



USI Corporation
台灣聚合化學品股份有限公司



永續報告書

2021 ESG Report

A thick, yellow, curved brushstroke graphic that tapers at both ends, positioned behind the text.

**USI Corporation
2021 ESG Report**

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* = Material topics in 2021

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Message from the Chairman

GRI 102-14、GRI 102-26



Message from the Chairman and CEO

In 2021 COVID-19 continued to affect our daily life, and climate became more severe, such as the Texas ice storm in February and the hit of hurricane Ida in August in the USA and China's implementation of the energy consumption and intensity dual control system in October. All brought direct impact to business operations. Based on the Glasgow Climate Pact at COP26, coal use reduction has become a global consensus, and the government of Taiwan also proposed the goal: net zero emissions by 2050, making ESG (Note 1) the representation of resilience for businesses to address the rapidly changing environment. Based on the vision to "create and cohere sustainable value for a sustainable society", in March 2022, we set the Group's 2030 carbon reduction target at 27% less based on 2017 to address the government's goal and our determination.

Enhancing ESG

Each listed company within the Group has established and operated its own CSR committee under the Board for some years. Chaired by independent directors, these CSR committees reviewed the company's ESG half-yearly performance twice a year. To extend the scope of ESG management, these listed companies renamed their CSR committees the ESG committee in March 2022 to pursue sustainable development through the deep involvement of directors.

Increasing renewable energy investment

We concern ourselves with the global net zero development and the domestic energy transformation policy. In March 2020, we established the group's Green Power Working Group to plan and implement green power strategies. In 2021 we completed the investment of the 5MW solar plant with a projected output of 6 GWh of green power. Additionally, through the continuous review of the risks and opportunities related to climate change based on the TCFD-recommended

(Note 2) framework, we adopted corresponding strategies and actions and implemented projects including old equipment replacement and production efficiency enhancement. To ensure the accuracy of carbon emission data, all plants in Taiwan of the Group's listed companies will complete 100% carbon inventory and verification according to ISO 14064-1 in 2022.

Innovation, R&D, and safe production

We are committed to developing products that make human life more convenient and reducing environmental burden, including the development of eco-friendly water-based sunshield coatings, cooling PVC (Note 3) vinyl fabrics, low-VOCs (Note 4) EPS (Note 5), and SiC (Note 6) market application development. We also devote to promoting the goal of safety and environmental five zeros: zero pollution, zero emissions, zero occupational hazards, zero accidents, and zero failures and implementing the process management system (PSM) to lower the probability of accident occurrence through system establishment and optimization, data quantitative analysis, and plant cross-audit.

In the past year, we maintained steady operations and were awarded ESG awards. We will continue to concern ourselves with the net-zero policy, maintain close communication with stakeholders, and set ESG goals and programs for a better society. Lastly, I need to thank all employees for your concerted efforts to achieve steady operations for the Group. While there will be more challenges ahead, we must make advanced preparations to keep going at a steady pace.

Note 1: Environmental, social, and governance, abbreviated as ESG.

Note 2: Task Force on Climate-related Financial Disclosures, abbreviated as TCFD.

Note 3: Polyvinyl chloride, abbreviated as PVC.

Note 4: Volatile Organic Compounds, abbreviated as VOCs.

Note 5: Expandable Polystyrene, abbreviated as EPS.

Note 6: Silicon carbide, carborundum, chemically SiC.

Chairman & CEO: Quintin Wu

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About this report

Reference Guidelines GRI 102-54

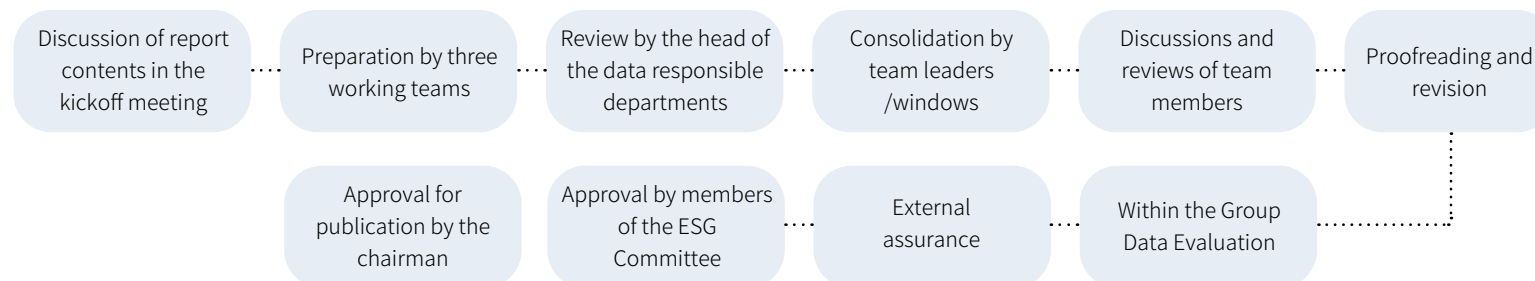
For all stakeholders to understand our performance in relation to corporate social responsibility, we, USI Corporation (USI), have prepared this report in accordance with the Core disclosure principle in the GRI Sustainability Reporting Standards (GRI Standards) published by the Global Reporting Initiative (GRI), disclosed the contents of the related sustainable issues with respect to the Sustainability Accounting Standards-Chemicals published by the Sustainability Accounting Standards Board (SASB), and the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies." We also make reference from the United Nations Global Compact (UNGC), ISO 26000 Guidance on Social Responsibility, and TCFD as reporting frameworks.

Report Scope and Boundaries GRI 102-45 · 102-50

This report covers USI, including the Taipei Office, Guishan R&D Division, Kaohsiung Plant, and USI Education Foundation. Other subsidiaries presented in the consolidated financial statements are not covered in this report. Environmental performance is based on the data of Kaohsiung Plant, while other related information is disclosed separately in the report. The reporting period is January 1 to December 31, 2021. The report contents demonstrate USI's environmental, social, and governance (ESG) management and performance, and the financial information is consistent with the financial data certified by accountants. Some statistics are extracted from the USI annual report, government department, and the open information of related websites.

External Assurance GRI 102-56

Report compliance with the Core disclosure principle in the GRI Standards has been verified and assured by BSI Taiwan with reference to the requirements for Core disclosure principle of the GRI Standards and the Moderate Assurance in Type 1, AA1000AS v3.

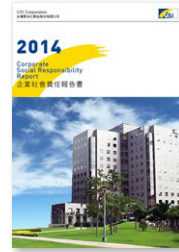
Editing Process

History and Time of Publication GRI 102-51、102-52



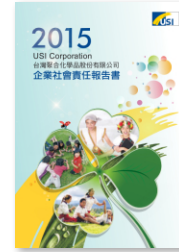
2014 / 12

First release:
CSR Report



2015 / 06

Second release:
CSR Report



2016 / 06

First third-party verification
(BSI AA1000)



2017 / 06

CPA Firm Limited Assurance
(Deloitte Taiwan AS No. 1)



2018 / 06

CPA Firm Limited Assurance
(Deloitte Taiwan AS No. 1)



2019 / 06

CPA Firm Limited Assurance
(Deloitte Taiwan AS No. 1)



2020 / 06

Third-Party Verification
(SGS AA1000)



2021 / 06

Third-Party Verification
(BSI AA1000 AS v.3)



2022 / 06

Third-Party Verification
(BSI AA1000 AS v3)



2023 / 06

Next issue
(GRI 102-52)

Contact Information GRI 102-53

You can download report-related information from the “ESG” section of our corporate website at <https://www.usife.com/ESG/en-us/ESG72.aspx>. Should you have any comment or suggestion for our report, please feel free to contact us.

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- ESG email: esg-usi@usig.com

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2021
Sustainability
Performance

Business performance

- Profit from operations: **NT\$3.52 billion**, increased by **288%** from 2020, a new high in history.
- Earnings per share (EPS): **NT\$4.84**, increased by **115%** over 2020, the highest in history.
- EVA sales increased by **9%** over 2020 to **147,000MT**, a new high in history.
- Ranked the top **6-20%** of listed companies in the Corporate Governance Evaluation 2021.
- Promotion by Taiwan Ratings to **twA/twA-1** with a “steady” outlook.
- Started commercial operations of the Fujian Gulei Integrated Refining and Petrochemical Project in December 2021.
- Innovation and R&D accumulated **138** patents.
- Development of high-liquidity injection **HDPE product-LH5590**.
- Energy structure transformation: Completed the investment in the external renewable energy site, the first stage achievement. In 2021, we invested in solar generation systems with capacity of **5MW**.
- 2021 employee turnover: Reduced by 7.9% over 2020 to **5.6%** including retirees by **2.3%** or over 2020 to 3.4% excluding retirees by 0.9%
- Permanent employee ratio: **99.35%**.
- Local employee ratio increased by **5.6%** over 2020 to **77.63%**.
- Total employee education/training duration: **10,776 hours**, averaging **23.8** hours/person.
- Organized HSE education and training up to **3,555 hours for a total of 1,166 persons**. Emergency fire drills, project training, and physical/mental training for a total of **69 sessions with 1,576 participants**.
- Implemented training on process safety management (PSM) up to **1,902 hours for a total of 329 persons**.
- Underground pipeline joint defense organization: Ranked the 2nd and 14th respectively among 22 manufacturers at the “Test of the Emergency Response Capability and Performance of Industrial Pipeline Joint Defense” respectively in the 2 competitions.
- **Zero** work-related injuries, **zero** transportation-related accidents.
- The 2021 environmental expenditure was about **NT\$135.67 million**, increased by **16.8%** from 2020.
- Annual reduction: Electricity by **0.75%** (2015-2021 average 1.38%), energy by **5.10%**, carbon by **2.39%**, and water by **4.26%**.
- Constant implementation of ISO 14064-1 Greenhouse Gases Inventory and Verification and scope 3 inventory.
- Implementation of the ISO 46001:2019 Water Efficiency Management System and completion of verification.
- Implementation of ISO 14067:2018 Carbon Footprint of Products and verification.
- Recovery of 12.87MT of plastics through promotion of the plastic resin pellet leakage prevention and management program.
- Increased materials recycling rate to 12.3%.
- Green purchase expenditure: NT\$4.38 million.
- **Forestation Adoption Program**: Adopted the forestation of 5 hectares of land for 20 years under program in collaboration with the Experimental Forest, College of Bio-Resources and Agriculture, National Taiwan University.

