision of enhancing human welfare and addressing the United Nations’ Sustainable Development Goals, thereby making a positive contribution to society.

Long-term stationed volunteers

Events were organized in 2023	Participated volunteers and contributions
<b>24 events</b>	<b>137 people 411 hrs</b>

Beneficiary units: Taichung and Yunlin-Chiayi areas

Educational volunteers

Events were organized in 2023	Participated volunteers and contributions	Number of beneficiaries
<b>10 events</b>	<b>78 people 234 hrs</b>	<b>318 people</b>



Charitable donations/charity sales and material fundraising

Events were organized in 2023	Raised in donations	Collected charity receipts	Collected charity supplies
<b>18 events</b>	<b>US\$ 9.1 thousand</b>	<b>328</b>	<b>5,197</b>

Community care and social inclusion

Mooncakes for the Mid-Autumn Festival	Dumplings with love
<b>4,614 boxes</b>	<b>1,600 pieces</b>

Beneficiary units: Genesis Social Welfare Foundation, Taichung Sound Bright Association, Eden Social Welfare Foundation, and Down Syndrome Foundation R.O.C

1 Long-term stationed volunteer service

The HIWIN volunteer team offers ongoing assistance by being stationed at the institution for extended periods of time. They provide support in various tasks and interact with the children. The primary services they provide include organizing invoices, accompanying the children, sorting and shelving second-hand goods, and maintaining cleanliness in the environment.



Chuo Yong-Tong Memorial Library



Taichung Childcare Home



Hong-En Social Welfare Foundation

## 2 Educational volunteer service

Since 2016, the HIWIN volunteer team has been engaged in educational volunteer activities, providing assistance to children from social welfare organizations in close proximity to the HIWIN Factories. The team aims to empower children from underprivileged backgrounds within the local community, as well as those from disadvantaged families, by offering them opportunities to broaden their horizons and foster boundless imagination for the future through enjoyable experiences and hands-on accomplishments.

- Baking activities

The baking activities are designed to engage children from disadvantaged backgrounds or families. Volunteers assist the children in baking cookies or cakes, providing them with a hands-on experience of the joy of baking through group activities. Additionally, the children have the opportunity to share the cookies and cakes with their families or friends. By participating in these activities, disadvantaged families come together and interact, fostering stronger parent-child relationships.

- Farming education

The HIWIN volunteer team accompanies children on nature excursions, where they visit organic farms and participate in hands-on activities to learn about the planting, growing, and harvesting of crops. These experiences help them appreciate the effort required to produce food and encourage them to value and avoid wasting it. Additionally, they develop an understanding of food safety and foster stronger parent-child relationships through their involvement.

- Handicraft workshop

Children bring their vivid imaginations to life through engaging in handicraft activities. This process of exploration, problem-solving, and self-directed learning cultivates a consistent attitude towards learning and a strong sense of responsibility. In addition to creating handcrafted art pieces, children also experience a profound sense of achievement.

- Environmental education

Children gain awareness and appreciation of pertinent issues through environmental education. Additionally, education enables children to engage with their surroundings and cultivate proper values, as well as acquire the ethics, knowledge, and attitudes essential for safeguarding and enhancing the environment. Moreover, education fosters children's concern for the environment and contributes to the attainment of sustainable education objectives.

## 3 Community care and social inclusion

The volunteer team works together with local community social welfare organizations to assist and offer employment and vocational training opportunities to marginalized groups.

- Dumplings with love

The Company's monthly special meal features handmade dumplings prepared by children from the Shih Fan Disabled Center. This initiative aims to combine volunteer activities with dining among colleagues, supporting underprivileged children and boosting the income of social welfare organizations.

- Mooncake collaboration

The Welfare Commission annually collaborates with social welfare organizations to produce mooncakes. This year, the Welfare Commission collaborated with four organizations: the Genesis Social Welfare Foundation, the Taichung Sound Bright Association, the Eden Social Welfare Foundation, and the Down Syndrome Foundation R.O.C. Together, they produced a total of 4,614 boxes of Mid-Autumn Festival mooncakes. This initiative not only provides employment and vocational training opportunities for disadvantaged groups, but also contributes to social stability.





#### 4 Donations with love/sales and material fundraising

- Through a charity sale event, the children at the orphanage received warmth on Children's Day and helped prevent hunger among other children. The event also promoted the sale of handmade crafts to generate additional income. In 2023, the total donation amount reached US\$ 1,553.5. The handmade crafts charity sale, organized in collaboration with the St. Coletta Catholic Training Center for Special Needs, raised an additional US\$ 1,824.1. The HIWIN gardening team at the factory contributed US\$ 546.7 from the sale of plant products. Together with HIWIN's annual sports event, where social welfare groups, local farmers, and disabled massage therapists were invited to set up stalls, the total income from charity sales amounted to US\$ 4,762.4.
- HIWIN employees also donated a total of US\$ 258.5 to various organizations, including the Hong-En Social Welfare Foundation, Genesis Social Welfare Foundation, Xin Yi Children's Home, Hsiang Shang Social Welfare Foundation, Taiwan Motor Neuron Disease Association, and Xin Yi Orphanage. Additionally, US\$ 267 from lost and found donations was given to the Shih Fang Ability Center, Xin Yi Children's Home, and Hong-En Foundation.
- Donation events included contributions of a total of 3,706 items to the Shih Fang Disability Center and Everlasting Home Children's Home. The used goods donation event saw 465 items donated to the Yunlin Branch of the Taiwan Fund for Children and Families, 924 items to The Garden of Hope Foundation, and 102 picture books to the Taichung Mountain Village Cultural Industry Development Association (Taichung City Heping Tribe School).
- Charity invoice donations: The HIWIN volunteer team established a charity invoice collection box within the Company, through which they regularly contributed the collected invoices and cash to social welfare organizations. In total, they donated 328 invoices.

## Community Care

### 1 Donation of Hygiene System to Min Dao Home in Chiayi county

In November 2023, HIWIN demonstrated our care for the underprivileged and those with disabilities by donating a self-developed Hygiene System to Min Dao Home in Chiayi County. The aim is to support both the service recipients and caregivers, contributing to the improvement of care services. To date, HIWIN has donated three Hygiene Systems—one to Min Dao Home, another to Yunlin Educational Nursing Home in 2021, and the third to Maria Wufeng Caring Home in Taichung City in 2022—upholding the principle of mutual benefit between HIWIN and local communities.

The Hygiene System is an electric lift bathing and hydrotherapy system that uses HIWIN's self-produced transmission components. It allows users to enjoy hydrotherapy and SPA treatments, helping them relax, soothe their emotions, and slow down muscle atrophy. Additionally, the bathing transfer equipment aids in moving users, reducing the risk of accidents during transfers and easing the physical burden on caregivers, thus enhancing the safety of the care process.



### 2 HIWIN GmbH (Germany)

HIWIN GmbH (Germany) supports industry-academia cooperation by donating a 22.5-meter Single-Axis Robot to the robotics lab at Offenburg University. Additionally, HIWIN GmbH provides scholarships of €4,000 each to four schools in Offenburg and participate in Offenburg's annual charity cycling event, supporting the cause of "Environmental and Personal Health."





