



Environmental

Social

Governance

ISU PETASYS **SUSTAINABILITY REPORT** **2024**



ABOUT THIS REPORT

Report Overview

Since 2015, ISU PETASYS has been transparently disclosing its ESG activities and performance to stakeholders through the publication of its Sustainability Report. This report is the sixth Sustainability Report published by ISU PETASYS and contains information on the company's key topics, ESG strategic tasks, and directions. ISU PETASYS will continue to actively communicate with stakeholders through the annual publication of the Sustainability Report.

Reporting Standards

This report is prepared in accordance with the GRI (Global Reporting Initiative) Standards, which are international standards for the Sustainability Report. In addition, it includes disclosures on sustainability issues that may affect the company financially, reflecting disclosure recommendations of the TCFD (Task Force on Climate-Related Financial Disclosures) and the SASB (Sustainability Accounting Standards Board) standards. Financial information was prepared based on the K-IFRS (Korean International Financial Reporting Standards).

Reporting Period and Scope

This report covers sustainability management activities and achievements from January to December 2023, with some achievements extending to the first quarter of 2024. The reporting scope includes ISU PETASYS headquarters and all subsidiary locations, and some achievements from global business locations have been also included. For any data differing from the reporting period and scope as specified above, notations are given separately.



Assurance of the Report

This report is verified by BDO Sunghyun, an independent verification agency, to enhance the reliability and completeness of the information contained through third-party verification. Detailed information regarding the verification can be found on page 99 of the report.

Additional Information for the Report

This report is published in Korean and English and includes interactive features to enhance information accessibility. Features like navigating to related pages within the report or using direct links to related web pages (QR codes, links) are available.

ISU PETASYS Sustainability Report 2024

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Interactive User Guide



The 2024 Sustainability Report, available for download on the ISU PETASYS website (<https://www.petasys.com/eng/csr/report.jsp>), has been created in an interactive PDF format for user convenience.

Translation Disclaimer

This report is a translated version of the 2024 ISU PETASYS Sustainability Report. In case of any discrepancies, the Korean version of the report shall prevail.

COVER STORY | ISU PETASYS pursues securing sustainability and creating value for all stakeholders, including employees, investors, customers, communities, and the environment. We aim to minimize the negative impacts produced by corporate business activities and strive to create positive value for the environment and society.

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ESG Performance

ENVIRONMENTAL

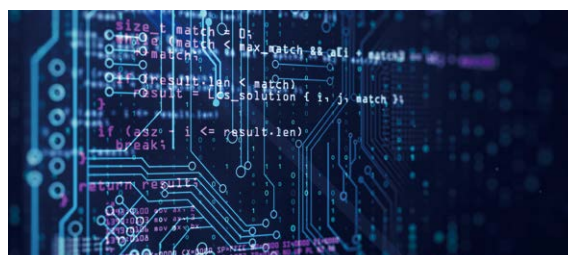
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LETTER FROM CEO



ISU PETASYS is a company committed to fulfilling dreams of humanity. By building trust with customers and inspiring hope in our shareholders, employees, and local community, we will always stand by your side.

Greetings, valued stakeholders,

As a specialized manufacturer of ultra-high layer PCB (Printed Circuit Board), ISU PETASYS has continuously made robust growth through innovation since establishing its PCB business in 1989. We extend our sincere appreciation to those who have consistently entrusted and supported us.

Last year, the market environment was unfavorable due to reduced semiconductor production and a decline in sales prices. However, despite these difficulties, we achieved record production and revenue based on our excellent technical expertise and competitive quality. Furthermore, we completed the construction of a new plant and welfare facility, along with the relocation of existing factories and new investments.

We anticipate a challenging business environment in 2024 due to accelerated competition and a stagnant network infrastructure market. Nevertheless, with an expected rise in demand for AI accelerators and robust growth in orders, ISU PETASYS plans to leverage its technological strengths, stable production, and sales environment to pursue continuous innovation and challenges, and we are committed to making the following efforts.



First, we will secure core technological competencies that reflect changes in the market and customer demands.

The demand for high-performance PCB will continuously rise with the expansion of data centers and the increase in edge computing and hyperscale data centers. In response to these market changes and in reference to the recent growth in AI, ISU PETASYS will expand its product portfolio to include AI accelerators, high-specification networks, and server equipment. We will maintain a maximum production system through increased sales of high-performance servers and accelerator modules, enhancing our core PCB technological competencies to achieve continuous growth.



Second, we will enhance product competitiveness through innovative manufacturing and new investments.

Introducing smart infrastructure and technology for innovative manufacturing is not optional but essential. ISU PETASYS plans to improve the production and management environments by investing in automated equipment and programs, establishing an integrated RPA monitoring system, and incorporating automation technology throughout the entire production process starting from product design. We will also enhance quality detection capabilities with new inspection equipment that utilizes digital technology.



Third, we will implement sustainable ESG management.

As a member of the RBA (Responsible Business Alliance), ISU PETASYS will continuously strive to enhance transparent management activities that consider all stakeholders, including employees, the environment, and communities, as well as the sustainability of the global supply chain. Furthermore, to respond to the climate crisis, we will develop systematic Net Zero strategies and activities, and introduce an ESG data management system to improve the accuracy and reliability of our ESG data, thereby positioning ourselves as a leading ESG company.

Dear valued stakeholders,

ISU PETASYS will solidify its leading position in the PCB market through change and innovation. We kindly request your continued interest and support.

Thank you.

June 2024

Chang-Bok Choi,
CEO of ISU PETASYS Co., Ltd.



COMPANY PROFILE

ISU PETASYS is a specialized manufacturer of ultra-high layer PCBs (Printed Circuit Board). Established in 1972, we have developed highly integrated, high-quality products since our PCB business launch in June 1989. Leveraging excellent technical expertise and quality, ISU PETASYS continuously maintains collaborative relationships with global IT companies. We have established a distinctive position in the global market through our exceptional technology, production capabilities, and sales environment.

ISU PETASYS is focusing its capabilities to actively respond to rapidly changing market dynamics, such as the development of AI technology, the spread of noncontact transactions, and the increasing demand for network infrastructure. By expanding our business portfolio and manufacturing base, and developing next-generation core technologies, ISU PETASYS aims to secure a foundation for sustainable growth and become a company that creates new opportunities in the high-value-added market.



Company Name	ISU PETASYS Co., Ltd.
Date of Establishment	February 1972
CEO	Chang-Bok Choi
Location of Headquarters	36, 50, 60 Nongong-ro 53-gil, Nongong-eup, Dalseong-gun, Daegu, Republic of Korea
Business Areas	Manufacturing and sales of PCB (Printed Circuit Board)
Number of Employees	1,108

2023 Business Performance

(As of December 2023)

Capital (Consolidated basis)

63.2 KRW billion



Revenue (Consolidated basis)

675.3 KRW billion



Net Profit

47.7 KRW billion



Operating Profit

62.2 KRW billion



VISION & MISSION

To achieve its management philosophy's core purpose of 'Create Beautiful Future with Abundance and Convenience,' ISU PETASYS has established 'Sincerity,' 'Seek for World Best,' and 'Customer Satisfaction' as its three core values and is actively pursuing its management activities. The diligent approach to creating the best products through sincerity towards people and work, the continuous pursuit of innovation and self-improvement through challenges, and the commitment to delivering greater value for customer satisfaction are realized throughout the overall management of ISU PETASYS.

Objective



“Create beautiful future with abundance and convenience”

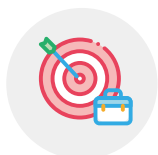
Core Values



SINCERITY

‘Whole hearted efforts towards persons and tasks’

‘Sincerity’ is a promise that we will make the finest product with ‘sincerity towards people and work’ based on respect for humanity, self-improvement, honesty, and responsibility.



SEEK FOR WORLD BEST

‘No.1 in quality’

‘Challenge’ is a will to aim to the ‘World Best’ through endless innovation and self-development (improvement).



CUSTOMER SATISFACTION

‘Customer value creation’

‘Customer Satisfaction’ is knowing and respecting current and future expectations of our customers and striving to provide better value proposition to them.



OUR HISTORY

ISU PETASYS strives to leap forward as a global electronic components company, leveraging its high quality and technological competitiveness. In a rapidly changing business environment, ISU PETASYS has continuously pursued technical development for customer satisfaction and is enhancing corporate value by strengthening its business portfolio that focuses on the next-generation growth industries.

~ 1990s

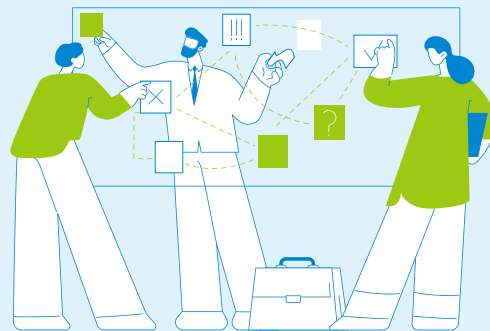
- Feb. 1972** Founded ISU PETASYS
- Jun. 1989** Started PCB business
- Nov. 1995** Incorporated into ISU Group
- Jun. 1998** Completed the second factory

2000s

- Aug. 2000** Listed on KOSDAQ
- Sep. 2000** Established ISU PETASYS America
- Oct. 2003** Listed on KOSPI
- Jan. 2004** Established ISU EXABOARD Co., Ltd.
- Nov. 2007** Obtained AS9100 certification (PCB for aerospace)

2010s

- Apr. 2011** Acquired ISU EXAFLEX Co., Ltd.
- Nov. 2013** Established ISU PETASYS HUNAN
- Oct. 2014** ISU EXABOARD Co., Ltd. merged ISU EXAFLEX Co., Ltd.
- Oct. 2015** Completed the third factory
- Nov. 2015** Obtained TS16949 (Automotive quality management system) certification
- Dec. 2017** Obtained IATF 16949 (Automotive quality management system) certification
- Nov. 2018** Obtained AA in ESG assessment from Sustainvest




2020s

- Jan. 2021** Acquired RBA Gold Level certification
- Feb. 2021** Developed RF Radar for vehicles (ETRI)
- Jun. 2021** Developed Main Board PCB for HPC (Korea Institute of Science and Technology Information)
- May 2023** Held completion ceremony of the fourth factory
- Nov. 2023** Completed the second welfare facility

GLOBAL NETWORK

In addition to its headquarters and Seoul office in Korea, ISU PETASYS has overseas production and sales subsidiaries, including locations in the United States and China.


Domestic and Overseas Business Sites



ISU PETASYS HUNAN Ltd.
 (China Subsidiary)

- **Location:** No. 1 Quanchuang Road, Jinhua Industrial District, Xiangtan, Hunan, China
- **Founded:** 2001
- **Main Business:** Mid-layer PCB production/sales






ISU PETASYS Corp.
 (USA Subsidiary)

- **Location:** 12930 Bradley Ave., Sylmar, CA 91342, USA
- **Founded:** 2013
- **Main Business:** PCB business/sales






ISU PETASYS
 (Daegu, Headquarters)

- **Location:** 36, 50, 60 Nongong-ro 53-gil, Nongong-eup, Dalseong-gun, Daegu, Republic of Korea
- **Founded:** 1989
- **Main Business:** Ultra-high layer PCB production/sales

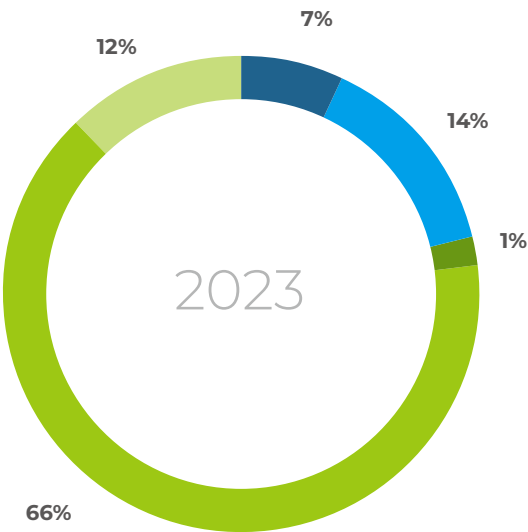




ISU PETASYS
 (Seoul Office)

- **Location:** 84, Sapyeong-daero, Seocho-gu, Seoul, Republic of Korea
- Overall sales/service

Revenue Ratio by Region

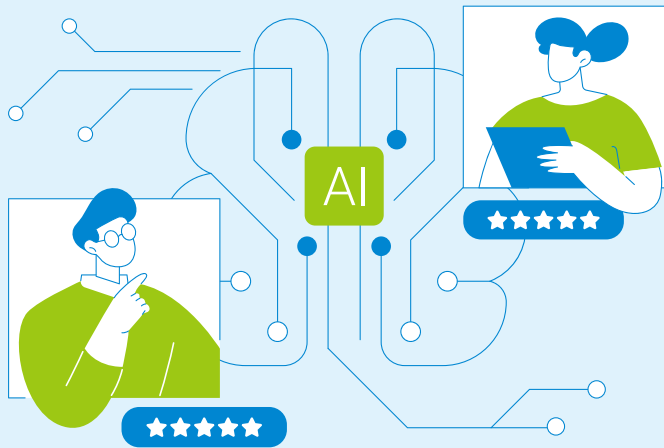


(Unit: KRW 1,000, %)

Category	Revenue	Revenue Ratio
Republic of Korea	45,433,182	7%
USA	94,259,966	14%
Europe	6,369,158	1%
Asia	445,714,188	66%
Others	83,556,262	12%
Total	675,332,756	100%

BUSINESS AREAS

ISU PETASYS aims to focus on creating new opportunities within high-value-added markets by expanding its business portfolio and manufacturing base. By securing a foundation for sustainable growth through the development of core technologies in the next-generation network industry, ISU PETASYS will evolve into a globally leading PCB company.



PCB for Network Equipment



Ultra-high layer MLBs of ISU PETASYS are advanced-level PCBs, which are integrated into network equipment that require high performance, high integration, and high reliability, enabling faster and more secure communication without interruptions or signal delays.

Market Outlook and Strategy

The demand for wired network PCBs is on the rise due to the recent growth of the IT equipment market, driven by increased data traffic and the trend towards higher product specifications. ISU PETASYS will continue to secure value-added production capabilities by participating in the development of high-value-added models and expanding mass production volumes.

PCB for Servers/Storage



ISU PETASYS's PCBs for servers and storage enable efficient maintenance and management of large amounts of data through the application of high-end technology that ensures efficient storage and operation of extensive data volumes.

Market Outlook and Strategy

Recent trends include the rapid development of the IT industry and the increasing need to efficiently maintain and manage large amounts of data. ISU PETASYS is leading the increase in ASP (Average Selling Price) with the high specifications of our server and HPC* product lines, developed to enable high-speed signal transmission. Additionally, we aim to secure top global customers and strengthen our market leadership with advanced multilayer network technology.



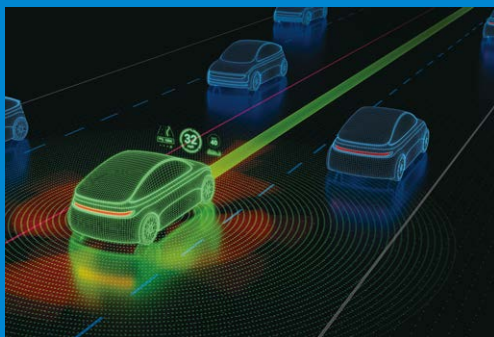
PCB for Supercomputers



ISU PETASYS has excellent technical expertise in the field of developing PCB boards for supercomputers, which is essential for handling vast data processing and rapid calculations. ISU PETASYS's PCBs provide an environment where computing resources can be efficiently expanded and flexibly utilized for big data analysis and complex problem-solving.

Market Outlook and Strategy

HPC* is widely utilized across diverse industries including government, academic research, high-performance graphics, life sciences, genomics, manufacturing, financial services and banking, earth sciences, and media, with its applications constantly expanding. ISU PETASYS plans to lead the localization of PCBs for supercomputers to enhance Korea's technological sovereignty and improve national competitiveness.



PCB for Automotive Radar

ISU PETASYS's PCBs for automotive radar are products with a high-frequency antenna of 77-79 GHz, formed on a PCB that can transmit and receive distance and location information of automobiles.

Market Outlook and Strategy

As autonomous driving, electric vehicles, and hybrid technologies evolve, the level of technology and quality required for electronic PCB products is rising. ISU PETASYS aims to focus on global customers and product development based on our expertise in using special raw materials for high multilayer PCBs.

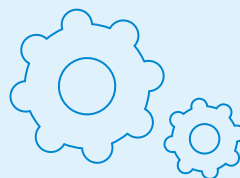
PCB for IC Tester



ISU PETASYS manufactures highly reliable PCBs for IC testers based on ultra-high layer PCB manufacturing technology.

Market Outlook and Strategy

High-performance PCBs for IC testers are required to minimize losses due to defects by evaluating the functionality and reliability of semiconductors, as zero-defect level semiconductor quality has become an essential requirement. ISU PETASYS is developing new products utilizing its ultra-high layer technology and expertise.



PCB for Aerospace and Aviation Industries



ISU PETASYS operates a systematic quality system with continuous technology development to meet the high-quality and reliability standards of aerospace and aviation products.

Market Outlook and Strategy

PCBs used in the aerospace and aviation industries are subject to particularly strict standards for long-term reliability, as malfunctions can lead to fatal problems or major accidents. ISU PETASYS complies with these quality standards through company-wide efforts.



PCB for Base Stations

ISU PETASYS manufactures RF (Radio Frequency) PCBs that transmit and receive radio waves.

Market Outlook and Strategy

The wireless base station industry is undergoing a transformation with the transition to 5G and the emergence of 6G development as new focal points. The PCBs used in base station equipment have also evolved as the trend of high specification and miniaturization of base station equipment has spread. ISU PETASYS will strengthen its market position by promptly responding to customer needs and changes in technology trends.



2023 ACHIEVEMENTS

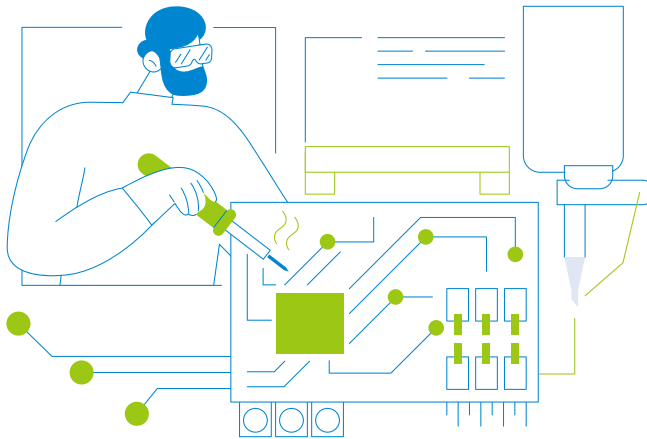
675.3 KRW billion
Achieved record-breaking revenues

Top 3
Ranked third in global revenue among ultra-high layer PCB manufacturers (over 18 layers)
(Source: PrismarkReport)



Completion of
the Fourth Plant
for PCB Manufacturing

Korea MLB PCB
Revenue Rank #1
(Source: PrismarkReport)



RBA Audit

Silver Level

The Ministry of Trade,
Industry and Energy

400 USD million
Export Tower Award

EcoVadis Rating

Silver Level

Environmental Law Violation

ZERO

Employment-Friendly Company
(Selected by Daegu Metropolitan City)

ESG Rating by Sustainvest

B

(Overall Rating)

Data Leakage and Security Accident

ZERO

Stimulating Local Investment

Approx. KRW **130** billion
in Dalseong-gun



ESG FUNDAMENTALS

ISU PETASYS is a company committed to fulfilling dreams of humanity.
By building trust with customers and inspiring hope in our shareholders, employees,
and local community, we will always be by your side.

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ESG MANAGEMENT STRATEGY

ISU PETASYS is pursuing five ESG strategic tasks to lead global ESG standards. These strategic initiatives encompass critical areas for advancing ESG management, with detailed action plans and performance indicators developed for each initiative to assess annual performance and conduct inspection and improvement activities.

In 2023, ISU PETASYS focused on several key operational tasks to strengthen ESG management, including improving the results of RBA (Responsible Business Alliance) on-site due diligence and strengthening manual management, enhancing competencies through ESG practitioner training, and responding to mandatory ESG disclosures. In 2024, we plan to strengthen the responsibilities and roles of the ESG Committee and operational TFTs for ESG to establish ESG governance. We will also adopt an ESG data management system, measure and manage Scope 3, establish Net Zero strategies, and continue to strengthen TCFD-based disclosures.

ESG Strategy Operating System



ESG GOVERNANCE

ESG Committee ____ In 2023, ISU PETASYS reorganized our CSR Committee into the ESG Committee and transitioned to an ESG operational framework. The ESG Committee is convened upon the declaration of an ESG department and includes board members, including the CEO, as well as responsible representatives from various areas. The ESG Committee deliberates on ESG-related policies and strategies, along with nonfinancial risks that include ESG topics. It also inspects the status of ESG management promotions, major achievements, and plans.

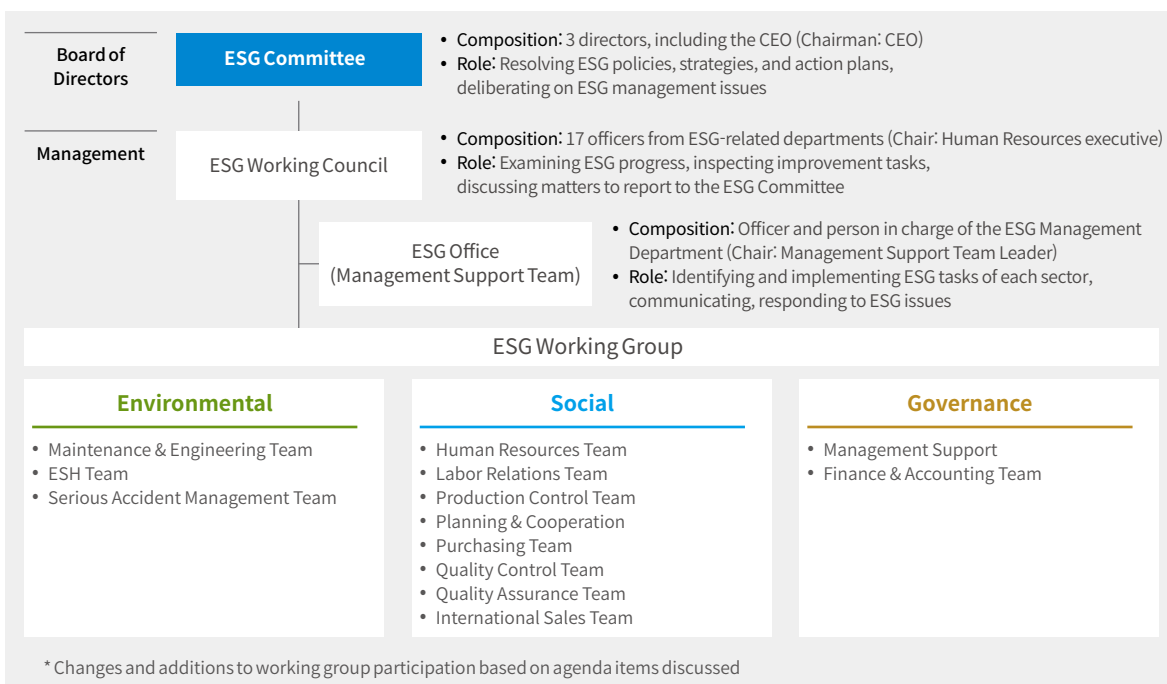
ESG Working Council ____ ISU PETASYS operates the ESG Working Council, composed of officers from environmental, social and governance-related departments, to enhance the execution of the ESG working groups. The ESG Working Council oversees ESG implementation and improvement tasks, and reports to the ESG Committee on significant ESG issues.

ESG Office ____ The ESG Office serves as a control tower for the overall ESG activities of ISU PETASYS. It is responsible for establishing ESG management strategies and implementing tasks by selecting company-wide important ESG issues. It monitors ESG management communication and implementation status to establish KPIs of the implementing departments of each sector. The responsibility also includes conducting internal audits for each ESG sector, participating in global initiatives, responding to ESG assessments, publishing the ESG report, and responding RBA audit and customer surveys.

ESG Committee Meeting Records

Category	Date	Agenda	Attendance
2023	1st	April 7, 2023	2023 ESG internal/external environment analysis and implementation schedule report
	2nd	December 15, 2023	2023 ESG performance report, Scope 3 calculation and management agenda resolution
2024	1st	April 22, 2024	Net Zero declaration and resolution on enhancing participation in climate-related initiatives

ESG Governance of ISU PETASYS



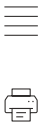
MATERIALITY ASSESSMENT

ISU PETASYS conducts an annual double materiality assessment to identify industry issues and stakeholder needs related to sustainability, and to identify sustainability topics that are significant for both impact materiality and financial materiality assessments.

In 2024, a professional assessment team with expertise in the sectors of environment, social, and governance was formed. The team was composed of a lawyer, labor attorney, climate change expert, and product safety expert, and it conducted FGIs (Focus Group Interviews) to identify and prioritize material topics to be managed intensively. To assess impact materiality and financial materiality, ISU PETASYS analyzed and evaluated the 'scale,' 'scope,' 'remediability,' 'likelihood,' 'magnitude,' and 'time horizon' of each material topic, and selected the contents to be reported in the Sustainability Report based on the assessment results.

Materiality Assessment Process

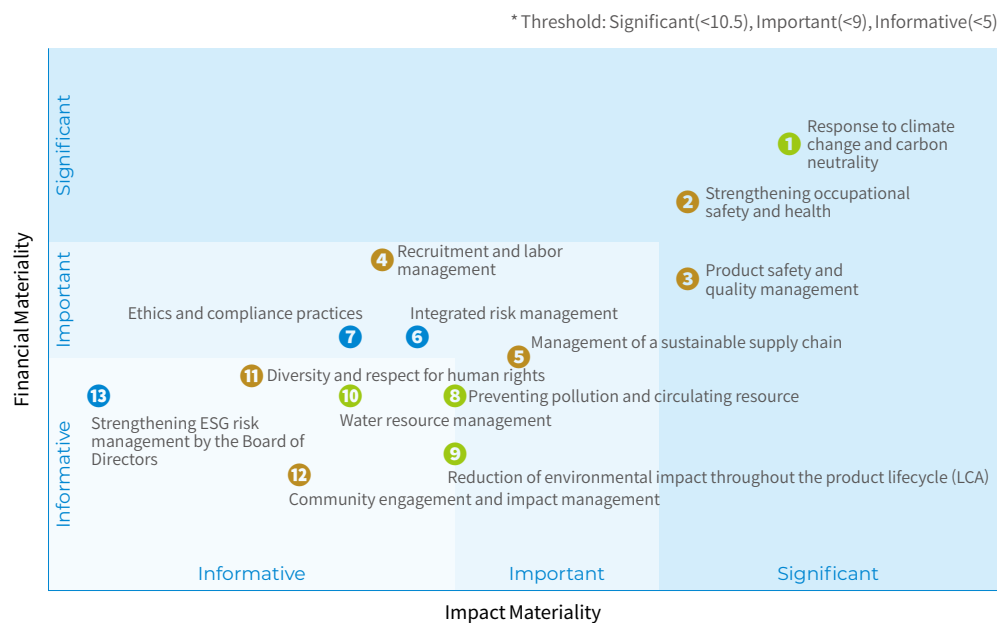
ISU PETASYS selected material topics through a four-step process: Identifying a list of sustainability topics; Analyzing impacts, risks, and opportunities; Prioritizing; Reviewing effectiveness and reporting. Efforts were made to gather stakeholder interests, by including internal and external stakeholder participation in the material topic selection process.





Materiality Assessment Results

As a result of conducting a double materiality assessment on 13 sustainability management topics, ISU PETASYS selected 'Response to Climate Change and Carbon Neutrality,' 'Strengthening Occupational Safety and Health,' and 'Product Safety and Quality Management' as material topics, placing them in the top group (Tier 1). To provide an in-depth report on these selected material topics, ISU PETASYS reviewed management activities and performance, and reported on governance, strategy, risk management activities, and performance management status under the 'Material Topics' section in this year's sustainability report.




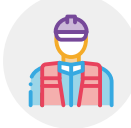

Sustainability Management Topics

● Environmental ● Social ● Governance

	Sustainability Management Topics	Impact Materiality	Financial Materiality
Tier 1	1 Response to climate change and carbon neutrality	Significant	Significant
	2 Strengthening occupational safety and health	Significant	Significant
	3 Product safety and quality management	Significant	Significant
Tier 2	4 Recruitment and labor management	Important	Important
	5 Management of a sustainable supply chain	Important	Important
	6 Integrated risk management	Important	Important
	7 Ethics and compliance practices	Important	Important
	8 Preventing pollution and circulating resource	Important	Informative
	9 Reduction of environmental impact throughout the product lifecycle (LCA)	Important	Informative
Tier 3	10 Water resource management	Informative	Informative
	11 Diversity and respect for human rights	Informative	Informative
	12 Community engagement and impact management	Informative	Informative
	13 Strengthening ESG risk management by the Board of Directors	Informative	Informative

Opportunities and Risks related to Material Topics

ISU PETASYS identifies risks and opportunities related to material topics to manage their potential impact on the company. Management activities and major achievements related to material topics are reported on pages 21~42 of the report.

Material Topic	Business Context and Corporate Activities	Potential Impact	Impact Characteristics			Impacted Stakeholders	Page
			Positive/ Negative Impact	Actual/ Potential Impact	Financial Impact		
 Response to climate change and carbon neutrality	Risk <ul style="list-style-type: none"> LNG, gasoline, and purchased electricity use for business operations and product production Increased demand from regulators and customers to reduce the environmental footprint of products 	<ul style="list-style-type: none"> Increased energy purchase costs due to rising costs of purchased electricity, and increased emissions due to insufficient carbon reduction activities Loss of key global customers who prefer energy-efficient products, weakened reputation and market competitiveness 	Negative	Actual/ Potential	(-)	Shareholders and investors Community	p. 21~28
	Opportunity <ul style="list-style-type: none"> Monitor GHG emissions across the value chain Implement energy efficiency activities such as replacing old equipment, including cooling tower fillers, with high-efficiency equipment 	<ul style="list-style-type: none"> Reduced reputational risk through GHG management and compliance in accordance with the national GHG management standards Improve global customer acquisition and reputation by reducing carbon emissions, expanding the use of renewable energy, and producing more efficient products 	Positive	Actual/ Potential	(+)	Shareholders and investors Community	
 Strengthening occupational safety and health	Risk <ul style="list-style-type: none"> Disasters due to inadequate safety and health management of employees/suppliers Employee illnesses and injuries due to operating workplaces with safety risks 	<ul style="list-style-type: none"> Reduced trust among employees and stakeholders, labor-management disputes due to safety and health threats, and reputational damage Workforce decline, decreased productivity, and talent churn 	Negative	Potential	(-)	Employees Shareholders and investors	p. 29~36
	Opportunity <ul style="list-style-type: none"> Identify and improve key risk factors through risk assessment and near-miss incidents prevention activities throughout the entire process Establish a safety and health management system, regular inspection of implementation status, and 100% completion of occupational safety and health education 	<ul style="list-style-type: none"> Minimize the likelihood of similar accidents through activities that identify near-miss incidents that could lead to industrial accidents Raise awareness of the importance of safety and health among all employees 	Positive	Actual	(+)	Employees Shareholders and investors	
 Product safety and quality management	Risk <ul style="list-style-type: none"> Product safety incidents during use, including electrical fires Regulatory and customer demands to reduce the use of hazardous chemicals 	<ul style="list-style-type: none"> Quality control failures leading to product liability law claims, increased redesign costs, and recalls Failure to meet regulatory and customer requirements leading to loss of market share and financial loss 	Negative	Potential	(-)	Customers Shareholder and investors	p. 37~42
	Opportunity <ul style="list-style-type: none"> Inspection of hazardous substances from the purchase of raw materials to the preprocessing stage, and confirmation of hazardous substances detected in samples before the release of finished products Quality communication and feedback to strengthen claim handling processes and follow-up management system 	<ul style="list-style-type: none"> Enhance customer satisfaction and stakeholder trust by complying with enhanced PCB quality standards and providing products that meet quality policies Improving customer satisfaction and stakeholder trust by listening to customer opinions and responding to them quickly 	Positive	Actual	(+)	Customers Shareholder and investors	

STAKEHOLDER ENGAGEMENT

ISU PETASYS operates various communication channels considering the characteristics of each stakeholder group and is expanding open communication with stakeholders. ISU PETASYS is examining major issues by collecting opinions from each communication channel and responding to them. We strive to create sustainable value for stakeholders.