Certification and Awards



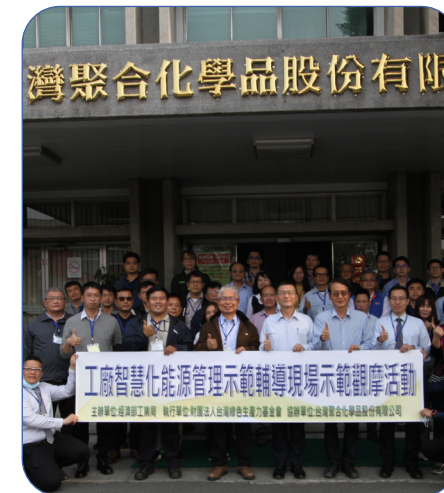
Outstanding Achievement at the 2020-2021 Kaohsiung City Cross-Sector GHG Reduction Collaboration



TCIA Industrial Contribution Award 2021

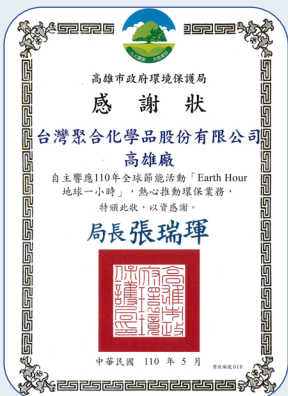


Four awards including the 2021 TCSA, TSAA, and GCSA



Selected as the demonstration factory for the Smart Energy Management System

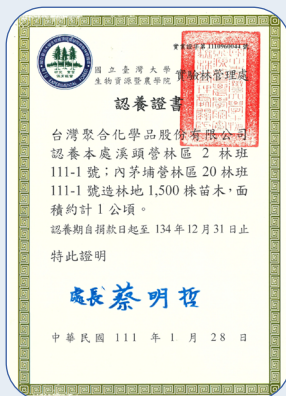
Charity Events



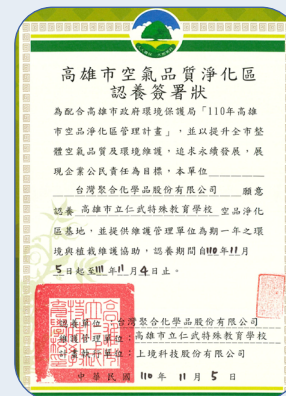
Supported "Earth Hour" by turning off lights for one hour during 2018-2021.



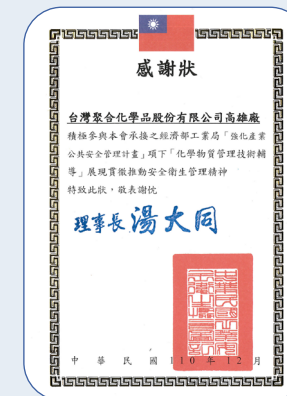
Signed the memorandum on cooperation of enterprise disaster prevention enhancement with Renwu District Office, Kaohsiung City.



Implementation of the Forestation Adoption Program in collaboration with the Experimental Forest, College of Bio-Resources and Agriculture, National Taiwan University.



Constantly sponsored the "Kaohsiung City Air Quality Purification Area Management Program" in 2018-2021.



Certificate of appreciation for active participation in the Industrial Safety Management Strengthening Program-Guidance for Chemical Substance Management Technology.



Employee blood donations in Taipei and Kaohsiung



Fieldtrip to Guishan R&D Division for the Renda Cooperation Program.



USI Education Foundation sponsored Toufen Junior High School to establish the music seed school.



Organization of the 2nd USI Cup Charity Softball Competition.



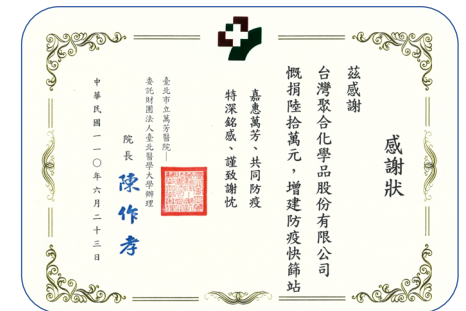
Neighborly activities and pandemic concerns



Support for local agricultural products: USI group purchased Taiwanese pineapples.



Donation of NT\$3 million to the USI Education Foundation.



Donation for building screening stations



Donation for epidemic control



TSMC Charity Foundation activated the charitable green energy model by installing solar panels at social welfare organizations in southern Taiwan. USI and National Cheng Kung University joined the line.



Participation in the 20th Anniversary of Kaohsiung Municipal Renwu Special Education School to care about schoolchildren needing special education.



Chapter 1

Sustainable Development

1.1

Visions and Goals for Sustainable Development

GRI 102-16

Vision

Based on the vision to “create and cohere sustainable value for a sustainable society,” we hope to constantly create and cohere sustainable value to contribute to social sustainability.

Based on the sustainable vision, we have developed three core strategies: “R&D and innovation,” “steady operations,” and “social inclusion,” hoping to create value with stakeholders together. We extend the contents of the core strategies into seven key topics as the foundation for honest and reasonable partners to build visions.

As a member of the USI Group, we develop three sustainable principles: unity governance (U), sustainable development (S), and innovative technology (I) based on the group vision. Every year, we review the results of analysis of material topics and their consistency with the company’s sustainable principles, and evaluate and discuss the achievement of the annual performance to achieve the UN Sustainable Development Goals (SDGs).



Sustainable Development

USI has been known for ethical corporate management in business operations. We believe in the Chinese proverb, “round outside and square inside,” which means “harmonious with people and proper in business dealings.” We have also developed our own philosophy of “Solid Operations,” “Professional Management,” “Seeking Excellence,” and “Serving Society,” and created a corporate culture of rationality, practicality, continual improvement, sincerity, hospitality, and respect.



SDGs

Enterprise sustainable development begins with the core value. To pursue sustainable development, we identify the relevance to SDGs in three phases and set related goals in the business plan to combine with SDGs.

Understanding SDGs and Discussing operation development.

1

- Implementing SDGs education/training and discussing their impacts on business operations.
- Prioritizing SDGs

Identifying impacts and opportunities.







2







- Connecting SDGs with material topics
- Identifying key opportunities and allocating resources

Addressing SDG targets and actions

3

- Discussing target feasibility
- Setting short-, medium-, and long-term plans and discussing integration with the business plan.