## 7.5 Industrial Development Facilitator

HIWIN actively engages in the operation of public associations and is dedicated to integrating resources and collaborating with like-minded partners to establish an industrial ecosystem, drive industry transformation and upgrading, and enhance overall competitiveness. Additionally, HIWIN contributes through policy recommendations, supporting exhibition businesses, organizing forums, participating in international exchanges, and serving as chairpersons, directors, supervisors, or members of professional committees.

### 1 Taiwan Machine Tool & Accessory Builders' Association (TMBA)

Organization	HIWIN's Roles	Promoted Contents
Taiwan Machine Tool & Accessory Builders' Association (TMBA)	Honorary Chairman: Eric Y. T. Chuo (PH.D.) Executive Director: Eddie Chuo	Promote the Taiwan International Machine Tool Show (TMTS). Advocate for constructing the Taichung (Shuinan) International Convention Center, and promote industry-academia cooperation.
Elimi Association	Founder: Enid H.C. Tsai	Regularly organize related activities (at least once per quarter), including themed lectures, discussions, book clubs, visits, and exchanges with organizations in the machinery industry, government, academia, and research sectors, as well as public service, fitness, and leisure activities.
① National Team of Machine Tool Mask ② "Masking the Impossible" Documentary	① Main Participants ② Documentary Director: Enid H.C. Tsai	Support the government in constructing 92 mask equipment production lines and assist in equipment assembly. Funded the production of the "Masking the Impossible" documentary, which records the entire process from the team's formation to the completion of their mission, highlighting the integrity and value of Taiwan's small and medium-sized enterprise chain.

Eric Y. T. Chuo (PH.D.), the Global Chairman of HIWIN, served as the chairman of the Taiwan Machine Tool & Accessory Builders' Association (TMBA) during the 2nd and 3rd terms, and is now an honorary chairman. He wholeheartedly promoted the transformation and upgrading of Taiwan's machine tool-related industries and the Taiwan International Machine Tool Show (TMTS). Under his leadership, the exhibition's marketing model, combined with the supply chain from the production site, received substantial recognition from exhibitors. During his tenure as Chairman, Mr. Chuo advocated multiple times for the construction of the Taichung (Shuinan) International Convention Center, and after years of efforts, the ground-breaking finally took place in March 2019. In October 2022, Eddie Chuo, Chairman & CEO of HIWIN, was elected as an executive director of TMBA, serving as a committee member for industry and academia cooperation and governance. He actively promoted collaboration between the industry and academia, leveraging their resources to accelerate

technology research, development, and talent cultivation, supporting the sustainable development of Taiwan's machine tool industry.

On May 2, 2012, Enid H.C. Tsai, President, founded the Elimi Association under the support and expectations of female managers in the machinery industry. The purpose of Elimi is to provide a platform for female managers in the precision machinery-related industries to exchange and learn from each other, enhance their professional capabilities, and combine feminine qualities to break the stereotype that the machinery industry is solely a grease-monkey industry. It aims to create a new image and become a driving force in the precision machinery industry.

The name "Elimi" is derived from the abbreviation of the phrase "elegant leader in the machinery industry" in English. This naming inspiration comes from the founding President, Enid H.C. Tsai, and her expectations. "Elimi" also sounds like "one grain of rice" in Chinese, symbolizing hope and vitality, just like sowing rice seeds.

Enid H.C. Tsai, President of HIWIN, played a significant role in the documentary film "Masking the Impossible." She served as the main driving force behind the film and directed it. The documentary records the rapid formation of the National Team of Machine Tool Mask and the team's support to the government in constructing 92 mask equipment production lines, delivering them ahead of schedule. Enid H.C. Tsai stated that the primary purpose of making this film is to convey the message that in the spring of 2020, there was a group of people who created miracles through love and mission. When the COVID-19 pandemic struck, machine tool industry players stood up at the first moment to assist the government in facing an impossible mission, leaving a historically significant record in Taiwan's mechanical industry.

### 2 Taiwan Automation Intelligence and Robotics Association (TAIROA)

In 2011, Eric Y. T. Chuo (PH.D.), Global Chairman of HIWIN, merged the Robotics Association of Taiwan (ROBOAT) and the Taiwan Society of Manufacturing Engineers and Automation (TSMEA) to establish the Taiwan Automation Intelligence and Robotics Association (TAIROA). He served as the founding chairman of TAIRQA and currently holds the position of honorary chairman. Since 2009, TAIRQA has been collaborating with both sectors to bridge the gap between academia and industry, promoting certification exams for Automation Engineers and Robot Engineers. In 2016, Global Chairman Eric Y. T. Chuo (PH.D.) called for rapid industrial upgrading in Taiwan and organized the Industrial 4.0 Summit Forum to actively promote Smart Manufacturing and Intelligent Automation. Starting from 2020, TAIRQA has been actively promoting the Taiwan Robot Industry-Academia Alliance, encouraging practical training in robotic skills. By the end of 2022, TAIRQA had donated 78 robotic arms, with a total investment of approximately US\$976.9 thousand, to foster talent for Taiwan's smart manufacturing.

### 3 The SINOCON Industrial Standards Foundation

Eric Y. T. Chuo (PH.D.), Global Chairman of HIWIN, also serves as a director of the SINOCON Industrial Standards Foundation. He aims to foster collaboration between Taiwan and the Mainland in the field of intellectual property, with a particular focus on establishing industry standards. In 2016, the foundation initiated a dialogue on smart manufacturing cooperation between Taiwan and the Mainland, marking a significant milestone. HIWIN actively participated in discussions to develop three standards: robot and machine tool interface standards, robot controller standards, and polishing and grinding robot standards. These efforts have successfully established consistent standards for the control interface between industrial robots and processing machine tools, thereby enhancing the efficiency of intelligent automation.

### 4 Taiwan Excellent Brand Association (TEBA)

On February 10, 2023, Enid H.C. Tsai, the President of HIWIN, was elected as the new President of the Taiwan Excellent Brand Association (TEBA). As the first female President of TEBA, Enid H.C. Tsai expressed her commitment to continuing the efforts of the founding chairman, Mr. Stan Shih, and the past presidents. Under the slogan "Branding Taiwan, Net Zero Sustainability," TEBA aims to support member companies in incorporating ESG (Environmental, Social, and Governance) practices into their daily operations. This will enable Taiwan's brands to maintain a high level of competitiveness in light of the global trend towards carbon reduction.