Stakeholder	Communication Channel	Communication Cycle	Topic of Interest	Response Activity
Internal	 Employees <ul style="list-style-type: none"> Employee meetings Employee surveys Occupational Safety and Health Committee Grievance handling system Monthly newsletter (PetaTalkTalk) Labor-Management council Organizational culture diagnosis 	<ul style="list-style-type: none"> Monthly Annually/Ongoing Quarterly Ongoing Monthly (Established in March 2024) 4 times per year Annually 	<ul style="list-style-type: none"> Creating a fun workplace Creating a win-win corporate culture Occupational safety and health Handling employee grievances Fostering organizational cohesion and culture improvement Promoting employee benefits and enhancing competencies Activating interaction and enhancing collaboration among teams 	<ul style="list-style-type: none"> Safety and health education Operating a health promotion program Operating a safety culture campaign Organizational culture improvement campaign Operating a labor-management council Operating a workshop (joint labor-management, site manager) Operating a mobile grievance handling system
	 Customers <ul style="list-style-type: none"> Company website/SNS Publications VOC (Voice of the Customer) Customer satisfaction survey 	<ul style="list-style-type: none"> Ongoing Monthly Ongoing Quarterly (Varies by customer) 	<ul style="list-style-type: none"> High-quality and safe products Customer communication Resolving customers' complaints promptly 	<ul style="list-style-type: none"> Product hazardous chemicals management Quarterly QBR/SBR meetings Quality review and presentation of improvement measures Customer satisfaction survey
	 Suppliers <ul style="list-style-type: none"> Supplier council Regular meetings (Roundtable) Supplier assessment Joint safety and health inspection 	<ul style="list-style-type: none"> Monthly Semiannually Annually Quarterly 	<ul style="list-style-type: none"> Shared growth Supplier safety and health Responsible supply chain management 	<ul style="list-style-type: none"> Mutual cooperation program Operating supplier council Joint safety and health inspection Supply chain ESG evaluation
External	 Shareholders and Investors <ul style="list-style-type: none"> Shareholders' meeting IR activities Press release 	<ul style="list-style-type: none"> Annually Annually Ongoing 	<ul style="list-style-type: none"> Enhancing shareholder value Investor Sustainable achievements and preparing for the future 	<ul style="list-style-type: none"> Disclosing decisions of the directors Providing investor information Publication of the ESG report
	 Government and Relevant Agencies <ul style="list-style-type: none"> Materials requested by agencies Seminars Attend conferences 	<ul style="list-style-type: none"> Ongoing Ongoing Ongoing 	<ul style="list-style-type: none"> Participating in government policies and regulatory compliances Responsible tax compliance Transparent disclosure 	<ul style="list-style-type: none"> Ethics and compliance management Regulatory compliance Regular and timely reporting
	 Community <ul style="list-style-type: none"> Volunteer group 'Nanum' NGO Community welfare center 	<ul style="list-style-type: none"> Quarterly As needed As needed 	<ul style="list-style-type: none"> Promoting welfare for children and the disabled Supporting the underprivileged Contributing to the community 	<ul style="list-style-type: none"> Participating in support projects for the underprivileged Donating computer equipment Investing in the community



MATERIAL TOPICS

ISU PETASYS is a company committed to fulfilling dreams of humanity.
By building trust with customers and inspiring hope in our shareholders, employees,
and local community, we will always be by your side.

- 21 Topic 1. Response to Climate Change
- 29 Topic 2. Occupational Safety and Health
- 37 Topic 3. Product Safety and Quality Management



Material Topics 1.**RESPONSE TO CLIMATE CHANGE****GOVERNANCE****Climate Change Response System**

ISU PETASYS recognizes that the climate crisis is the most imminent challenge facing humanity and is laying the groundwork to carry out climate actions throughout the company. According to the Nationally Determined Contribution (NDC), we have established a reduction plan to cut greenhouse gas emissions by 40% compared to the baseline year (2018) by 2030 and achieve Net Zero by 2050. The plan is under implementation in phases.

To achieve the reduction targets, ISU PETASYS is actively searching for and introducing both internal and external reduction directions. We plan to continuously enhance the climate change response strategies, embed carbon management, expand the scope of carbon management, and participate in global initiatives.

Climate Change Response Framework**① GOVERNANCE**

- Establishment of a governance system that manages and supervises climate change risk and opportunity factors
- Enhanced Roles and Responsibilities (R&R) of the committee, management, and operational groups

② STRATEGY

- Identifying climate change risks and opportunities
- Analyzing climate change impact on the business, corporate strategies, and finance
- Analyzing climate change scenario (1.5 °C / 2 °C) and resilience of climate strategies

③ RISK MANAGEMENT

- Implementation and analysis of transition risk following climate change
- Integration of the climate change risk management process into the company-wide risk management system

④ METRICS & TARGETS

- Disclosing indicators for the continuous management of climate change risks and opportunity responses
- Setting reduction targets and monitoring performance

**Climate Change Governance**

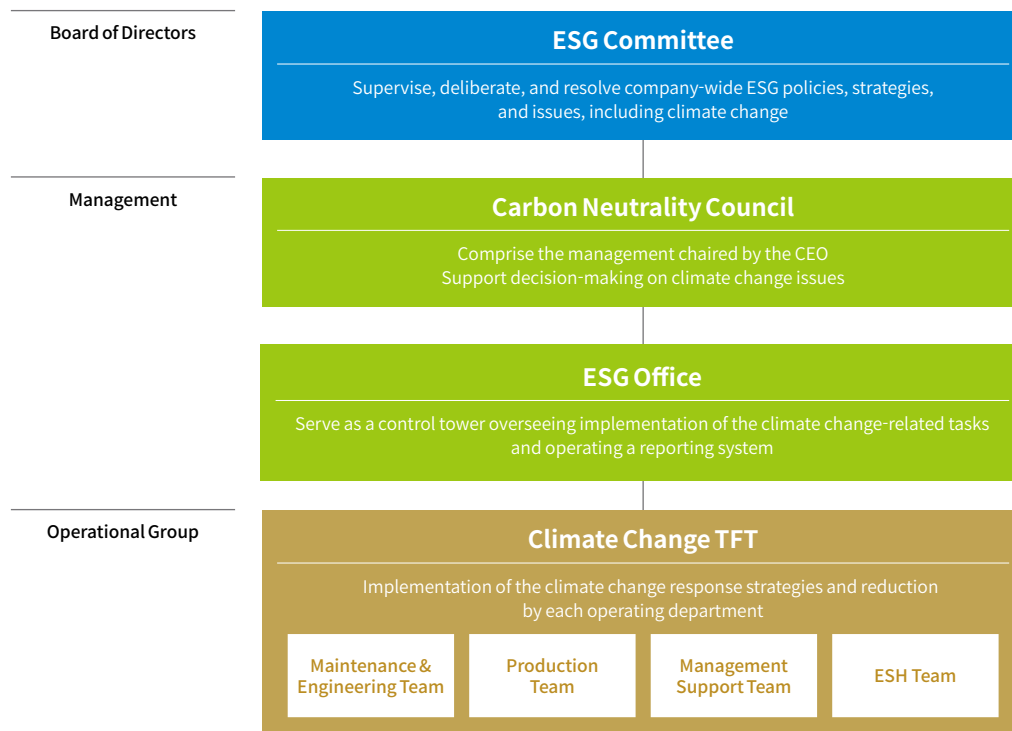
ESG Committee ____ The ESG committee of ISU PETASYS, composed of the CEO and board members, serves as the highest decision-making body, overseeing, deliberating, and resolving strategies and issues related to climate change.

Carbon Neutrality Council ____ The management of ISU PETASYS recognizes that the recent demand by global clients for greenhouse gas reduction poses a material business risk. To support decision-making related to its business operations, ISU PETASYS has established the Carbon Neutrality Council, which collaborates with related departments to discuss the response direction.

In 2023, the ESG Committee resolved to address the agenda for calculating and managing Scope 3 emissions, as well as the agenda for declaring Net Zero and joining climate-related initiatives in 2024. Additionally, as part of our long-term energy reduction plan, the Committee reported to the Board of Directors a plan to replace outdated equipment with the latest high-efficiency equipment over the next 10 years.



Climate Change Governance



STRATEGY

Climate Change Risks and Opportunities

In accordance with the TCFD recommendations, ISU PETASYS identifies and manages risks by dividing them into transition risks, arising from the transition to a low-carbon economy, and physical risks, stemming from the physical effects of climate change. ISU PETASYS strives to minimize negative business impacts and explore new business opportunities through climate change risk reduction.



Climate Change Response Activities



Establishing Climate Change Response Implementation Plan

Starting with TCFD-based disclosures, ISU PETASYS is driving and planning climate change response activities that go beyond domestic legal requirements and meet global standards. In 2023, we strengthened our governance by planning and controlling carbon reduction activities throughout the company, which were previously implemented at the department level, and identified climate change risks and opportunities in accordance with TCFD recommendations. Starting from the second half of 2024, ISU PETASYS plans to establish Net Zero strategies, including Scope 3 emissions, and continuously internalize and enhance our climate change response system.





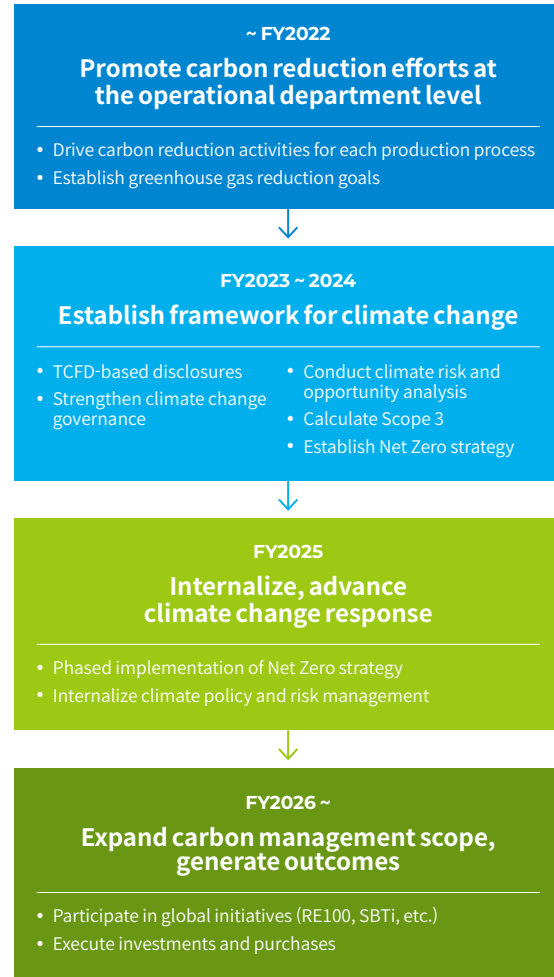
Climate Change Risks and Opportunities

	Category	Potential Financial Impact	ISU PETASYS Response Activity	
 Risk	Policy/ Legal	<ul style="list-style-type: none">Increased regulatory response costs due to heightened domestic and international regulations related to climate changeLegal proceedings and decreased corporate value resulting from violations of environmental laws, public disclosures, and greenwashing issuesIncreased operating costs due to rising and fluctuating emission allowance prices	<ul style="list-style-type: none">Monitor and respond to climate change regulationsEstablish emissions purchasing and selling strategies, monitoring emissions trading prices	
	Transition risk	Technological	<ul style="list-style-type: none">Increased investment costs for new, low-carbon equipment during the transition to low-carbon technologyFinancial losses resulting from side effects of implementing new technologiesIncurring losses due to depreciation and early disposal of existing assets	<ul style="list-style-type: none">Gradual investment in low-carbon facilities with financial considerationsIntroduce eco-friendly equipment and materials when investing in new facilities
		Market	<ul style="list-style-type: none">Greater demand from customers (global IT companies) to reduce carbon emissions and participate in climate-related initiatives	<ul style="list-style-type: none">Set and implement GHG reduction targetsConsider customer demands, evaluate adoption of initiatives (Net Zero, RE100, SBTi, etc.)
		Reputation	<ul style="list-style-type: none">Decrease in brand value due to negative evaluations from customers and stakeholders, and lower operating profits resulting from decreased product demand	<ul style="list-style-type: none">Enhance eco-friendly image through CDP disclosure, TCFD-based disclosure
	Physical risk	Acute	<ul style="list-style-type: none">Increased recovery costs resulting from damage or breakdown of company assets and facilities due to heightened occurrences of extreme weather events such as typhoons, floods, heavy snow, diseases, etc.; impact business continuity through infrastructure damage (damaged machinery, chemical leaks, etc.)Greater energy consumption due to new plants and facility expansion	<ul style="list-style-type: none">Implement a workplace emergency response manualInspect and stabilize facilitiesIntroduce high-efficiency products when introducing new facilities
		Chronic	<ul style="list-style-type: none">Increased power usage due to heat waves and extreme coldIncreased fixed costs (power, utilities) due to rising energy prices, resulting in lower operating income	<ul style="list-style-type: none">Constant monitoring of energy usageImplement energy efficiency measures like optimizing indoor temperature and recycling waste heat
	Resource efficiency		<ul style="list-style-type: none">Systematic emission reduction management through a greenhouse gas monitoring systemReplacement of energy-efficient equipment through identification and feasibility study of aging facilities	<ul style="list-style-type: none">Install energy-efficient equipment when replacing old equipment
	Energy resources		<ul style="list-style-type: none">Reduce energy consumption and emission purchasing costs by enhancing workplace energy efficiency	<ul style="list-style-type: none">Monitor internal and external emission reduction measures
 Opportunity	Product and service	<ul style="list-style-type: none">Conduct research and development to produce energy-efficient products and expand eco-friendly business	<ul style="list-style-type: none">Consider low-carbon products and high-efficiency technology	

High-Efficiency Energy Process

ISU PETASYS recognizes that reducing greenhouse gas emissions and energy consumption are key activities for mitigating climate change. Therefore, we are making various efforts to implement energy-saving activities in each production process and to replace outdated equipment with high-efficiency alternatives. In 2023, energy efficiency was enhanced by replacing outdated low-power agitators, and the efficiency of power usage facilities was enhanced during the construction of the new fourth plant by installing the latest high-efficiency equipment (including inverter-type turbo chillers, air compressors, and various rotating machinery inverters). LED lighting was also installed. Furthermore, we are implementing continuous power monitoring systems to monitor and control appropriate power usage within the processes.

Climate Change Response Implementation Roadmap



Energy Saving Activities by Year

Year	Key Highlights	Energy Savings	GHG Reductions
2023	Introduce high-efficiency inverter chillers	N/A	N/A
	Introduce high-efficiency inverter compressor	N/A	N/A
	Introduce high-efficiency inverter air conditioners and blowers	N/A	N/A
2022	Replace outdated high voltage transformers at Plant 1	22,500kWh/yr	10 tCO ₂ eq
	Replace air compressor and adsorption air dryer	1,869,508kWh/yr	871 tCO ₂ eq
2021	Introduce CF ₄ gas reduction device (Plasma Scrubber) for plasma process	-	23,310 tCO ₂ eq
2020	Install inverter-type air compressors at Plant 2	687,621kWh/yr	320 tCO ₂ eq
2019	Install turbo air compressors	2,271m ³ /yr	5 tCO ₂ eq
	Replace high-voltage transformers at Plant 2	22,500kWh/yr	10 tCO ₂ eq
2018	Install power-saving devices for chillers at Plant 3	129,600kWh/yr	60 tCO ₂ eq



Operation of Greenhouse Gas Monitoring System

ISU PETASYS is subject to regulations under the Greenhouse Gas Emission Trading Scheme. In response, greenhouse gas emissions are calculated and managed based on the NGMS* standards. Greenhouse gas emissions are effectively measured annually through establishing a greenhouse gas inventory system. When improvement measures related to emissions reduction are identified, action plans to reduce emissions are created to implement these efforts.

* NGMS (National Green-house Gas Management System)



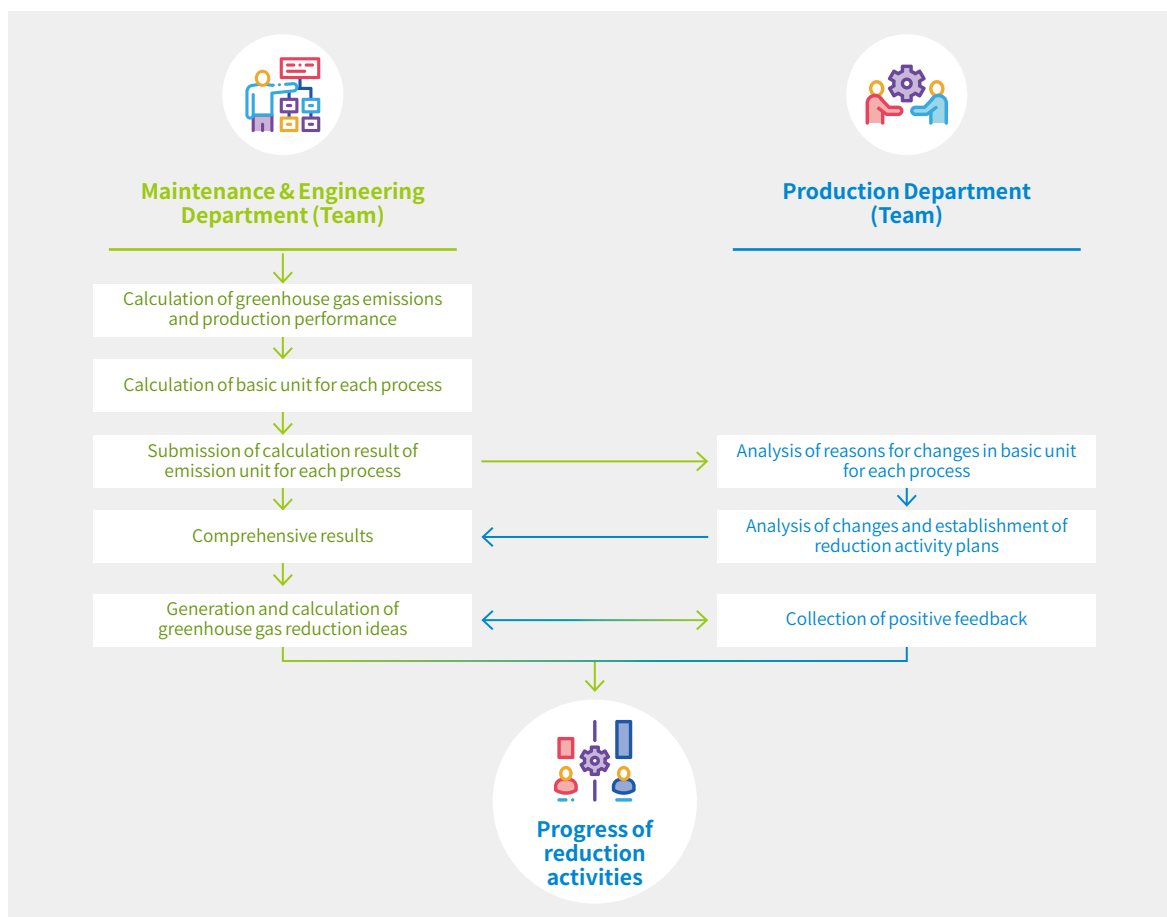
* CDP (Carbon Disclosure Project) :

Since 2003, CDP has been acting on behalf of global investment institutions to request information disclosure on environmental issues (climate change, water, forests) from major listed companies around the world.

Participation in the Climate Change Initiatives

ISU PETASYS has been participating in the Carbon Disclosure Project (CDP) since 2014, to transparently disclose climate change-related information to stakeholders. By continuing CDP disclosures, ISU PETASYS will prepare climate change response and disclosure systems and share related activities with stakeholders. In the future, ISU PETASYS plans to participate in the initiatives, including Net Zero declaration, RE100, and EV100, and share them to enhance its climate change response and eco-friendly corporate image.

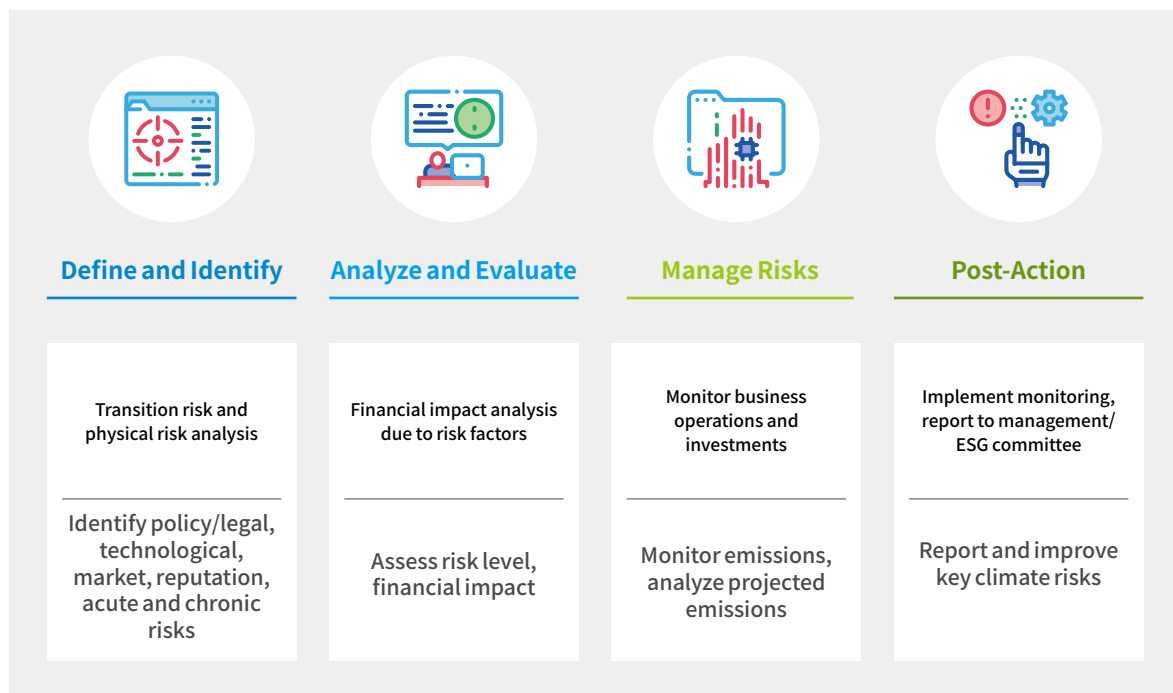
Greenhouse Gas Management Flow Chart



RISK MANAGEMENT

Management of Climate Risks

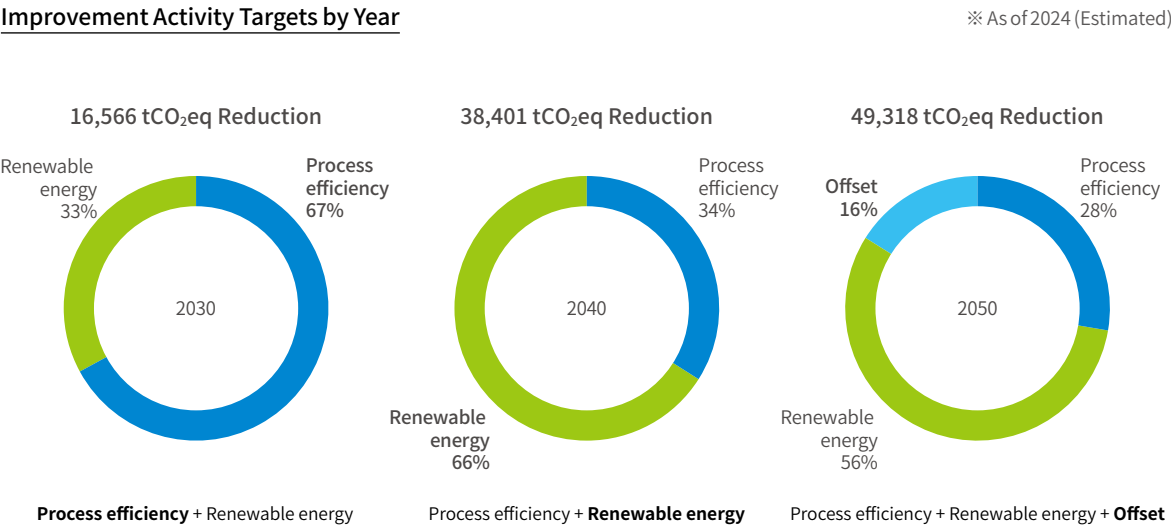
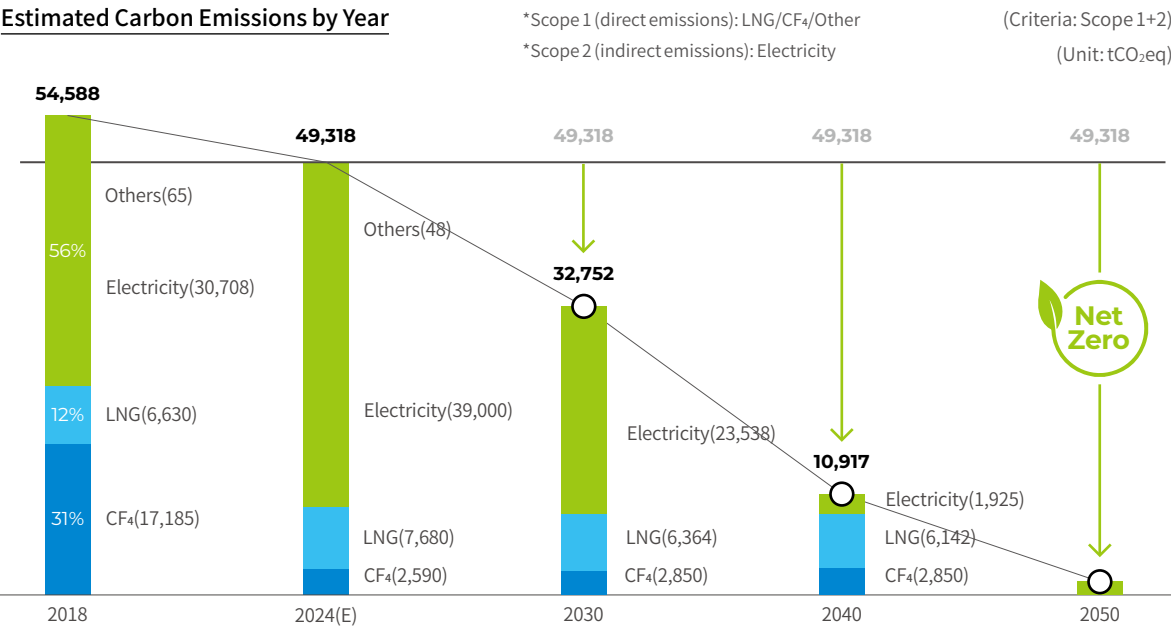
ISU PETASYS has established a climate risk management system to manage climate change-related risks that significantly impact business activities. We identify climate change risks and opportunities by understanding domestic and international environmental regulations and industry trends. Collaboration efforts are made with relevant departments, including the maintenance & engineering team, production team, and management support team, to determine response strategies. Furthermore, when significant climate change risks are discovered, they are reported to the ESG Committee through the ESG Office, which functions as a control tower.



METRICS & TARGETS

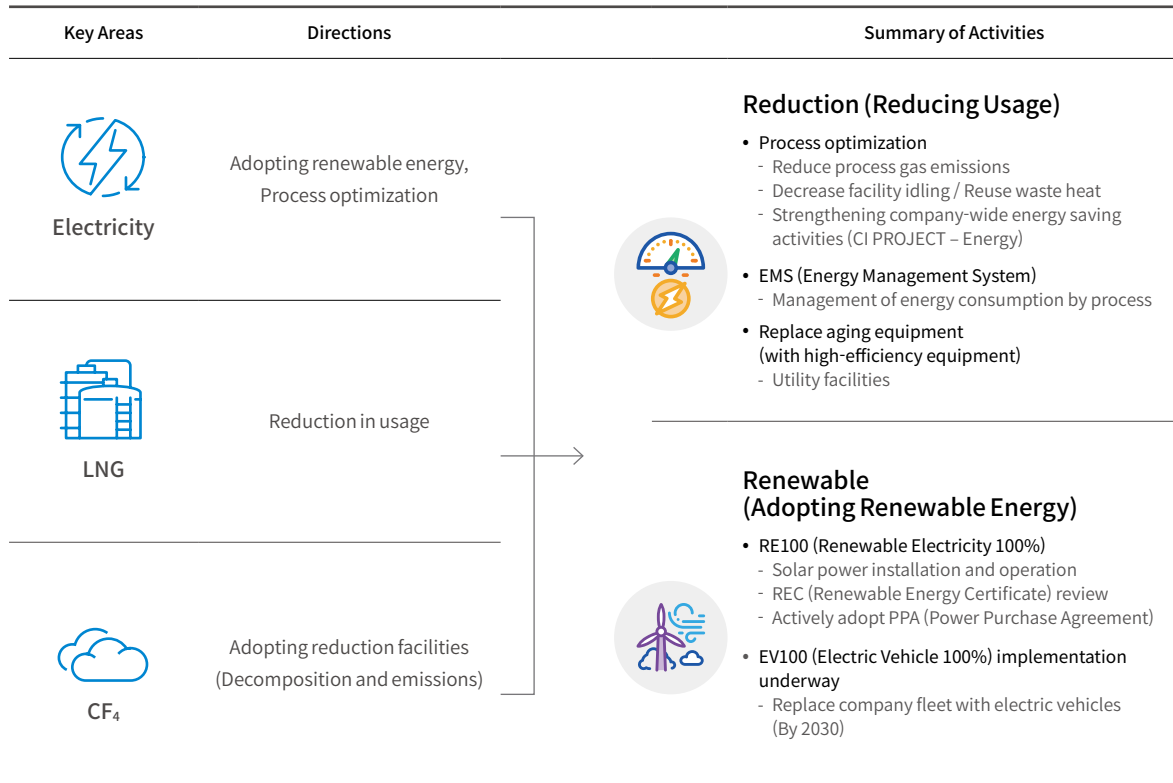
The international community adopted the Paris Agreement in 2015 to address climate change and pledged to keep the global average temperature rise below 2°C compared to preindustrial levels. To plan business activities for carbon reduction, ISU PETASYS utilizes the IEA 2°C Scenario (2DS) and has set a mid-term goal of reducing emissions by 40% (by 2030) and a long-term goal of achieving carbon neutrality by 2050, as compared to the baseline year 2018. In 2023, energy consumption increased temporarily due to the construction of the new fourth plant and the expansion of equipment in existing plants. However, ISU PETASYS strived to enhance energy efficiency by installing high-efficiency equipment in the new plant and using eco-friendly construction materials. After completing process reallocation in 2024, ISU PETASYS aims to achieve a 9.8% reduction in greenhouse gas emissions compared to the baseline year through energy-saving activities and the reduction of process gas emissions.