SDG/Goals	 <p>3.5 ∙ 3.8 ∙ 3.a ∙ 3.d Maintain factory workplace environment safety and employee health Corresponding Section: Chapter 5</p>	 <p>4.4 ∙ 4.7 Professional division of labor Education for employment Corresponding Section: Chapter 3, 4, 5</p>	 <p>6.4 ∙ 6.a Reduce water discharge by 5,280 MT Improved effluent water quality (COD<60 mg/L) Corresponding Section: Chapter 4</p>
Achievements in 2021	<ul style="list-style-type: none"> • 3.5 Substance abuse and alcoholism prevention: Plant access sobriety test and health management for contractors and employees • 3.8 Healthcare: National Health Insurance for all employees and additional employee insurance • 3.a Tobacco control: No smoking or tobacco sales on the plant site. • 3.d Health risk management: Arranged special checkups for 280 employees and implemented health management based on the graded health management by risk level. 	<ul style="list-style-type: none"> • 4.4 Technology and vocational skills <ol style="list-style-type: none"> 1. Process safety training for 329 persons with a total of 1,902 hours. 2. HSE education and training for 1,166 persons with a total of 3,555 hours. 3. Emergency fire drills, project training, and physical/mental training for a total of 69 sessions with 1,576 participants. • 4.7 Sustainable development of employee knowledge and skills <ol style="list-style-type: none"> 1. Maintained the validity of the professional licenses and certificates of employees through in-service education and training: 8 sessions. 	<ul style="list-style-type: none"> • 6.4 Enhancement of water efficiency: Reclamation of 10,986MT of water. • 6.a Effluent quality in the H1 and H2: COD 14.4 mg/L and COD 25.5 mg/L respectively.
SDG/Goals	 <p>7.2 ∙ 7.3 ∙ 7.a Continue to increase utilization of high-efficiency products and invest in clean energy Corresponding Section: Chapter 3, 4</p>	 <p>8.3 ∙ 8.5 ∙ 8.7 ∙ 8.8 Expand the scope of operations to constant increase revenue / Ensure equal job opportunities / Safe work environment / Harmonious labor-management relations Corresponding Section: Chapter 2, 3, 4</p>	 <p>9.5 ∙ 9.b Annual R&D fund NT\$100 million minimum New product development and improvement: 4 pcs/year. Corresponding Section: Chapter 3</p>
Achievements in 2021	<ul style="list-style-type: none"> • 7.2 Renewable energy: Investment in green power generation at 5MW. • 7.3 Enhancement of energy efficiency: <ol style="list-style-type: none"> 1. Green purchase expenditure: NT\$4.38 million. 2. Invested NT\$4.5 million in energy-efficient equipment to save electricity by 1,972,419 kWh and reduced carbon by about 1,004 tCO₂e. • 7.a Clean energy acquisition: Assessed geothermal and wind power generation projects. 	<ul style="list-style-type: none"> • 8.3 Business innovation: Established the high-value R&D center. • 8.5 Equal pay for equal work: Hired full quota (4) of persons with disabilities by law and implemented various gender equality measures: The men-to-women pay ratio of general employees was 0.95:1 and supervisors was 1.14:1. • 8.7 No child labor: No child labor was hired throughout the Group. • 8.8 Protection of labor rights and workplace safety: <ol style="list-style-type: none"> 1. Established the labor union and held periodic labor-management meetings. 2. Provided well-designed group insurance plans and contributed pension by law to protect the later life of employees. 3. Implementation of PSM 	<ul style="list-style-type: none"> • 9.5 Improvement of scientific research and increase in R&D expenditure for high success rate: Developed 4 new products with an R&D investment of NT\$160 million. • 9.b Support for customer technology innovation: Provided worldwide customers with technical services and green products.

SDG/Goals	 11.6、11.a Underground Pipelines Complete urban industrial pipeline management Corresponding Section: Chapter 4, 5	 12.2、12.5、12.6 Complete the execution of the CSR Commitment by all suppliers in 5 years Corresponding Section: Chapter 3	 13.2、13.3 Constantly develop and promote eco-friendly products Every year: Electricity less by 1%, Energy less by 1.2%, Carbon less by 1.5%, Water less by 1% Corresponding Section: Chapter 2,4
	Achievements in 2021 <ul style="list-style-type: none"> • 11.6 Reduction of hazardous environmental impacts: VOCs reduction and waste management • 11.a Transportation safety: Implemented the Kaohsiung City Underground Pipeline Operation Safety and Management Project to protect the public safety of nearby underground industrial pipelines, citizens, and workers. <ol style="list-style-type: none"> 1. Participated in the underground pipelines joint defense organization, implemented routine pipeline inspection, and completed the visual inspection and thickness check of the overground sections of the underground pipelines in July and November. 2. Completed 36 times of cathodic corrosion rectifier check; 176 times of cathodic corrosion test; inspection of 2 insulation flanges; and thickness test (overground sections) on 2 pipelines. 	<ul style="list-style-type: none"> • 12.2 Sustainable purchase of resources: Built the green procurement mechanisms and implemented green supply chain management. • 12.5 Enhanced resource recycling rate to 12.3% to reduce the waste of resources. • 12.6 Methods to encourage sustainable development: Requested suppliers to sign the CSR Commitment 	<ul style="list-style-type: none"> • 13.2 Climate change countermeasures: Annual targets: electricity conservation by 0.75% (average rate of 1.38%), energy conservation by 5.10%, carbon reduction by 2.39%, water conservation by 4.26%; implemented ISO 14064-1, ISO 46001, and ISO 14067. • 13.3 Enhancement of climate change adaptability: Environmental protection expenditure at NT\$135.67 million, promotion of green sunshield coatings, organization of technology exchanges and observations with various affiliates. <ol style="list-style-type: none"> 1. Built the cooling water energy-conservation system by advising the optimal operational model with AI. 2. Promotion of IDB's Factory Intelligent Energy Management System Project and became a demonstration factory
SDG/Goals	 15.2 Increase forestation area Corresponding Section: Chapter 4	 16.2、16.3、16.5、16.6、16.b Legal compliance Corresponding Section: Chapter 2,5	 17.17 Encourage sponsorship and participation in social welfare Corresponding Section: Chapter 5
	Achievements in 2021 <ul style="list-style-type: none"> • 15.2 Forest sustainable management: Sponsored 5 hectares of forestation for 20 years. 	<ul style="list-style-type: none"> • 16.2 No child labor • 16.3 Legal compliance: No legal and regulatory noncompliance in the economic aspect. • 16.5 No corruption or bribery: Employee Code of Conduct and Ethical Corporate Management Best Practice Principles. • 16.6 Built a fair promotion and transfer system • 16.b Implementation of non-discrimination policy: Promoted the human rights policy. 	<ul style="list-style-type: none"> • 17.17 Encouragement of social cooperation: <ol style="list-style-type: none"> 1. Supported "Earth Hour", a global energy conservation activity. 2. Organized the 2nd (2021) USI Cup Charity Softball Competition to integrate sports with charity. 3. Implemented community charitable activities and sponsored epidemic control equipment for hospitals and schools.

Sustainable Development Goals

Based on the SDGs, we establish the 5-year business plan and report it to the Board. Each department has established its own management by objectives (MBOs) and set key performance indicators (KPIs) of employees for the reference of performance evaluation, promotion, and raises.

	Short-term (1 year)	Medium-term (3 years)	Long-term (5 years)
Governance	<ul style="list-style-type: none"> ● Activate the operations of the Gulei Integrated Refining and Petrochemical Project (Gulei Project) ● Promoting green power development and assess the countermeasures for carbon neutrality. ● Assessing green energy and circulatory economic development ● High-Value R&D Center ● Construction of the Kaohsiung Intercontinental Container Terminal Project ● Assessing energy conservation and carbon reduction performance of equipment and equipment replacement. 	<ul style="list-style-type: none"> ● Planning of and investment in the downstream development projects of the Gulei Project. ● Continuing green power development and planning countermeasures for carbon neutrality. ● Planning and implementing the circular economy. ● Constant R&D of high value-added products ● Completion and operation of the Kaohsiung Intercontinental Container Terminal. 	<ul style="list-style-type: none"> ● Planning of and investment in the downstream development projects of the Gulei Project. ● Cultivate Taiwan, continue local investments, and implement the circular economy. ● Constant R&D of green/high value-added products
Industrial safety and environmental protection	<ul style="list-style-type: none"> ● Enforcing the “Five Zeros Goal” ● Promoting the process safety management system. ● Implementing the underground pipeline maintenance and operation program. ● Enhancing education and training to improve safety knowledge and culture. ● Strengthening contractor management and promoting AI forklift safety identification. ● Promoting transportation safety audit. ● Promoting the circular economy, electricity conservation, water conservation, and carbon reduction. ● Green Procurement ● Promoting the prevention and management of plastic resin pellet leakage. ● Enhancing the control and reduction of three types of waste ● Managing hazardous air pollutants (HAPs) ● Establishing the waste audit and management systems. ● Constantly implementing ISO 14001, ISO 50001, ISO 45001, ISO 14064-1, ISO 46001, ISO 14067 	<ul style="list-style-type: none"> ● Continuing short-term plans ● Furthering energy conservation, carbon reduction, and water conservation. ● Implementing GHG (Scope 3) inventory ● Implementing VOCs reduction programs ● Establishing the waste audit and management systems. ● Implementing waste reduction ● ISO management system certification ● Constantly monitoring underground pipeline safety and ensuring preventive maintenance. ● Promoting the circular economy to plan resource recycling and reuse. 	<ul style="list-style-type: none"> ● Continuing the medium-term plan ● Implementing smart management of operation safety. ● Reducing water withdrawal and consumption to enhance water recycling and reuse. ● Reducing equipment and unit leakage ● Reducing pollutant emissions ● Implementing waste recycling and reuse ● Planning climate change address ● Promoting the circular energy for green energy development. ● Promoting 2030 carbon reduction target at 27% (base year 2017)
Social relations	<ul style="list-style-type: none"> ● Constant care for employee health and providing a safe workplace ● Maintaining harmonious labor-management relations and protecting labor rights and interests. ● Increasing channels for stakeholder communication. ● Being a good neighbor to local communities and maintaining sound interaction with them. ● Encouraging and sponsoring employees to engage in charitable activities. ● Constantly cultivating educational and environmental protection activities in remote areas. 	<ul style="list-style-type: none"> ● Continuing neighborly activities to maintain sound interaction with them ● Constantly sponsoring various charitable activities to optimize the corporate image. ● Enhancing industry-academia-government collaboration to cultivate excellent workforces. ● Strengthen the services and effectiveness of USI Education Foundation ● Encouraging and sponsoring employees to engage in charitable activities. 	<ul style="list-style-type: none"> ● Optimizing the supplier/contractor assessment systems. ● Increasing the sources and energy for social participation to expand the scale of social contributions. ● Encouraging and sponsoring employees to engage in charitable activities.