### Donations to associations and non-profit organizations in 2020-2023

Items	Units	2020	2021	2022	2023
Lobbying, Interest Representation or Similar Activities	US\$	0	0	0	0
Local, regional, or national political movements/organizations/candidates	US\$	0	0	0	0
Industry associations or tax-exempt organizations (e.g., think tanks)	US\$	124,644.2	194,238.9	120,929.8	80,443.2
Others (e.g., expenses related to voting measures or referendums)	US\$	0	0	0	0
Total Donations and Others	US\$	124,644.2	194,238.9	120,929.8	80,443.2
Data coverage (percentage of denominator, indicating the organizational scope of the reported data)	%	100	100	100	100

### Main participation in associations and non-profit organizations in 2023

Association	HIWIN's Role	Main Activities	Input Resources (US\$ thousand)	Social/Environmental Issues
Chinese National Association of Industry and Commerce	Executive Director	Join as a member and contribute funds to provide the government with innovative ideas for industrial policy, support international expansion activities, and assist in hosting international delegations visiting Taiwan.	21.2	Align with the government's 2050 net-zero plan by integrating resources to implement low-carbon transformation in enterprises, supporting the Paris Agreement.
Taiwan Institute for Sustainable Energy (TAISE)	Directors	Join as a member and contribute funds to focus on issues such as climate change, sustainable energy, and corporate sustainability. Develop HIWIN's ESG policies and practices to align with international standards.	9.1	Recognize climate risks, support the Paris Agreement, establish the Taiwan Alliance for Net Zero Emission, and promote net-zero initiatives and related conferences.
The SINOCON Industrial Standards Foundation	Directors	Bring together the strengths of industry, government, academia, and research to promote the establishment of shared standards across the Taiwan Strait and facilitate the exchange and cooperation on industry standards.	6.5	Facilitate cross-strait resources exchange to advance net-zero initiatives and share resources.
Taiwan Semiconductor Industry Association (TSIA)	Member	Annually organize domestic and international seminars, member networking events, technical standard discussion forums, semiconductor awards, and more, to establish interaction mechanisms between domestic industries and relevant international organizations, thereby enhancing the competitiveness of Taiwan's semiconductor industry.	5.9	Encourage association members to support energy-saving and sustainability goals by organizing seminars on net-zero emissions and carbon reduction technologies.
Chinese Business Ethics Education Association	Directors	Promote understanding of the differences in decision-making across various roles through perspective-taking, to appreciate the ethical considerations behind each position. This fosters a more harmonious, stable, and sustainable relationship between society and businesses.	3.3	Promote ethics education to raise awareness of social and corporate ethics, and cultivate sustainable talents beneficial to social development.

## 7.6 Creative Collaboration

HIWIN has long been involved in creative and inspiring cross-disciplinary co-creation events, fostering Taiwan's soft power. Through the use of HIWIN products, the company collaborates on co-creation projects with the technology and education sectors as well as with artists.

### ① Banqiao Broadcasting Station - contemporary legend theatre: retelling journey to the west

In collaboration with the Contemporary Legend Theatre, we are using the newly acquired cultural and creative park, "Banqiao Broadcasting Station," as a base to blend traditional arts with technology for performances that offer educational culture, arts, and community enjoyment. Specifically, in the children's paradise, "Parent-Child Technology and Arts Fusion Exhibition Hall," we are for the first time combining technology with traditional arts. In familiar scenes from "Journey to the West," Industrial Robots play roles and interact with Sun Wukong, creating engaging performances that make the story more immersive for children and deepen their understanding of Industrial Robots.

### ② Trash Kitchen - sustainable recycling experience

Trash Kitchen, established by MINIWIZ Sustainable Energy Development, offers an engaging approach to promoting sustainability through recycling. In collaboration with local businesses, designers, and the public, this project provides a comprehensive and user-friendly recycling experience, showcasing the next steps in the recycling process. By transforming disposable waste into sustainable materials for products, consumers are empowered to become producers, fostering participation in the circular economy and promoting zero waste through low-carbon actions.

At the heart of the Trash Kitchen is the integration of HIWIN's RA610 Industrial Robots and XEG series electric gripper with the miniTRASHPRESSO, a recycling device developed by MINIWIZ Sustainable Energy Development. This automated machinery assists individuals in completing repetitive and high-risk tasks, effectively demonstrating the circular remanufacturing process through an automated exhibit. The primary objective of this project is to inspire everyone to contribute to environmental protection.

Interdisciplinary co-creation project  
total input amount in 2023

us\$ 58,785.5

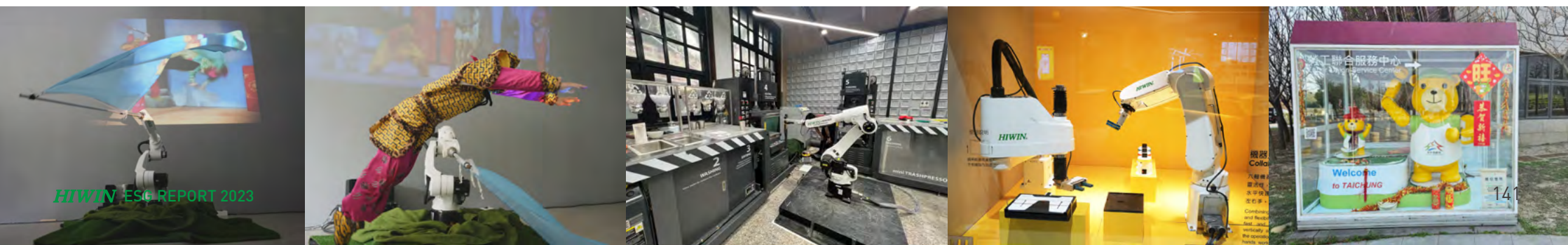


### ③ Kaohsiung National Science and Technology Museum - industrial robots permanent exhibition

Since 2018, HIWIN has been supporting the Kaohsiung National Science and Technology Museum in promoting science education, committed to advancing the idea of "technology in daily life, daily life in technology." From 2018 to 2023, HIWIN set up an "Industrial Robots" exhibition area in the "Power and Machinery Hall" on the 2nd floor of the museum. The HIWIN team made the complex knowledge and principles of industrial robots accessible to the public by incorporating hands-on operations and interactive games. From 2024 to 2029, the exhibition is planned to be upgraded to the "Smart Manufacturing Area - Industrial Robots 2.0." This upgrade will not only enhance the existing equipment and applications but also add trending topics like semiconductor industry applications and ESG sustainability education. The goal is to provide visitors with a fresh and engaging experience, sparking interest in learning and enhancing scientific literacy.

### ④ Robear Twins - installation art work

Robear Twins is located next to the Labor Service Center in the Precision Machinery Technology Innovation Park in Taichung City. HIWIN and HIWIN MIKROSYSTEM contributed self-made key components for the installation. The robots can perform delicate movements like waving, head patting, and rotating. In 2021, HIWIN took the initiative to adopt and maintain the installation, adding a festive atmosphere during Christmas and New Year. Every day, Robear Twins energetically change their poses, waving hello to colleagues at the busy key scientific intersection and welcoming a brand new day.





# Appendix





# Appendix I. About the Report

HIWIN Technologies Corp. (HIWIN) has been publishing its Corporate Social Responsibility (CSR) report on an annual basis since 2012. In 2022, the report was renamed the Sustainability Report. The purpose of this report is to provide a systematic disclosure of HIWIN's sustainable management strategies and performance in the economic, environmental, and social domains to its stakeholders. Additionally, it highlights the focus areas and communication outcomes identified by stakeholders, showcasing the Company's dedication to sustainable business practices. HIWIN encourages its valued partners to actively participate in interactive exchanges and knowledge sharing, fostering a culture of sustainable thinking. Moving forward, HIWIN remains committed to meeting stakeholders' expectations and making meaningful contributions to society.