Reduction Targets for Achieving Net Zero



Net Zero Activities: Direction and Summary

In three key areas that impact the achievement of Net Zero, the following improvement activities are planned to be implemented.



Energy Consumption and GHG Emissions

	Category	Unit	2021	2022	2023
Energy Consumption	Direct energy	TJ	110	120	132
	Indirect energy	TJ	587	620	701
	Total	TJ	697	740	833
	Energy intensity	TJ/KRW billion	1.484	1.151	1.233
GHG Emissions	Scope 1	tCO ₂ eq	23,083	11,590	25,499
	Scope 2	tCO ₂ eq	28,104	29,685	33,565
	Total	tCO ₂ eq	51,187	41,275	59,064
	GHG intensity	tCO ₂ eq/KRW million	0.109	0.064	0.087

GHG Reduction Target

Category	2018 (Base year)	2024	2030	2050
Scopes 1 & 2 Reduction Target	54,588 tCO ₂ eq	9.6% reduction	40% reduction	Carbon neutrality



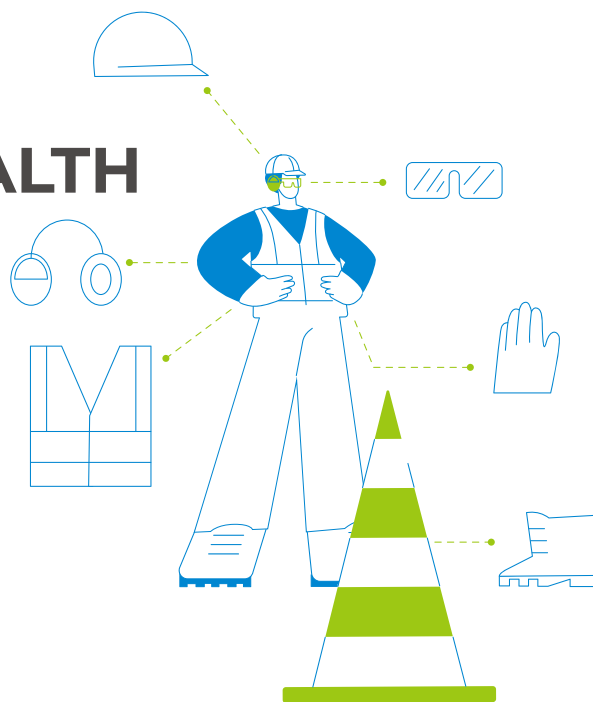
Material Topics 2.

OCCUPATIONAL SAFETY AND HEALTH

GOVERNANCE

Safety and Health Management Promotion System

ISU PETASYS recognizes safety, health, and environment as top priorities in all its business activities and strives to create a safe and pleasant work environment through labor-management cooperation. For that purpose, ISU PETASYS has established safety and health management regulations and an ESH manual, which stipulates that all production activities and tasks involving risks must prioritize safety and health. In addition, the ESH policy and objectives are being declared and shared to ensure that all employees and stakeholders involved in our business activities understand its commitment to ESH management and its clear direction.



ESH Policies

ISU PETASYS is a production company specializing in ultra-high multi-layer printed circuit boards. We recognize environment, safety, and health as the top priorities of the company throughout our business activities and establish ESH policies as follows to minimize the impact of organizational activities, products, and services on ESH in operating the ESH management system.

- Compliance with ESH (Environment & Safety & Health) legislation and other requirements
- Continuous ESH risk improvement
- Minimize environmental pollution and establish zero-accident workplaces
- Sustainable resource utilization and climate change mitigation
- Strengthen safety and health cooperation system through active consultation and participation of workers

To ensure the will and clarity of ESH management to all workers and stakeholders, the policy is announced through education and posting. In addition, in order to achieve the ESH policy, ESH goals are set as follows, and the best efforts are made to establish and implement detailed goals that can be implemented for each organization.

Goal

- Zero major industrial accidents
- Zero environmental accidents

Safety and Health Management System

ISU PETASYS obtained the ISO 45001 certification, an international standard for safety and health management systems, and has maintained it to operate a safety and health management system that meets global standards. We also acquired the KOSHA-MS certification, a voluntary safety and health management system, to manage employees' safety and health in a more systematic way, including disaster prevention. The safety and health management system applies to all employees who work at ISU PETASYS's work sites and all employees of contracted suppliers.

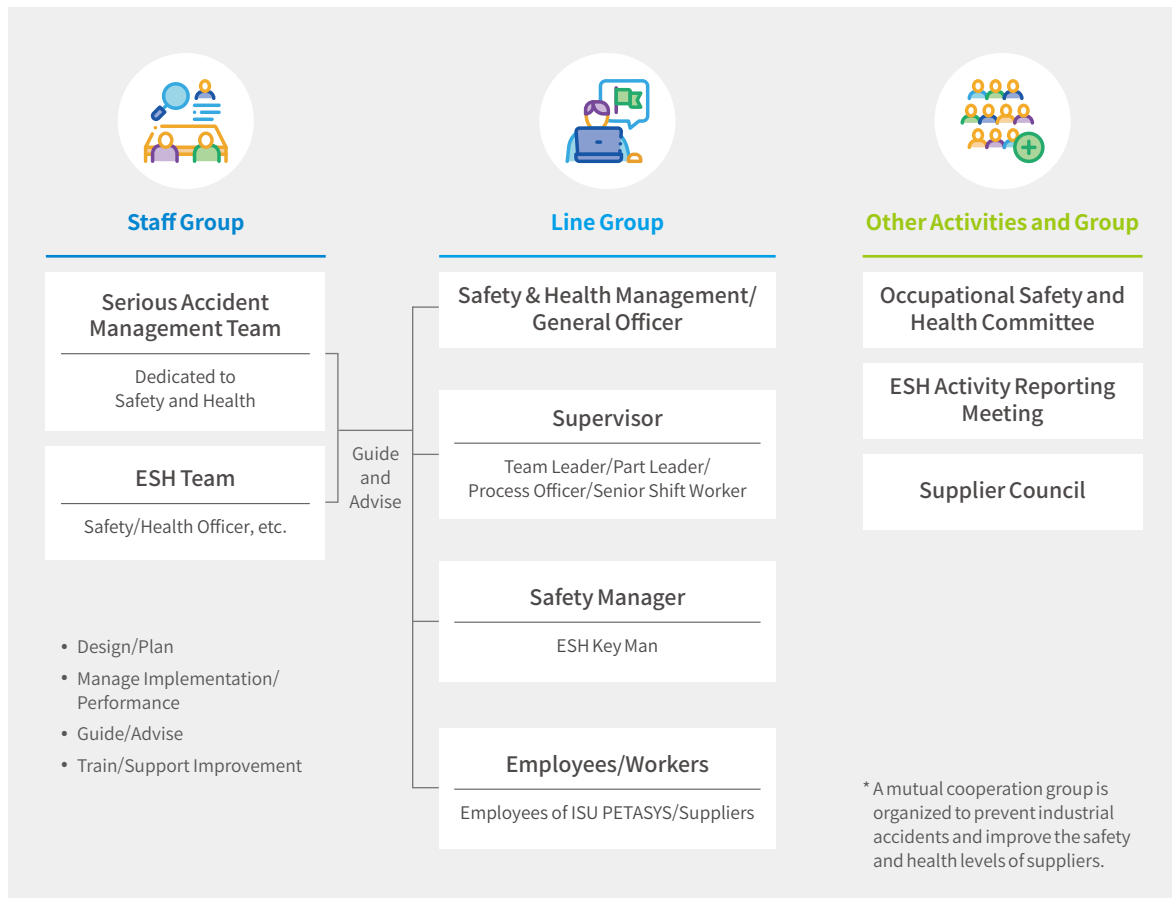
Safety and Health Governance

ISU PETASYS appoints the CEO as the person responsible for safety and health management and establishes a governance system with this role at its center. Every year, the CEO reports to the Board of Directors and obtains its approval for the annual safety and health management policies and budget. The Industrial Safety and Health Committee, which meets quarterly with equal representation from labor and management, deliberates and resolves major safety and health issues to establish a safe work environment.



ISO 45001:2018

Safety and Health Organizational Chart



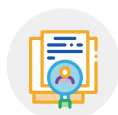
STRATEGY

Safety and Health Management Activities

Workplace Safety Management

ISU PETASYS performs regular inspections and operates communication channels to ensure a safe workplace.

ESH Regular Inspection by Safety and Health Management Officer



To foster a safe workplace, the CEO conducts monthly on-site safety inspections to identify internal hazards and risks, directly listens to safety and health concerns at the site, and undertakes improvement activities.

Occupational Safety and Health Committee



The Occupational Safety and Health Committee holds a meeting every quarter. Composed of the same number of labor and management representatives, it identifies and addresses safety and health-related issues within the company, serving as a communication platform for cooperation between labor and management throughout the processes.

Joint Labor- Management Patrol



A joint labor-management patrol is conducted every quarter to identify on-site risk factors. Through this process, improvement measures are jointly formulated, reflecting the opinions of both labor and management.

Safety and Health Inspection Team



An inspection team is organized every month, where management supervisors and representatives from suppliers participate in on-site safety and health inspection activities to identify non-compliant safety and health factors.

ESH Activity Reporting Meeting



Monthly meetings are held where the Safety and Health Officer, all executives, department heads, and representatives from suppliers participate to report on safety and health issues, accident analysis, measures to prevent recurrence, and activities of the Safety and Health Inspection Team, emphasizing the importance of occupational safety and health.

Facility Inspection



Monthly inspections are performed on safety devices and facilities prone to fire hazards to prevent safety and fire accidents.

Housekeeping



Housekeeping is conducted on the company's off days to prevent fire accidents in factories where workers are absent due to scheduled shutdowns. This process ensures the isolation of organic solvents, the removal of combustible materials around facilities, and the inspection of the power-off status of non-operational equipment.

Accident Response



When unforeseen safety and health accidents occur, prompt responses are undertaken and measures to prevent recurrence are established by analyzing the causes.



Internalizing safety culture_Contest poster

Response to Accident by Stages



Creating a Safe Work Environment

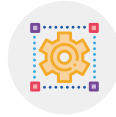
ISU PETASYS is operating various programs to ensure a safe environment for workers.

Workplace Environment Measurement



We conduct biannual measurements and analysis of harmful factors such as noise, dust, and hazardous chemicals in employee workspaces to ensure they remain below 30% of legal exposure standards and manage them accordingly.

Confined Space Training Program



To prevent suffocation accidents, ISU PETASYS provides training on risk assessment, work procedures, first aid procedures, rescue support equipment, and methods for measuring oxygen levels in confined spaces. Additionally, emergency rescue training for confined spaces is conducted.

Hearing Conservation Program



We identify noise-generating processes and facilities in the workspace and seek improvements by applying the Hierarchy of Controls (HOC) technique. Furthermore, we implement ongoing management measures for hearing protection, including regular hearing tests, distribution of protective equipment, and educational programs.

Asbestos Management



We accurately identify the locations where asbestos is included in the workplace and follow legal standards during dismantling and demolition work at those locations. If there is a risk of asbestos exposure, we provide protective equipment to maintain a safe working environment.



Internalizing safety culture_Safety Golden Bell



Managing employees' health_Mental health counseling program

Health Management for Workers

ISU PETASYS has various programs in place to promote the health of our workers.

Health Checkups



We conduct pre-placement and post-placement health assessments, as well as general, special and comprehensive health checkups for all employees at the workplace, including those from supplier companies. We also manage individuals with notable findings based on the results.

Health Promotion Program



We operate an in-house health management room and support employees' health promotion through programs such as smoking cessation, moderate drinking, and metabolic syndrome management, based on the health checkup results.

Management of Individual Disease for Risk Group



Based on the risk assessment results for cerebrovascular and cardiovascular diseases, we conduct monthly health monitoring and, if necessary, adjust work schedules for individuals in the high-risk group.

Pregnant Employee Management



We conduct regular risk assessments for female employees of childbearing age and frequent risk assessments for pregnant employees to support job placement and changes in work patterns.

Job Stress Management



ISU PETASYS assesses the job stress levels of all workers in the workplace, including suppliers. We offer continuous management through specialist consultations with the Dalseong-gun Mental Health Welfare Center, brainwave tests, anxiety/depression/stress level assessments, 24-hour online counseling, and educational materials.

Prevention and Management of Musculoskeletal Disorders



We identify and assess tasks that pose musculoskeletal disorder risks and continuously improve tasks with high risk. Furthermore, we conduct symptom surveys among employees and supports job transitions and protective equipment for those at risk of developing musculoskeletal disorders.

Embedding Safety Culture

ISU PETASYS has implemented programs to internalize safety culture in our management activities and individual employees.

Safety Culture Level Evaluation



We conduct an annual evaluation to assess the level of employee safety culture. The evaluation assesses five areas, which are safety values, safety performance, education training, system operation, and communication and participation. Following the evaluation, we analyze the causes of weaknesses and implement improvement activities.

Safety and Health Counseling Center



We operate a counseling channel using SNS and publish safety and health information and guidance once a month. In addition, regarding employees' requests for improvement, anyone can freely present opinions through a two-way communication.

ESH Newsletter



We select topics related to safety and health and publish a newsletter every month that includes commendation cases, major safety and health issues, and schedule guidance, which is informed by the Safety and Health Counseling Center. The newsletter is posted on bulletin boards and in restrooms of the workplace to easily inform employees about its contents.

Safety Culture Campaign



Based on the results of the safety culture level evaluation, we plan and implement various safety culture campaigns, such as key safety rule compliance campaigns, safety and health contests (slogans, posters, acrostic poems), and the Safety Golden Bell, all aimed at establishing a safety culture.

Safety and Health Education

ISU PETASYS evaluates the necessity and effectiveness of education every year to identify the educational needs of our employees and select the required education program. An annual education plan is established reflecting the necessity and effectiveness, which are implemented to continuously enhance the safety and health capabilities of its members.

Participation in Safety and Health Education

Category	2021	2022	2023
Participants	910	967	975
Completions	910	967	975
Participation rate	100%	100%	100%

Safety and Health Education Program

Education	Hours/Interval
Regular safety and health education	2 hours/month
Special education for noise-induced hearing loss	1 hour/year
Risk assessment training	1 hour/year (or upon risk assessment change)
Education for ESH-Key Man	2 hours/year
Education for supervisors	16 hours/year
Education for hazardous chemical handlers	16 hours/2 years
MSDS education	1 hour/upon occurrence
Job shifting training	2 hours/upon occurrence
Special safety and health education	16 hours/upon occurrence

Safety and Health Training

ISU PETASYS conducts emergency training quarterly to enhance response capabilities against emergencies (chemical spills and fires), with participation from all of our employees as well as suppliers' employees. During the training, scenarios reflecting the specific characteristics of each department are created to ensure well-organized responses in real situations. To encourage active participation, the training results are evaluated, and departments demonstrating outstanding performance are awarded prizes.

Management of Suppliers' Safety and Health Capabilities

ISU PETASYS has been conducting win-win cooperation projects, operations of councils, and inspection activities to enhance the safety and health capabilities of the suppliers.

Win-Win Cooperation Project		ISU PETASYS participates in win-win cooperation projects organized by the Korea Occupational Safety & Health Agency to resolve the gap in safety and health levels through voluntary solidarity with its suppliers. By participating in the projects, we conduct activities such as consulting for suppliers' risk assessments, performing safety and health campaigns, and supplying necessary safety and health equipment.
Operation of the Council		ISU PETASYS operates a safety and health council monthly with representatives from suppliers to discuss safety and health information, emergency evacuation methods, risk assessments, and communication methods. By listening to opinions related to safety and health, ISU PETASYS strives to create a safe work environment.
Roundtable Meetings		ISU PETASYS holds semiannual meetings with suppliers to deliver safety and health information, share safety and health problems, and promote improvement activities.
Joint Safety and Health Inspection		Every quarter, the CEO and representatives and workers from in-house suppliers conduct joint safety and health inspections, to inspect the workplaces of suppliers and provide improvement measures.
Supplier Inspection		ISU PETASYS conducts a semiannual assessment of suppliers to evaluate the level of occupational accident prevention. By providing support for safety and healthy work, it has been making efforts to improve risks and elevate safety and health levels.

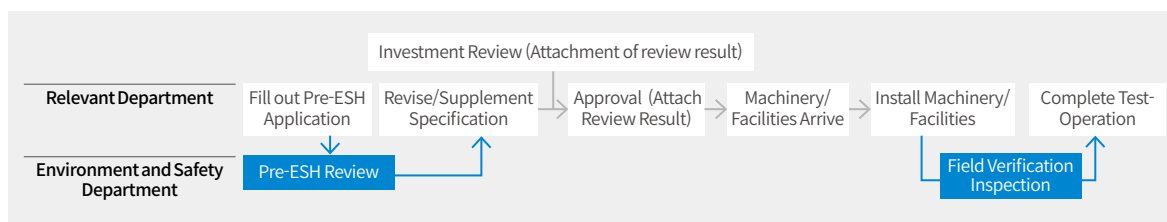
RISK MANAGEMENT

Occupational Safety and Health Risk Management Activities

Pre-ESH Assessment

ISU PETASYS reviews safety and health hazard and conducts site inspections throughout the investment review and approval process for construction projects and the installation of new or additional facilities. Through this process, we proactively ensure safety and prevent potential accidents. The Environment and Safety Department is responsible for conducting pre-ESH (Environment, Safety, and Health) evaluations in categorized areas, including safety, health, and fire prevention.

Pre-ESH Assessment Process



Workplace Risk Assessment

ISU PETASYS conducts risk assessments at workplaces every year to identify harmful and hazardous factors in advance and make improvements. We quantify risks of harmful and hazardous factors by reflecting the frequency and severity. Based on that, risk acceptance levels are determined and appropriate risk acceptance criteria and management measures are established for each level.

Prior Registration of Chemical Products

When ISU PETASYS needs to use a new chemical product, a prior registration process is required. During this process, the Material Safety Data Sheet (MSDS), usage process, and quantity are filled out and submitted 15 days before the expected delivery date. Following that, environmental safety and health personnel review the submitted information to check legal requirements and determine approval for use. In addition, when chemical products arrive at the company, MSDS warning labels are attached, and related training is provided to inform the hazardous risks in advance, thereby contributing to the prevention of safety accidents for workers.

Chemical Hazard Assessment

ISU PETASYS uses the results of the workplace environment measurements to identify the hazard and risk levels of the chemicals in use. We also employ the Hierarchy of Controls (HOC) to establish risk levels and proceed with improvement works.

Uncovering Near-Miss Incidents

To create a work environment where all workers can work without any safety concerns, ISU PETASYS has been proactively uncovering near-miss incidents. A near-miss incident refers to a situation where there was a possibility of an accident due to a worker's negligence or equipment defects in the workplace, but it did not lead to an actual accident. ISU PETASYS recognizes the importance of preventing near-miss incidents and systematically conducts activities to mitigate even the slightest possibility of industrial accidents.



Mid- & Long-Term
Target of Occupational
Safety and Health

ZERO
Severe Occupational
Accident

METRICS & TARGETS

ISU PETASYS manages performance indicators of occupational safety and health as follows:

Category	Unit	2021	2022	2023	2024 (Target)
Employee safety and health ¹⁾					
Lost Time Injury Frequency Rate (LTIFR) ²⁾	Cases per million working hours	0.000	0.000 ³⁾	0.434	0
Industrial accident rate ⁴⁾	%	0.000	0.000	0.090	0
Work-related fatalities	Persons	0	0	0	0
Number of safety incidents (accidents)	Cases	0	0	1	0
Frequency rate	%	0.000	0.000	0.434	0
Supplier safety and health ¹⁾					
Lost Time Injury Frequency Rate (LTIFR) ²⁾	Cases per million working hours	0.000	7.8	3.412	0
Industrial accident rate ⁴⁾	%	0.000	1.5	0.709	0

1) Based on accident-related injuries 2) Lost Time Injury Frequency Rate (LTIFR): (number of LTI cases × injury rate per hour)/total working hours
3) Correction due to errors in the report of the previous year (1 case → 0 case) 4) Industrial accident rate: (number of accidents/number of workers)*100



Material Topics 3.

PRODUCT SAFETY AND QUALITY MANAGEMENT



GOVERNANCE

Quality Management Implementation System

According to the quality policy of ISU PETASYS, we aim to provide products and services at the level of quality demanded by customers, at the time customers desire, and at competitive prices. Through regular internal audits, we manage a quality system and obtain international quality certifications to ensure customer satisfaction.

Quality System Management

ISU PETASYS conducts semiannual internal audits to manage our quality system, maintaining zero instances of quality system issues over the past three years. To enhance capabilities of the internal auditors, we conduct regular training on procedures, methods, reporting/auditing techniques, and are committed to satisfying customers by stabilizing the quality system.

Acquisition of Quality Certification

ISU PETASYS has obtained and maintained various international standard quality certifications, including ISO 9001. We acquired the AS9100 certification first in 2007, paving the way for our entry into the aerospace and aviation sector. We have been participating in the development of automotive electronic components as well, by obtaining the IATF 16949 certification in 2017.

Quality Policy

The quality policy of ISU PETASYS is for all employees to take responsibility for quality assurance activities that satisfy customers by

- ① Providing products and services at the level of quality demanded by customers,
- ② At the time customers desire,
- ③ At competitive prices.



New facilities in the fourth plant (Drill)

Key Certification



TL 9000 (2023)



AS9100 (2022)



IATF 16949 (2023)



ISO 9001 (2023)

STRATEGY

Key Activities of Quality Management

Quality Management per Product Process

ISU PETASYS applies a quality management system to the entire production process, from raw materials to the product packaging stages. We only purchase materials that have passed safety and environmental tests and are marked with the UL certification. Prior to the processing stage, raw materials are inspected for hazardous substances, and samples are checked for the presence of such substances prior to product release. Subsequently, through automatic optical inspection and electrical performance testing, efforts are made to minimize defects that may arise during production. In addition, the pre-alarm system (Q-Communication), information about potential risk factors that affect quality is shared with the production process in advance, aiming to prevent substandard processes. Furthermore, we strive to improve the performance of our inspection tools by introducing new equipment, such as back drill inspection, AVI, and AFVI, all of which integrate digital technology for improved quality stability.



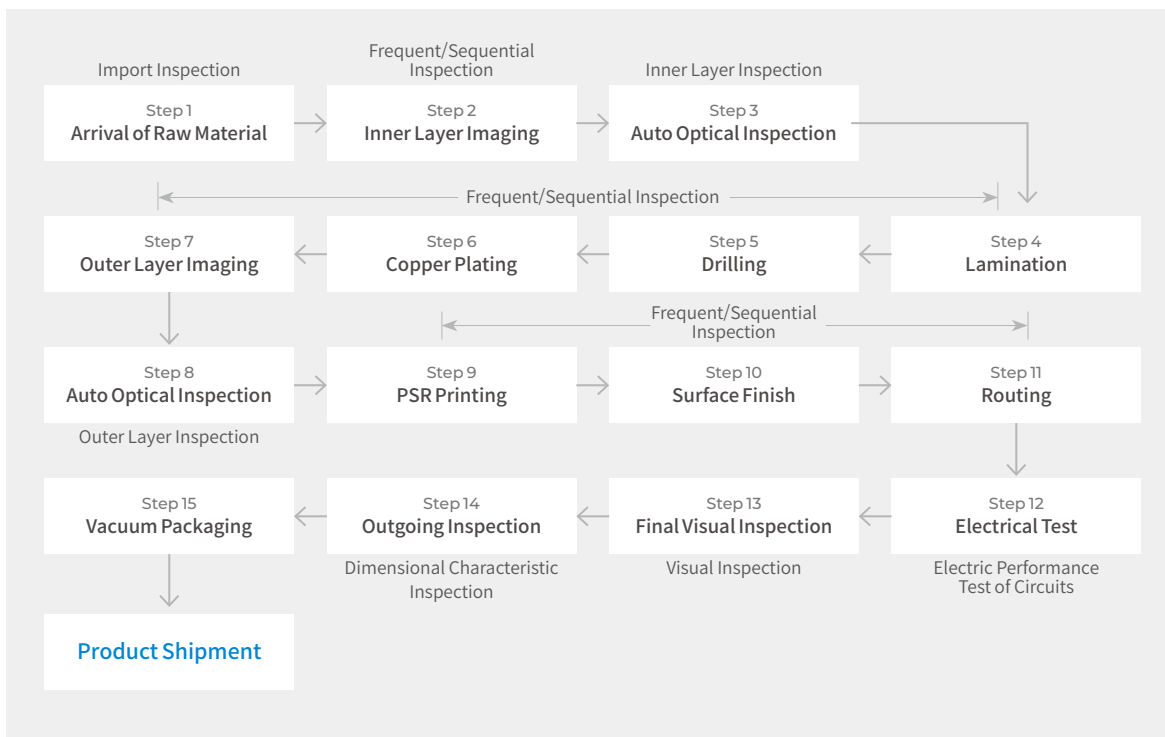
Innovation and Automation in Manufacturing Process

To enhance quality through automation, ISU PETASYS is considering the implementation of the 'X-Ray CT inspection equipment' and 'inspection analysis software' that leverages inspection data. ISU PETASYS remains committed to actively utilizing accumulated data and continuing our efforts in ongoing manufacturing process innovation, including automation, to ensure advanced quality standards.

X-Ray CT ____ Previously, manual measurements took 20 minutes/Point, but with the current use of Gerber data for automated measurement, this has reduced to 2 minutes/Point, resulting in a 90% improvement in processing speed. ISU PETASYS is also considering the implementation of an automatic judgment system in the future, beyond just automatic measurement capabilities.

Inspection Analysis Software ____ By using inspection result data accumulated in the inspection equipment, ISU PETASYS plans to induce process improvements, providing feedback on the number, location, and type of defects to relevant processes. We also plan to introduce inspection analysis software to improve the filtering rate of AI false defects.

Quality Management per PCB Manufacturing Process



Quality TFT Activity Process

ISU PETASYS conducts quality TFT activities throughout the company to improve defect factors and unreasonable processes. Daily regular on-site inspections are conducted to proactively check for defect issues and identify the root causes of defects. Furthermore, identified causes of defects are analyzed, and corrective measures are devised and implemented to resolve the issues. Moreover, to prevent the recurrence of these issues, ideas are brainstormed during meetings to seek fundamental improvement solutions. ISU PETASYS also conducts problem-solving methodology training for TFT targets and manages the status of TFT activities weekly to enhance execution. In 2023, we set detailed targets, including improvement rates and savings amounts, through quality TFT activities. This resulted in an improvement of approximately 25%p in quality and cost savings of about KRW 1.01 billion compared to the previous year.

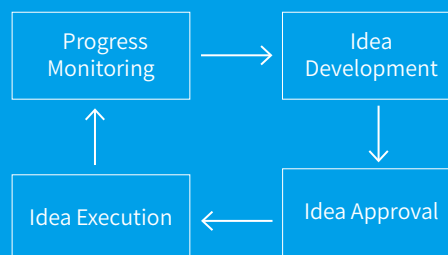
Quality CI (Cost Innovation) Idea Contest

ISU PETASYS is fostering employees' interest in quality through a company-wide proposal activity, known as the Quality CI (Cost Innovation) Idea Contest. The ideas adopted in this contest are used to establish improvement plans for unreasonable matters and to implement them to enhance quality. In 2023, ISU PETASYS actively executed quality improvement activities, achieving an execution rate of 141% compared to the quality improvement goals.

Quality TFT Activity Process

- ① Occurrence of Quality Issues within the Process and Selecting Topic
- ② Activity Planning and Identification of the Issue
- ③ Improvement Assessment & Activities (Tracking Defect Factors, Setting Objectives, and Establishing and Implementing Countermeasures)
- ④ Identification of the Effect
- ⑤ Standardization and Post-management

Quality CI Idea Activity Process



Enhancing Customer Satisfaction

Listening to Customer Feedback and Responding Promptly

The products manufactured by ISU PETASYS are produced on a 100% custom-ordered basis, due to the diverse requirements of each customer and variations in PCB structure of each application. As a result, it is important to attentively listen to customers' feedback during both the product design and manufacturing stages and respond promptly to their requests. ISU PETASYS operates local offices in the U.S., China, and Asia, in addition to domestic offices, providing services in the local language of each region to facilitate seamless communication with customers. With a sales team that responds within 24 hours and a design and technology team that responds within 48 hours, we ensure effective customer response, thereby enhancing reliability and customer satisfaction.

Customer Claim Handling Process

ISU PETASYS operates a claim handling process to improve customer satisfaction. In addition to the initial five steps—receiving a claim, determining the department in charge, analyzing the cause, taking corrective action, and sending a report on the results—we have introduced a sixth step: the tracking process, to strengthen the post-implementation management system. Claims are categorized by type based on severity, urgency, and significance upon reception. Computerized processes are employed to quickly assign responsibility to the relevant department and conduct cause analysis, ensuring prompt responses to customer demands and requests. Furthermore, to prevent the recurrence of similar customer complaints, ISU PETASYS applies the same preventive measures across other customers and product models. In addition to individual claims, we analyze problem types, frequencies, and associated products of those received regularly. Working closely with customers, we review the status and announce countermeasures. Additionally, when necessary, ISU PETASYS conducts regular customer visits to facilitate direct communication and collect immediate feedback from the field, further enhancing customer satisfaction.

Customer Satisfaction Survey

ISU PETASYS monitors customer complaint rates on a monthly basis and conducts annual customer satisfaction surveys to attentively listen to our customers. These surveys evaluate categories such as delivery, service, technical support, quality, and price, with some major customers include ESG factors such as sustainability in their criteria. Through customer satisfaction surveys, ISU PETASYS thoroughly analyzes the needs of customers and, based on the results, makes improvements in our services and products.

Prompt Response System

Quotation, Delivery Adjustment, Urgent Inquiry Response, etc.

- Sales Team
- Responds within 24 hours

Data Review (Stack-up, DFM, etc.)