1.2

Company Profile

About USI

USI Corporation (TWSE: 1304) was established on May 26, 1965 and established Taiwan's first LDPE plant. We primarily develop, produce, and sell polyethylene (PE) resins at our complex in Renwu District, Kaohsiung City, Taiwan.

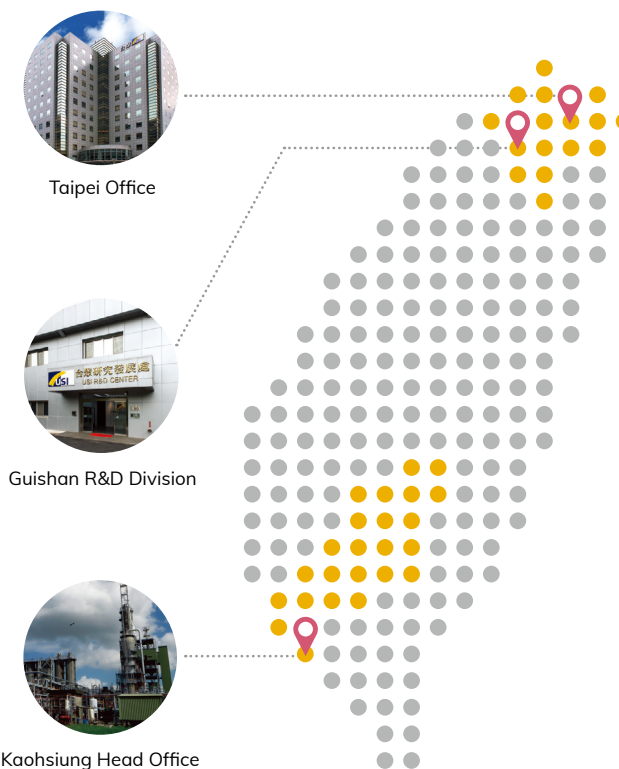
Basic Data GRI 102-1、102-3、102-4、102-5、102-7

Name of Company	USI Corporation
Industry	Plastics industry
Head Office	No. 330, Fengren Road, Renwu District, Kaohsiung City
Taipei Office	12F, No. 37, Jihu Road, Neihu District, Taipei City
Capital	NTD11.8 billion (by December 31, 2021)
Production	249,402 MT (2021)
Major Products	<ul style="list-style-type: none"> Ethylene Vinyl Acetate Copolymer (EVA) Low Density Polyethylene (LDPE) High Density Polyethylene (HDPE) Linear Low-Density Polyethylene (LLDPE) <p>PE resins become all kinds of plastic products in daily life after processing by downstream manufacturers.</p>
Numbers of employees	465 (by December 31, 2021)

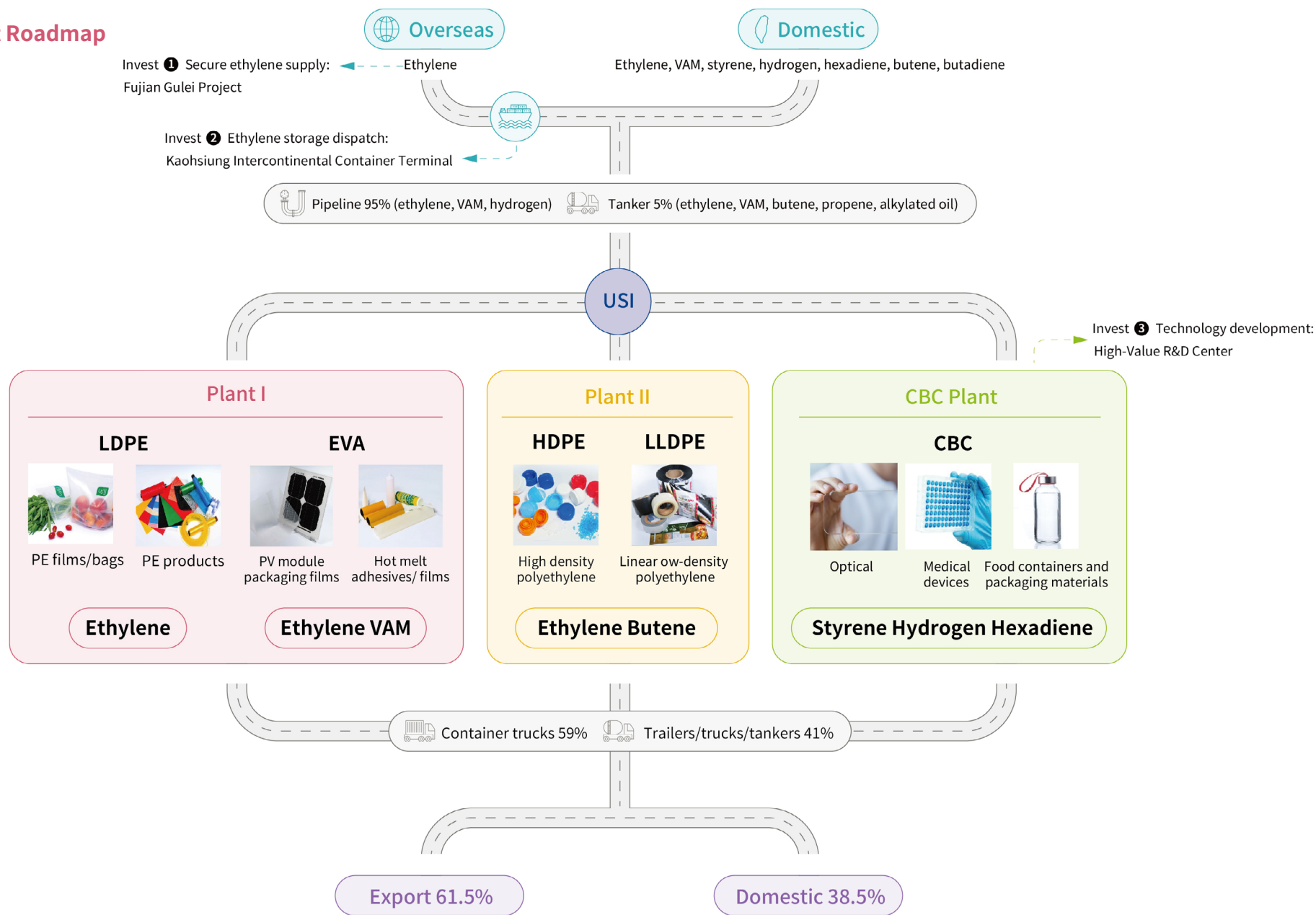
*Employees include 462 persons on a non-fixed-term contract and 3 on a fixed-term contract.

Locations

Major USI locations are located in Taiwan, including Taipei Office, Guishan R&D Division, and Kaohsiung Plant. Kaohsiung Plant comprises Plant I for producing LDPE and EVA, Plant II for producing HDPE and LLDPE, and the CBC plant for producing cyclic block copolymers.



Product Roadmap

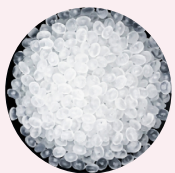


Across Europe and Asia with a total of 325 customers

Products GRI 102-2 · 102-6

Major Products

As a key PE manufacturer in Taiwan, we make continual improvement to improve product quality, increase product quantity, and supply excellent products to numerous downstream processors to raise the standard of processed products and cultivate markets with them. Our PE range covers the following four products:



Low Density Polyethylene (LDPE)
PAXOTHENE®



High Density Polyethylene (HDPE)
UNITHENE®



Ethylene Vinyl Acetate Copolymer (EVA)
EVATHENE®



Linear Low-Density Polyethylene (LLDPE)
LINATHENE®

ViviOn™ - Cyclic Block Copolymer

ViviOn™ is a new type of cyclic block copolymer (CBC) produced by full hydrogenation of styrene and conjugated alkene copolymer with special high-performance catalysts. This novel plastic is characterized by ultra-cleanliness, super high transparency, great thermal oxidation stability, excellent UV penetration rate and resistance, low water absorbency and low density. It is suitable for use in extrusion molding, injection molding, and blow molding. In addition, by adjusting the proportion of the soft and hard blocks in the chemical structure of the copolymer, ViviOn™ can change from a hard plastic material with a great mechanical strength into a flexible, soft plastic material. This special feature enables ViviOn™ to meet the demand of products with different natures and provide a broader space for product design.



Optical application-Optical films



Electronics-Carriers of semiconductor advanced process



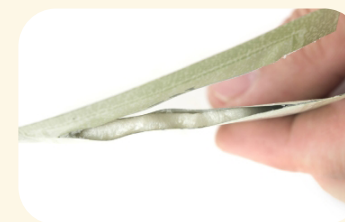
Medical device application: Vials and prefilled syringes



Biomedical test application: Microplates



Use of UVC disinfection: Portable UVC disinfection products.