## Report Scope and Coverage

The data presented in this 2023 Sustainability Report - ESG Report (the report) pertains to the period from January 1, 2023, to December 31, 2023. The report encompasses various operational locations. It is important to note that the scope of this report differs from the consolidated financial statements due to the current non-disclosure of data from overseas subsidiaries. However, the plan is to align the sustainability report data scope with the consolidated financial statements within 1 to 2 years. The boundary and content of this report remain consistent with the 2022 report, with no significant changes to Company information. If performance data and information include global figures, relevant notes will be provided for clarification. For financial-related data, please refer to the financial reports and annual report information.

In the event of any significant data restatement, explanatory notes will be included within the content of each chapter.

## Report Issuance



Previous Version  
Issued in June 2023



Current Version  
Issued in August 2024



Next Version  
Expected to be issued in June 2025

## Principles and Guidelines for Report Writing

Standards Followed	Verification Institutions
<ul style="list-style-type: none"> <li>GRI 2021 Sustainability Reporting Standards</li> <li>AA1000 v3 Accountability Principles Standard</li> <li>SASB Indicators</li> <li>TCFD Framework</li> <li>CDP Climate Change</li> <li>United Nations Sustainable Development Goals (SDGs)</li> </ul>	<ul style="list-style-type: none"> <li>TÜV Rheinland Taiwan Ltd.</li> <li>Verified according to GRI guidelines, SASB indicators, and TCFD framework</li> </ul>

## Contact Information



Responsible Unit  
Sustainable Development  
Committee  
(ESG Committee)

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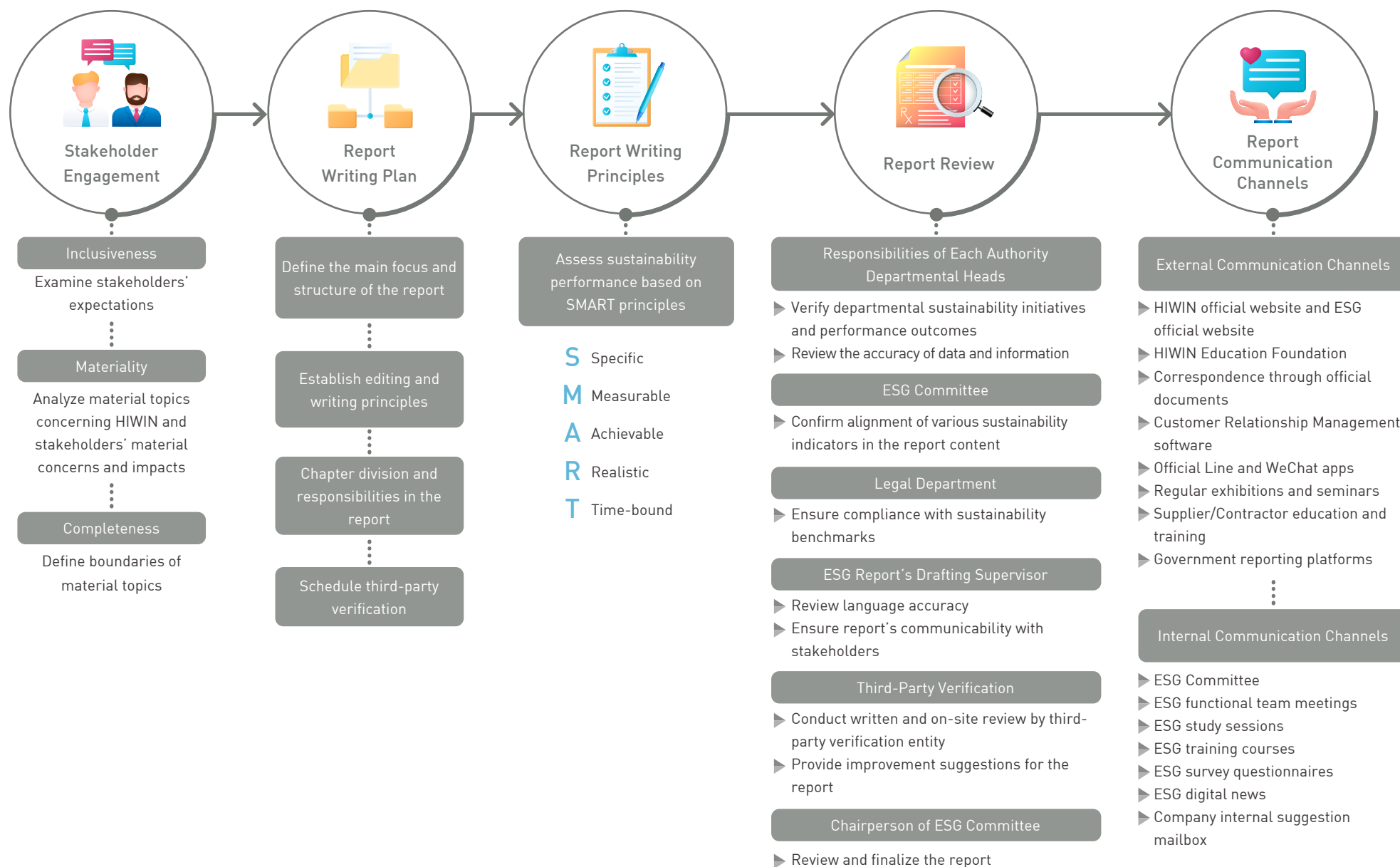
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










Address

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## Report Writing and Quality Management Process



## Appendix II. Management Approach

Material Topics	Goals	Unit	2030 Long-Term	2024	2023	2023 Achievements	Mechanisms for Effectiveness Assessment
 Research and Innovation Management	R&D expenditure as a percentage of revenue	%	6	4.5	4	3.85	① Financial statements ② New product revenue ③ New product proposals and production ④ Patent portfolio and management system ⑤ ESG Committee
	Enhanced investments in industry-academia cooperation	US\$ thousand	1,140	977	911.8	994.6 	
	Accumulated global patent applications	patent	4,000	3,550	3,480	3,492 	
	Output value per capita	US\$ thousand	325.6	250.8	241	190.5	
 Sustainable Products	Overall product manufacturing energy intensity <sup>Note 1</sup> (base year: 2021)	%	↓ 54	↓ 25	↓ 12	↑ 1.6 <sup>Note 4</sup>	ESG Committee
	Energy efficiency of mechatronic products <sup>Note 2</sup> (base year: 2021)	%	↑ 20	↑ 7.5	↑ 2.5	↑ 9 	
	Recycling rate for domestic wooden packaging materials <sup>Note 3</sup> (base year: 2021)	%	↑ 20	↑ 5	↑ 2.5	↑ 4 	
 Customer Relationship and Brand Management	Customer satisfaction	score	89	87	86	86 	① Customer satisfaction survey results & value assessment ② Dow Jones Sustainability Index (DJSI) ③ ESG Report ④ ISO 9001 Audit ⑤ Semi-Annual Customer Evaluation ⑥ CRM Customer relationship management system ⑦ Production and Sales Management Platform
	Product quality satisfaction	score	90	88	87	87 	
 Sustainable Supply Chain Management	Key focus on supplier evaluation rate	%	100	100	100	91.1 <sup>Note 5</sup>	① Sustainable supply chain management policy ② Supplier audit & assessment ③ Green procurement/recycled green procurement ④ ESG Committee ⑤ SCM platform
	Key focus on supplier on-site audit	no. of supplier	135	70	15	68 	
	Achievement in conflict minerals investigation	%	100	100	100	85.9	
	Completion of diversified raw material sources solutions	no. of solution	26	6	3	3 	
	Green procurement accounts for total annual procurement amount	%	10	6	5	7.3 	
	Local procurement ratio	%	70	70	66.6	74.5 	
	Implementation ratio of low carbon raw materials	%	20	18.5	18.5	15.4	


