- Design & Technology Team
- Responds within 48 hours



Claim Handling Process

1	Receive Claim		Improvement is required in record management for product identification and classification of types through the introduction of claim classification criteria	→	Establish claim classification criteria, considering severity, urgency, significance, etc.
2	Assign Relevant Department		Time taken to identify the responsible process or department needs to be reduced	→	Manage claim handling processes using computerized process
3	Analyze Causes		Difficulties exist in monitoring the claim processing status due to email communication between relevant departments	→	
4	Take Corrective Actions		Improvements are needed in corrective action and tracking/history management of action results	→	Refinement of tracking management items, refinement of closure criteria
5	Send Correction Result Report		Improvements are needed in closure management for each action result	→	
6	Tracking		Post-implementation management system is required		



RISK MANAGEMENT

Product Hazardous Substance Management

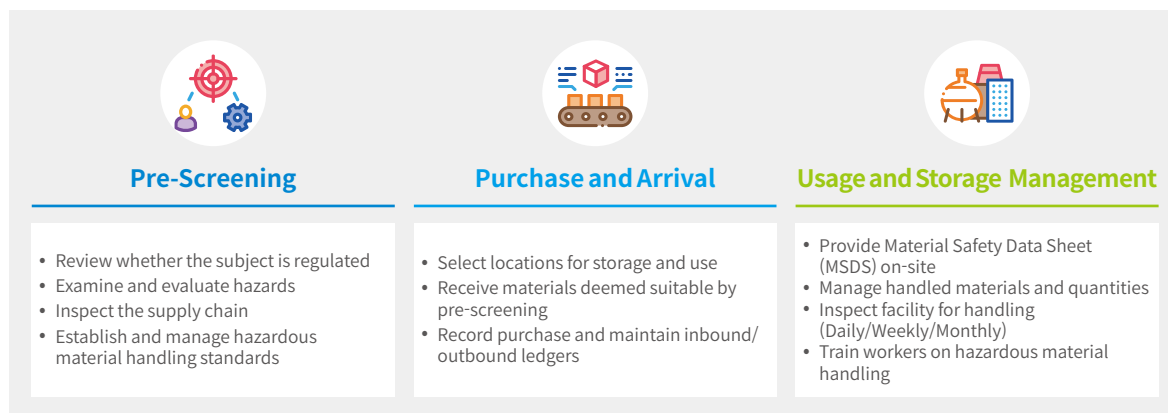
Product Hazardous Chemical Management System

ISU PETASYS complies with international standard requirements such as RoHS and REACH for hazardous substance management systems. We use 100% hazardous substance-free raw materials for delivery to our customers. For key raw materials, we exclusively use materials approved by UL, a PCB compliance and safety regulation inspection organization, and undergo quarterly post-screening by UL. In addition, ISU PETASYS ensures no hazardous substances remain in products by managing raw materials of suppliers and through MSDS management. In accordance with the hazardous substance management procedures, ISU PETASYS annually receives hazardous substance evaluation reports and guarantees from suppliers, along with MSDS, to monitor chemical substances contained in the materials.

Product Hazardous Chemical Inspection

ISU PETASYS receives hazardous substance analysis reports and guarantees from suppliers, manages chemical substances through MSDS, and randomly requests analysis from a third-party organization semiannually to analyze and monitor the presence of hazardous substances.

Hazardous Chemical Management System

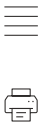


METRICS & TARGETS

Performance and Target Management

Category	Unit	2021	2022	2023	2024 (Target)
Customer's quality satisfaction*	Scores	94.8	93.2	94.4	90
On-time resolution rate of customer complaints	%	100	100	100	100
Material hazardous chemical leakage	Cases	0	0	0	0
Recall due to leakage	Cases	0	0	0	0
Quality issue-related claim rate	%	0.35	0.21	0.34	0.3
Audit findings in the quality system	Cases	0	0	0	0

*In case of major customers of ISU PETASYS, companies with scores of over 90 are classified as excellent suppliers



ESG PERFORMANCE

ISU PETASYS is a company committed to fulfilling dreams of humanity.
By building trust with customers and inspiring hope in our shareholders, employees,
and local community, we will always be by your side.

ENVIRONMENTAL

- 44 Environmental Management
- 47 Resource Usage and Pollution Reduction

SOCIAL

- 52 Talent Retention and Development
- 57 Sustainable Supply Chain
- 61 Enhancement of Product Competitiveness
- 66 Community Engagement

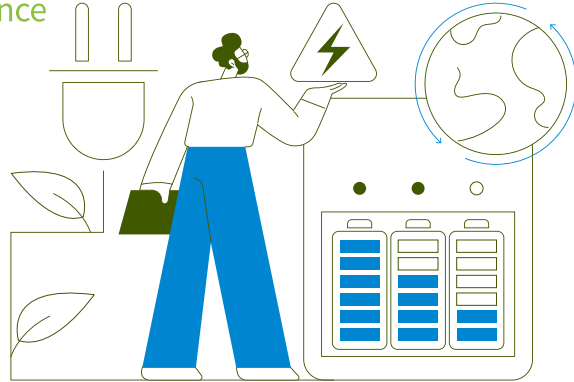
GOVERNANCE

- 69 Sound and Transparent Board of Directors
- 73 Ethics and Compliance
- 76 Risk Management
- 78 Information Security



ENVIRONMENTAL

ISU PETASYS will continue its efforts to enhance management activities that consider all stakeholders, including employees, the environment, and local community and the sustainability of the entire global supply chain.



Environmental Management

Eco-Friendly Management System

Environmental Management Policy

ISU PETASYS recognizes the environment, safety, and health as the company's top priority throughout its business activities and has established and operates an ESH policy (Environment, Safety, and Health Policy) to minimize the impact of the organization's activities, products, and services on the environment.

Organization for Promoting Environmental Management

ISU PETASYS defines the responsibilities and authorities of the CEO and dedicated organization through an environmental management manual. The CEO reviews and approves major climate change-related risks and opportunities, including carbon reduction initiatives and investments in environmental facilities. ESH Team, our dedicated environmental organization, reports to the CEO once a year on the review results for implementation of waste, chemicals, and water/air pollutant reduction plans. The Maintenance & Engineering Team manages energy and greenhouse gas by selecting priority issues related to climate change. In addition, the Energy Rationalization Activity Council is convened monthly to continuously monitor energy usage and identify opportunities for improvement.

Environmental Management System and Certification

ISU PETASYS has acquired the ISO 14001 certification, the international standard for environmental management systems. Through this certification process, our environmental policies and procedures have been standardized, and environmental risks within the workplace are regularly inspected and managed. In accordance with the requirements of ISO 14001, ISU PETASYS sets goals and indicators to minimize environmental impact, and we establish environmental management plans and implement them to achieve our goals.

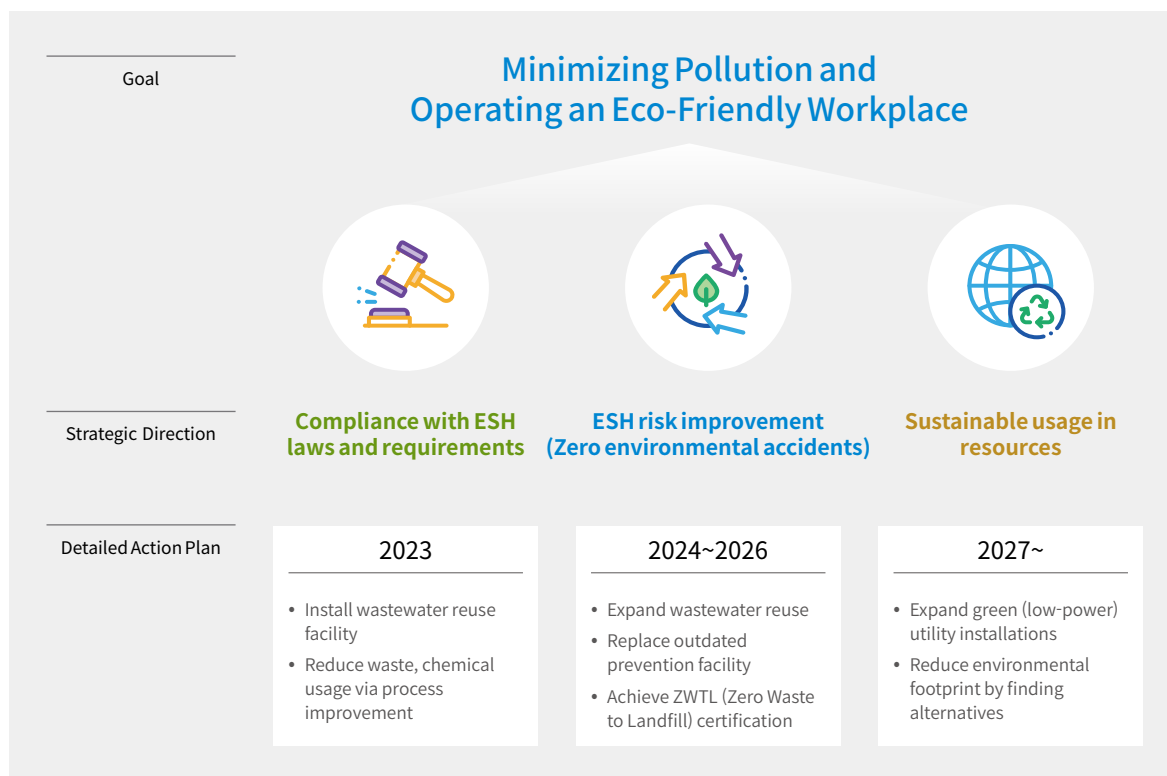
ESH Policy

- Compliance with ESH (Environment, Safety, and Health) laws and other requirements
- Continuous ESH risk improvement
- Minimizing environmental pollution and establishing an accident-free workplace
- Sustainable usage in resource and climate change mitigation
- Strengthening safety and health cooperation system through active consultation and participation of workers

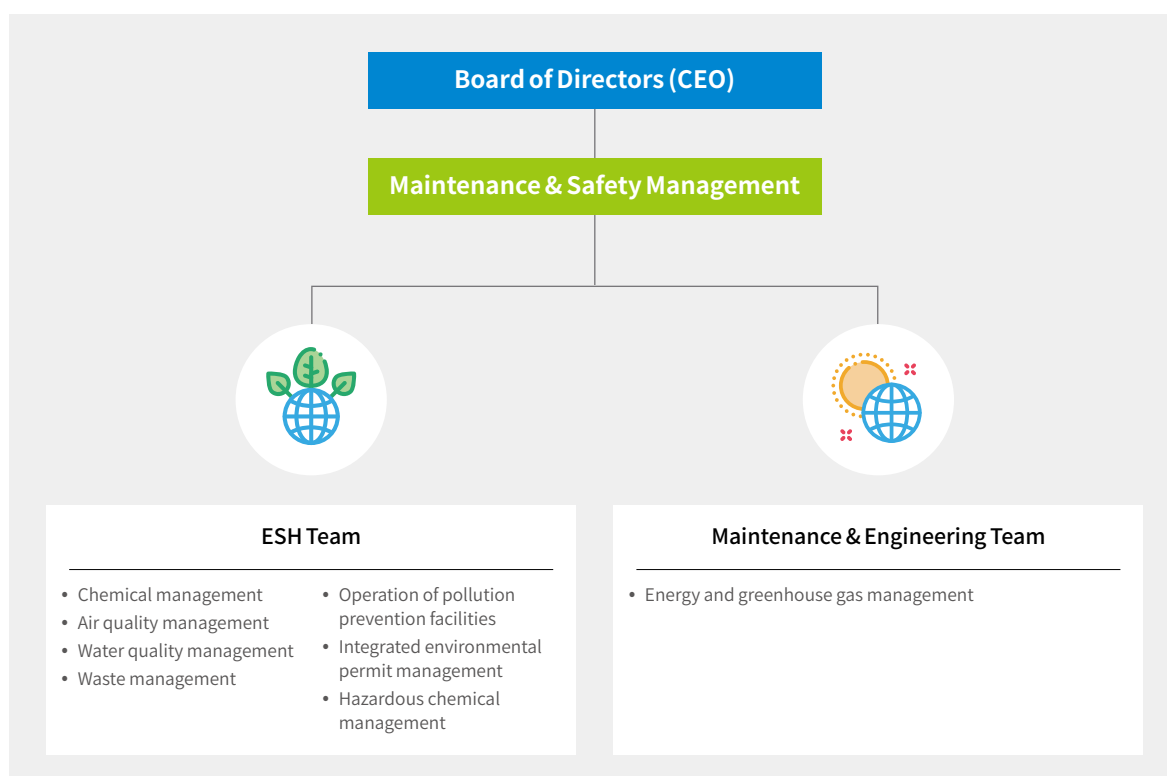


ISO 14001 : 2015

Environmental Management Strategy



Environmental Management Organization



Key Activities of Environmental Management

Environmental Impact Assessment

ISU PETASYS conducts environmental impact assessments¹⁾ throughout the entire process, from procuring raw materials for products and services to product disposal. Environmental impact assessments are conducted annually as regular evaluations. In addition, when issues occur such as the installation or expansion of facilities, development of new products, stakeholder demands, potential significant environmental impacts, and changes in the chemicals used in production processes, evaluations are performed frequently. The results of the assessment are ranked from grades A to F, with items rated D or higher categorized as having a significant environmental impact and managed as priority areas. Since 2024, ISU PETASYS has executed improvements by applying the HOC (Hierarchy of Controls) technique²⁾ to the environmental impact assessment, which divides improvement measures into four stages to reduce inherent risks.

- 1) Results of environmental impact assessment:
Grade A
(No impact on the environment),
Grade B
(Very minimal environmental impact),
Grade C
(Minimal environmental impact),
Grade D
(Somewhat significant potential environmental impact),
Grade E
(Significant environmental impact),
Grade F
(Very significant environmental impact).

- 2) HOC (Hierarchy of Controls) technique:
A method for determining risk control measures. Its aim is to reduce risks by identifying appropriate control measures and prioritizing the most fundamental risk reduction measures through a step-by-step reduction structure.

Eco-friendly Investment

ISU PETASYS continues to make eco-friendly investments and purchases to minimize our environmental impact. We made eco-friendly investments of KRW 4.5 billion in 2023, including the installation of wastewater recycling facilities, air pollution prevention facilities at the fourth plant, and procurement of eco-friendly paint and gypsum board construction materials.

Environmental Education and Campaign

ISU PETASYS actively enhances environmental awareness within the organization through various educational initiatives and campaigns. Regular training is provided to relevant employees on hazardous substances and water/air pollutants. New employees receive education on the importance of waste management and proper waste disposal practices. Also, various campaigns are carried out every year for separate waste disposal and reduction in energy usage.

Environmental Compliance

ISU PETASYS identifies major environmental regulations and establishes response strategies for each regulation to ensure compliance with environmental laws. Starting 2023, the regular compliance assessment will increase from annually to quarterly to continuously identify revised regulations and maintain compliance. In 2023, ISU PETASYS recorded zero environmental violations and zero environmental accidents.

Eco-friendly Investment Details

(Unit: KRW billion)

Category	Key Contents	Amount
2023	Installation of wastewater recycling facilities, air pollution prevention facilities at the fourth plant, etc.	4.5
2022	Replacement of air pollution prevention facility fans, replacement of walkways	0.25
2021	Replacement of low-power agitator in wastewater treatment facility	0.37



Resource Usage and Pollution Reduction

Establishment of Resource Circulation System

Resource Circulation System

ISU PETASYS works with external recycling specialists to recover mineral raw materials, such as copper, gold, silver, and nickel, from process scrap and liquid waste generated in the manufacturing processes. In 2023, a total of 11,094 tons of remnant scrap and liquid waste from products were recycled.



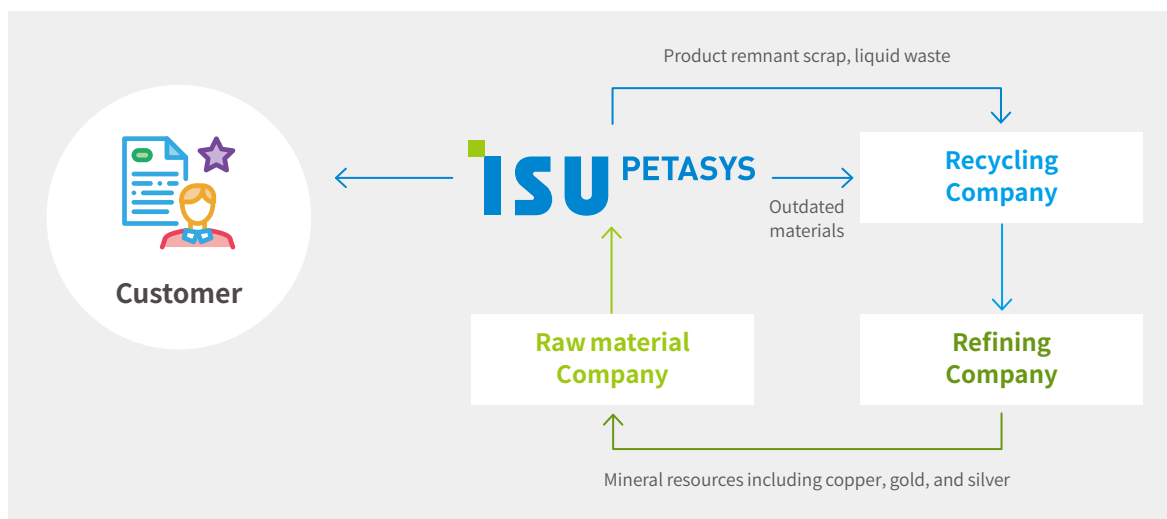
11,094 tons

Reuse of process scrap and liquid waste

Use of Recycled Materials

ISU PETASYS efficiently recycles various wastes from our manufacturing process to conserve resources and minimize environmental impact. In the plating process, recycled copper from waste hydrochloric acid generated in the inner layer process is used to manufacture copper sulfate. Furthermore, in the wastewater treatment process, regenerated sulfuric acid is used for neutralization reactions, and ferrous chloride, recycled from waste hydrochloric acid produced by steel mills, is used as an inorganic coagulant. The use of these recycled materials not only reduces production costs but also contributes to the establishment of a sustainable environment.

Resource Circulation System



Use of Recycled Materials

	Activities by Process	Recycled Raw Materials	Recycled Material Usage
Plating process	Utilizing waste hydrochloric acid	Copper sulfate	77 tons
	Regenerated sulfuric acid	Regenerated sulfuric acid	130 tons
Wastewater treatment process	Utilizing waste hydrochloric acid	Ferric chloride	6,260 tons



Nakdong River, Daegu Metropolitan City

Waste Management

Waste Management System

ISU PETASYS has established reduction targets per process to minimize waste generation during production activities and manages all waste from generation to storage and disposal. In addition, to minimize the environmental impact of outsourced waste disposal, regular assessments of waste disposal companies are conducted based on criteria such as equipment, technology, waste treating capabilities, legal requirements, etc. Waste is only entrusted to companies that have received a tradable grade.

Waste Reduction Activities

To reduce waste, ISU PETASYS manages the amount of waste generated on a basic unit, which allows us to efficiently manage the waste generated in each process. In addition, we have set a goal of achieving Zero Waste to Landfill Certification by 2026 and are continuously improving our waste recycling and treatment processes to achieve the goal.

Recycling Waste and Raw Materials

Resource recycling plays a crucial role in mitigating environmental pollution and addressing resource scarcity by reducing indiscriminate waste discharge. ISU PETASYS contributes to resource recycling through the establishment of a comprehensive recycling system for waste, raw materials, and subsidiary materials. In particular, we classify all waste, including products disposed of due to defects, into 40 categories, with 34 of them being reintegrated into the production of new products through outsourced treatment companies. By this process, we effectively recover waste that would otherwise be disposed of without recycling. In 2023, the waste recycling rate reached 89.6%, with plans to increase it to 95% by 2028.

Waste Management Process

Arrival of Material



Product production

Establishment of waste reduction plan



Waste generation

Moved to recycling and in-house waste storage



Waste storage

Classification storage, inspection of recycling status, and training for disposal personnel



Waste disposal

Transferred to the waste treatment company



Final processing

Verify legality of handling, regular assessment, and due diligence

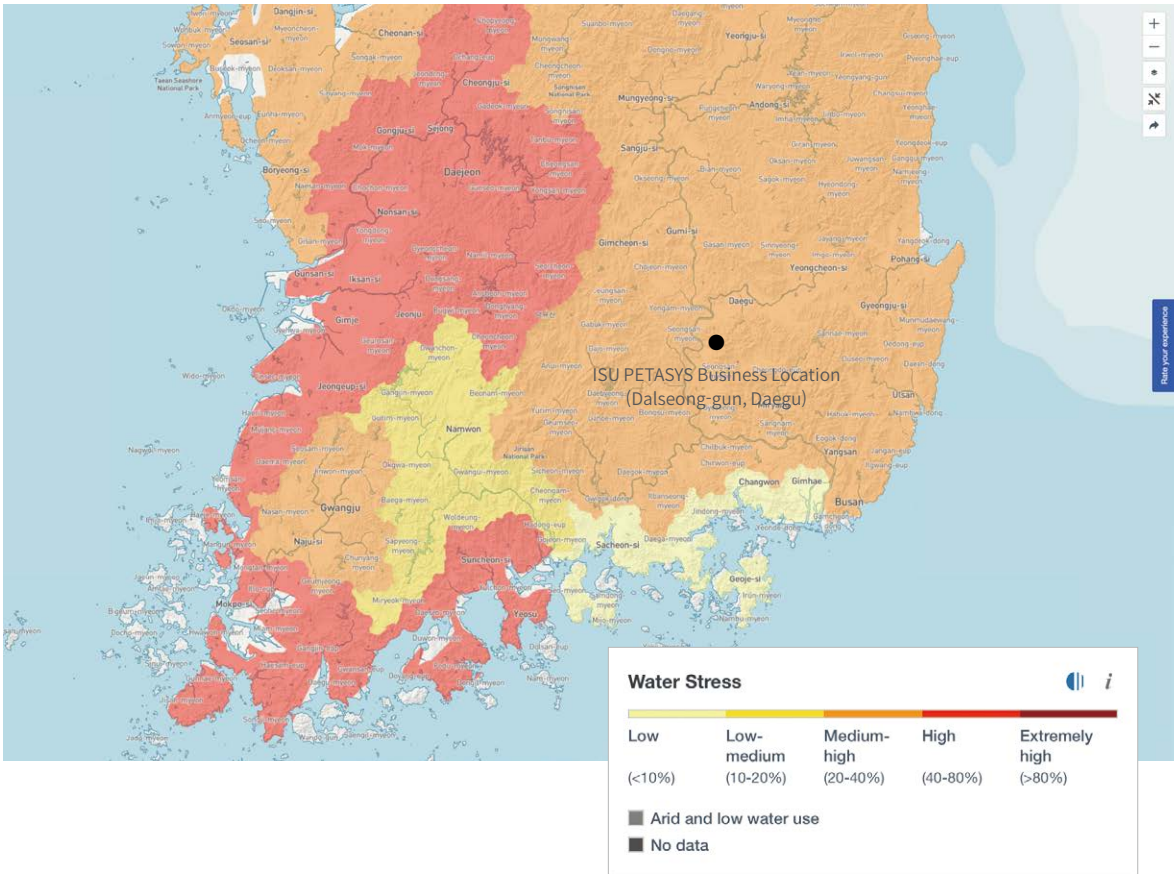
Waste Disposal and Recycling

Category	Unit	2021	2022	2023	2023 Target	2024 Target
Total Waste	ton	10,898.7	12,035.3	13,637.6		
General Waste	ton	5,252.7	6,071.9	7,389.8	14,000	14,500
Designated Waste	ton	5,646.0	5,963.4	6,247.8		
Waste Recycling Rate	%	77.9	81.0	89.6	85	90

Water Resources Management

Water Stress Management

ISU PETASYS recognizes the severity of the global water scarcity and is prioritizing water resource management while strengthening our management of water-related risks. According to the World Resources Institute’s ‘Water Risk Atlas,’ the Daegu area, where ISU PETASYS is located, is classified as a water stress area with a medium-high level (20–40%). Despite Daegu not being categorized as a very high-water stress area, ISU PETASYS is actively working to minimize water usage in our production processes and expand water reuse initiatives as a precautionary measure against water resource risks.



Water Stress Management

Business Location	Water Stress Index	Water Source	Key Management Activities
Daegu HQ	Medium-High (20-40%)	Nakdong River	Management of water resource usage per basic unit
			Facility investment to reduce water usage
			Increasing investment in wastewater reuse facilities
			Received B-rating for CDP water management in 2023





Water Usage Reduction Activities

To reduce water usage and reuse wastewater, ISU PETASYS has developed an action plan from the 3R (Reduce, Reuse, Recycle) perspective and is actively promoting it. This aims to recycle wastewater generated in the production process as much as possible and reduce overall water usage.

Water Reuse

ISU PETASYS has been reusing water since 2023. A portion of the wastewater generated during production process is purified through the wastewater recycling facility into pure water, which is then reused for production. In 2023, the wastewater reuse rate is at a level of 7%, and we plan to increase the reuse rate to over 20% by 2024, aiming to achieve one of the highest reuse rates in the industry.

Water Usage Reduction Activities

3R Activities	Activity Performance	Key Management Activities
Reduce	Reducing process usage	<ul style="list-style-type: none"> • Circulation use of water from washing process • Automatic shutdown of water supply to nonoperating facilities
Reuse	Portions of acid wastewater	<ul style="list-style-type: none"> • Using for the supply water of scrubber pre-treatment facility
Recycle	Wastewater from washing process	<ul style="list-style-type: none"> • Resupply of pure water through wastewater recycling facility

Water Usage and Reuse

Category	Unit	2021	2022	2023	2023 Target	2024 Target
Total water withdrawal	ton	1,321,183	1,326,252	1,387,559		
Tap water	ton	19,265	21,026	20,710	14,000	14,500
Industrial water	ton	1,301,918	1,305,226	1,366,849		
Water reuse rate ¹⁾	%	-	-	7	5	20

1) Data aggregation since 2023 due to the introduction of the wastewater recycling facility in 2023



Pollutant Management

Water Pollutant Management

ISU PETASYS recognizes the importance of water pollutant management and maintains stable effluent water quality through precise internal quality analyses conducted twice daily. Additionally, when necessary, we commission water pollutant analysis from external professional organizations to strictly manage the concentration of discharged water pollutants to within 70% of the emission standards. In 2023, the average discharge concentration of ISU PETASYS was 15.7% of the emission standards.

Air Pollutant Management

ISU PETASYS is continuously striving to comply with the enhanced emission standards under the Act on the Integrated Control of Pollutant-discharging Facilities. To this end, we operate emission and prevention facilities using the BATs (Best Available Techniques) and apply strict internal standards at 70% of the government's emission standards. In 2023, the average emission concentration of ISU PETASYS was 3.7% of the emission standards, demonstrating our efforts to minimize air pollutant emissions.

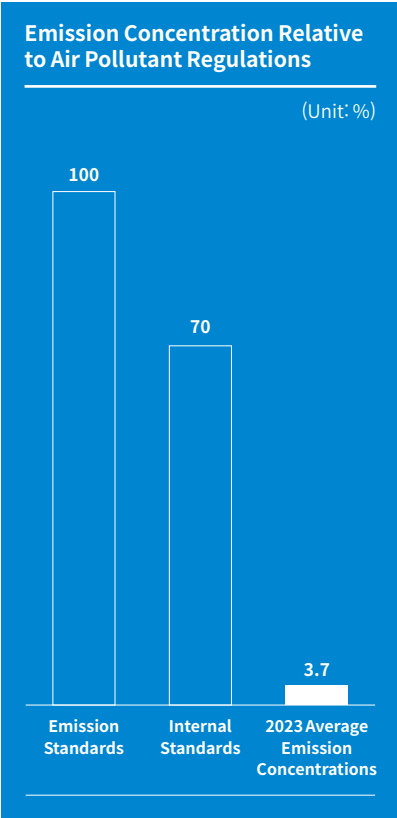
Hazardous Chemical Management

ISU PETASYS manages all chemicals used through a chemical product registration process. All chemicals can be used only after approval from the management department, and chemicals with high hazardous risks are reviewed for alternative products. We conduct chemical risk assessments based on work environment measurements once a year. When substances are classified as high-risk, HOC (Hierarchy of Controls) techniques such as removal, replacement, engineering improvements, management improvements, and the use of protective gear are applied to block and manage exposure at the source. For equipment identified as high risk based on risk assessment and accident history, focused inspections are conducted to evaluate and manage the suitability of the local exhaust ventilation system.

Reduction in Chemical Usage

ISU PETASYS sets and manages reduction goals for each process to minimize the chemical substances used in production activities. In 2023, we achieved reductions in chemical usage, including a 5% reduction in CF₄ gas usage and a 10% reduction in plating degreasing chemicals. we also pursue improvement activities based on the PDCA¹⁾ cycle every year.

1) PDCA: Plan, Do, Check, Act



SOCIAL

ISU PETASYS will continue our efforts to enhance management activities that consider all stakeholders, including employees, the environment, the local community and the sustainability of the entire global supply chain.



Talent Retention and Development

Human Resource Management

Talent Model of ISU PETASYS

ISU Group aims to become a world-class company by enhancing management and performance and strengthening competitiveness through talent development, nurturing experts who create new knowledge and value, and fostering a culture of self-directed learning in the global and digital era. ISU PETASYS has established the following talent model in line with the group's talent policy.

Talent Recruitment

To operate a fair and transparent HR system, ISU PETASYS has established employment rules and personnel regulations based on domestic laws including the Labor Standards Act. The prohibition of discrimination is stipulated in the human rights and labor policy, and the guidelines for employee ethical behavior and respect for human rights specify that there will be no discrimination based on gender, age, position, political or religious orientation, etc. when hiring. To promote competency-based fair recruitment, we train interviewers through external educational institutions before conducting interviews for new hires, and interviewers from affiliated companies within the group are cross-assigned to conduct fair and objective interviews. Discriminatory factors are eliminated from the recruitment stage, and the single wage system and equal benefits are applied to all employees after recruitment, ensuring no discrimination based on gender or job function. ISU PETASYS also provides equal opportunities for promotion to all employees through a fair performance evaluation system.

Self-Directed

Communication Communicating ISU



Communicating ability to concisely and precisely expressing one's opinion to help understanding

Teamwork-Oriented Collaborating ISU



Willingness to work collaboratively with people with diverse characteristics to achieve common goals

Self-development Growing ISU



Enjoyment of self-development through advice of others or learning new things



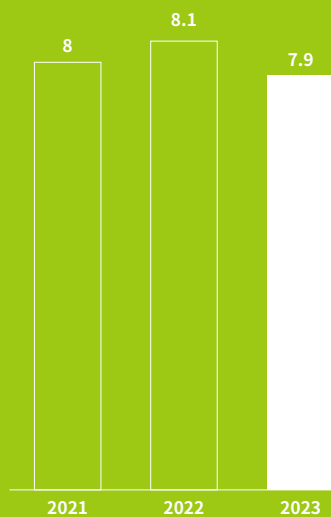
Employee Diversity

(Unit: Persons, %)

	Category	2021	2022	2023	2024 (Target)
Female	Employees (%)	73(8)	78(8.1)	87(7.9)	87(7.9)
	Managers (%)	3(0.3)	3(0.3)	3(0.3)	3(0.3)
Minority	Disabled (%)	32(4.3)	31(3.9)	31(3.4)	31(3.4)
	Veterans (%)	15(1.6)	15(1.6)	15(1.5)	15(1.5)

Female employee ratio

(Unit: %)

7.9%

Fair Evaluation and Compensation

ISU PETASYS ensures fair evaluation and compensation for all employees, regardless of position, gender, or other factors. Fair and objective evaluations of employees' work performance and capabilities contribute to the company's development by fostering and enhancing employees' abilities to perform their jobs. This approach is reflected in promotions, raises, salaries, and placements, with a focus on nurturing talent through rational human resource management. In accordance with the company's management strategy policy, MBO¹⁾ is utilized to establish goals for each department. Goals are set through a coaching and feedback process between team leaders and team members to ensure fairness. Mid-term reviews are conducted to check the progress of goals, and adjustments are made as needed. Evaluations are conducted by comprehensively considering individual competency and performance. We conduct performance-based human resource management by differentially reflecting wages according to the evaluation results. Additionally, to increase employee interest and participation in the ESH (Environment, Safety & Health) activities, including environmental protection, safety, health, and firefighting, we include scores in these areas in team evaluations. Participation in ESH activities, prevention efforts, and health disease rates are used as evaluation criteria. Departments that excel in these areas are awarded extra points in team evaluations.