PE and PP packaging application: Easy peel films

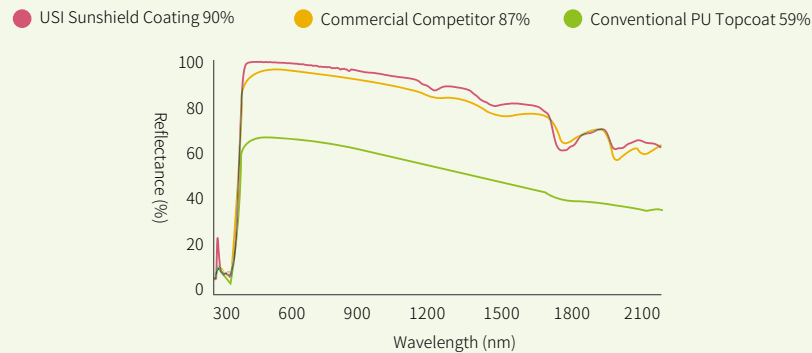
More informations:
<https://www.usife.com/en-us/dirProduct/frmProduct6>



Functional Coatings

USI is committed to energy conservation and emissions reduction over the years. In practice, we use sunshield coating to lower tank temperature and thereby reduce water cooling frequency to save energy and reduce VOCs to minimize carbon footprint. This sunshield coating is a water-based formula with total solar reflectance (TSR) up to 90% to quickly reflect heat without storing it.

TSR Comparison Between Products from USI and Other Manufacturers:



Eco-friendly coatings with excellent performance.



Sunlight reflection rate 90%



Thin coating



Reduce interior temperature of coatings



Save energy and carbon footprint



Eco-friendly water-based paints



Reduce water spray frequency / Reduce VOC effusion



More informations:

<https://www.usife.com/en-us/dirAbout/frmAbout5>



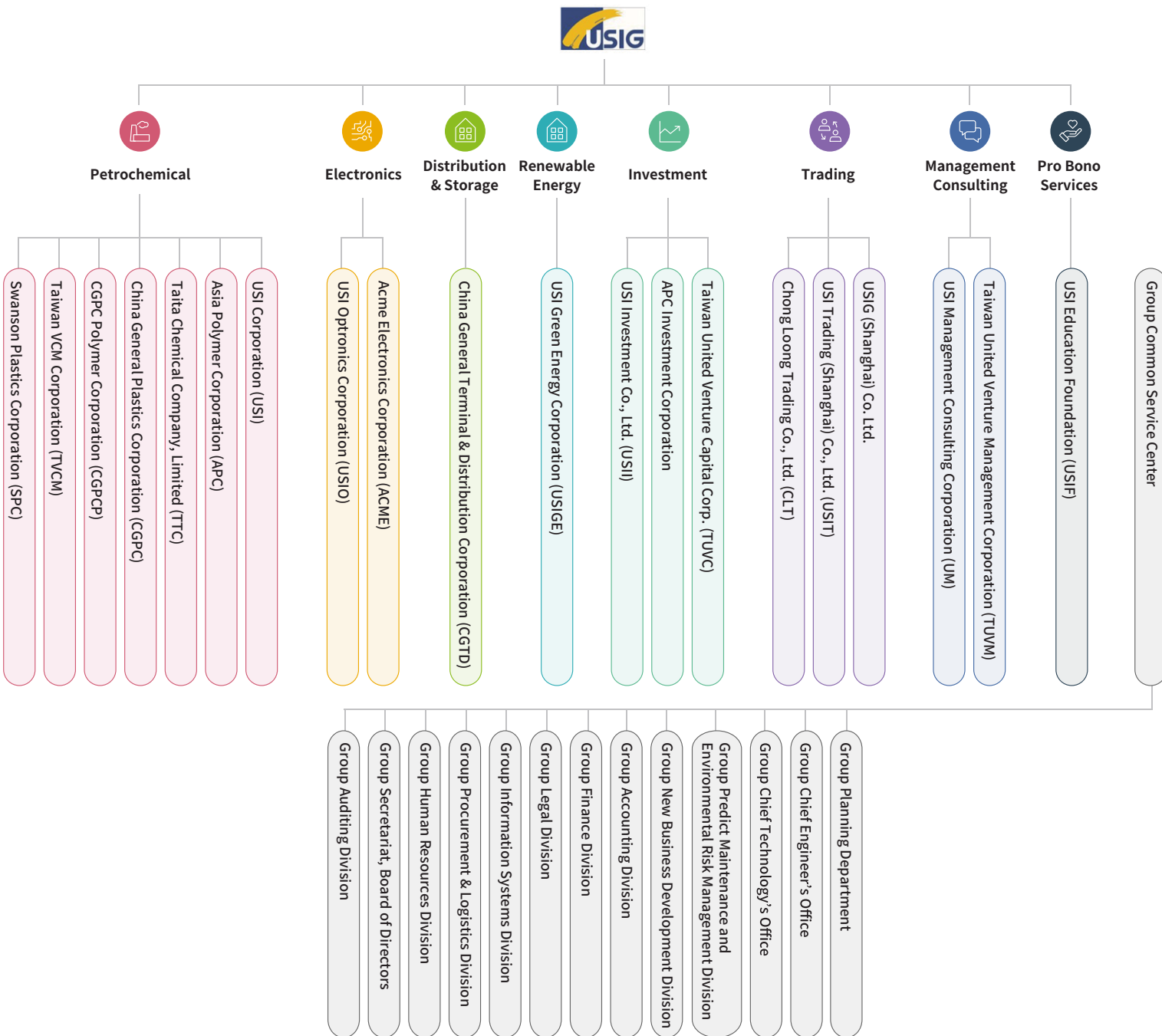
External initiatives and membership of associations GRI 102-12 · 102-13

We actively participate in technology exchange with professional groups to promote the professional growth of technologies and competencies in various fields through same-industry and cross-industry exchange and cooperation. Besides sponsoring associations and unions to hold professional technology seminars, publish journals, and promote sustainable development information, we also take important posts, such as the vice chairperson, director, chairperson, and others of these associations and unions to pursue the sustainable development of the industry through participating in association affairs and exerting our influence as a corporate member.

In 2021, we were member of 16 associations and non-profit organizations, such as the Petrochemical Industry Association of Taiwan, Chinese National Association of Industry and Commerce Taiwan, Chinese National Federation of Industries, and Taiwan Chemical Industry Association, with a total investment of about NT\$1,978,800. Please visit <https://www.usife.com/en-us/dirAbout/frmAbout9> for the details of organizations and memberships.

In support of external initiatives, besides becoming one of the 1,846 businesses worldwide supporting TCFD in November 2020, we began to join Earth Hour in 2018 and also participated in the Carbon Neutrality Alliance in April 2022.

About USI Group





Note: 1. Please refer to the USI website for the details: <https://www.usig.com>

2. Four publicly offered USI subsidiaries, including Asia Polymer Corporation (APC), China General Plastics Corporation (CGPC), Taita Chemical Company Limited (TTC), Acme Electronics Corporation (ACME) published their own ESG reports in 2021.

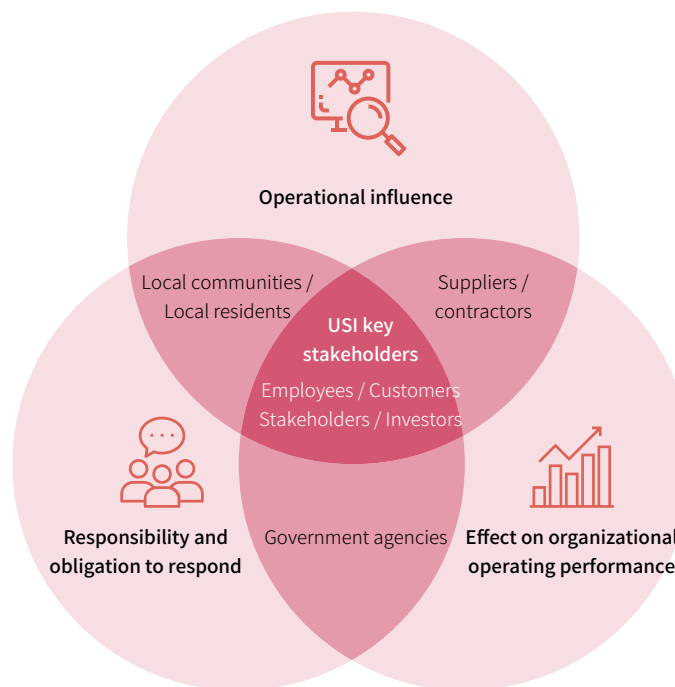
1.3

Stakeholder Engagement

GRI 102-40、102-42

We believe that in-depth communication with stakeholders is the foundation for sustainable management, and well-planned and effective communication can understand the topics that concern stakeholders. Therefore, apart from constantly establishing communication channels, we focus on and address issues that concern stakeholders, discuss their influence at different types of meetings and include them in the company's short-, medium-, and long-term strategies, such as the five-year plan and risk and opportunity management policies. We also adjust the directions of sustainable operations, and report to the board regularly.

Referring to the attributes of stakeholders as specified in AA 1000 SES: dependency, responsibility, influence, diverse perspectives, and tension, we identified 5 stakeholder groups: employees, customers, government agencies, suppliers/contractors, and shareholders or investors. We also added local communities and residents as the 6th stakeholder group required communication based on the underground pipeline operation and management plan. Besides gathering stakeholder opinions from various channels, we have also set up the ESG section on the corporate website to enhance communicability.