Note: 1. Overall product manufacturing energy intensity = Energy resources consumed in manufacturing processes.

2. Energy efficiency of mechatronic products = Ratio of effectively utilized energy to actual energy consumption.

3. Focusing on the recycling rate of packaging materials for domestic wooden packaging materials, hence renamed as domestic wooden packaging material recycling rate.

4. Despite a decline in revenue in 2023, the factory maintains basic manufacturing electricity consumption, leading to an increase rather than a decrease in overall manufacturing energy intensity. HIWIN follows a carbon reduction path for factory energy conservation and carbon reduction therefore the target remains unchanged for 2024.

5. To strengthen supplier resilience, a restructured supply chain grading management is implemented.

Material Topics	Goals	Unit	2030 Long-Term	2024	2023	2023 Achievements	Mechanisms for Effectiveness Assessment
 Climate Strategy and Energy Management	Greenhouse gas scope 1 and 2 in total	%	↓ 42	↓ 14.1	↓ 9.4	↓ 24.4 	① TCFD Climate-related financial disclosure ② CDP Climate change assessment ③ ESG Committee ④ ISO 14064-1 Greenhouse gas verification ⑤ ISO 50001 Energy management system
	Disruptions due to climate disasters	day	0	0	0	0 	
	Accumulated installation capacity for renewable energy	kW	12,100	7,543	2,922	2937.72 	
	Accumulated energy eaved from efficiency projects	kWh	27,406	7,637	8,222	10,532.57 	
 Water Stewardship	Water reclamation ratio (base year: 2021)	%	16	15	12	13.7 	① ISO 14046 Water footprint verification ② ESG Committee ③ ISO 46001 Water resource efficiency management system ④ Smart water meter monitoring system
 Waste Management and Reuse	Waste resource utilization ratio	%	83	81	79	81 	① ISO 14001 Environmental management system ② ESG Committee ③ Compliance with environmental regulations reporting ④ Waste management project meetings
 Talent Development and Retention	Promotion rate for managerial positions from internal employees	%	85	88	88	100 	① Labor market salary survey ② Employee engagement survey ③ TCSA Talent development leadership award ④ ESG Report ⑤ Enterprise human resources enhancement program ⑥ Workforce inventory and knowledge enrichment meetings
	Retention rate of key talents	%	90	90	85	94.6 	
	Ratio of female in STEM positions	%	15	13.5	13	12.51	
	Employee training participation rate	%	90.5	87.5	87	87.54 	
	Employee learning satisfaction	score	4.6	4.5	4.5	4.59 	
	Increase total diversity learning subsidy amount	US\$ thousand	> 74.9	> 74.9	> 74.9	113.2 	
	Projects/Work Reports	No. of Project/Report	> 180	> 180	> 180	266 	
	Financial benefit from post-training project work	US\$ million	> 6.51	> 6.51	> 6.51	8.66 	
Growth rate of new generation talent	%	37	33.5	33	36.05 		
 Workplace Safety and Health	Disabling injury frequency rate	F.R.	≤ 0.41	≤ 0.56	≤ 0.59	0.2 	① ISO 45001 Occupational health and safety management system ② ESG Committee ③ Production enhancement meetings ④ Occupational health and safety committee meetings
	Disabling injury severity rate	S.R.	≤ 12	≤ 15	≤ 17	4 	
	Reduce the proportion of colleagues with metabolic syndrome	%	50	55	35	52.5 	
 Social Engagement	Allocation of profits for social welfare	%	≥ 2	≥ 2	≥ 2	5.84 	① Global sustainable citizen award ② TCSA Taiwan corporate sustainability award ③ ESG Committee
	Number of beneficiaries	people	≥ 500,000	≥ 55,000	≥ 55,000	66,191 	



## Appendix III. Guilds & Associations

No.	Participating Association (or Cooperative Association)	The Role of HIWIN	No.	Participating Association (or Cooperative Association)	The Role of HIWIN
1	Chinese Society of Mechanical Engineers (CSME)	Member	21	Taiwan Excellent Brand Association (TEBA)	Chairman
2	Cross-Strait CEO Summit	Member	22	Taiwan Society of Tribology Technology	Member
3	Chinese National Association of Industry and Commerce	Executive Director	23	Chinese Professional Management Association	Member
4	Chinese National Federation of Industries (Employer Committee)	Directors	24	Taiwan Stock Affairs Association	Member
5	Chinese National Federation of Industries (Youth Committee)	Committee Member	25	Chinese Management Association	Member
6	Taiwan Machine Tool & Accessory Builders' Association (TMBA)	Honorary Chairman, Honorary Consultant, Executive Director	26	Business Accounting Association/Taiwan	Member
7	TMBA-elim Social Club	Founding President	27	Precision Machinery Development Association of R.O.C. (CMD)	Advisors, Directors
8	Taiwan Association of Machinery Industry (TAMI)	Directors/Executive Director	28	Taiwan Medical and Biotech Industry Association (TMBIA)	Member
9	Taiwan Electronic Equipment Industry Association (TEEIA)	Member	29	Institute for Biotechnology and Medical Industry	Member
10	Taiwan Automation Intelligence and Robotics Association (TAIROA)	Executive Director	30	Taiwan Semiconductor Industry Association (TSIA)	Member
11	Taiwan Automation Intelligence and Robotics Association (TAIROA) -Smart Manufacturing Committee	Deputy Director	31	Chinese Association for Industrial Technology Advancement (CAITA)	Member
12	Taiwan Electrical and Electronic Manufacturers' Association	Member	32	Chinese Business Ethics Education Association	Directors
13	The Entrepreneur Club	Member	33	Association of Industrial Relations, R.O.C.	Executive Director
14	Taichung Industrial Park Association	Convener	34	Taiwan Russia Association	Directors
15	Taichung Precision Machinery Technology Park Association	Directors	35	Taiwan India Business Association	Member
16	Yunlin Technology Industrial Park Association	Member	36	Chinese International Economic Cooperation Association, Taiwan	Member
17	Chiayi Dapumei Precision Machinery Park Manufactures' Association	Directors	37	Taiwan Institute of Directors	Member
18	Greater Taichung Friends of the Police Association	Directors			
19	Importers and Exporters Association of Taipei	Member			
20	Monte Jade Science and Technology Association of Taiwan	Member			