1) MBO: Management By Objective

Employee Competency Development

ISU PETASYS recognizes the importance of excellent talent in achieving sustainable growth and management goals, and actively invests in fostering and developing such talent. ISU PETASYS operates a customized education and training system tailored to each position and job, divided into categories such as competency strengthening by job level, job specialization, and global competency enhancement. Through this, we strengthen overall organizational capabilities by supporting and motivating the continuous competency development of employees.

Employee Education



Hierarchical Competency Enhancement ____ ISU PETASYS offers a variety of training programs for all job levels to enhance competencies. We provide executive and team leader training that focuses on leadership and management trends, as well as courses for newly promoted, experienced, and new employees. For new hires, ESG lectures are mandatory and include On-the-Job Training (OJT) and mentoring programs to help them quickly adapt to the organizational culture and support their professional development.

Job Specialization ____ To enhance professional development, ISU PETASYS offers MyBoard training, Six Sigma training, and off-site job courses. We also encourage continuous self-development through online job training, as well as reading and communication courses. In addition, we help expand job-related knowledge and networks by supporting attendance at domestic and international exhibitions and conferences to experience the latest industry trends and innovations.

Global Competency ____ To enhance global competitiveness, ISU PETASYS offers in-house and off-site language courses. This helps employees develop language skills and communicate effectively in a global business environment.

2023 Major Education

Category	Title of Education	Contents of Education	Completions
Hierarchical Competency Enhancement	Executive training	<ul style="list-style-type: none">Coaching and educating executives on leadership and management trends to drive change and spur innovation	12persons
	Team leader training	<ul style="list-style-type: none">Strengthening corporate competitiveness through leadership and management trends trainingNew team leader course, team leader seminar	23persons
	New promotions training	<ul style="list-style-type: none">Role awareness and management trend training	37persons
	Experienced employee course	<ul style="list-style-type: none">Securing corporate competitive edge by enhancing competency of experienced employees	16persons
	Employee course	<ul style="list-style-type: none">Networking/Work competency improvement (Biz)/Followership training1st year feedback course, 2nd year course	56persons
	New employee course	<ul style="list-style-type: none">New employee introductory course (HR system, core values, business capabilities, ESG), OJT within the department, mentoring	49persons
Job Specialization	Cyber/Reading communication	<ul style="list-style-type: none">Online job competency improvement course and reading communication course	927persons
	MyBoard course	<ul style="list-style-type: none">PCB technology training for new employees	49persons
	Six Sigma course	<ul style="list-style-type: none">Quality/basic statistics training for engineers (staff level)	26persons
	Off-site job training	<ul style="list-style-type: none">Off-site training to strengthen individual/team job competencies	97persons
	Domestic/International exhibitions and conferences	<ul style="list-style-type: none">Industry trends and strengthening employee competenciesCES, KPCA, JPCA, HKPCA, CPCA etc.	71persons
Global Competency	In-house language course	<ul style="list-style-type: none">In-house language courses and off-site language classes (English/Chinese) to improve employees' language skills and strengthen global competencies	24persons
	Off-site language course		27persons
Total			1,414persons



Culture of Respect for Employees

Work-Life Balance

ISU PETASYS recognizes the improvement of employees' quality of life as a vital factor in enhancing productivity. To achieve this, flexible working hours have been implemented since 2016, creating shorter working hours conditions. Furthermore, various programs are in operation to ensure a balance between work and family life. With programs that alleviate the burden of childcare, such as an automatic parental leave system, workplace childcare facilities, financial aid for education, and the operation of lactation rooms, ISU PETASYS provides employees with a stable and fulfilling life.

Employee Welfare and Benefits

ISU Group actively supports employees through various welfare and benefits systems so they can feel pride in their workplace and maintain a work-life balance. In line with the Group's welfare policy, ISU PETASYS offers a range of benefits to employees. We have developed a welfare application to inform employees about the benefits and provide information for their convenience.

Labor Union

ISU PETASYS strives to create a corporate culture of mutual growth based on labor-management harmony. We guarantee employees' freedom of association and promote continuous dialogue between labor and management. Through quarterly Labor-Management Council meetings and semiannual Occupational Safety and Health Committee meetings, opinions are exchanged between labor and management. Agreed-upon matters are actively implemented to improve the workplace environment and working conditions.

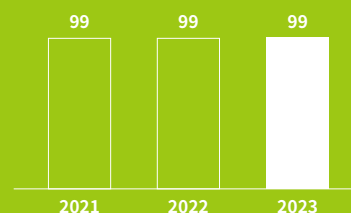
Employee Grievance Handling

ISU PETASYS operates a grievance system that guarantees anonymity with a grievance policy that clearly stipulates the procedures for employees' personnel counseling and grievance review. Through this system, we contribute to creating a healthy working atmosphere by listening to employees' grievances and taking measures to address them.

Union membership rate

(Unit: %)

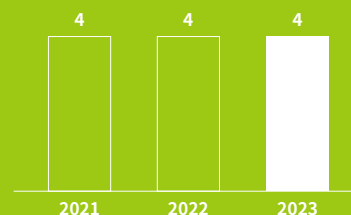
99%



Labor-management Committee convening

(Unit: cases)

4cases



Employee Benefits Program

Leisure & Activity	<ul style="list-style-type: none"> Resort membership operation 'Circle' (club) operations and support In-house foreign language courses 	<ul style="list-style-type: none"> Cyber training center Mentoring program
Life Balance	<ul style="list-style-type: none"> Children's education support Support for various congratulations and condolences Regular health checkups and counseling center 	<ul style="list-style-type: none"> Support for health checkups by position/age Group accident insurance for employees Housing loans Benefits for the disabled and veterans
Happy Workplace	<ul style="list-style-type: none"> Operation of a cafeteria Dormitory provided Commuter bus service Support for celebratory/bereavement leave 	<ul style="list-style-type: none"> Foundation anniversary/Labor Day holiday Encouragement gift for children taking college entrance exam Communication expenses support Operation of a break room, shower room, and conference room
Motivation	<ul style="list-style-type: none"> Long-term employee rewards and vacation Employee recognition award 	<ul style="list-style-type: none"> Performance bonus Refresh vacation



Human Rights Management

Human Rights Management Policy

ISU PETASYS is committed to reinforcing and practicing the value of respect for human rights at institutional and cultural levels. To this end, a Code of Conduct has been established based on relevant international standards and guidelines, including the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights (UNGPs), the Charter of the International Labor Organization (ILO), the OECD Due Diligence Guidelines, and the Responsible Business Alliance (RBA) Code of Conduct. Within the Code of Conduct, ISU PETASYS has established guidelines related to 'Human Rights and Labor,' which are used as a human rights management policy to prevent and manage human rights-related risks arising from our business activities. The human rights management policy was established to minimize human rights risks for all workers participating in our business and it includes measures to protect the human rights of temporary workers, dispatched workers, and external service providers who are vulnerable to human rights-related risks.

Human Rights Due Diligence

ISU PETASYS, through our dedicated Human Resources Labor Team, formulates and implements plans for human rights management and regularly monitors performance. The Human Resources and Labor Team conducts overall management activities to identify human rights violations and related risks and investigates reports of human rights violations through annual internal audits. When human rights violations are confirmed, immediate disciplinary actions are taken against the perpetrators, and protective measures for the victims are reported to the Ethics Management Committee for prompt implementation.

Human Rights Education

ISU PETASYS conducts various human rights trainings, including sexual harassment prevention, and operates a human rights pledge program to raise employees' awareness of human rights. These trainings and programs make employees aware of the importance of human rights and reinforce a culture of respect for human rights in the workplace.

Main Contents of Human Rights Management Policy

Management Area	Main Contents
Prohibit Forced Labor	<ul style="list-style-type: none"> Prohibit all forms of forced labor Prohibit labor exploitation via threats, violence, coercion, abduction, fraud, etc. Ensure workers' freedom of entry/movement into facilities
Juvenile Worker	<ul style="list-style-type: none"> Exclusion of child labor Student worker management
Working Hours	<ul style="list-style-type: none"> Maximum hours of work (compliance with local law) Workweek (not to exceed 52 hours including overtime)
Wages and Benefits	<ul style="list-style-type: none"> Overtime (voluntary) At least one day off every seven days
Nondiscrimination/ Anti-harassment/ Humane treatment	<ul style="list-style-type: none"> Compensation (compliance with laws regarding minimum wage, overtime, and statutory allowances) Same job/qualification: equal pay Overtime pay is higher than regular hourly rate No salary reduction for disciplinary action Provide easy-to-understand pay-slips during payroll Temporary, dispatched, outsourced workers (compliance with local laws)
Freedom of Association and Collective Bargaining	<ul style="list-style-type: none"> Eradicate workplace harassment/illegal discrimination Prohibit discrimination in recruitment/employment activities Disciplinary policies and procedure policies/notices Reasonable accommodation for religious activities and disabilities Prohibit discriminatory medical/physical examinations
	<ul style="list-style-type: none"> Respect workers' rights to form/participate in labor unions Elect/join alternative forms of worker representation when restricted by law/regulation

Sustainable Supply Chain

Supply Chain Management System

As global supply chain management has emerged as a major issue in corporate sustainability, ISU PETASYS is also strengthening our risk management of suppliers. Embracing the role of a co-destined partner rather than merely a collaborator, we are committed to the values of 'shared destiny,' 'integral management,' 'pursuit of performance,' and 'collaborative innovation' as set forth in the 'Standards of Conduct for Realizing the Value of Shared Growth.'

Sustainable Management of Suppliers

Responsible Sourcing of Raw Materials

ISU PETASYS rigorously manages its raw material procurement process to ensure that conflict minerals* and similar substances are not used in the production process. We have established management policies in accordance with the RMI (Responsible Minerals Initiative) to investigate the origins of materials used by our suppliers and are implementing a conflict mineral management process. In particular, ISU PETASYS utilizes the CMRT (Conflict Minerals Reporting Template) provided by RMI to identify the usage status of conflict minerals such as tin, tantalum, tungsten, and gold within its supply chain and reviews and updates all names and locations of smelters.

*Conflict mineral: Natural resources produced in countries where conflicts may lead to labor exploitation, abuse, human rights violations, and the funding of armed groups during mining. Due to these concerns, the international community regulates the mining of conflict minerals.

Signing of Code of Conduct Implementation by Suppliers

ISU PETASYS requires suppliers to comply with both the ISU PETASYS Code of Conduct and the RBA Code of Conduct. To ensure this compliance, ISU PETASYS receives the Agreement of Implementation from suppliers regarding the adherence to the Code of Conduct of ISU PETASYS. The Code of Conduct covers various aspects, including human rights and labor, environmental health and safety, fair business operations, product responsibility and customer, community engagement and development, and ESG governance. It was revised in March 2024 to reflect the content of the RBA Code of Conduct 8.0. Suppliers also pledge their commitment to the RBA Code of Conduct by signing a commitment letter to comply with the RBA Code of Conduct as part of their contract.

Supplier ESG Audit

ISU PETASYS expands corporate social responsibility throughout the supply chain and conducts ESG audits to diagnose and evaluate the environmental, social, and governance risks of its suppliers. We evaluate the ESG capabilities of our suppliers according to the RBA evaluation criteria. Through this process, we reduce risks that may occur in the supply chain and encourage our suppliers to strengthen their sustainable management capabilities.

Supply Chain Management Policy

Shared Destiny

- To ascend to the top as number one, not just in a simple cooperative relationship, but with a sense of shared destiny, and realize the value of mutual growth based on trust.

Ethical Management

- Respect the fair and free market economic order based on the principle of free competition among suppliers and contribute to increasing the growth value of suppliers by ensuring fair competition with competitors.
- Pursue common development by building mutual trust and cooperative relationships through fair trade with suppliers.

Collaborative innovation

- Select competitive suppliers and focus on fundamental improvement.
- Pursue self-innovation and aim to foster strong suppliers to leap forward as global leaders.
- Pursue innovative values that can secure long-term self-sustainability for suppliers and create mutual growth.

Pursuit of Performance

- Set and pursue goals to become the global No. 1 PCB group.



RBA Code of Conduct



ISU PETASYS aims to become a 'world-class PCB company through customer satisfaction and management innovation.' We will enhance our competitiveness through progressive and innovative management practices while fulfilling our corporate social responsibilities by growing and developing together with all stakeholders. To this end, we have established and implemented a Code of Conduct as a guiding principle for our employees in performing their duties. This Code of Conduct, aimed at fostering a safe working environment, ensuring respect for employees, and promoting environmentally friendly and ethical business operations, applies to all ISU PETASYS employees. We also encourage third parties, including suppliers, to comply with it.

This Code is organized into seven sections based on the Responsible Business Alliance (RBA) Code of Conduct version 8.0 (2024). Sections A, B, C, D, E, F, and G, respectively, covers human rights and labor, safety and health, environment, ethics, product responsibility and customers, community engagement and development, and the ideal management system to comply with this Code.

ISU PETASYS supports employees in understanding and practicing the Code of Conduct. Areas not covered by the Code of Conduct or requiring further clarification are detailed in our work regulations, with guidance available from the relevant department. All ISU PETASYS employees recognize that adhering to the Code of Conduct is a prerequisite for becoming a sustainable company and will strive to comply with it.

Supply Chain Risk Management

Due Diligence on Conflict Minerals

Based on its conflict minerals due diligence, ISU PETASYS categorizes our suppliers' conflict minerals management into three tiers: high risk, low risk, and no risk. Suppliers categorized as 'high risk' are required to replace their conflict minerals. In 2023, we surveyed 37 suppliers subject to due diligence and found that all of them use minerals from RMI-certified smelters, and none required corrective measures.

Regular Supplier Assessment and Monitoring

ISU PETASYS conducts regular supplier assessments at least once a year to select and manage competitive suppliers effectively. The assessment results are divided into four grades (A, B, C, D). For key suppliers, ISU PETASYS actively places orders. ISU PETASYS suggests improvement measures for suppliers requiring corrective actions and monitors their implementation. Regular assessments targeting raw material and logistics companies encompass various criteria, including pricing, quality, delivery, safety, financial stability, collaboration, reliability, incident history, and customer satisfaction.

Conflict Minerals Management Policy for Suppliers

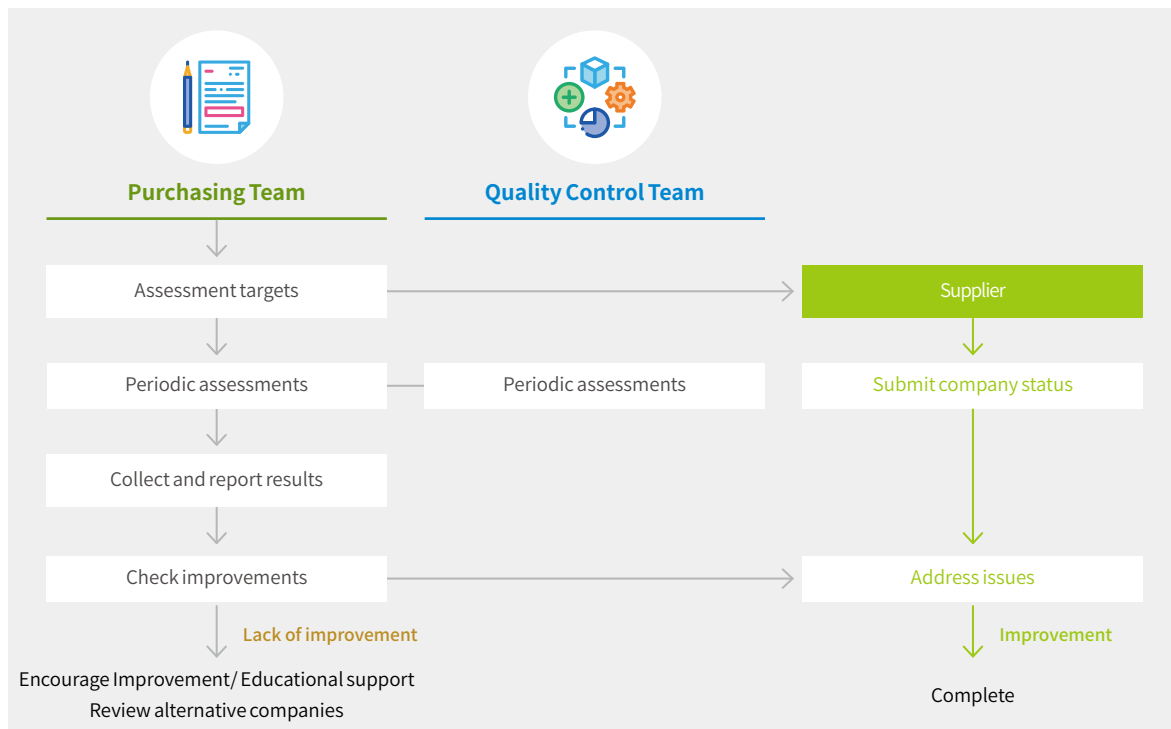
- Suppliers must establish documented conflict mineral management policies and procedures to ensure that products supplied to ISU PETASYS do not contain conflict minerals that contribute to the interests of armed forces in the Democratic Republic of the Congo or neighboring countries.
- Suppliers must make good faith efforts to identify the names and locations of all smelters in the supply chain where conflict minerals are purchased.
- Suppliers must fill out a conflict mineral use report questionnaire and submit it promptly upon request from ISU PETASYS.
- If risks are discovered in the supply chain, suppliers must take corrective action promptly.

ISU PETASYS Conflict Minerals Management Policy

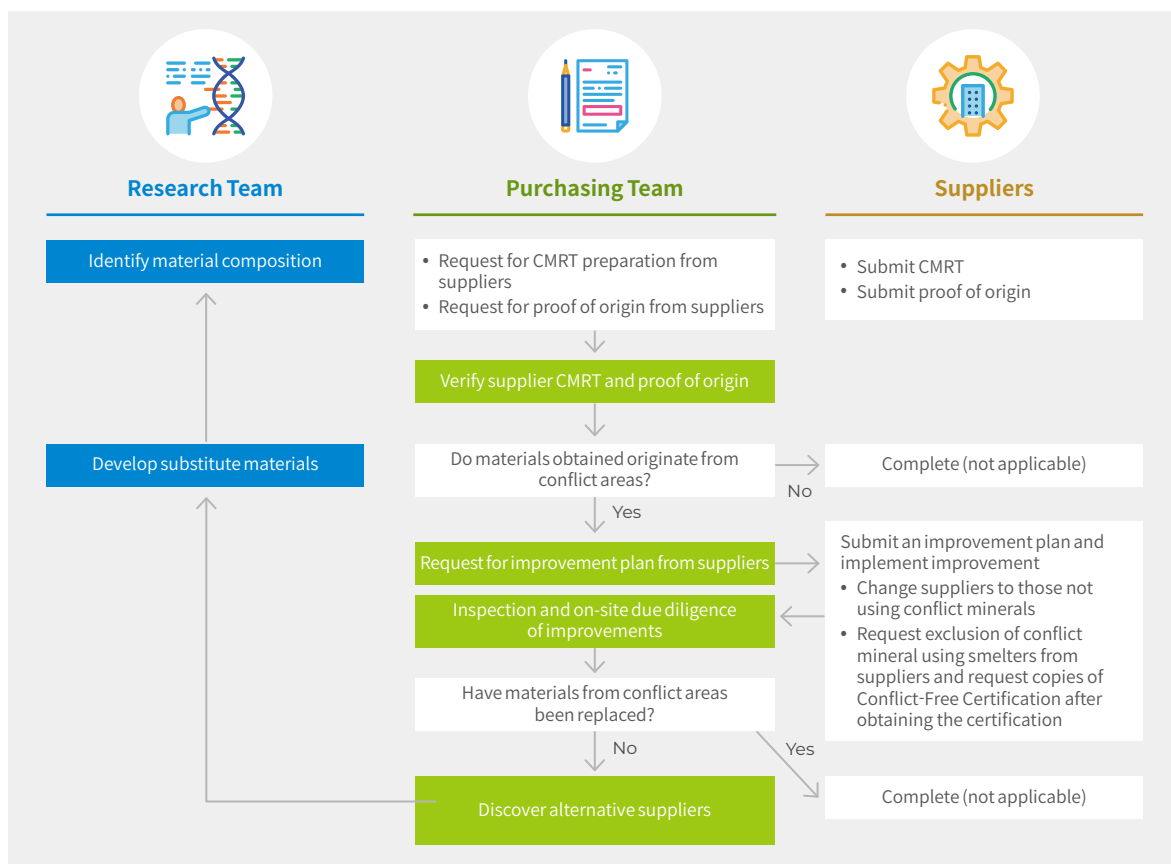
- Establishing a conflict minerals business process to comply with the law by applying international standards regulating conflict minerals and supporting activities to ban their use promoted by the RBA and the GeSI (Global e-Sustainability Initiative).
- Utilizing the Conflict Minerals Reporting Template provided by RBA-GeSI to identify the names and locations of all smelters of tin, tantalum, tungsten, and gold used in products.
- Requesting suppliers to submit a questionnaire to report the use of conflict minerals and provide written confirmation that they are not using conflict minerals.
- Supporting suppliers to purchase minerals from smelters certified under the 'Conflict-Free Smelter Program.'
- Establishing due diligence procedures in accordance with the OECD Due Diligence Guidance and, if necessary, conducting due diligence on the procedures and materials performed by suppliers to report the use of conflict minerals.



Supplier Assessment Process



Conflict Minerals Management Process



Enhancement of Mutual Growth Initiatives

Increasing Suppliers Capabilities

ISU PETASYS requires our suppliers to adhere to both the ISU PETASYS Code of Conduct and the RBA evaluation criteria to ensure a safe working environment and promote environmentally friendly and ethical business operations. We verify compliance through due diligence of our suppliers, analyze the effectiveness of the evaluation criteria, and strive for continuous improvement.

Strengthening Safety Capabilities ____ Under the goal of shared growth through the establishment of a safe and healthy workplace, ISU PETASYS is promoting a mutual cooperation program jointly with a total of seven suppliers. Through voluntary collaboration with suppliers, we are participating in cooperative projects to bridge the gap in safety and health levels. This includes various safety and health activities such as monthly council meetings, core safety rule compliance campaigns, semiannual roundtable meetings, quarterly joint safety and health inspections, and emergency response drills.

Enhancing manufacturing capabilities ____ To improve the quality of our suppliers, ISU PETASYS holds regular quality meetings with our suppliers once a month to discuss issues and carries out activities to enhance quality by eliminating unreasonable elements through training when improvements are needed. We also maintain sound partnerships with our suppliers. To foster a collaborative culture, ISU PETASYS holds a mutual growth meeting with suppliers once a year to share market trends, business strategies, performance, and partner issues. Additionally, we encourage suppliers to improve their manufacturing capabilities by awarding outstanding suppliers. ISU PETASYS will continue to make efforts to achieve shared growth with its suppliers in the future.

Education for Suppliers

ISU PETASYS supports safety and health education, including regular safety and health education, special safety and health education, and MSDS education as required by the Occupational Safety and Health Act, to prevent safety accidents from occurring at our partner workplaces.

Expanding Communication with Suppliers

ISU PETASYS maintains constant communication with our suppliers to enhance the exchange of market and technical information. Through monthly council meetings and semiannual partner roundtable meetings, ISU PETASYS addresses grievances from suppliers related to safety and health and works to improve the unreasonable. Additionally, we operate a whistleblowing process through a third-party organization, actively incorporating ethics-related reports from both employees and suppliers. This approach helps ensure a continuous and transparent relationship with our suppliers.



RBA

RBA Code of Conduct
Compliance

Education for Suppliers

Contents of Education	Education Cycle
Regular safety and health education	Monthly
Training upon hire	Upon new hires
Special safety and health education	For new special education subjects
MSDS education	Upon engagement of education subjects
Hazardous chemical worker training	Annual



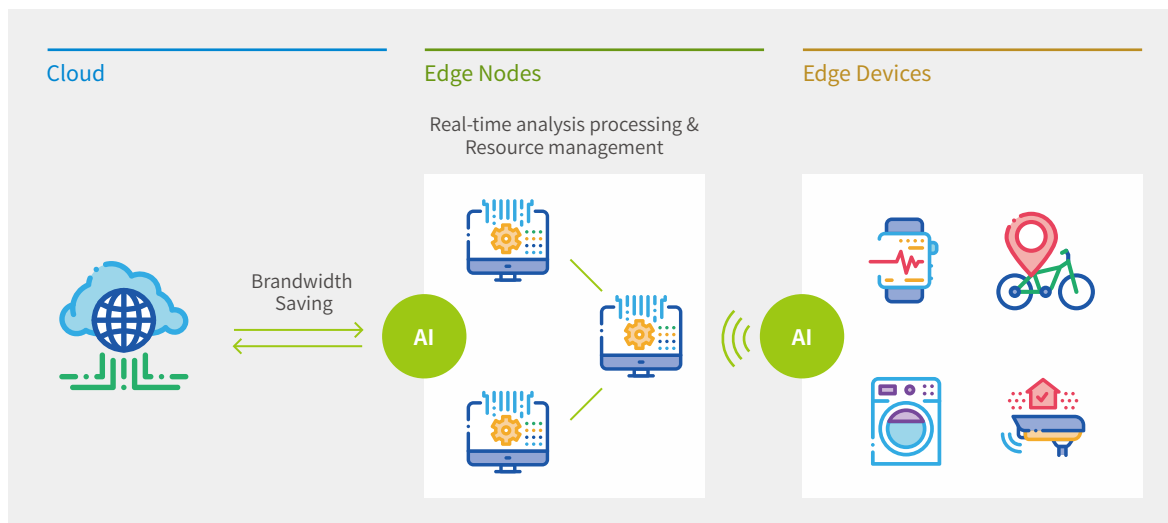
Enhancement of Product Competitiveness

Response to Changing Market Trends

Despite the growing uncertainty in the downstream market caused by the rapidly changing external environment, demand for IT infrastructure equipment continues to rise steadily. This growth is driven by factors such as the expansion of AI technology adoption, digital transformation initiatives, and the routine use of big data-based technology, all of which contribute to increased data traffic. Consequently, the PCB market, which is ISU PETASYS's primary market, is also expected to sustain growth. Increased investment in hyperscale data center expansion and the expansion of edge computing are positively impacting the demand for high-end PCBs. Furthermore, the acceleration in the specifications of network and server equipment is driving active technology development aimed at minimizing signal loss. Recently, with the increased use of cloud services due to the rise of non-face-to-face communication and the expansion of user-generated content, there has been a surge in demand for AI accelerators. These accelerators are specialized chip equipment designed to enhance the performance and efficiency of equipment by accelerating artificial intelligence and machine learning applications. As a result, there have been significant shifts in the landscape of the upstream market, both large and small. The demand for AI accelerators is anticipated to experience rapid growth, driven by strategic trends among downstream companies that prioritize the increased utilization of AI technology and enhanced equipment performance. ISU PETASYS is focusing on preparing for 800G to develop faster and more stable signal transmission technology. We have devised a technology roadmap aimed at enhancing production capacity for core processes of ultra-high-spec PCB precision processing technology, including lamination, plating, and processing. Additionally, we have been collaborating with high-performance raw material suppliers to develop materials that minimize signal loss. Leveraging our extensive experience in the network market, ISU PETASYS has ventured into the AI accelerator market. This strategic move aims to fulfill customer satisfaction through highly reliable technological responses.