Stakeholder Communication Channels and Topics that Concern Them GRI 102-43、102-44

The identity of stakeholders, the topics that concern them and addresses are reported to the BOD every year.

Employees

Employees are the bedrock of corporate development and the partners of sustainable development. Therefore, we recruit outstanding employees, provide a safe and healthy work environment, develop and retain talents, provide employees with continuous care, and constantly care for their needs.

Concerned Topic

- Operating performance
- Employee benefits
- Occupational safety and health
- Labor-management relations
- Recruitment and retention

Communication Channel and Frequency

- New employee interviews (with relevant officers of all levels)
- Performance interviews (regularly)
- Labor-management meetings (quarterly)
- Union board meetings (quarterly)
- Union general meetings (annually)
- Employee Welfare Committee meeting (biannually)
- Occupational Safety & Health Committee meeting (quarterly)
- HSE/Energy Management Committee meeting (quarterly)
- Labor Pension Fund Supervisory Committee meeting (biannually)
- Employee engagement survey (irregularly)
- Internal health forums (five times a year minimum)
- Education/training (as planned)
- On-site tour inspections (at any time)

Engagement Results

- Adjustment of the remuneration and reward systems.
- Preferential distribution of year-end special bonuses.
- Enhancement of care for employee health.

Summary of Address in 2021

- The 2021 employee engagement survey was implemented with a six-point scale, and the results of all items fell above the industry's standard.
- The reward differentiation system was implemented to link the year-end bonus to reward and punishment. The employee year-end bonus was distributed in accordance with the Employee Performance Evaluation Regulations.
- To screen the high-risk group for special care, we ask night-shift employees and employees working shift to answer the overwork questionnaire and Framingham Risk Score questionnaire, arrange health checkups and EKG tests for them, and review their past history.
- Contact: Ms. Chen, Department of Personnel Affairs (02) 2650-3381

Customers

Customers are the main source of USI's income. Valuing technology innovation, we are committed to providing customers with the best service to create a win-win situation for both customers and the Company.

Concerned Topic

- Technology R&D
- Customer privacy
- Transportation safety management
- Industrial and public safety
- Customer satisfaction survey

Communication Channel and Frequency

- Customer satisfaction survey (biannually)
- Participation in trade fairs (once a year minimum)
- Sales visits (once a year minimum)
- "Contact us" on the corporate website (at any time)
- Contact by phone/email (irregularly)

Engagement Results

Communication with customers through various methods and constant provision of quality products and services for customers.

Summary of Address in 2021

- We provided 36 times of technical service for customers and assisted in 66 outsourced test projects.
- Of all 10 customer complaints, 1 case was dropped, and the remaining 9 cases were all resolved and closed.
- We conduct customer satisfaction surveys twice a year, with over 98.65% responses falling in the "satisfied" and "highly satisfied" options.
- Contact: Mr. Shen, Sales Department (02) 8751-6888 #3213

Government

Government policies and environmental protection laws and regulations have far-reaching influences on USI operations. Therefore, we maintain practicality and stability in professional operations.

Concerned Topic

- Market presence
- Legal compliance
- GHG emissions
- Air pollution control
- Waste management
- Worker safety
- Water resources management

Communication Channel and Frequency

- Participation in law and regulation outreaches or public hearings (irregularly)
- Participation in forums or seminars (irregularly)
- Official documents, material information (as prescribed by law)
- Market Observation Post System (as prescribed by law)

Engagement Results

- The Kaohsiung Labor Standards Inspection Office conducted the on-site PSM performance check.
- The Kaohsiung Labor Standards Inspection Office conducted an on-site inspection of the compliance with the Category C hazardous workplace.
- The Kaohsiung Labor Standards Inspection Office conducted an on-site review on the recordation of priority management chemicals, in-service training, and special health checkups.
- On-site publicity and audit of the correct use of PPE by the Kaohsiung Labor Standards Inspection Office.
- Dashe Industrial Park degradation
- The Kaohsiung Environmental Protection Bureau requested USI plant to perform the OP-FTIR monitoring and analysis around the boundary of Dashe Industrial Park.
- Renwu sanitation team audited the prevention and management of dengue fever.
- The Kaohsiung City Government implemented industry water rationing phase I at 7% and phase II at 11% in response to severe water shortages.

Summary of Address in 2021

- Implemented PSM to enforce equipment self-management by risk level.
- Completed the re-evaluation of B-line in April 2021 for the process 5-year re-evaluation report for Category C hazardous workplaces and revised the CBC plant report for 2021-2022.
- Implemented the periodic recordation of priority management chemicals, in-service training for the supervisors of processes using organic solvents and specific chemical substances, and organized special health checkups.
- Enhancing on-site inspection and PPE education/training for employees.
- Participated in various discussion meetings against land degradation to maintain the rights and interests of manufacturers and workers at Dashe Industrial Park.
- Set up the FTIR surveillance station in the plant every quarter.
- Periodically performed dengue fever walk-through inspection and recordation.
- Implemented the water conservation control plan and the ISO 46001 Water Efficiency Management Systems in coordination with the government's industry water conservation
- Contact: Mr. Lee, Industrial Safety Section (07) 735-9998 #2311 Mr. Hsieh, Environmental Protection Section (07) 735-9998 #2314

Stakeholders/Investors

Each shareholder is an important corporate asset. We constantly pursue excellence to maximize profit for shareholders.

Concerned Topic

- Local major investments
- Technology R&D
- Operating performance
- Customer privacy
- Supplier management

Communication Channel and Frequency

- Annual general meeting of shareholders (annually)
- Investment conference (biannually, minimum)
- Market Observation Post System (as prescribed by law)
- Contact information of spokespersons (at any time)
- Annual report (annually)
- CSR reports (annually)
- Financial statements (quarterly)
- “Investor Service” section on the corporate website (at any time)
- “Shareholder Service” section on the corporate website (at any time)
- “Audit Committee Email” on the corporate website (at any time)

Engagement Results

- Progress of Fujian Gulei Project
- Investment in the construction of ethylene storage tanks
- Status of corporate operations

Summary of Address in 2021

- AGM on July 26
- Investor conferences on May 24 and November 24
- Contact: VP Wu, Spokesperson (02) 2627-4745
Ms. Hung/Ms. Wu, Stock Affairs Dept. (02) 2650-3773

Suppliers/Contractors

Ethical corporate management is USI’s corporate culture. We carefully select suppliers and contractors to provide customers with quality products and employees with a safe work environment.

Concerned Topic

- Operating performance
- Local major investments
- Market presence
- Legal compliance
- Procurement practices

Communication Channel and Frequency

- Purchase procedures (on-demand)
- Supplier questionnaire survey (annually/new supplier)
- Performance review meeting (on-demand)
- Face-to-face review meeting (by product type)
- Purchaser visit (irregularly)
- Market survey (weekly)
- Contractor consultative organization meeting (irregularly)

Engagement Results

- Communication of the need to comply with labor human rights, OH&S, environmental protection, and code of ethics.
- Supplier evaluation results: All pass.

Summary of Address in 2021

- To enforce USI’s ethical corporate management policy and discern suppliers’ needs, we communicate with and address suppliers through the following methods:
 1. Supplier evaluation results, twice a year
 2. Topics concerned suppliers questionnaire, once a year
- Purchaser visits (1-2 times/quarter)
- Contact: Ms. Liu, Procurement & Logistics Division
(02) 8751-6888 #3217

Local communities/ residents

Local residents are the most important partners growing with USI. Social inclusion is our core strategy.

Concerned Topic

- Noise control
- Air pollution control
- Involvement with local communities and philanthropy
- GHG emissions
- Underground pipeline maintenance

Communication Channel and Frequency

- “Contact us” on the corporate website (at any time)
- Visits on local groups (three time a year minimum)
- Participation in community activities (irregularly)
- Interview or phone contact (irregularly)

Engagement Results

- Provision of learning sources for local schools to develop quality talents.
- Enhancement of neighborly activities.
- Implementation of the underground pipeline maintenance and operation program.

Summary of Address in 2021

- Constant adoption of the air quality purification zone of Renwu Special Education School
- Donated epidemic control materials such as facemasks and bleach to schools in local communities to fight COVID-19 together with residents.
- Participated in the 2021 rescue drills for accidents and disasters of cross-district and cross-industrial parks for regional joint defense organizations of the pipeline 6 unit of underground pipeline joint defense organization.
- Contact: Mr. Hsueh, General Affairs Section (07) 735-9998 #2262
Mr. Chen, Personnel Section (07) 735-9998 #2261

1.4

Management of Material Topics

GRI 102-46、102-47、102-49、103-1

Analysis and identification of material topics

- 1
 - Identify stakeholders
 - Collect information topics that concern stakeholders through various channels

- 2
 - Analyze topic materiality according to the “level of stakeholder concern” and “impact on USI”

- 3
 - The ESG Committee identifies material topics and defines the boundaries of material topics and corresponding GRI Standards topics.

- 4
 - Hold ESG Committee meetings and enforce management and execution.
 - Continuous review of short, medium, and long-term sustainable development programs.