# Appendix IV. GRI Standards Index: Comparison Table

★ : Material Topics

GRI Guidelines	Disclosure Items	Relevant Chapters/ Reasons for Omission	Page No.
GRI 2: General Disclosures 2021	2-1 Organizational Details	3.1 About HIWIN	29, 31
	2-2 Entities Included in the Organization's Sustainability Reporting	Appendix- About the Report	-
	2-3 Reporting Period, Frequency, and Contact Point	Appendix- About the Report	-
	2-4 Restatements of Information	Appendix- About the Report	-
	2-5 External Assurance	Appendix- About the Report Appendix-Assurance Statement	-
	2-6 Activities, Value Chain, and Other Business Relationships	4.5 Sustainable Supply Chain Management	76-80
	2-7 Employees	6.1 Employee Diversity and Inclusion 7.3 Industry-academia Cooperation	103-104 134
	2-8 Workers Who Are Not Employees	6.1 Employee Diversity and Inclusion 6.4 Workplace Safety and Health	103 116
	2-9 Governance Structure and Composition	2.2 Sustainable Development Committee 3.3 Corporate Governance	13 34-37
	2-10 Nomination and Selection of the Highest Governance Body	3.3 Corporate Governance	36
	2-11 Chair of the Highest Governance Body	3.3 Corporate Governance	36
	2-12 Role of the Highest Governance Body in Overseeing the Management of Impacts	2.2 Sustainable Development Committee 2.5 Materiality & Stakeholder 3.3 Corporate Governance	13 20-27 34
	2-13 Delegation of Responsibility for Managing Impacts	2.2 Sustainable Development Committee	13
	2-14 Role of the Highest Governance Body in Sustainability Reporting	2.2 Sustainable Development Committee Appendix- About the Report	13 144
	2-15 Conflicts of Interest	3.3 Corporate Governance	42
	2-16 Communication of Critical Concerns	2.5 Materiality & Stakeholder 3.3 Corporate Governance	20-27 34-35
	2-17 Collective Knowledge of the Highest Governance Body	3.3 Corporate Governance	37-38
	2-18 Evaluation of the Performance of the Highest Governance Body	3.3 Corporate Governance	34, 39-41
	2-19 Remuneration Policies	3.3 Corporate Governance	40

GRI Guidelines	Disclosure Items	Relevant Chapters/ Reasons for Omission	Page No.
GRI 2: General Disclosures 2021	2-20 Process to Determine Remuneration	3.3 Corporate Governance	39
	2-21 Annual Total Compensation Ratio	3.3 Corporate Governance	40
	2-22 Statement on Sustainable Development Strategy	1.1 Chairman's Statement	6
	2-23 Policy Commitments	2.1 Vision in Sustainability & Strategies 3.7 Human Rights	12 50
	2-24 Embedding Policy Commitments	2.1 Vision in Sustainability & Strategies 2.5 Materiality & Stakeholder 4.5 Sustainable Supply Chain Management 3.7 Human Rights	12 24-25 76-78 53-54
	2-25 Processes to Remediate Negative Impacts	3.7 Human Rights 5.1 Strategies for Climate Change & Energy Management 5.3 Water Stewardship 5.4 Waste Management & Recycling 6.4 Workplace Safety and Health Appendix-Management Approach	53-54 82-90 92-94 95-98 116-121 145-146
	2-26 Mechanisms for Seeking Advice and Raising Concerns	3.3 Corporate Governance 3.7 Human Rights	41 51, 55-56
	2-27 Compliance with Laws and Regulations	3.3 Corporate Governance	42
	2-28 Membership Associations	Appendix-Guilds & Associations	-
	2-29 Approach to Stakeholder Engagement	2.5 Materiality & Stakeholder	20-27
	2-30 Collective Bargaining Agreements	3.7 Human Rights	55
GRI 3: Material Topics 2021	3-1 Process to Determine Material Topics	2.5 Materiality & Stakeholder	20-22
	3-2 List of Material Topics	2.5 Materiality & Stakeholder	23
	3-3 Management of Material Topics	2.5 Materiality & Stakeholder	24-27

GRI 200: Economic Series				
Series	Disclosure Items		Corresponding Sections	Page No.
★ GRI 201: Economic Performance 2016	201-1	Direct Economic Value Generated and Distributed	3.4 Business Performance	43-44
	201-2	Financial Implications and Other Risks and Opportunities Due to Climate Change	5.1 Strategies for Climate Change & Energy Management	82-85
	201-3	Defined Benefit Plan Obligations and Other Retirement Plans	6.2 Talent Attraction and Retention	107-111
	201-4	Financial Assistance Received From Government	For additional information, please consult p.156 of the annual report.	-
GRI 202: Market Presence 2016	202-1	Ratios of Standard Entry Level Wage by Gender Compared to Local Minimum Wage	6.2 Talent Attraction and Retention	107-108
	202-2	Proportion of Senior Management Hired from the Local Community	6.1 Employee Diversity and Inclusion	104
GRI 204: Procurement Practices 2016	204-1	Proportion of Spending on Local Suppliers	4.5 Sustainable Supply Chain Management	80
GRI 205: Anti-Corruption 2016	205-1	Operations Assessed for Risks Related to Corruption	3.3 Corporate Governance	41
	205-2	Communication and Training about Anti-Corruption Policies and Procedures	3.3 Corporate Governance	41-42
	205-3	Confirmed Incidents of Corruption and Actions Taken	3.3 Corporate Governance	41
GRI 206: Anti-Competitive Behavior 2016	206-1	Legal Actions for Anti-Competitive Behavior, Anti-Trust, and Monopoly Practices	3.3 Corporate Governance	42
GRI 300: Environmental Series				
Series	Disclosure Items		Corresponding Sections	Page No.
★ GRI 302: Energy 2016	302-1	Energy Consumption Within the Organization	5.1 Strategies for Climate Change & Energy Management	87-88
	302-2	Energy Consumption Outside of the Organization	5.1 Strategies for Climate Change & Energy Management	87
	302-3	Energy Intensity	5.1 Strategies for Climate Change & Energy Management	88
	302-4	Reduction Of Energy Consumption	5.1 Strategies for Climate Change & Energy Management	89
	302-5	Reduction in Energy Requirements of Products and Services	4.3 Sustainable Products	67-70