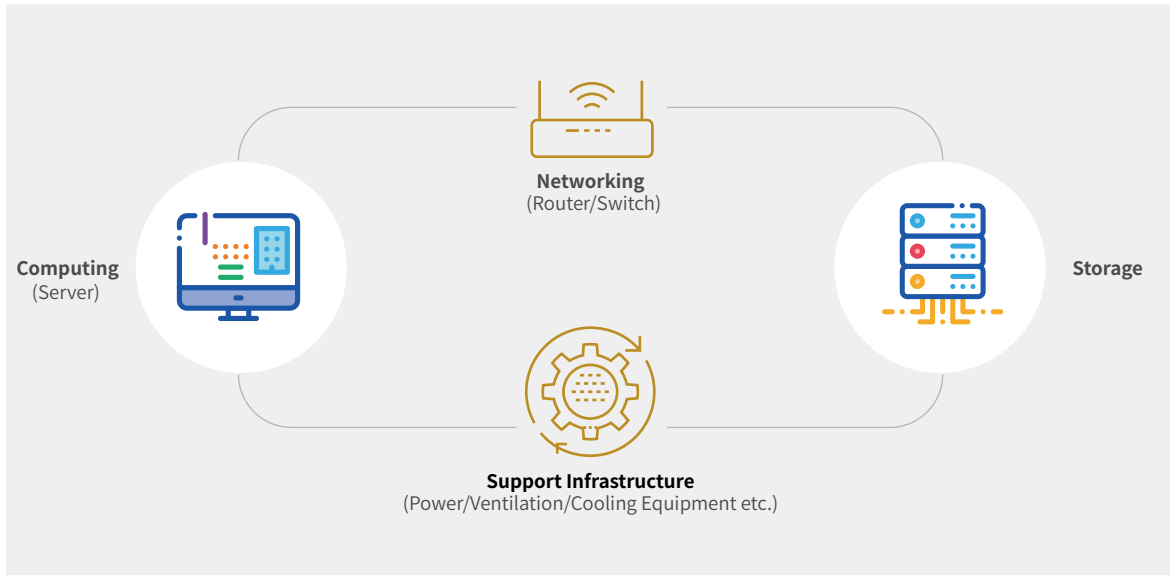


Edge Computing

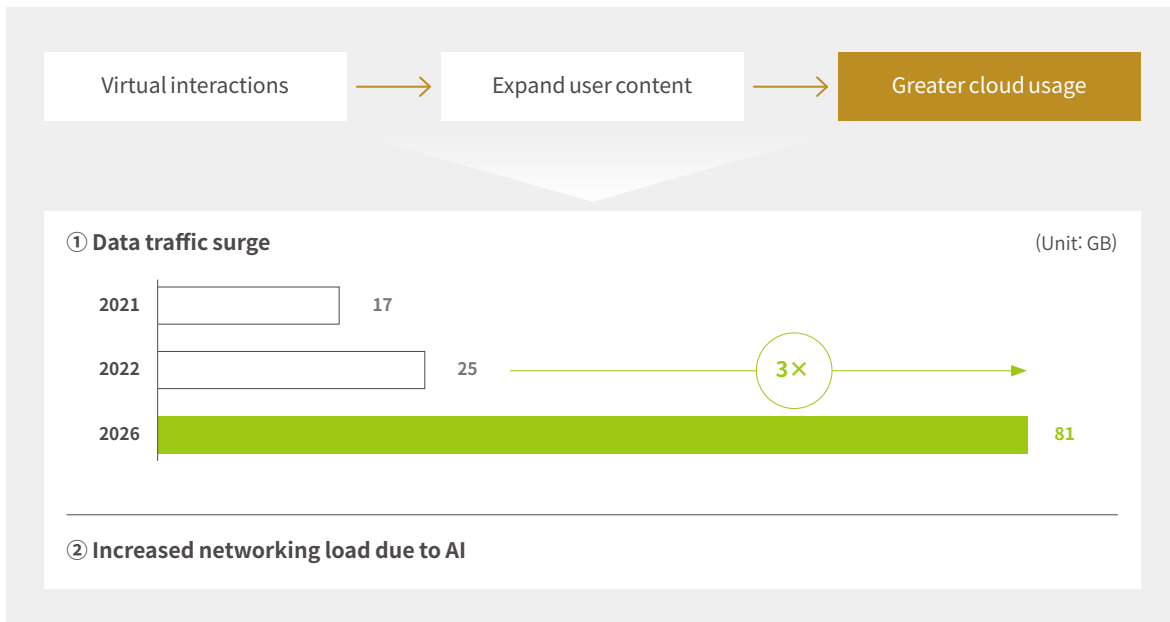


(Source: Korea Information and Communication Technology Association)

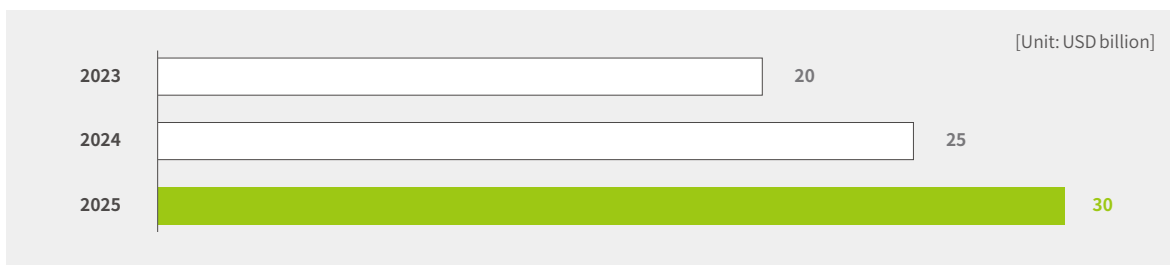
Data Center



Market Trend



Increased Accelerator Demand Expected

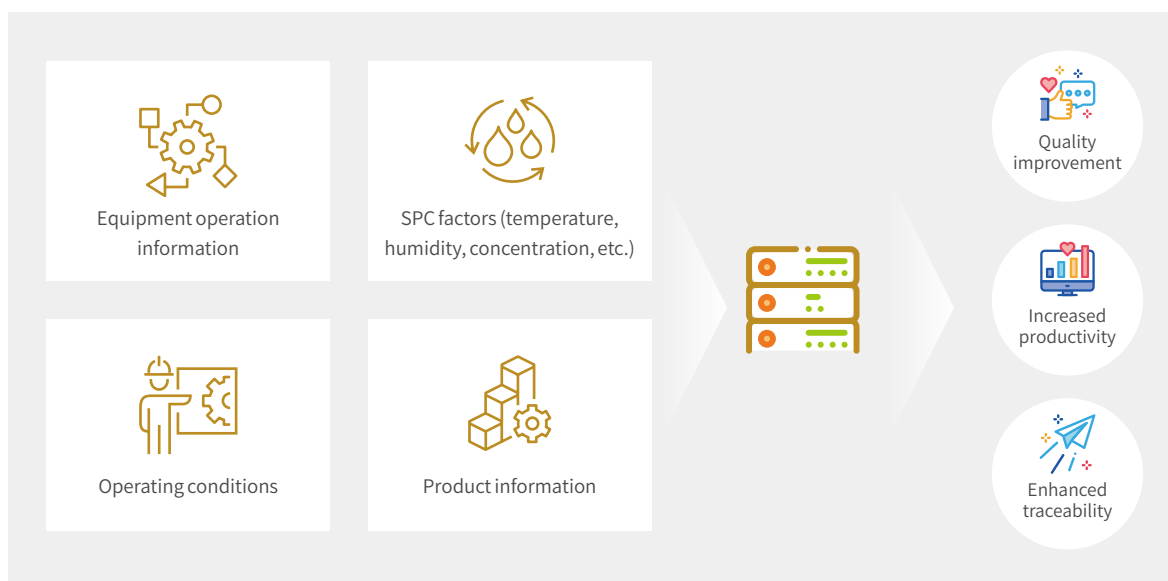


DT(Digital Transformation)

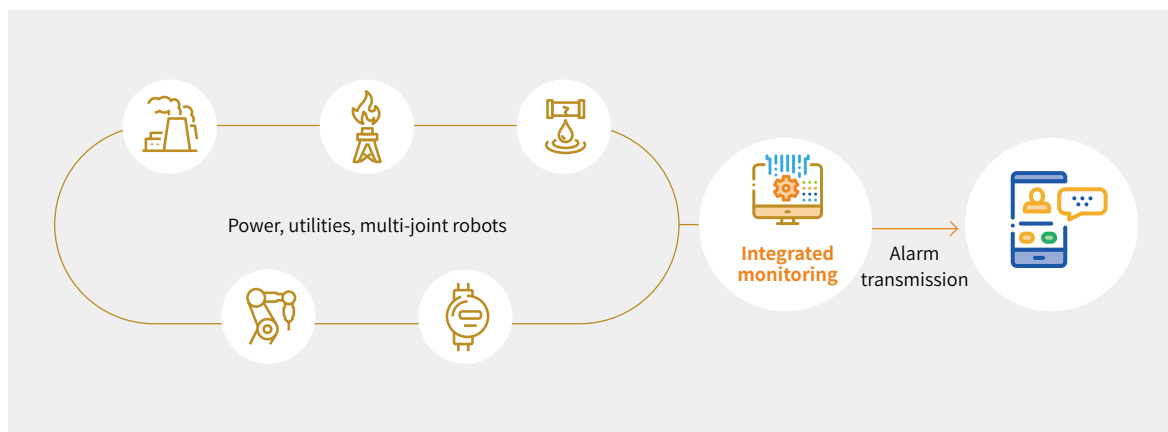
In the rapidly changing global business environment, innovative manufacturing through digital transformation (DT) and factory automation is emerging as one of the key competencies for companies. ISU PETASYS is consistently identifying new challenges and developing DT capabilities each year, based on the mid- to long-term digital transformation master plan established in 2022.

In 2023, ISU PETASYS made significant investments in automation facilities and programs to integrate automation technology from design to production. We are also in the process of digitizing our facilities with the aim of implementing a smart factory. To facilitate this, we have developed a system enabling integrated monitoring of power, utilities, articulated robots, sensors, and more, thereby enhancing the ease of information importation and control. Additionally, ISU PETASYS is preparing for the transition to a smart office, leveraging AI technology for digital transformation in both office operations and production.

Establishment of Smart Factory Infrastructure



Development of Integrated Monitoring System



ESTABLISHED FOURTH FACTORY TO STRENGTHEN PRODUCTION CAPACITY

ISU PETASYS plans to expand our investments in manufacturing plants to enhance efficiency and productivity, thereby laying a solid foundation for growth.

In May 2023, ISU PETASYS completed the construction of our fourth multilayer PCB manufacturing plant within the Daegu Dalseong 1st Industrial Complex. This marks the beginning of the company's efforts to increase production capacity by 2024 through the construction and reorganization of factories. Our new investments focus on expanding production facilities for multilayer PCBs, replacing outdated equipment in its existing first to third factories, and deploying multi-joint robots to streamline automation processes and optimize logistics movements. Through these initiatives, ISU PETASYS aims to position ourselves as a specialized PCB manufacturing company by proactively responding to the growing demand from global data center customers.

R&D center and the fourth plant



Completion ceremony of the fourth plant (May 4, 2023)



New facility in the fourth plant (Drill)



The fourth plant AMR (Autonomous Moving Robot)



R&D Operating System

ISU PETASYS, driven by its dedicated research and development organization, the R&D group, is continuously promoting R&D activities to enhance its technological competitiveness.

R&D Strategy

In a rapidly changing competitive environment, ISU PETASYS is enhancing its R&D capabilities to lead technological trend changes and maintain a competitive advantage in the market. Drawing upon decades of experience in ultra-high layer PCB technology, we aim to establish a strong position through preemptive responses in future growth areas.

R&D Organization

The R&D organization is led by the Director of the Technical Research Center and consists of the R&D Team, Technical Team 1, Technical Team 2, and Front End Team, which work together to achieve strategic technology development goals. As of the end of 2023, the total number of employees was 61.

Major Research & Development

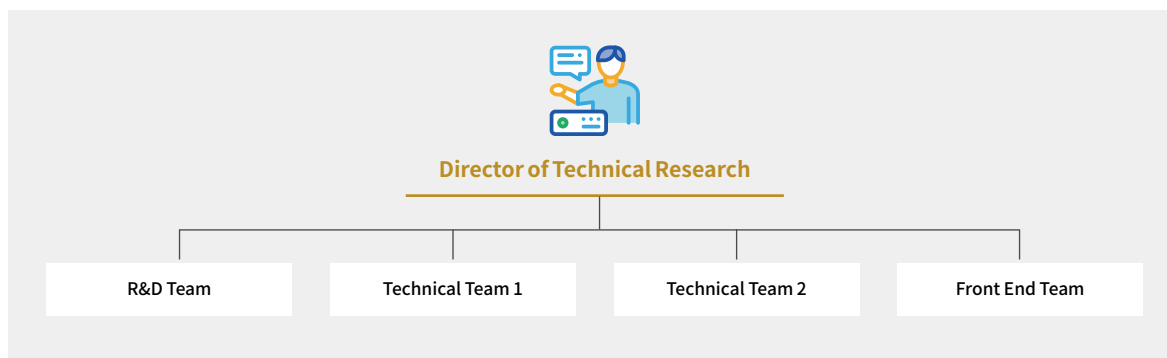
AI Accelerator ____ ISU PETASYS is promoting the development of an AI Accelerator PCB, which is becoming increasingly important due to the innovation of AI technology and its expanding applications. The project, which started in May 2023, aims to optimize multi-lamination technology to minimize signal loss and increase transmission speed, and is expected to contribute to the improvement of core technologies.

800G Data Center Network ____ ISU PETASYS began developing PCB technology for 800G network equipment used in data centers in January 2023. The term '800G' refers to the transmission speed of optical transceivers that can be handled by switch equipment, which amounts to 112 Gbps (28 GHz) per circuit. ISU PETASYS is focusing on the development of various technologies to create PCBs capable of achieving 800G high-speed transmission.

Optical Technology ____ Optical technology refers to a connection method that diverges from the traditional approach of forming copper circuits and conducting electricity. This technology gained prominence due to the limitations of copper circuit implementation as the need for high-speed data transmission in equipment became more advanced. Since January 2023, ISU PETASYS has been researching various optical connection technologies, including embedded wave-guide optic circuit board technology, which enables optical circuits to be mounted on a PCB. Through continuous research and development on future technologies, ISU PETASYS aims to respond swiftly to changes in future technology trends.

Development of New Materials and Parts ____ ISU PETASYS is promoting the development of PCB process technology for 6G ultra-high-speed signal transmission. The project, initiated in September 2021 as a national project fostering joint research and development with industry and academia, aims to develop an ultra-low-light surface treatment solution capable of reducing signal loss and identifying optimal process conditions. Through this project, we aim to contribute to securing 6G intellectual property rights and enhance our capabilities in processing ultra-low-latency materials.

R&D Organization

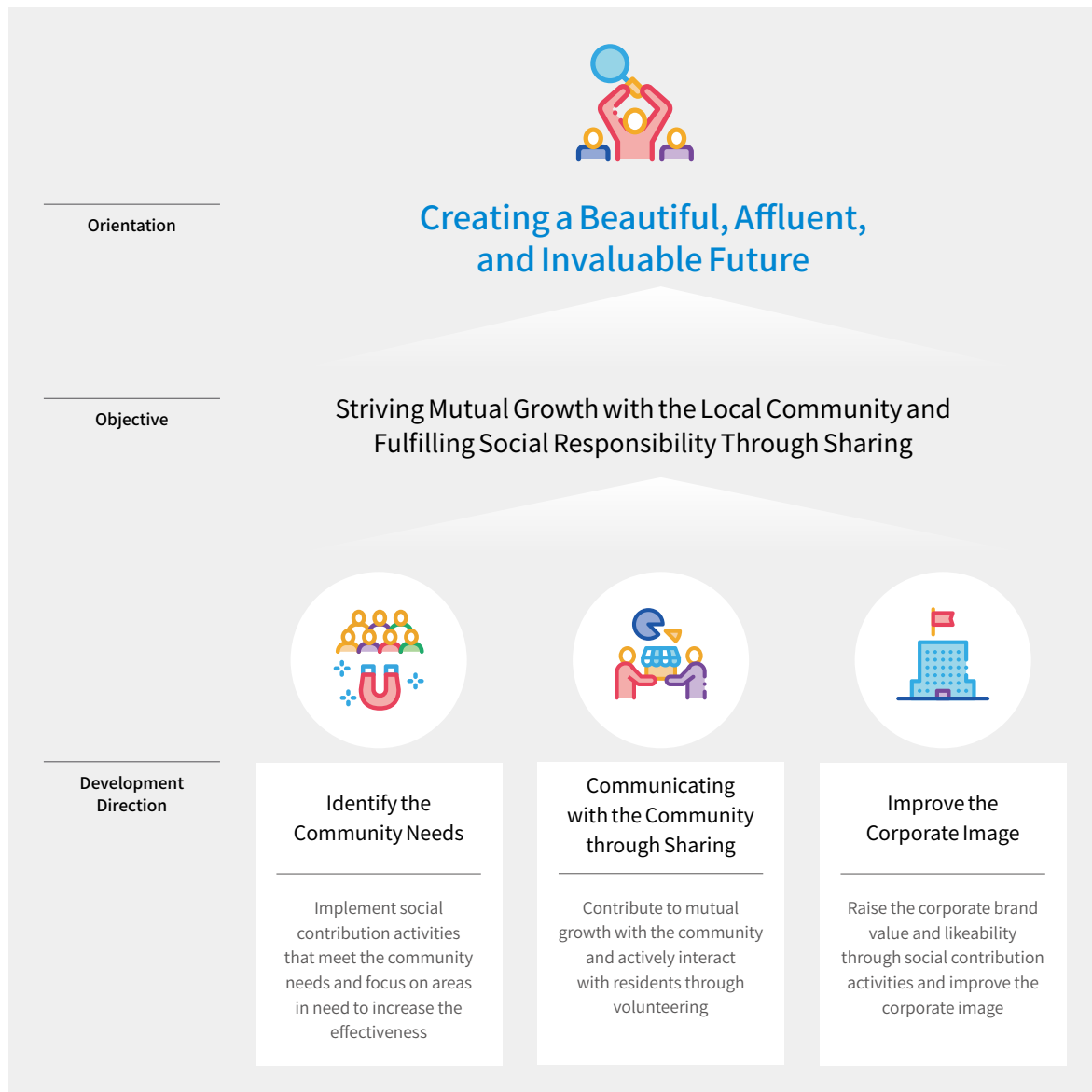


Community Engagement

Social Contribution Promotion System

ISU PETASYS recognizes creating community value as a key corporate responsibility and is engaged in various social contribution activities to achieve our goal of 'striving mutual growth with the local community and fulfilling social responsibility through sharing.' Through analysis of the effectiveness of these social contributions, ISU PETASYS is implementing activities that enhance value for both participants and beneficiaries.

Direction of Social Contribution Promotion



Social Contribution Promotion Process

The Management Support Team, a department dedicated to social contribution at ISU PETASYS, establishes the operation plan for related activities and monitors the performance of these activities in accordance with our social contribution promotion system. In particular, we evaluate and analyze the benefits generated from social contribution activities and strive to make practical contributions to the development of local communities.

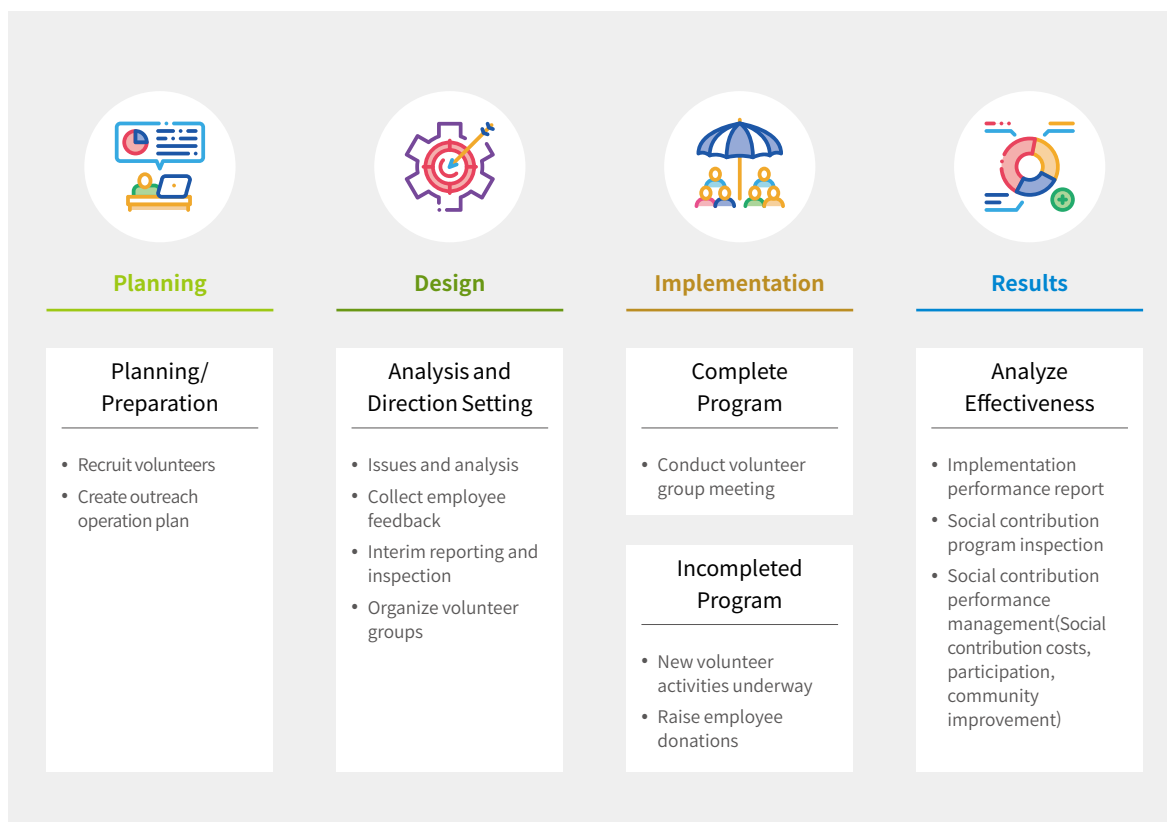
Analysis of Social Contribution Effectiveness

ISU PETASYS aims to increase the 'satisfaction' of participants in our social contribution programs by 33% from 3 points to 4 points out of 5 points by 2024, thus enhancing the effectiveness of the social contribution programs. Additionally, we plan to develop mid- to long-term community participation programs that address stakeholder needs to strengthen community engagement.



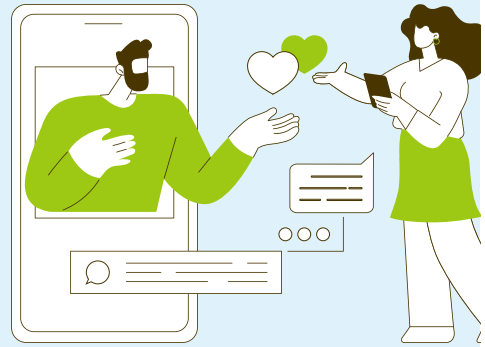
**Shared Growth with
Local Community and
Social Responsibility
Fulfillment**

Social Contribution Promotion Process



KEY ACTIVITIES FOR COMMUNITY ENGAGEMENT

ISU PETASYS recognizes creating value in the local community as a significant corporate responsibility and is actively promoting various social contribution activities.



Fundraising for Neighbors in Need

Every year, ISU PETASYS conducts social contribution activities in collaboration with the Dalseong Comprehensive Welfare Center, an organization specializing in social contributions. At the end of the year, ISU PETASYS donates funds raised for neighbors in need by employees, and participates in and sponsors various welfare programs, including "Getting Through Warm Winter," "Getting Through Cool Summer," the Community Social Security Association, various holiday support programs, support for future generations, sharing Kimjang (traditional kimchi-making) kimchi, and "Finding Hope and Family Love Through Travel."



Sharing Kimjang Kimchi



Donating Computer Equipment

ISU PETASYS collaborates with the Korea IT Welfare Promotion Agency twice a year to donate computer equipment (PCs, monitors, printers, copiers, etc.) to developing countries. The process involves collecting and refurbishing obsolete and outdated devices, which are then distributed free of charge to vulnerable populations. In 2023, 73 computer units were donated, including PCs, laptops, monitors, printers, and multifunctional devices. ISU PETASYS plans to continue its responsible support activities, including annual donations, in the coming years.



Supporting Future Generation



GOVERNANCE

ISU PETASYS will continue its efforts to enhance management activities that consider all stakeholders, including employees, the environment, and local community and the sustainability of the entire global supply chain.



Sound and Transparent Board of Directors

Sound Governance Structure

ISU PETASYS is committed to establishing a sound governance structure to create a sustainable business. The Board of Directors at ISU PETASYS represents stakeholders' interests, supervises the management, and strives to make decisions from a long-term perspective. As the highest decision-making organization, the Board of Directors deliberates on matters stipulated by the Commercial Law or Articles of Incorporation, matters delegated from the shareholders' meeting, and key issues related to the company's fundamental policies and business execution.

Composition of the Board of Directors

The ISU PETASYS's Board of Directors consists of three inside directors and one outside director, meeting the legal minimum requirements for board composition, with each director serving a three-year term. To efficiently and professionally operate the board, the CEO is designated as the board chairman, and directors with expertise in various fields are appointed.

Independence and Expertise of the Board of Directors

The Board is composed of four directors, including one outside director, who is appointed by the shareholders' general meeting after receiving nominations from candidates suitable for the duties of directors and who have secured economic or status independence. CEO Chang-Bok Choi has been appointed as chairman by the Board of Directors, deemed suitable for coordinating opinions among members and overseeing activities of the Board of Directors, which comprises experts with specialized knowledge or experience in related fields such as economics, mechanical engineering, and production.



Members of the Board of Directors

(As of December 2023)

Category	Name	Gender	Responsibilities	Key Background	Initial Appointment Date	Term Expiration Date
Inside directors (3 persons)	Chang-Bok Choi	M	CEO	<ul style="list-style-type: none"> Current Vice President of ISU PETASYS Co., Ltd. Former Planning/HR Executive of ISU Co., Ltd. Former Management Planning Executive of ISU Co., Ltd. Former Planning Executive of ISU PETASYS Co., Ltd. Master's Degree in Business Administration, Sogang University 	March 31, 2023	March 30, 2026
	Wook-Hyun Oh	M	Production HQ	<ul style="list-style-type: none"> Current Head of Production HQ of ISU PETASYS Co., Ltd. Former CEO of ISU PETASYS Co., Ltd. Former Sales Executive of ISU PETASYS Co., Ltd. Bachelor's Degree in Industrial Chemistry, Yeungnam University 	March 31, 2023	March 30, 2026
	Byung-Ho So	M	Maintenance & Safety Management	<ul style="list-style-type: none"> Current Maintenance & Safety Management Executive of ISU PETASYS Co., Ltd. Former Production Executive of ISU PETASYS Co., Ltd. Bachelor's Degree in Industrial Chemistry, Yeungnam University 	March 31, 2021	March 30, 2024
Outside director (1 person)	Seung-Han Yang	M	Outside director	<ul style="list-style-type: none"> Professor, School of Mechanical Engineering, Kyungpook National University Ph.D. in Mechanical Engineering, University of Michigan, Ann Arbor 	March 31, 2022	March 30, 2025
Auditor (1 person)	Kwan-Sik Ko	M	Audit	<ul style="list-style-type: none"> Head of IT Department of Korea Development Bank Bachelor's Degree in Computer Statistics, Chungbuk National University 	March 31, 2021	March 30, 2024

Independence and Expertise of the Board of Directors

	Category	Unit	2021	2022	2023
Independence	Ratio of outside directors	%	25.0	25.0	25.0
	Leadership	Persons	4	4	4
Expertise	Finance/Economics	Persons	1	1	1
	Experience in production/industry	Persons	4	4	4

Operation of the Board of Directors

	Category	Unit	2021	2022	2023
Number of meetings held		Times	43	28	26
Attendance rate	Inside directors	%	100	100	100
	Outside directors	%	100	100	100
Number of Agendas	Reporting and resolutions	Cases	58	31	29



Operation of the Board of Directors

The Board of Directors is convened in accordance with the regulations governing its operations, and agendas are provided in advance to ensure thorough pre-meeting reviews. Furthermore, a support organization for external directors is provided to assist them in performing their specialized duties within the board. To ensure that the contents of the agenda can be thoroughly reviewed before the board meeting, materials are provided in advance, along with additional detailed explanations when necessary. Regular updates are also provided on other major internal issues.

Transparency of the Board of Directors

To ensure transparency of the Board of Directors, ISU PETASYS employs a full-time auditor who has received specialized training in audit-related matters from a professional institution. The auditor conducts audits of the company's financial and operational activities. Additionally, arrangements are made for the auditor to attend board meetings and provide insights and opinions. Furthermore, it is stipulated that shareholders holding shares exceeding 3% of the total issued shares with voting rights when appointing the auditor shall not exercise their voting rights related to the excess shares.

Board of Directors Code of Responsibility

ISU PETASYS supports confident decision-making and prevents excessive legal liability for all board members, including outside directors, with executive liability insurance purchased by all of them. Furthermore, the company's Articles of Incorporation include provisions that allow shareholders' meetings to reduce the responsibility of directors for actions related to the company.

Assessment and Compensation for the Board of Directors

Compensation for board members is paid within the approved compensation limits set by the shareholders' meeting, following the criteria for board performance compensation. This compensation includes a base salary and bonuses, considering not only quantitative indicators such as company revenue, operating profit, and net profit but also qualitative indicators such as leadership, expertise, and ethical management performance when bonuses are paid.

Compensation for Board of Directors in 2023

(Unit: KRW 100 million)

Class	Persons	Total Payment
Inside director	3	10.01
Outside director	1	0.24
Total	4	10.25

Total Annual Compensation Ratio for Highest-paid Employees and Employees in 2023

(Unit: KRW 100 million)

Total compensation highest paid	Employee compensation (median)	Ratio (times)
5.2	0.8	6.2

Increased Ratio in Compensation for Highest-paid Employees and Employees in 2023

Total compensation increase rate for highest paid	Employee compensation increase rate (median)	Ratio (times)
80.8%	-3.3%	24

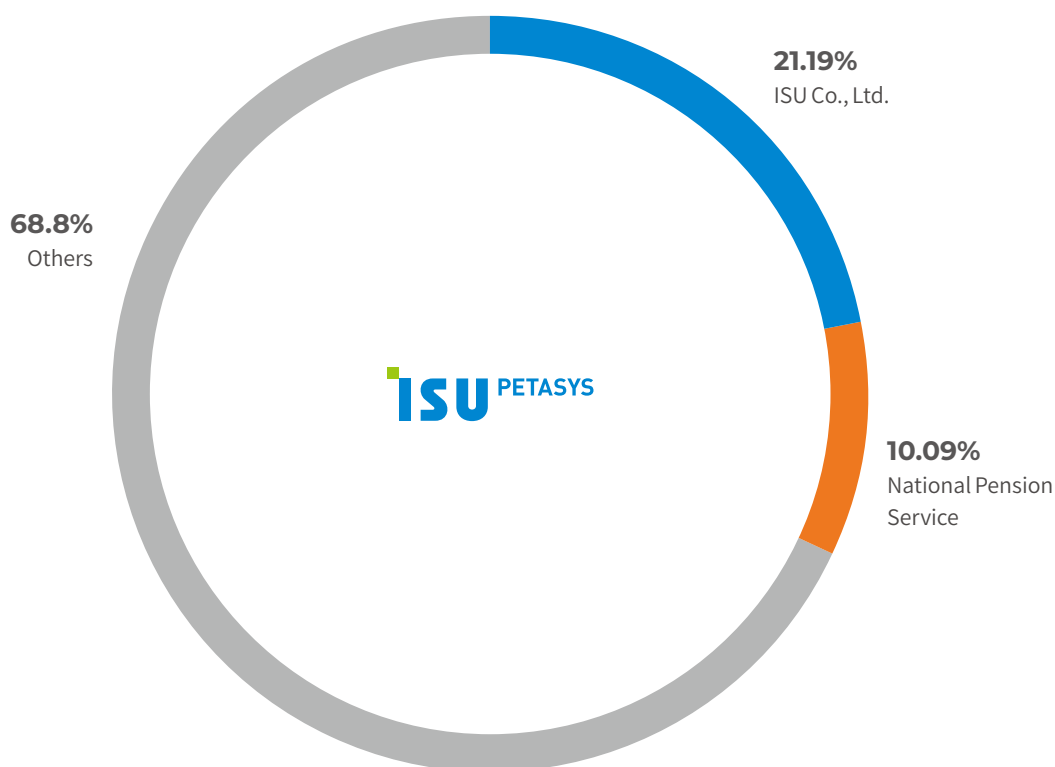
Stock Ownership and Enhancing Shareholder Value

ISU PETASYS has 63,246,419 shares outstanding as of the end of 2023, with the largest shareholder being ISU Co. Ltd., which holds 21.19%.

Enhancing Shareholder Rights

ISU PETASYS holds its annual regular shareholders' meeting and announces details such as the venue and agenda through a notice issued 15 days before the meeting. During these shareholder meetings, we actively consider shareholders' opinions concerning major corporate decisions and management. Shareholders are also provided the opportunity to participate in the director appointment process. For transparency, ISU PETASYS discloses all information related to directors before the shareholders' meeting, where director appointments are discussed. This includes details of any relationships between directors and nominators, significant shareholders, and transactions with the company. The approval of financial statements and decisions regarding profit distribution are made in accordance with the provisions of the Articles of Incorporation and are resolved by the Board of Directors. In addition, ISU PETASYS actively communicates with its shareholders by making key management information available through its website and DART (Data Analysis, Retrieval and Transfer System) operated by the Financial Supervisory Service.