To ensure the completeness of topic inclusiveness, besides referring to the topics in the GRI Standards published by GRI, ESG issues and trends of industries at home and abroad, and the UN SDGs, we also gathered issues of “high stakeholder concerns” through various communication channels and verified the effectiveness to address issues that concerned stakeholders of the information disclosed contained in the current ESG report with the “Stakeholder Questionnaire” posted on the corporate website. We began to identify material topics biennially in 2019. In 2021, we collected a total of 232 responses. Through the expertise in its duties and functions of each working group under the ESG Committee, we conducted an internal survey with 41 valid responses on the “impacts on USI” of governance, environmental and social issues. In 2021, we collected a total of 273 responses.

As ethical corporate management and legal compliance are our belief in sustainable development, legal compliance issues were excluded from the questionnaire. With the approval of the ESG Committee and working groups, legal compliance will become a required material issue for disclosure every year since the 2019 report.

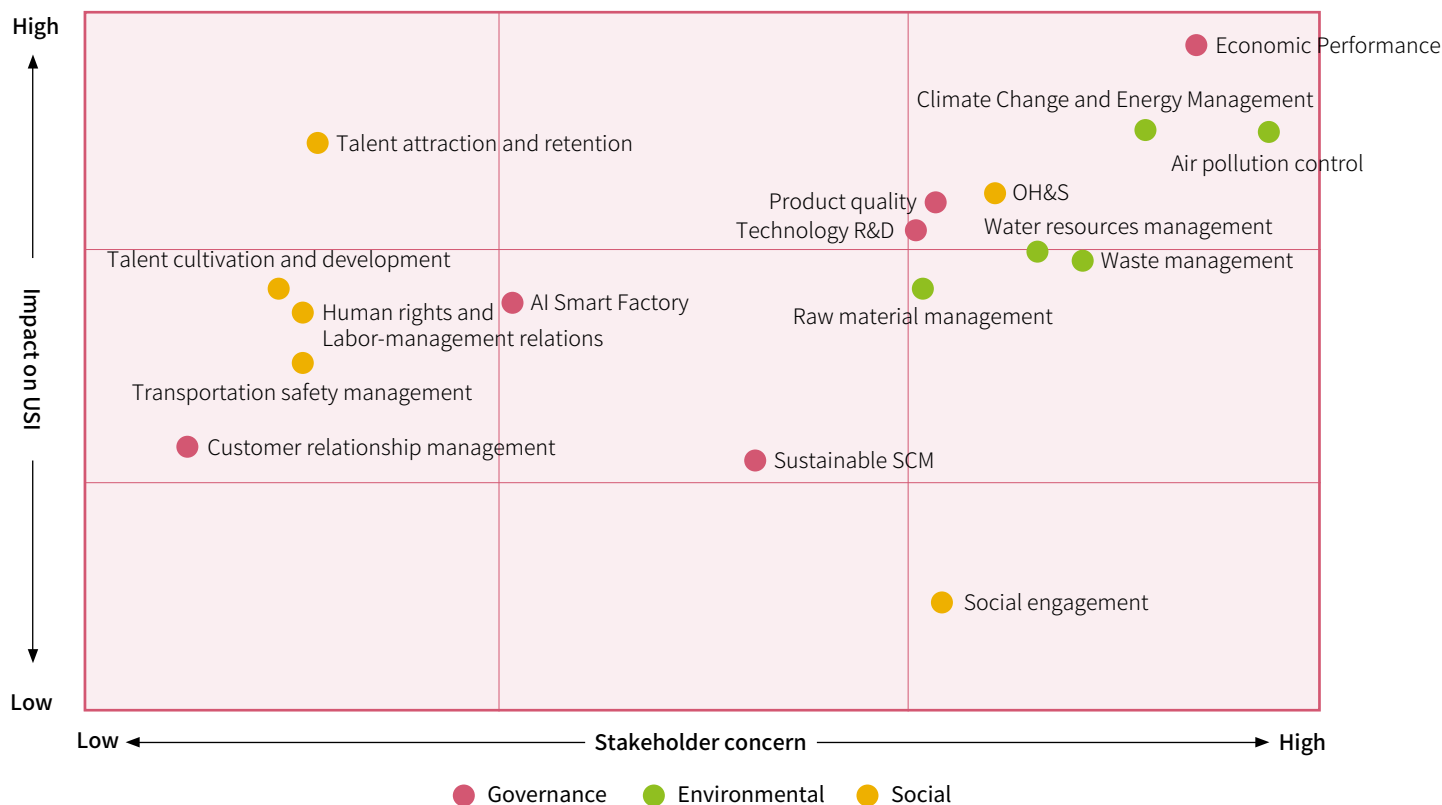


Identification of material topics

After analyzing the “level of stakeholder concerns” and the “impacts on USI” of all above issues based on the questionnaire surveys, we held meetings for members of the ESG Committee and working groups to discuss and identify each issue to produce the map (matrix) of material issues. After integrating 9 materials issues of high stakeholder concern and material USI impact, we included the legal compliance issue required

for disclosure every year as the focus of priority disclosure and address in the 2021 ESG report, making up to 10 material issues in total, for the reference of stakeholders wishing to understand more about USI. Additionally, we also periodically review the management approach, performance, and future planning of each material issue to ensure that the key performance indicators (KPIs) are achieved.

Analysis of Material Stakeholder Topics



*USI also voluntarily discloses the material topics identified in 2021. See 6.1 GRI Standards Content Index for details.



Changes in material topics in 2021 GRI 102-44, 102-47, 102-49


Compared to 2020, the changes in material topics are tabulated below. The responsible units proposed implementation plans and short-, medium, and long-term targets for each material topic and reviewed their effectiveness periodically. The value chain concept has been included in the boundary to expand the scope of consideration of the impacts of each material topic.

Aspects	Material Topics				Level of Concern	Causes of Change
	2020		2021			
Governance	Economic performance	1	Economic performance	1	●	Concerns remained unchanged.
	Technology R&D	4	Technology R&D	6	↓	Decrease in concern
	Product quality	6	Product quality	5	↑	Increase in concern
	Legal compliance	—	Legal compliance	—	●	Legal compliance is USI's belief in sustainable development
Environmental	Air pollution control	3	Air pollution control	2	↑	Increase in concern
	Waste management	7	Waste management	8	↓	Concern decreased because waste management was optimized.
	Water resources management (not included)	11	Water resources management	7	↑	Concern increased and thus included as a material topic for the first time. In response to global climate change, valuable water resources are reclaimed for reuse.
	Climate change and energy management	9	Climate change and energy management	3	↑	Concern increased because it is an internationally concerned topic of high stakeholder concerns.
Social	OH&S	2	OH&S	4	↓	Concern decreased because occupational safety measures were well practiced.
	Talent development	5	Talent attraction and retention	9	↓	Text revision: ...achieve the personal career development of employees and thereby enhance overall corporate performance.
	Transportation safety management	8	Transportation safety management	15	↓	Concern decreased because Transportation Safety Management was well practiced.

*Material topics are the top 9 topics in the level of concern and level of impact. ● Unchanged


Progress of implementation of material topics

Aspects	Material Topics	Level of Completion in 2020	Actual Progress in 2021
 Governance	Economic performance	<ol style="list-style-type: none"> Earnings per share (EPS): NT\$2.25, the highest in the last 7 years. HDPE sales at 120,379 MT, a new high in USI history. The total sales volume of EVA/PE in 2020 increased by 6% from 2019 to 270,920MT. 	<ol style="list-style-type: none"> Earnings per share (EPS): NT\$4.84, a new high in USI history. EVA sales: 147,000 MT, a new high in USI history. Annual net income at NT\$3.52 billion, also a new high in USI history. Development of high-liquidity injection HDPE products. Commercial operations of the Fujian Gulei Project in December 2021.
	Legal compliance	Improvement was completed and re-verified by the competent authorities for 5 environmental protection offenses and 1 industrial safety offense.	Improvement was completed and re-verified by the competent authorities for 1 environmental protection and/or regulatory offense and 1 OH&S offense.
	Technology R&D	New product development: 5 pcs/year, achievement 125%.	New product development: 4 pcs/year, achievement 100%.
	Product quality	Targets: Customer complaints of plants I/II: <6 cases/<8 cases Controllable defect rate of plants I/II: <0.45/<0.9% Actual: 1. Confirmed customer complaints of plants I/II: 5 cases /8 cases 2. Controllable defect rate of plants I/II: < 0.09%/<0.23% * *Defect Rate was expressed in Controllable Defect Rate from 2020.	Targets: Customer complaints of plants I/II: <6 cases/<8 cases Controllable defect rate of plants I/II: <0.3/<0.8% Actual: 1. Confirmed customer complaints of plants I/II: 6 cases /3 cases 2. Controllable defect rate of plants I/II: 0.12 / 0.5%
 Environmental	Water resources management (new topic in 2021)	<ol style="list-style-type: none"> Water conservation: 3.62% Reclaimed water: 7,945MT 	<ol style="list-style-type: none"> Water conservation: 4.26% Reclaimed water: 10,986MT Coordination with the government's industry water conservation (phase I: 7% and phase II: 11%) from April-May. Implementation of water conservation to control consumption. Implementation and certification of the ISO 46001 Water Efficiency Management System.
	Air pollution control	<ol style="list-style-type: none"> VOCs equipment leakage: 0.057% The TO system was completed in 2020, commissioning started on 2020.08.21, high-intensity VOCs processing results: VOCs 4ppm, reduction rate >99.9%; low-intensity VOCs processing results: VOCs 6ppm, reduction rate >99.3%. 	<ol style="list-style-type: none"> VOCs equipment component leakage: 0.038% Completed the equipment pipeline improvement of lines B and D to reduce the fugitive emissions of VOCs. Added 3 tanker unloading arms and completed the improvement of 6 catalyst mixing tanks to effectively reduce the fugitive emissions of VOCs. Completed the cooler renewal to prevent the organic substance leakage due to equipment corrosion.
	Waste management	<ol style="list-style-type: none"> Monthly industrial waste storage audit: Compliance with the regulations. Enhancement of the flow control of waste cleanup and disposal by performing spot checks on 4 contractors in 2020, and no nonconformity was found. Expansion and assessment of the waste reduction program: Treated by stirring and heating to separate VA in the wax by heating and prevent the fugitive emissions of VOCs with water sealing. 	<ol style="list-style-type: none"> Monthly industrial waste storage audit: Compliance with the regulations. Enhancement of the flow control of waste cleanup and disposal by performing spot checks on 10 waste cleanup contractors and 7 waste disposal contractors in 2021, and no nonconformity was found.
	Climate Change and Energy Management	<ol style="list-style-type: none"> Product energy consumption reduced from 4.58 GJ/MT in 2019 to 4.28 GJ/MT in 2020. Implemented 6 energy improvement projects to save power consumption by 1.67%. 	<ol style="list-style-type: none"> Product energy consumption reduced from 4.28 GJ/MT in 2020 to 4.34 GJ/MT in 2021. Implemented 5 energy improvement projects to reduce power consumption by 0.75%, with an annual conservation rate (2015-2021) of 1.38%.