GRI 300: Environmental Series				
Series	Disclosure Items		Corresponding Sections	Page No.
★ GRI 303: Water and Effluents 2018	303-1 (Management Approach)	Interactions with Water as a Shared Resource	5.3 Water Stewardship	92-93
	303-2 (Management Approach)	Management of Water Discharge-related Impacts	5.3 Water Stewardship	93
	303-3	Water Withdrawal	5.3 Water Stewardship	94
	303-4	Water Discharge	5.3 Water Stewardship	94
	303-5	Water Consumption	5.3 Water Stewardship	94
★ GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG Emissions	5.1 Strategies for Climate Change & Energy Management	86
	305-2	Energy Indirect (Scope 2) GHG Emissions	5.1 Strategies for Climate Change & Energy Management	86
	305-3	Other Indirect (Scope 3) GHG Emissions	5.1 Strategies for Climate Change & Energy Management	87
	305-4	GHG Emissions Intensity	5.1 Strategies for Climate Change & Energy Management	87
	305-5	Reduction of GHG Emissions	5.1 Strategies for Climate Change & Energy Management	87
	305-6	Emissions of Ozone-Depleting Substances (ODS)	No Relevant Incidents	-
	305-7	Nitrogen Oxides (NOx), Sulfur Oxides (SOx) and other Significant Air Emissions	5.5 Air Pollution Prevention	98-99
★ GRI 306: Waste 2020	306-1 (Management Approach)	Waste Generation and Significant Waste-Related Impacts	5.4 Waste Management & Recycling	95-96
	306-2 (Management Approach)	Management of Significant Waste-Related Impacts	5.4 Waste Management & Recycling	97-98
	306-3	Waste Generated	5.4 Waste Management & Recycling	96
	306-4	Waste Diverted from Disposal	5.4 Waste Management & Recycling	96
	306-5	Waste Directed to Disposal	5.4 Waste Management & Recycling	96
★ GRI 308: Supplier Environmental Assessment 2016	308-1	New Suppliers that were Screened Using Environmental Criteria	4.5 Sustainable Supply Chain Management	77-79
	308-2	Negative Environmental Impacts in the Supply Chain and Actions Taken	4.5 Sustainable Supply Chain Management	77-79

GRI 400: Social Series				
Series	Disclosure Items		Corresponding Sections	Page No.
GRI 401: Employment 2016	401-1	New Employee Hires and Employee Turnover	6.2 Talent Attraction and Retention	107, 111-112
	401-2	Benefits Provided to Full-Time Employees That Are Not Provided to Temporary or Part-Time Employees	6.2 Talent Attraction and Retention	107-111
	401-3	Parental Leave	6.2 Talent Attraction and Retention	111
GRI 402: Labor/Management Relations 2016	402-1	Minimum Notice Periods Regarding Operational Changes	6.2 Talent Attraction and Retention	111
★ GRI 403: Occupational Health and Safety 2018	403-1 (Management Approach)	Occupational Health and Safety Management System	6.4 Workplace Safety and Health	116
	403-2 (Management Approach)	Hazard Identification, Risk Assessment, and Incident Investigation	6.4 Workplace Safety and Health	117
	403-3 (Management Approach)	Occupational Health Services	6.4 Workplace Safety and Health	122-124
	403-4 (Management Approach)	Worker Participation, Consultation, and Communication on Occupational Health and Safety	6.4 Workplace Safety and Health	117
	403-5 (Management Approach)	Worker Training on Occupational Health and Safety	3.3 Corporate Governance 6.4 Workplace Safety and Health	42 121
	403-6 (Management Approach)	Promotion of Worker Health	6.4 Workplace Safety and Health	125
	403-7 (Management Approach)	Prevention and Mitigation of Occupational Health and Safety Impacts Directly Linked by Business Relationships	6.4 Workplace Safety and Health	114-115
	403-8	Workers Covered by an Occupational Health and Safety Management System	6.4 Workplace Safety and Health	116
	403-9	Work-Related Injuries	6.4 Workplace Safety and Health	119-121
	403-10	Work-Related Ill Health	6.4 Workplace Safety and Health	122
GRI 404: Training and Education 2016	404-1	Average Hours of Training Per Year Per Employee	6.3 Talent Capital Development	112
	404-2	Programs for Upgrading Employee Skills and Transition Assistance Programs	6.2 Talent Attraction and Retention 6.3 Talent Capital Development	110 112-113
	404-3	Percentage of Employees Receiving Regular Performance and Career Development Reviews	6.2 Talent Attraction and Retention	108

GRI 400: Social Series				
Series	Disclosure Items		Corresponding Sections	Page No.
GRI 405: Diversity and Equal Opportunities 2016	405-1	Diversity of Governance Bodies and Employees	3.3 Corporate Governance 6.1 Employee Diversity and Inclusion	36-37
	405-2	Ratio of Basic Salaries and Remuneration of Women to Men	6.2 Talent Attraction and Retention	108
GRI 406: Non-Discrimination 2016	406-1	Incidents of Discrimination and Corrective Actions Taken	No Relevant Incidents	-
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and Suppliers in Which the Right to Freedom of Association and Collective Bargaining May Be at Risk	No Relevant Incidents	-
GRI 408: Child Labor 2016	408-1	Operations and Suppliers at Significant Risk for Incidents of Child Labor	Prohibition of Child Labor	-
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and Suppliers at Significant Risk for Incidents of Forced and Compulsory Labor	No Relevant Incidents	-
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of Violations Involving Rights of Indigenous Peoples	No Relevant Incidents	-
GRI 413: Local Communities 2016	413-1	Operations with Local Community Engagement, Impact Assessments, and Development Programs	7.1 Social Impacts	127
	413-2	Operations with Significant Actual and Potential Negative Impacts on Local Communities	7.1 Social Impacts	127
★ GRI 414: Supplier Social Assessment 2016	414-1	New Suppliers That Were Screened Using Social Criteria	4.5 Sustainable Supply Chain Management	77-79
	414-2	Negative Social Impacts in the Supply Chain and Actions Taken	4.5 Sustainable Supply Chain Management	77-79
★ GRI 416: Customer Health and Safety 2016	416-1	Assessment of the Health and Safety Impacts of Product and Service Categories	4.4 Customer Relations and Brand Management	74
	416-2	Incidents of Non-Compliance Concerning the Health and Safety Impacts of Products and Services	No Violations	-
★ GRI 418: Customer Privacy 2016	418-1	Substantiated Complaints Concerning Breaches of Customer Privacy and Losses of Customer Data	4.4 Customer Relations and Brand Management	75