Major Shareholders' Stock Ownership



Shareholder	Shares owned (Share)	Share ratio (%)
ISU Co., Ltd.	13,404,873	21.19
National Pension Service	6,382,619	10.09
Employee Stock Ownership Association	950	0.00
Total	19,788,442	31.2

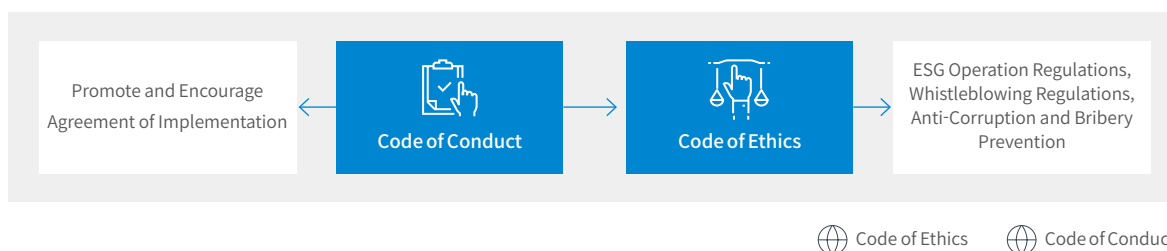


Ethics and Compliance

Ethical Management System

ISU PETASYS exerts its best efforts to realize its core management philosophy, 'Creating a Beautiful and Affluent Future Value.' In line with these efforts, we have established a Code of Ethics and encourage all our employees to actively practice the Code of Conduct in compliance with the Code of Ethics through an agreement. Through the Agreement of Implementation, suppliers should also comply with the Code of Conduct, which is obligatory to both internal and external stakeholders. The Code of Ethics of ISU PETASYS is organized into six parts, including attitude towards shareholders and investors, attitude towards customers, attitude towards competitors and suppliers, responsibility towards employees, responsibility towards society, and basic ethics of employees.

Ethical Management Promotion System



Ethical Management Committee

ISU PETASYS constantly operates the Ethical Management Committee to enhance corporate credibility and effectively respond to ethical issues. The committee oversees the company's ethical management practices and serves as a deliberative body that maintains a fair whistleblowing system. It reviews and resolves cases involving reports of ethical management violations and may be convened at any time upon inquiries related to ethics regulations, proposals for deliberation, or requests from the chairman.

Anti-Corruption Responsibility and Authority Regulations

To prevent corruption, ISU PETASYS defines the responsibilities and authorities of employees and management.

CEO



Overall responsibility for company-wide ethical risk management.

Anti-Corruption Officer



Independent responsibility and authority regarding anti-corruption matters. Responsible for providing advice and guidance to resolve issues related to the company's anti-corruption management system, as well as overseeing its implementation.

HR Team Leader



Responsible for the overall management of the Ethical Management Committee. Conducts ethical audits through interviews and reviews of internal documents once a year to identify and assess various ethical risks, including intellectual property protection, bribery, corruption, fraud/embezzlement, extortion, legal, ethical and fair business/marketing practices, reporting violations, whistleblower protection, fair trade, fair competition, fair advertising, kickbacks, bribery, privacy, and illegal payments.

Employees



Obligation to report ethical issues and conflicts of interest to the dedicated Ethics department as soon as they are identified.

Internal Control System Operation

ISU PETASYS has established and operated an internal audit and control system to comply with domestic and international regulations related to anti-corruption. The Code of Conduct, along with the anti-corruption and bribery prevention principles, prohibits bribery, corruption, coercion, and embezzlement, strictly prohibiting the giving or receiving of any bribe or equivalent consideration for improper gain in any form. These principles apply to all employees, and those involved in relevant roles may face penalties for violations, even if no favors can be proven in return. As a result of these efforts, ISU PETASYS recorded zero anti-corruption-related violations in 2023.

Ethics and Compliance Education

ISU PETASYS conducts anti-corruption and ethics education for employees and suppliers to promote an anti-corruption mindset and emphasize the importance of ethical management. Since 2018, all employees have been required to complete this education, and in 2023, the participation rate in such education was 100%.

Ethics and Compliance Education

	Classification	2021	2022	2023
Employees	Participants (Persons)	835	834	1,100
	Participation rate (%)	100	100	100
Suppliers	Participating companies (Companies)	20	20	12
	Participants (Persons)	20	20	12

Compliance Inspection Process

Anti-Corruption and Preventing Bribery

ISU PETASYS prevents corruption and bribery and maintains integrity through a thorough inspection process. The Anti-Corruption Officer conducts an annual regular review of anti-corruption and bribery prevention principles for all stakeholders, including employees and suppliers, and conducts ongoing reviews when issues arise. The process is verified by a third party every other year to ensure reliability.

 [Anti-corruption and Bribery Prevention Principles](#)

Ethical Management System

Annually, ISU PETASYS focuses on verifying key ethical issues such as anti-corruption, bribery prevention, fair competition, and nondiscrimination to assess the effectiveness, efficiency, and sustainability of the company's ethical management system. Through this, ISU PETASYS identifies policy and institutional improvement points and seeks proactive measures to address potential issues. As a result of ethical management monitoring in 2023, no areas requiring improvement were found.

Regulations Related to Business Activities

ISU PETASYS reviews ethical and behavioral norms related to corporate activities and relevant regulations every quarter to ensure no conflicts with internal regulations. Each department regularly checks for revisions to relevant regulations, and the Management Support Department, responsible for regulatory management, conducts quarterly reviews to incorporate any revisions into internal regulations. In 2023, we conducted four regulatory reviews and confirmed that no revisions were required.



Grievances and Violations Reporting Channels

ISU PETASYS operates a whistleblowing system where all stakeholders, including employees, suppliers, customers, and communities, can freely report grievances and actions that violate human rights and ethical management. All stakeholders can report anonymously through various channels, including a cyber reporting system on the website, phone, fax, and mail. To activate the reporting system, the reporting and investigation procedures have been outsourced to a third party since July 2022, which strictly maintains the confidentiality of the whistleblower's personal information and the reported information. After receiving the report, internal due diligence, review by relevant departments, and convening of the Ethics Management Committee are conducted, and final results are reported to the CEO. In 2023, there were zero cases reported through the whistleblowing channel.

Whistleblowing Channels

Website

Cyber whistleblowing
(<https://www.petasys.com/kor/csr/cyber.jsp>)

Phone

053-610-0289 (Reporting)
053-610-0289 (Grievance counseling)

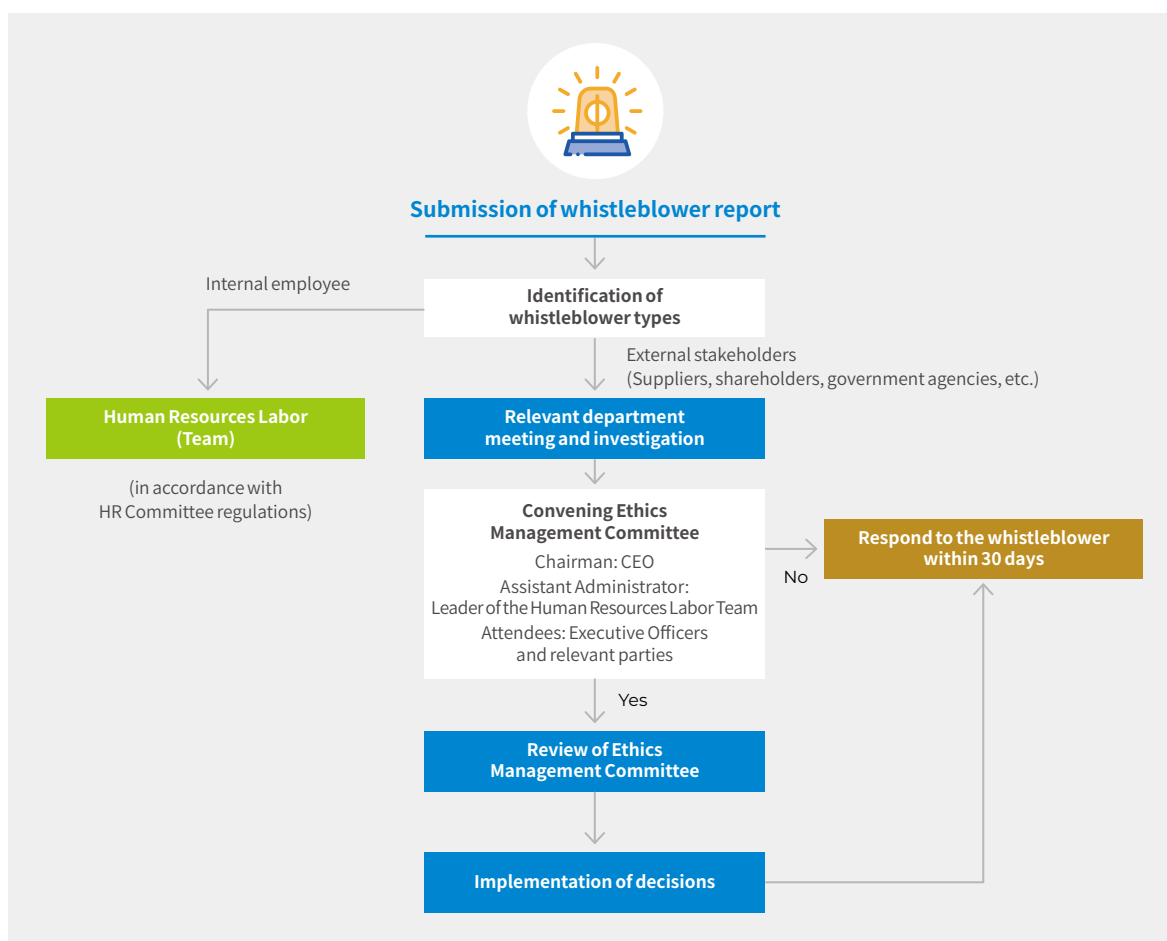
Fax

053-610-0401 (Reporting)
053-610-0401 (Grievance counseling)

Mail

(42981) 36, Nongong-ro 53-gil,
Nongong-eup, Dalseong-gun,
Daegu, Republic of Korea

Whistleblowing Handling Process



Risk Management

Risk Management System

ISU PETASYS operates an integrated risk management system to proactively respond to significant risks that affect its business activities. A risk assessment process has been established to identify key risks, establish response plans, and timely implement countermeasures. We not only manage financial risks but also focus on ESG-related risks. In particular, environmental, ethical, and compliance risks that closely impact the business operations of ISU PETASYS are managed through a separate risk management system.

Risk Management Organization

The risk team leader, team leaders of each department, and executives in charge of plants are responsible for risk assessment and detailed operations within their respective organizations. In the case of major risks identified through risk assessment, the risk team leader reports them to the CEO, who is responsible for overall risk management throughout the company, including reviewing and approving them. Furthermore, ESG-related risks are identified and assessed annually by the department in charge of ESG. For significant issues identified through risk assessment, separate improvement plans are developed, and result reports are prepared.

Risk Assessment and Monitoring

ISU PETASYS conducts risk assessments based on the analysis of the organizational situation before establishing the business plan at the beginning of the year. Significant risks are identified and reported to the CEO, risk management plans are established, and a TFT is convened as needed to conduct risk assessments and monitoring. Risk assessments are divided into regular and irregular assessments depending on the situation. Regular assessments are conducted once every three years for each team, while irregular assessments are conducted when significant business or environmental changes occur. During risk assessments, ISU PETASYS not only identifies risk factors but also derives business impact, likelihood of occurrence, risk severity, risk rating, and response strategies.

Furthermore, recognizing the importance of follow-up management, ISU PETASYS conducts periodic monitoring of major risks and reevaluates them by team once a year. For major risks and opportunities, we continuously review and improve them through follow-up management.

Management Methods by Risk Type

Risk Source	Identification Method	Management Method
Exchange rates, markets, competitors, customer trends, etc.	<ul style="list-style-type: none"> The team in charge of risk collects information from various related areas, regularly reviews organizational situations, and creates guidelines for establishing management plans. 	<ul style="list-style-type: none"> By prioritizing risks, reporting on major risks, and conducting SWOT analysis at the CEO, executive, and team leader levels, response strategies are set as business goals or policies within a specific period, and implemented by each team or through a company-wide response project team.
Products under development/production	<ul style="list-style-type: none"> Conduct D/P FMEA¹⁾ for new products, products, and processes in mass production, and identify an emergency response plan for major equipment or process issues. 	<ul style="list-style-type: none"> Conduct FMEAs, create and revise emergency response scenarios, and develop, train, and deploy on-site guidelines for environmental, safety, and quality precautions.
Management system process	<ul style="list-style-type: none"> Annually, each team identifies stakeholders and their requirements and outlines the risks if these requirements are not met. 	<ul style="list-style-type: none"> Stakeholders and their requirements are reflected in risk assessment sheets created annually, and management guidelines are established in the management system standards/ processes or relevant procedures.
Customer requirements	<ul style="list-style-type: none"> Lessons learned from product recalls/reviews, field returns and repairs, customer complaints, disposals and reworks. 	<ul style="list-style-type: none"> Organize TFTs for major risks to recognize and manage them as company-wide projects.
Risks related to each team's unique activities	<ul style="list-style-type: none"> Various risks that arise during the daily work of each team are analyzed by the team leader before making a decision and documented accordingly. 	<ul style="list-style-type: none"> The team leader establishes measures to reduce risks, specifies them in written statements, and manages them in work progress reports.
ESG risk	<ul style="list-style-type: none"> Identify risks such as RBA, regulatory bodies, stakeholders, legal matters, and potential emergencies. 	<ul style="list-style-type: none"> Analyze and evaluate major risks annually, periodically manage BCP²⁾ and ESG strategies, in response to findings.

1) D/P FMEA (Design/Process Failure Mode and Effects Analysis): Process for analyzing potential process defects when process conditions or raw materials change

2) BCP: Business Continuity Plan

Risk Management Activities

Management of Key Financial/Non-financial Risks

Compliance Risk ____ ISU PETASYS strictly complies with applicable national laws and regulations at both domestic and overseas business sites where it operates. In particular, we adhere to and implement ESG-related laws and international agreements in all organizational activities through ESG law management regulations, thereby reducing the possibility of compliance risks. As ISU PETASYS conducts business activities, it regularly identifies relevant ESG laws and regulations, including any revisions, determines related tasks, and establishes action plans.

Business Continuity ____ The importance and impact of business continuity management are increasing day by day, and the occurrence of risks significantly affects business continuity. Therefore, ISU PETASYS operates the BCP¹⁾ to shorten recovery time in emergencies, mitigate the decline in the company's operational level, identify the impact of risks, and respond efficiently. Additionally, since the BCP applies not only to the company's employees but also to its stakeholders, ISU PETASYS continuously communicates with customers to maintain and improve the BCP document. To ensure the systematic operation of the BCP, we continuously improve the BCP through the PDCA²⁾ cycle every year. First, we establish a business continuity policy and declare the policy to all employees to increase understanding and responsibility for the BCP. Next, we monitor the overall BCP by implementing policies, controls, processes, and procedures. Then, we check responsiveness in BCP situations through simulation training. Finally, we reevaluate the results of management reviews, internal audits, etc., and maintain and improve the BCP through improvements. Furthermore, ISU PETASYS conducts 'Understanding BCP' training for all employees once a year to enhance their understanding of the BCP.

1) BCP: Business Continuity Plan

2) PDCA: Plan, Do, Check, Act

Environment and Occupational Safety and Health ____ ISU PETASYS determines and manages risks and opportunities related to the ESH Management System in accordance with the Risk and Opportunity Assessment Management Regulation. Each year, we conduct a four-step risk management process, which includes identifying, estimating, and determining risks and opportunities, as well as establishing and implementing management measures. First, in the risk and opportunity identification stage, we identify the needs and expectations of employees and stakeholders, internal and external issues, and legal requirements. Based on these, the likelihood and materiality of risk occurrence are estimated in the estimation stage. In the risk determination stage, risks are categorized into four levels depending on the size of the risk level, with the top two levels being judged as risks subject to management. Lastly, management measures are established and implemented for risks subject to management. In 2023, the occurrence of dust in the process and the increase in industrial water usage were analyzed as risks and opportunities, and a monitoring and inspection plan was established and implemented.



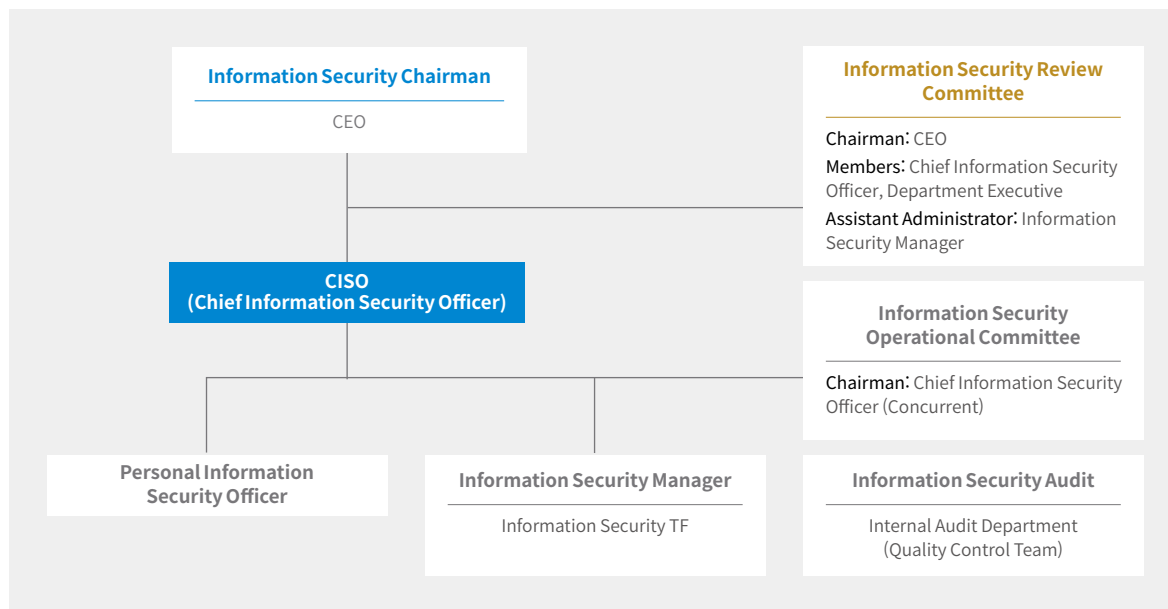
Information Security

Information Security Management System

Information Security Committee

ISU PETASYS has appointed a Chief Information Security Officer (CISO) and a Chief Privacy Officer (CPO) to manage company-wide information protection. We regularly convene the information security committee to conduct continuous information protection activities, such as security diagnosis, prevention of breaches, implementation of technical protection measures for information systems, improvement and advancement of information security tasks, and sharing of the latest legislation and security trends.

Information Security Organization



Prevention of Information Security Breaches

In response to increasing cybersecurity threats, ISU PETASYS provides training to enhance its cyber crisis response capabilities by sending simulated phishing emails and conducting simulated network penetration tests that mimic real hacking attempts. In addition, we regularly conduct infrastructure vulnerability assessments to identify potential vulnerabilities and implement security measures and improvement activities. ISU PETASYS will continue to implement a high-level security management system to fundamentally prevent risks from occurring.

Prevention of Information Security Breaches

(Unit: Case)

Category	2021	2022	2023
Customer information leaks	0	0	0
System hacking	0	0	0
DDoS breach	0	0	0

Information Security Risk Management

To mitigate information security risks, ISU PETASYS conducts risk mitigation activities every year based on the information security risk management processes. In order to meet the changing global information security guidelines and address the increasing importance of security, we conduct an environmental analysis that reflects internal and external issues and stakeholder requirements prior to risk analysis. Based on the analysis, high risks are identified, and DoAs are selected considering the level of control. ISU PETASYS actively conducts risk control activities to mitigate risks. By defining the control level, we accept the residual risks and conduct activities to mitigate them and reestablish policies, guidelines, and procedures to eliminate high risks and fundamentally improve risk management.

Information Security Risk Management Process



Information Security Activities

Privacy Policy

ISU PETASYS has established personal information protection regulations to safely protect and manage personal information, preventing it from being lost, stolen, leaked, or tampered during its processing. In addition, to ensure information subjects' right to self-determination regarding their personal information, a personal information processing policy has been established and is being operated in accordance with Article 30 of the Personal Information Protection Act. This policy guides information subjects on the procedures and standards for personal information processing and facilitates the prompt and effective handling of related grievances.

Information Security Education

ISU PETASYS provides information security education to all employees and suppliers every year to enhance information security awareness and strengthen their capabilities. We strive to prevent security incidents caused by users' carelessness and lack of knowledge, by providing education on relevant case studies and necessary precautions. This ensures that employees remain aware of security issues. Education on personal information leakage cases, preventive measures, and related laws are also provided to protect the personal information of employees and customers' companies. In addition, ISU PETASYS requires all employees to sign an information protection pledge to emphasize the significance of information protection and instill a sense of responsibility.

Network Segregation for Sensitive Information

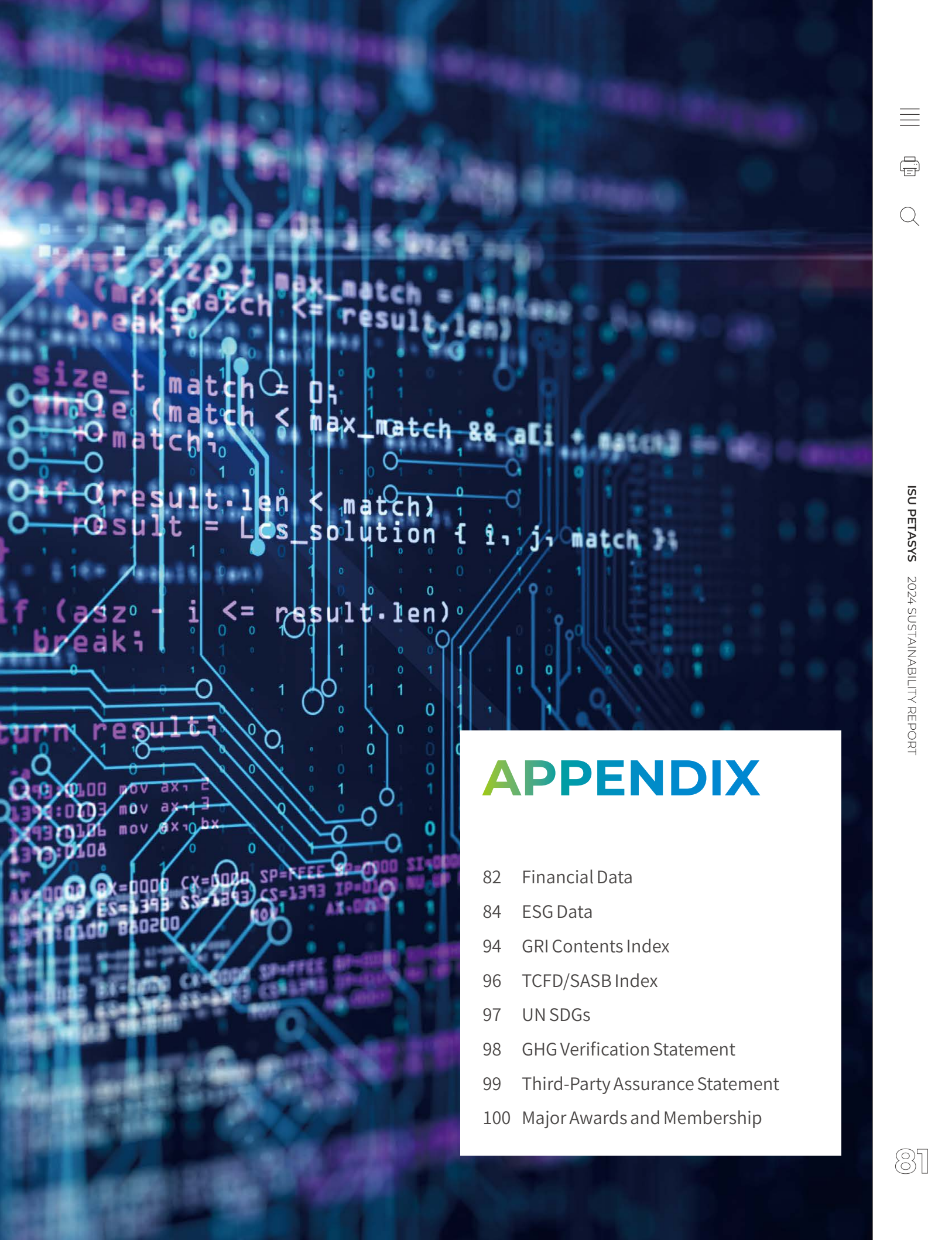
Network segregation is a technology that separates and operates networks so tasks can be conducted in a completely isolated environment. To protect sensitive information, the network is completely separated from the general OA network for those who handle important technical information of customers and for the department in charge of core designing in PCB manufacturing. In order to move data from the separated network to the general OA network, a separate approval procedure is required, thus fundamentally preventing external leakage of design-related information. The virtualization was conducted through VDI (Virtual Desktop Interface) on the employees' work PCs to enable enhanced security management against risks that threaten the company's business, such as the inflow of malicious codes from the outside and the leakage of confidential company information. Furthermore, a project to upgrade the Virtual Private Network (VPN) for off-site access, such as employees' telecommuting, is underway to enhance security with two-factor authentication, enabling employees to perform efficient work in a safe environment.

Private Information Processing Policy



- Clarify the purpose of processing and collect minimum data legitimately and rightfully within the purpose
- Process within the purpose of processing and prohibit any use outside those purposes
- Ensure accuracy, completeness, and currency within the purpose of processing
- Manage information safely, taking into account risks of infringing the rights of the information subjects
- Disclose personal information processing and ensure information subjects' rights
- Process information minimizing privacy invasion
- Process anonymously if possible
- Secure personal information handlers' responsible compliance and credibility of information subjects





```
const size_t max_match = minless = 1000000;
if (max_match <= result.len)
    break;

size_t match = 0;
while (match < max_match && a[i + match] == b[j + match])
    ++match;

if (result.len < match)
    result = Lcs_solution { i, j, match };

if (asz - i <= result.len)
    break;

return result;

0100 mov ax, 2
0103 mov ax, 3
0106 mov bx, 10
0108
AX=0000 BX=0000 CX=0000 SP=FFFF BP=0000 SI=0000
DS=1393 ES=1393 SS=1393 CS=1393 IP=0100 NU=UP
0100 8B0200
```

APPENDIX

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FINANCIAL DATA

Consolidated Statements of Financial Position

(Unit: KRW million)

	2021	2022	2023
Assets			
Current assets	310,268	373,857	383,628
Cash and cash equivalents	44,365	45,645	47,963
Trade and other current receivables	118,709	147,221	151,632
Current financial assets at fair value through profit or loss, designated upon initial recognition or subsequently	44	4,173	1,148
Current financial assets at amortised cost	31,831	6,169	700
Current inventories	111,337	167,461	176,074
Other current assets	3,983	3,189	6,112
Non-current assets	139,410	172,157	242,808
Investments accounted for using equity method	401	332	1,033
Non-current financial assets measured at fair value through other comprehensive income	2,724	3,843	6,079
Other non-current financial assets	13,473	23,159	28,348
Property, plant and equipment	111,322	131,564	192,365
Investment property	8,177	8,109	8,041
Intangible property	3,065	3,039	4,356
Deferred tax assets	250	2,111	2,586
Total assets	449,679	546,014	626,436
Liabilities			
Current liabilities	298,216	286,001	290,514
Trade and other current payables	77,901	99,205	105,477
Other current financial liabilities	204,355	174,802	165,343
Current tax liabilities	9,828	3,039	8,156
Other current liabilities	6,132	8,954	11,538
Non-current liabilities	25,971	37,685	69,144
Other non-current financial liabilities	20,779	33,840	64,524
Deferred tax liabilities	3,261	1,239	1,607
Other non-current liabilities	1,932	2,607	3,014
Total liabilities	324,187	323,686	359,658
Equity			
Equity attributable to owners of parent	125,492	222,328	266,778
Issued capital	63,246	63,246	63,246
Capital surplus	63,737	81,041	81,041
Other capital	-4,944	-4,944	-4,944
Other Comprehensive income/loss accumulated amount	8,879	6,480	13,068
Retained earnings (deficit)	-5,427	76,505	114,366
Non-controlling interests	-	-	-
Total equity	125,492	222,328	266,778
Total equity and liabilities	449,679	546,014	626,436

FINANCIAL DATA

Consolidated Statements of Comprehensive Income

(Unit: KRW million)

	2021	2022	2023
Revenue(Sales)	469,621	642,921	675,333
Cost of sales	384,121	479,018	558,885
Gross profit	85,500	163,903	116,448
Selling general administrative expenses	38,624	47,284	54,279
Operating income(loss)	46,876	116,618	62,169
Finance income	12,827	33,080	30,063
Financial expenses	19,190	42,181	38,367
Other revenue	3,399	1,335	1,295
Other expenses	870	1,022	481
Profits/Loss of associates and joint ventures accounted for using equity method	-30	0	-23
Profit (loss) before tax	43,011	107,830	54,656
Tax expense (income)	11,358	7,499	6,933
Profit (loss) from continuing operations	31,653	100,330	47,723
Profit (loss) from discontinued operations	-35,256	2,143	0
Profit (loss)	-3,604	102,473	47,723
Other comprehensive income	-1,265	-8,572	3,034
Other comprehensive income that will be reclassified to profit or loss, net of tax	904	989	634
Changes in capital of associates and joint ventures accounted for using equity method	3,159	0	0
Profit or loss on foreign business conversion	-2,255	989	634
Other comprehensive income that will not be reclassified to profit or loss, net of tax	-2,169	-9,561	2,399
Other comprehensive income, net of tax, gains (losses) on remeasurements of defined benefit plans	-2,788	-6,085	-3,546
Other comprehensive income, net of tax, gains (losses) on revaluation of property, plant and equipment, right-of-use assets and intangible assets	615	-3,424	5,125
Financial asset valuation gains or losses measured fair value through other comprehensive income	5	-52	820
Total comprehensive income	-4,868	93,901	50,757
Earnings per share [abstract]			
Basic earnings (loss) per share from continuing operations (unit: KRW)	708	1,586	755
Basic earnings (loss) per share from discontinued operations (unit: KRW)	-789	34	0
Earnings (loss) per share (unit: KRW)	-81	1,620	755



ESG DATA

Environmental

ISU PETASYS manages and discloses environmental data for domestic sites (headquarters and four production sites).

Energy Consumption

Category	Unit	2021	2022	2023 target	2023	2024 target
Total energy consumption (direct + indirect)	TJ	697	740	814	833	954
Total direct energy consumption	TJ	110	120	132	132	151
LNG	TJ	109.2	119.3	131	130.8	150
Gasoline	TJ	0.8	0.7	0.7	1.2	1.2
Total indirect energy consumption	TJ	587	620	682	701	803
Electricity	TJ	587	620	682	701	803
Renewable energy	TJ	0	0	0	-	-
Energy intensity	TJ/KRW billion	1.484	1.151		1.233	

GHG Emissions

Category	Unit	2021	2022	2023	2024 target
Direct (Scope 1) GHG emissions	tCO ₂ eq	23,083	11,590	25,499	10,318
Indirect (Scope 2) GHG emissions	tCO ₂ eq	28,104	29,685	33,565	39,000
Total GHG emissions (Scope 1+2)	tCO ₂ eq	51,187	41,275	59,064	49,318
GHG intensity (Scope 1+2)	tCO ₂ eq/KRW million	0.109	0.064	0.087	0.082

Air Pollutants

	Category	Unit	2021	2022	2023
Emissions	Total emissions	kg	9,022.3	6,052.9	13,038.5
	Nitrogen oxides (NOx)	kg	6,324.3	4,429.6	5,332.7
	Sulfur oxides (SOx)	kg	732.3	206.6	76.4
	Ammonia (NH ₃)	kg	1,361.8	554.4	627.3
	Dust	kg	603.9	862.3	326.6
Emissions intensity	Nitrogen oxides (NOx)	kg/KRW million	0.013	0.007	0.009
	Sulfur oxides (SOx)	kg/KRW million	0.002	0.000	0.000
	Ammonia (NH ₃)	kg/KRW million	0.003	0.001	0.001
	Dust	kg/KRW million	0.001	0.001	0.001

Hazardous Chemical Substances

	Category	Unit	2021	2022	2023
Measure	Chemical Substance use	ton	9,883	11,371	10,632
	Chemicals emission	ton	2,857	2,031	2,627
Leakage	Hazardous substances leakage	number of incidents	0	0	0

ESG DATA

Environmental

Water Pollutants

	Category	Unit	2021	2022	2023
Emissions	TOC ¹⁾	ton	-	-	56.851
	BOD	ton	74.002	49.047	51.893
	SS	ton	13.296	20.741	25.789
	T-N	ton	69.032	55.147	62.081
	Cu	ton	0.656	0.806	0.703
Emissions intensity	TOC ¹⁾	kg/KRW million	-	-	0.00009
	BOD	kg/KRW million	0.136	0.076	0.00009
	SS	kg/KRW million	0.024	0.032	0.00004
	T-N	kg/KRW million	0.127	0.086	0.00011
	Cu	kg/KRW million	0.001	0.001	0.00000

* Measurement item switched from COD to TOC in April 2022.

Water

	Category	Unit	2021	2022	2023
Headquarters	Water withdrawal	Total withdrawal	1,321,183	1,326,252	1,387,559
		Tap water	19,265	21,026	20,710
		Industrial water	1,301,918	1,305,226	1,366,849
Seoul Office	Water consumption	Total consumption	1,321,183	1,326,252	1,387,559
	Water consumption	Total consumption	1,249	1,259	1,643

Wastes

	Category	Unit	2021	2022	2023
Discharge	Total waste discharged	ton	10,898.7	12,035.3	13,637.6
	General wastes	ton	5,252.7	6,071.9	7,389.8
	Designated wastes	ton	5,646.0	5,963.4	6,247.8
Recycling	Waste recycling ratio	%	77.9	81.0	89.6
Processing	Total waste processed	ton	10,898.8	12,035.4	13,637.6
	General wastes	ton	5,252.7	6,071.9	7,389.8
	Incineration	ton	0	0	0
	Landfill	ton	0	0	0
	Recycling	ton	5,252.7	6,071.9	7,389.8
	Designated wastes	ton	5,646	5,963	6,248
	Incineration	ton	476.5	516.6	594.3
	Neutralization	ton	1,928.0	1,776.5	805.1
	Recycling	ton	3,241.6	3,670.4	4,833.7
	Landfill	ton	0	0	14.8



ESG DATA

Environmental

Raw Materials

	Category	Unit	2021	2022	2023
Purchased	Total raw materials purchased	KRW million	132,726	164,414	179,904
	Thin core (TC)	KRW million	79,765	97,852	104,043
	Prepreg (PP)	KRW million	51,887	65,125	74,711
	Copper foil	KRW million	1,074	1,437	1,150
Used	Total raw materials used	PNL	22,947,156	23,938,718	22,475,670
	Thin core (TC)	PNL	7,096,906	7,202,715	6,664,150
	Prepreg (PP)	PNL	14,643,805	15,168,203	14,480,670
	Copper foil	PNL	1,206,445	1,567,800	1,330,850

Environmental Investment and Purchase

Category	Unit	2021	2022	2023	2024 target
Environmental investments	KRW 100 million	3.70	2.50	45.0	12.0
Eco-friendly purchases ¹⁾	KRW 100 million	-	-	6.63	-

1) The eco-friendly purchase in 2023 includes the purchase of materials for eco-friendly construction. We plan to increase the report scope to include eco-friendly office equipment and furniture.

Environmental Training

Category	Unit	2021	2022	2023
Number of environmental training sessions for employees	sessions	63	68	111
Total hours of environmental training for employees	hours	161	273	365

Eco-friendly Transport

Category	Unit	2021	2022	2023
Number of forklifts	vehicles	2	2	6
Number of electric/hydrogen forklifts	vehicles	0	0	4
Percentage of eco-friendly forklifts	%	0	0	67

Environmental Compliance

Category	Unit	2021	2022	2023
Number of violations	number of incidents	0	1	0
Fines and penalties	KRW million	0	2	0



ESG DATA

Social

Employees

Category		Unit	2021	2022	2023
Total number of employees		persons	910	967	1,108
By gender	Male	persons	837	889	1,021
	Female	persons	73	78	87
By employment type	Permanent employees (percentage)	persons (%)	892(98.0)	882(91.2)	971(87.6)
	Temporary employees (percentage)	persons (%)	18(2.0)	85(8.8)	137(12.4)
By age group	Under 30 (percentage)	persons (%)	84(9.2)	138(14.3)	239(22)
	Aged 30 to 49 (percentage)	persons (%)	758(83.3)	738(76.3)	738(67)
	Aged 50 or older (percentage)	persons (%)	68(7.5)	91(9.4)	131(11)
By job level	Staff (percentage)	persons (%)	813(89.3)	870(90)	1,008(91)
	Managers (percentage)	persons (%)	97(10.7)	97(10)	100(9)
	Executives (percentage)	persons (%)	19(2.1)	20(2.1)	22(2)

Employee Diversity

Category		Unit	2021	2022	2023
By job level	Female employees (percentage)	persons (%)	73(8)	78(8.1)	87(7.9)
	Female managers (percentage)	persons (%)	3(0.3)	3(0.3)	3(0.3)
	Female executives (percentage)	persons (%)	0(0.0)	0(0.0)	0(0.0)
Minority	People with disabilities (percentage)	persons (%)	32(4.3)	31(3.9)	31(3.4)
	People of national merit (percentage)	persons (%)	15(1.6)	15(1.6)	15(1.5)
	Foreigners (percentage)	persons (%)	0(0.0)	0(0.0)	0(0.0)

Recruitment and Turnover

Category		Unit	2021	2022	2023
New hire	All	persons	37	110	167
	No prior experience	persons (%)	17(45.9)	96(87.3)	148(88.6)
	Prior experience	persons (%)	20(54.1)	14(12.7)	19(11.4)
Turnover	Total turnover	persons	23	44	76
	Voluntary turnover	persons	22	41	63
	Voluntary turnover ratio	%	2.4	4.2	5.7
	Involuntary turnover	persons	1	3	13
	Involuntary turnover rate	%	0.1	0.3	1.2
Years of employment	Average years of employment	years	15.4	14.8	14.0
	Male	years	15.8	15.3	14.4
	Female	years	10.2	9.1	9.0



ESG DATA

Social

Employee Remunerations

	Category	Unit	2021	2022	2023
Remunerations by gender	All employees	KRW 1,000	74,989	86,624	83,787
	Male	KRW 1,000	76,583	88,608	85,175
	Female	KRW 1,000	57,493	64,017	67,492

Employee Training

	Category	Unit	2021	2022	2023
	Training hours per employee	hours	53.1	64.8	81.9
	Training costs per employee	KRW 1,000	168	442	603
	Total participants	persons	889	967	1,099
	Satisfaction score ¹⁾	points	42.9	43.4	42.1

1) Training satisfaction score: out of 50

Employee Welfare

	Category	Unit	2021	2022	2023
	Employee satisfaction score	points	85.7	86.8	84.3
	Welfare expenses against revenues	%	1.9	1.8	1.65
	Flexible work participation rate	%	26.0	33.0	37.0
Parental leave	Total parental leave users	persons	4	9	10
	Male	persons	1	3	3
	Female	persons	3	6	7
	Total number of soon-to-return employees	persons	13	4	1
	Male	persons	4	1	1
	Female	persons	9	3	0
	Returned employees	persons	6	2	6
	Male	persons	1	1	0
	Female	persons	5	1	6

ESG DATA

Social

Employee Human Rights

Category		Unit	2021	2022	2023
Labor Union	Union member percentage	%	99	99	99
Collective Bargaining	Labor-management meeting	number of incidents	4	4	4
Number of human rights-related incidents reported		number of incidents	0	0	0
Number of human rights-related incidents processed		number of incidents	0	0	0
Violation of human rights laws	Total number of violations	number of incidents	0	0	0
	Administrative fines	KRW 1,000	0	0	0
	Fines	KRW 1,000	0	0	0

Human Rights Training

Category		Unit	2021	2022	2023
Training hours per employee		hours	3	3	3
Sexual harassment prevention training		hours	1	1	1
Workplace harassment prevention training		hours	1	1	1
Disability awareness training		hours	1	1	1

Safety and Health Training

Category		Unit	2021	2022	2023
Total participants		persons	910	967	975
Number of completions		persons	910	967	975
Percentage of persons trained		%	100	100	100
Training hours		hours	26,350	30,188	35,878
Training hours per employee		hours	29.0	31.2	36.8

Occupational Safety and Health ¹⁾

Category		Unit	2021	2022	2023
Employees	Lost Time Injury Frequency Rate (LTIFR) ²⁾	number of incidents per million working hours	0.000	0.000 ³⁾	0.434
	Industrial accident ratio ⁴⁾	%	0.000	0.000	0.090
	Work-related fatalities	persons	0	0	0
	Number of safety accidents (occupational injuries)	number of incidents	0	0	1
	Frequency	%	0.000	0.000	0.434
Suppliers	Lost Time Injury Frequency Rate (LTIFR) ²⁾	number of incidents per million working hours	0.000	7.8	3.412
	Industrial accident ratio ⁴⁾	%	0.000	1.5	0.709
Number of near-miss incidents		number of incidents	10	10	15

1) Number of safety accidents (occupational injuries) 2) Lost time injury frequency rate: (Number of LTIs × injuries per hour) / total work hours

3) Revised due to a clerical error in the previous report (1 → 0) 4) Industrial accident ratio: (number of incidents/workers)*100

ESG DATA

Social

Supplier Communication*

Category	Unit	2021	2022	2023
Number of grievances reported	number of incidents	0	0	0
Number of grievances processed	number of incidents	0	0	0
Percentage of grievances processed	%	0	0	0

* Including fair trade issues

Supply Chain ESG Assessment

Category	Unit	2021	2022	2023
Number of companies evaluated	companies	32	32	37
Assessment ratio	%	100	100	100
Conflict minerals due diligence rate	%	100	100	100

Information Protection Training

Category	Unit	2021	2022	2023
Protecting personal information	Number of completions	885	1,095	1,274
	Percentage of persons trained	100	100	100
Information security	Number of completions	885	1,095	1,274
	Percentage of persons trained	100	100	100

Investment in Information Protection

Category	Unit	2021	2022	2023
Information protection investment budget	KRW million	171.7	339.8	457.8
Percentage of information protection investment	%	7.4	13.8	15.6

Information Protection Management

Category	Unit	2021	2022	2023
Customer information leakage	Total information leakages	number of incidents	0	0
	Fines for Violations of Information Protection	KRW 1,000	0	0

Local Community Engagement

Category	Unit	2021	2022	2023
Volunteer activities	Volunteer hours per employee	hours	0	0
	Employees participation ratio	%	0	0
Donations	Cash	KRW million	20	25
	In-kind	KRW million	42	118

ESG DATA

Governance

Board Composition

Category	Unit	2021	2022	2023
Percentage of outside directors	%	25.0	25.0	25.0
Directors with industrial experiences	persons	4	4	4
Number of financial experts	persons	1	1	1
Average term of outside directors	years	3	3	3

Board Operation Status

Category	Unit	2021	2022	2023
Number of board meetings	sessions	43	28	26
Board meeting attendance	%	100	100	100
Report and resolution agendas	number of incidents	58	31	29

Ethical Management Education*

	Category	Unit	2021	2022	2023
Employees	Total participants	persons	835	834	1,099
	Training hours per employee	hours	1	1	1
	Percentage of persons trained	%	100	100	100
Suppliers	Participating companies	companies	20	20	20
	Total participants	persons	20	20	20
	Training hours per person	hours	1	1	1

* Including fair trade issues



ESG DATA

Governance

Whistleblowing and Code of Conduct Violations

Category	Unit	2021	2022	2023
Total number of reports filed and processed	number of incidents	0	0	0
Employee reports filed and processed	number of incidents	0	0	0
Customer reports filed and processed	number of incidents	0	0	0
Others	number of incidents	0	0	0
Total number of code of conduct violations	number of incidents	0	0	0

Fair Trade

Category	Unit	2021	2022	2023
Business ethics	Number of non-monetary anti-corruption sanctions	number of incidents	0	0
	Monetary loss related to anti-corruption	KRW 100 million	0	0
Unfair trade practices	Anti-competition, monopoly, and other unfair trade practices	number of incidents	0	0
	Products and service information and labelling violations	number of incidents	0	0
	Antitrust and anti-competition fines and settlements	KRW 100 million	0	0
	Litigation expenses and fines related to price rigging	KRW 100 million	0	0

Product Safety

Category	Unit	2021	2022	2023
Number of recalls announced and total amount	number of incidents	0	0	0
Total amount of monetary losses as a result of legal labeling proceedings associated with product safety	KRW 100 million	0	0	0

Compliance

Category	Unit	2021	2022	2023
Legal review	sessions	4	4	4
Ethics and compliance inspection	sessions	1	1	1



ESG DATA

Governance

ESG Ratings

	Category	Unit	2021	2022	2023
KCGS	Overall	rating	B	C	C
	Environmental	rating	B	B	B
	Social	rating	A	B+	B+
	Governance	rating	C	D	C
Sustainvest	Overall	rating	AA	AA	BB
	Environmental	score	50.54	59.26	59.85
	Social	score	67.94	59.05	57.59
	Governance	score	51	53.57	49.29
RBA	Overall	score/rating	193.2/Gold	-	180.4/Silver
EcoVadis	Overall	rating	-	Gold	Silver

Key Business Outcomes

	Category	Unit	2021	2022	2023
By product category (PCB)	HDI	KRW million (amount)	4,645.19 (13,880)	14,364.49 (43,138)	22,812.70 (56,059)
	VIPPO	KRW million (amount)	288,426.44 (851,476)	401,193.09 (1,057,423)	470,527.31 (970,068)
	Low DK	KRW million (amount)	52,859.04 (264,601)	62,423.97 (249,928)	65,078.48 (261,102)
	General	KRW million (amount)	13,689.85 (467,599)	15,171.52 (374,071)	15,070.76 (169,846)
	NRE&PPV&CM	KRW million (amount)	2,256.55 (326)	1,622.96 (216)	1,194.94 (258)
By type	Printed circuit board (product) total	KRW million	2,511	2,143	5,614
	Export	KRW million	1,223	1,156	2,759
	Domestic	KRW million	1,289	987	2,855
	Printed circuit board (product) total	KRW million	360,987	495,070	573,431
	Export	KRW million	346,536	476,611	556,163
	Domestic	KRW million	14,451	18,459	17,268

GRI CONTENTS INDEX

Statement of use	ISU PETASYS reported the sustainable management performance and data from January 1, 2023 to December 31, 2023 in accordance with GRI Standards.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI sector standards	N/A

GRI Standard		Disclosure	Location
GRI 2: General Disclosures 2021			
Organization and reporting practices	2-1	Organizational details	6
	2-2	Entities included in the organization's sustainability reporting	2
	2-3	Reporting period, frequency and contact point	2
	2-4	Restatements of information	36, 89
	2-5	External assurance	99
Activities and workers	2-6	Activities, value chain and other business relationships	9~11
	2-7	Employees	87
	2-8	Workers who are not employees	N/A
Governance	2-9	Governance structure and composition	69~70
	2-10	Nomination and selection of the highest governance body	69~70
	2-11	Chair of the highest governance body	69~70
	2-12	Role of the highest governance body in overseeing the management of impacts	15
	2-13	Delegation of responsibility for managing impacts	15
	2-14	Role of the highest governance body in sustainability reporting	15
	2-15	Conflicts of interest	69~70
	2-16	Communication of critical concerns	15
	2-17	Collective knowledge of the highest governance body	69~70
	2-18	Evaluation of the performance of the highest governance body	71
	2-19	Remuneration policies	71
Strategies, policies and practices	2-20	Process to determine remuneration	71
	2-21	Annual total compensation ratio	71
	2-22	Statement on sustainable development strategy	4~5
	2-23	Policy commitments	56
	2-24	Embedding policy commitments	56
	2-25	Process to remediate negative impacts	56
	2-26	Mechanisms for seeking advice and raising concerns	56
	2-27	Compliance with laws and regulations	86, 92
Stakeholder engagement	2-28	Membership associations	100
	2-29	Approach to stakeholder engagement	19
	2-30	Collective bargaining agreements	89
GRI 3: Material Topics 2021			
Disclosures on material topics	3-1	Process to determine material topics	16
	3-2	List of material topics	17~18
	3-3	Management of material topics	21~42



GRI Standard	Disclosure	Location
Topic-Specific Standards		
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	23
	205-2 Communication and training about anti-corruption policies and procedures	73~74, 91
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	92
	302-1 Energy consumption within the organization	84
GRI 302: Energy 2016	302-3 Energy intensity	84
	303-3 Water withdrawal	85
GRI 303: Water and Effluents 2018	303-5 Water consumption	85
	305-1 Direct (Scope 1) GHG Emissions	84
GRI 305: Emissions 2016	305-2 Energy indirect (Scope 2) GHG Emissions	84
	305-4 GHG emissions intensity	84
	305-7 Nitrogen oxides (NOx), Sulfur oxides (SOx), and other significant air emissions	84
	306-3 Waste generated	85
GRI 306: Waste 2020	306-4 Waste diverted from disposal	85
	306-5 Waste directed to disposal	85
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	90
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	87
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	55
	401-3 Parental leave	88
	403-1 Occupational health and safety management system	29~30
GRI 403: Occupational Health and Safety 2018	403-2 Hazard identification, risk assessment, and incident investigation	31~32
	403-4 Worker participation, consultation, and communication on occupational health and safety	30
	403-5 Worker training on occupational health and safety	34~35
	403-6 Promotion of worker health	33
	403-9 Work-related injuries	36
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	88
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	87
	405-2 Ratio of basic salary and remuneration of women to men	88
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	55
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	66~68
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	57~59, 87
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	38~39
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	No violation
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	No violation

TCFD INDEX

Category	Recommendation	Page
Governance	a) Describe the board's oversight of climate-related risks and opportunities	p. 21~22
	b) Describe management's role in assessing and managing climate-related risks and opportunities	p. 21~22
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	p. 22~23
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	p. 22~23
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	N/A
Risk Management	a) Describe the organization's processes for identifying and assessing climate-related risks	p. 25~26
	b) Describe the organization's processes for managing climate-related risks	p. 24~26
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management	p. 26
Metrics and Targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	p. 27~28
	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions and the related risks	p. 27~28
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	p. 27~28









SASB INDEX

Topics	Code	Metrics	Unit	Disclosure
Risk Management	RT-EE-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	TJ, %	(1) 833TJ, (2) 84.1%, (3) N/A
Hazardous Waste Management	RT-EE-150a.1	Amount of hazardous waste generated, percentage recycled	t, %	p. 85
	RT-EE-150a.2	Number and aggregate quantity of reportable spills, quantity recovered	Number, kg	No occurrence in the reporting period
Product Safety	RT-EE-250a.1	Number of recalls issued, total units recalled	Number	No occurrence in the reporting period
	RT-EE-250a.2	Total amount of monetary losses as a result of legal proceedings associated with product safety	KRW	No occurrence in the reporting period
	RT-EE-410a.1	Percentage of products by revenue that contains IEC 62474 declarable substances	%	Not applicable
Product Lifecycle Management	RT-EE-410a.2	Percentage of eligible products, by revenue, that meet Energy Star® criteria	%	Not applicable
	RT-EE-410.3	Revenue from renewable energy-related and energy efficiency-related products	KRW	Not applicable
Materials Sourcing	RT-EE-440a.1	Description of the management of risks associated with the use of critical materials	N/A	p. 42
Business Ethics	RT-EE-410a.1	(1) Description of policies and practices for prevention of: (1) corruption and bribery and (2) anti-competitive behavior	N/A	p. 73~74
	RT-EE-410a.2	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	KRW	No occurrence in the reporting period
	RT-EE-410a.3	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	KRW	No occurrence in the reporting period
Accounting Metrics	RT-EE-000.A	Number of units produced by product category	Number	p. 93
	RT-EE-000.B	Number of employees	Number	p. 87



UN SDGs

ISU PETASYS is engaged in ESG management activities in line with the goals of the United Nations Sustainable Development Goals (UN SDGs), a global initiative for sustainable development. By implementing ESG management practices centered around eight of the UN SDGs, we will fulfill our role as a corporate citizen for a sustainable future.

Category	SDG Targets	Page
 3 GOOD HEALTH AND WELL-BEING	Ensure healthy lives and promote well-being for all at all ages <ul style="list-style-type: none"> 3.9 Reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination 	p. 37~42
 4 QUALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all <ul style="list-style-type: none"> 4.4 Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship 	p. 54
 5 GENDER EQUALITY	Achieve gender equality and empower all women and girls <ul style="list-style-type: none"> 5.1. End all forms of discrimination against all women and girls everywhere 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making 	p. 52~53
 8 DECENT WORK AND ECONOMIC GROWTH	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all <ul style="list-style-type: none"> 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services 	p. 60
 10 REDUCED INEQUALITIES	Reduce inequality within and among countries <ul style="list-style-type: none"> 10.4 Adopt policies especially fiscal, wage, and social protection policies and progressively achieve greater equality 	p. 53
 13 CLIMATE ACTION	Take urgent action to combat climate change and its impacts <ul style="list-style-type: none"> 13.2 Integrate climate change measures into national policies, strategies, and planning 13.3 Improve education, awareness raising and human and institutional capacity on climate change 	p. 21~28
 16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Promote peaceful and inclusive societies for sustainable development <ul style="list-style-type: none"> 16.10 Ensure public access to information and protect fundamental freedoms 16.b Promote and enforce non-discriminatory laws and policies 	p. 53
 17 PARTNERSHIPS FOR THE GOALS	Global Partnership for Sustainable Development <ul style="list-style-type: none"> 17.16 Enhance the global partnership for sustainable development complemented by multi-stakeholder partnership to support the achievement of sustainable development goals 	p. 25, 100

GHG VERIFICATION STATEMENT

Independent Verification Statement



ISU PETASYS Co., Ltd.

The Korea Management Registrar Inc. (hereinafter “KMR”) has conducted the verification on the greenhouse gas (hereinafter “GHG”) emission (Scope 1, 2) of ISU PETASYS Co., Ltd. (hereinafter “the Company”) in 2023.

SCOPE

Verification of all places of business and emission facilities under the control of the company.

STANDARDS

- ISO 14064-1:2018, ISO 14064-3:2019
- IPCC Guidelines for National Greenhouse Gas Inventory
- Operational Guidelines for Reporting and Certification of Emissions in the GHG Emission Trading Scheme
- Verification Guidelines for GHG Emissions Trading Scheme Operation
- Guidelines for GHG Target Management Scheme Operation

PROCEDURE

We conducted a risk analysis approach and on-site verification based on data evaluation, and we identified the appropriateness of the data and factors applied to GHG emission calculations based on objective evidence. The verification team verified the GHG emissions during the reporting period in a reasonable way based on the verification guidelines.

INDEPENDENT

KMR does not have any stake in the verified entity and does not conduct verification with biased opinions/views. We have drawn an independent and objective verification conclusion based on the verification standards, and reviewed the every aspect of the verification we performed throughout the entire verification process through internal review

LIMITATIONS

The verification team verified the related reports, information and data presented by the audited institution by sampling or enumeration methods. As a result, there are many inherent limitations, and there may be disagreements in the interpretation of appropriateness. Although we have tried to faithfully perform verification that meets the verification standards, we suggest that errors, omissions, and false statements that could not be found may be latent as the limitations to the verification.

OPINION

- GHG verification has been performed to meet the reasonable assurance level according to the verification standards.
- We express that no significant errors were found in the calculation of emissions during the verification process, and that relevant activity data and evidence were appropriately managed and calculated. As a result, we express an “unmodified” opinion.
- Criticality: meets the criterion, which is less than 5%
- GHGs Emission(All places)

GHGs Emission	Direct emission (Scope1)	Indirect emission (Scope2)	Total (tCO ₂ -eq)
2023	25,499	33,565	59,064

Energy Consumption	Fuel	Electricity	Steam	Total (TJ)
2023	132	701	0	833

※ Note : There is a difference in the total amount of emissions and emissions by greenhouse gas and by workplace.
(Total emissions are cut to a decimal point for each workplace unit and emissions are summed up for each workplace unit.)

RESULTS

We confirm through verification that the emissions from major emission facilities have been calculated and reported without omission.

※ The abovementioned company is responsible for preparing verification data in accordance with the “Guidelines for Reporting and Certification of Emissions in the Greenhouse Gas Emissions Trading System (Ministry of Environment Notice No. 2021-278)”, and KMR’s responsibility is limited to the party in the verification contract according to the agreed contract terms. and is not responsible for other decisions, including investment decisions based on this verification statement.

※ The abovementioned company must comply with the use of the certification and logo marks under the contract entered into with KMR.

March 28, 2024

Authorized By CEO **Eun Ju Hwang**



THIRD-PARTY ASSURANCE STATEMENT

Dear management and stakeholders of ISU PETASYS,

Foreword

BDO Sunghyun LCC (hereinafter referred to as “the Assurer”) performed Limited Assurance Engagement on the sustainability report of ISU PETASYS (hereinafter referred to as “the Company”) Co., Ltd. for the business year ending on December 31, 2023.

Limited Assurance Engagement evaluates conformity assessment, assessment of the risk of material misstatement of sustainability information subject to assurance due to fraud or error, response to risk, and overall disclosure of sustainability information subject to assurance — of the standards used by the company to prepare the sustainability information subject to assurance.

Assurance activities were conducted in accordance with ISAE 3000 (International verification standards for matters other than audit and review of financial information) published by The International Auditing and Assurance Standards Board (IAASB). These standards include the assurer's independence requirements and relevant ethical requirements; and also include requirements to plan and perform limited assurance to ensure that the report is properly prepared. Limited Assurance Engagement is more limited than Reasonable Assurance Engagement with regard to the scope of risk assessment procedures and procedures performed in response to assessed risks, including understanding of internal controls. The procedures we performed were based on our professional judgment and included questioning, observation of the process performed, review of documents, analytical procedures, assessment of suitability of quantification methods and reporting policies, and comparisons and collations among basic information. Considering the nature of this Engagement, we performed the following procedures:

- Interview with the persons responsible for internal reporting and data aggregation of the company's sustainability information to understand the management approach to material issues
- Understand the systems and processes for managing and reporting the company's sustainability information
- Review of documents related to results of the risk assessment process, policies and standards related to sustainability information, materiality assessment, stakeholder participation activities, etc.
- Perform Limited Assurance of the data subject to assurance based on questioning and analytical review

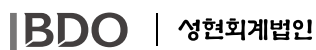
The nature, timing, and extent of the assurance procedures performed in Limited Assurance Engagement are designed to provide a lower level of assurance than Reasonable Assurance Engagement. Accordingly, we do not express reasonable assurance as to whether the information subject to assurance of the company has been prepared in terms of materiality in accordance with criteria.

Assurer's Opinion

As a result of our assurance process performances, nothing has come to our attention that causes us to believe that the report was not prepared in accordance with the criteria used by the company in terms of materiality.

Usage Restrictions

This report was prepared solely for the company's management to help them understand the company's sustainability management performances and activities. Accordingly, our firm bears no responsibility for use by third parties, other than the company and its management.



윤길배

BDO Sunghyun LLC Chairperson & CEO

This assurance report is valid as of the report publication date (June 2024). Therefore, between the date of publication and the time this report is viewed, events or situations that may have a significant impact on the company's report may occur, which may result in this assurance report being revised.

MAJOR AWARDS AND MEMBERSHIP

Major Awards

Award Date	Organizer	Award Category
2008. 01	CISCO	Awarded 'Supplier of the Year'
2009. 10	CRAY	Awarded 'Supplier of the Year'
2011. 12	Ministry of Knowledge Economy	Selected as a World-Class Product in Ultra-high Layer PCB
2016. 11	Ministry of Trade, Industry and Energy, Ministry of SMEs and Startups	Received the Chairman's Award from Korea Chamber of Commerce and Industry for Korea's Most Loved Company
2017. 07	Daegu Metropolitan City	Selected as Employment-friendly Leading company
2018. 11	Korea Occupational Safety and Health Agency	Selected as an Outstanding Workplace for Employee Health Promotion
2018. 11	Ministry of Trade, Industry and Energy, Ministry of SMEs and Startups	Received the Minister's Award from Ministry of Trade, Industry and Energy for Korea's Most Loved Company
2018. 12	Ministry of Employment and Labor	Presidential Commendation for Contributions to Labor-Management Culture
2019. 04	Juniper	TOP Direct Component Supplier Award
2019. 04	Palo Alto	Excellence in Technology Award
2022. 10	Korean Society for Precision Engineering	Precision Technology Award
2023. 09	Daegu Metropolitan City	Selected as Employment-friendly Company
2023. 12	Ministry of Trade, Industry and Energy	USD 400 million Export Tower Award

Membership

Daegu Enterprises Federation, Korea Exchange, Federation of Korean Trade Unions, Korea Printed Circuit Association, Daegu Chamber of Commerce & Industry, Dalseong Industrial Complex Autonomous Environmental Monitoring Committee, Korea Electric Engineers Association, Korea Environmental Engineers Association, Dalseong Industrial Complex Safety and Health Management Committee, Daegu-kyungbuk PSM Safety Management Committee, National Corporation Industrial Health Committee, Korea Listed Companies Association, RBA (Responsible Business Alliance) Korea Industrial Safety Association, Korea International Trade Association, Korea Institute of Science and Technology Information, Electronics and Telecommunications Research Institute, Daewoo Global Management Institute, Korea Personnel Improvement Association

Sustainability Report Working Group

Management Support Team **Tae-hyeong Kim, Ja-yoon Choi** / Human Resources Team **Jae-hoon Choi** / Maintenance & Engineering Team **Seong-rim Lee** / Purchasing Team **A-young Kim** / Planning & Cooperation Team **Su-jin Jeong** / Production Control Team **Hwang-won Park, Jae-pil Jeong** / Labor Relations Team **Seung-back Oh** / Finance & Accounting Team **Sang-soo Lee** / Quality Assurance Team 2 **Jong-in Park** / Quality Control Team **Hye-rim Lee** / ESH Team **Yeon-chung Park, Jeong-min Lee, Jun-myeong Song** / International Sales Team **Hye-ji Ann** / Serious Accident Management Team **Seung-wook Lee, So-young Lee**