## Appendix V. SASB Standards Index: Comparison Table

Topic	Code	Units of measurement	Accounting indicators	Report content or explanation	Page No.
Energy Management	RT-IG-130a.1	GJ	Total Energy Consumed	855,014	88
		%	Percentage Grid Electricity	98	87
		%	Percent Renewable	Currently not utilizing renewable energy	90
Employee Health and Safety	RT-IG-320a.1	Ratio	Total Recordable Incident Rate (TRIR)	3.0	120
		Ratio	Fatality Rate	0	120
		Ratio	Near Miss Frequency Rate (NMFR)	0.01	121
Fuel efficiency and Emissions during the usage phase	RT-IG-410a.1	Gallons - Kilo tons miles	Fleet Fuel Efficiency for Medium and Heavy-Duty Vehicles	Not applicable. All products of HIWIN are non-fuel-driven fixed/mobile/power generator equipment.	-
	RT-IG-410a.2	Gallons - Hours	Fuel Efficiency for Non-Road Equipment		
	RT-IG-410a.3	Watts - Gallons	Fuel Efficiency for Stationary Generators		
	RT-IG-410a.4	Gram - kWh	Emissions of: (1) Nitrogen Oxides (NOx) and (2) Particulate Matter (PM) for: (a) Marine Diesel Engines, (b) Locomotive Diesel Engines, (c) On-Road Medium- and Heavy-Duty Vehicle Engines, and (d) Other Non-Road Diesel Engines		
Materials Procurement	RT-IG-440a.1	-	Description Of The Management Of Risks Associated With The Use Of Critical Materials	HIWIN supports procurements of conflict-free raw materials and also ask suppliers to source conflict-free materials. In 2023, HIWIN has requested suppliers of products containing Tantalum, Tin, Gold, and Tungsten to adhere to responsible minerals policies and sign a Responsible Minerals Conflict-free Statement. More than 85% of the first-tier key suppliers have completed this requirement, a total of 135 suppliers.	80
Remanufactured Products and Remanufacturing Services	RT-IG-440b.1	US\$	Revenue from Remanufactured Products and Remanufacturing Services	Currently, HIWIN does not participate in the recycling and remanufacturing of its sold products.	-

Activity indicators	Code	Units of measurement	Indicator content	Report content or explanation							Page No.	
	RT-IG-000.A	Output unit	Production quantity by product category	Unit: US\$ million;Thousands							Please refer to page 83 of HIWIN's 2023 annual report.	
				Quantity Commodity	Year	2022			2023			
						Production capacity	Production quantity	Production value	Production capacity	Production quantity		Production value
						Ballscrew	2,750	2,272	206.81	2,750		1,885
	Linear Guideway	33,700	32,169	668.20	33,700	27,521	484.67					
	RT-IG-000.B	People	Total number of employees	3.1 About HIWIN							29	

Appendix VI. Assurance Statement



Independent Assurance Statement

HIWIN Technologies Corp. ESG Report 2023

Introduction:

TÜV Rheinland Taiwan Ltd., member of TÜV Rheinland Group, Germany (“TÜV Rheinland Taiwan”, “We”) has been entrusted by the management of HIWIN Technologies Corp. (“HIWIN”, “the Company”) to conduct independent assurance of HIWIN Technologies Corp. ESG Report 2023 (“the Report”). All contractual contents for this assurance engagement rest entirely within the responsibility of HIWIN. Our task was to give a fair and adequate judgment on the HIWIN Technologies Corp. ESG Report 2023.

The intended users of this assurance statement are stakeholders having relevance to the HIWIN overall Sustainability Performance and impacts of its business activities during 2023 (January 2023 ~ December 2023).

TÜV Rheinland Group is a global service provider of CSR & Sustainability Services in over 65 countries, having qualified professionals in the field of Corporate Sustainability Assurance, Environment, Social and Stakeholder Engagement. We have maintained complete impartiality and independence during the assurance engagement and were not involved in the preparation of report contents.

Assurance Standard:

The Independent Assurance was carried out in accordance with AccountAbility, U.K Standard AA1000 Assurance Standard v3 and related standards AA1000 AccountAbility Principles (2018), AA1000 SES (2015), Principles of Inclusivity, Materiality, Responsiveness and Impact, Global Reporting Initiative (GRI) Universal Standards 2021.

Scope & Type of Assurance:

Our Assurance engagement covers the following:

- HIWIN Sustainability performance as described in the ESG report 2023 in accordance with GRI Universal Standards 2021 and performance indicators and according disclosure on management approach (DMAs) from Economic, Environment & Social category, also defined in Reporting boundaries.
- SASB Standards, INDUSTRIAL MACHINERY & GOODS Sustainability Accounting Standard.
- Evaluation of disclosed information in the report as per the Assurance Standards.
- Type-2, Moderate Level as per AA1000 Assurance Standard v3

Limitation:

The assurance engagement was carried out at HIWIN headquarters at Taichung City, Taiwan. The consultations with external stakeholder were not carried out. We have not observed any significant situations to limit our assurance activity. The verification is carried out based on the data and information provided by HIWIN, assuming they are complete and true. We did not verify the reported financial data as same is verified by another third party in annual report.

Assurance Methodology:

TÜV Rheinland Taiwan has challenged the report contents and assess the process undertaken by HIWIN from source to aggregate in disclosure of information related to Sustainability performance. Our judgment is based on the objective review of reported and based on the principles defined in the assurance standards, the principles of inclusiveness, materiality, responsiveness and impact, and the integrity of the data provided in the report.

Analytical methods and the performance of interviews as well as verification of data, done as random sampling, to verify and validate the correctness of reported data and contents in light of contractual agreement and the factual HIWIN Corporate Sustainability strategy as mentioned in the report. Our work included consultation with over 15 HIWIN representatives including

senior management and relevant employees. The approach deemed to be appropriate for the purpose of assurance of the report since all data therein could be verified through original proofs, verified database entries.

The Assurance was performed by our multidisciplinary team of experienced professionals in the field of Corporate Sustainability, Environment, Social and Stakeholder Engagement. We are of the opinion that our work offers a sufficient and substantiated basis to enable us to come to a conclusion mentioned below and based on the content of our contract.

Adherence to AA 1000 principles:

Inclusivity:

HIWIN has continually sought the engagement of its stakeholders, identify and understand their stakeholder, and use the communication mechanism to identify the material issues and achieve an accountable response.

Materiality:

HIWIN has implemented the material issues identification processing. The identification was based on the requirements and focus of attention of the stakeholder, the consideration of the company internal policy, shareholders meeting, questionnaires and the understanding and communication on the sustainable development content. The sustainability information disclosed enables its stakeholders to make informed judgements about HIWIN 's management and performance.

Responsiveness:

HIWIN has implemented the policy including environment and safety, quality, and corporate sustainability. The ESG report 2023 disclosed the management system of the company and stakeholder engagement, responding to their stakeholders against material issues of the sustainable development.

Impact:

HIWIN has identified and fairly represented impacts that were measured and disclosed in effective way. HIWIN has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization.

Conclusion:

In conclusion, we can mention that no instances or information came to our attention that would be to the contrary of the statement made below:

- HIWIN Technologies Corp. ESG Report 2023 meets the requirement of Type-2, Moderate Level Assurance according to AA1000AS v3 and Global Reporting Initiative (GRI) Universal Standards 2021.
- The Report includes statements and claims that reflects HIWIN achievements and challenges supported by documentary evidences and internal records.
- The performance data we found in the report are collected, stored and analyzed in a systematic and professional manner and were plausible.
- TÜV Rheinland Taiwan shall not bear any liability or responsibility to a third party for perception and decision about HIWIN based on this Assurance Statement.

Vito Lin



Vito C. C. Lin Technical Manager

TÜV Rheinland Taiwan Ltd.

Taipei, August 1, 2024

# HIWIN®



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