Aspects	Material Topics	Level of Completion in 2020	Actual Progress in 2021
 Social	OH&S	Incident Rate=1.28 ① Checked pipeline corrosion at 57 spots. ② Replaced 3 corroded derime pipelines. ③ Checked leakage on and locked four coolers and scheduled maintenance and repair. ④ Located reactor steam leakage points and scheduled maintenance and repair in 2021. ⑤ Purchased and connected spare thermoplastic pump (M/P) and scheduled installation and testing in 2021. ⑥ Completed the specifications for and purchased the tanker unloading jib and scheduled delivery and installation in 2021. ⑦ Completed the installation, testing, personnel education/training, and permit acquisition for the TO. ⑧ Removed the rust and replaced the anti-corrosion coating of the corroded pipelines in the Teal Pump area. ⑨ Completed rust removal, welding, screw replacement, and painting of the cooling tower. ⑩ Fortified and renewed the drain grates in the unloading area of the 1,3-butadiene feedstock tankers. ⑪ Completed inspection/monitoring personnel training, and the tour inspection, visual inspection, and thickness test of underground pipelines. ⑫ Verified and repaired the underground pipelines between the CPC Linyuan Petrochemical Complex and the USI Kaohsiung Plant through excavation. ⑬ Improved the management of change process, updated the SOP (OP-KHT-810-01), and implemented the new-version database.	Incident Rate =0 ① Completed the 6-month inspection of 37 coolers, replaced 1 corroded and leaked pipeline section, and two other sections will be replaced during the downtime in 2022. ② Purchased new reactors to prevent leakage due to sleeve breakage during startup and shutdown. Delivery will be made at the end of 2022. ③ Completed the pipeline tie-in and C-line pipeline vibration correction project. Tests will be performed in 2022. ④ Completed the installation and the education and training for on-site workers for the mobile tanker unloading arms to enhance convenience and safety of tanker materials unloading. ⑤ Constructed the new swivel unloading arm systems for ethylene, VA, butene, and propylene to improve the safety of materials unloading. ⑥ Completed the spot check of 140 steam injection points to prevent hazards from pipeline corrosion hazards. ⑦ Replaced the D-1 train cooler, and the coolers of EF-line and B-line will be replaced during downtime in 2022. ⑧ Renewed the pipelines of the recycle train cooler in January 2022. ⑨ Renewed the M/P outlet pipelines of D-line in January 2022. ⑩ Added the explosionproof and soundproof glass to the processing shop. New explosionproof and soundproof glass will be added to the compressor area in 2022. ⑪ Improved the corrosion of the condensate underground pipelines of the processing shop. ⑫ Completed visual inspection and thickness check of the overground pipeline sections. ⑬ Completed 12 hours of on-site IPQC education and training. ⑭ Completed the daily walk-through inspection and recordation and the bimonthly self-imposed walk-through inspection and audit. ⑮ Completed the water pumping works at the pressure relief valve area of the liquid breaker.
		① Frequency-Severity Indicator (FSI) =1.27. (1) Workers ran the operation according to the work instruction WI-KHB-713-77 for (2) rust removal, welding, screw replacement, and painting. ② Monitoring indicator excess=0. Completed workplace environment monitoring in H1 and H2, and no nonconformity was found.	① Frequency-Severity Indicator (FSI)=0. Rust removal, supplementary welding, screw replacement, and paint maintenance of equipment and pipelines. ② Monitoring indicator excess=0. Completed on-site monitoring on 2nd organic solvents, specific chemical substances, noise, and CO ₂ . The effectiveness of new QC fume hoods was also inspected. No nonconformity is found.
	Shutdowns caused by key equipment=2. The engineering department completed 3,406 equipment maintenance missions; completed the medium-high voltage distributor replacement of the K-20 electrical room.	Downtime caused by key equipment=1, machinery maintenance by the engineering department = 5,048 units.	
	Talent attraction and retention (new topic in 2021)	① Turnover (excluding retirement) of all employees: 4.3%. ② Continuous employment of persons with disabilities. ③ Provision of well-designed group insurance plans and contribution of pension by law to protect the later life of employees. ④ Employee engagement survey and idea feedback, and improvement. ⑤ Annual employee health checkup. ⑥ Completion of labor-management meetings.	① Turnover (excluding retirement) of all employees: 3.4%. ② Employment of full-quota (4) of persons with disabilities by law. ③ Provision of well-designed group insurance plans and contribution of pension by law to protect the later life of employees. ④ Annual employee health checkup. ⑤ Completion of labor-management meetings.

Material topics and value chain GRI 102-46、103-1

● Direct impact ○ Indirect impact

Aspects	Material Topics	Rationale	GRI Standards Topic	Value Chain				SDGs	Response
				SCM	Operational	Product	Social		
 Governance	Economic performance	Sustainable business operations, legal compliance, pursuit of profit, maintenance of stakeholder rights and interests, and development of high value-added products.	GRI 201:2016 Economic Performance	○	●	●		2.2 Economic Performance*	
	Legal compliance	Legal compliance is USI's belief in sustainable development and its foundation of corporate governance.	GRI 307:2016 Environmental Compliance GRI 419:2016 Socioeconomic Compliance	●	●	●	●	2.4 Ethical Corporate Management and Legal Compliance*	
	Technology R&D	The R&D Division located in the USI R&D Center proactively recruits and cultivates professional talents to engage in R&D and innovation and provides quality products and services to meet customer demands.	N.A.		●	●	●	2.5 Intelligent Management 3.1 Technology R&D*	
	Product quality	Product quality is the foundation of enterprise sustainable development. Total participation in quality is the key to success of USI's quality culture development.	N.A.	●	●	●		3.2 Product Quality*	
 Environmental	Water resources management	In response to global climate change, valuable water resources are reclaimed for reuse through water conservation and emission reduction measures.	GRI 303:2018 Water and Effluents	○	●	●	●	4.2 Water Resources Management*	
	Air pollution control	Continual improvement of environmental protection for "zero pollution and zero emission."	GRI 305:2016: Emissions	○	●		●	4.3 Air Pollution Control*	
	Waste management	Waste recycling through reclamation, reuse, and proper processing. Continual improvement of environmental protection for "zero pollution and zero emission."	GRI 306: 2020 Waste	○	●	○	●	4.4 Waste Management*	
	Climate change and energy management	Develop related energy conservation and carbon reduction measures. Enhance climate adaptability. Reduce GHG emissions. Reduce operating costs. Enhance process efficiency. Raise corporate competitiveness.	GRI 302:2016 Energy GRI 305:2016: Emissions	○	●	●	○	4.5 Climate Change and Energy Management*	
 Social	OH&S	Take care of employee health. Prevent industrial accidents. Enhance employee OH&S protection. Develop the emergency response capacity and self-imposed safety management of employees.	GRI 403:2018 Occupational Health and Safety	○	●	○	○	5.2 Occupational Health and Safety*	
	Talent attraction and retention	While talents are the Company's irreplaceable core asset, and maintaining steady and continuous workforce growth is the cornerstone of sustainable operations, we encourage employees to keep making self-improvement through well-planned training courses, welfare system, and salary in order to achieve the personal career development of employees and thereby enhance overall corporate performance.	GRI 401:2016 Employment GRI 404:2016 Training and Education		●	○	○	5.3 Talent Attraction and Retention*	



Chapter 2

Corporate Governance and Operational Performance

Material topics in this chapter

- Economic performance
- Legal compliance

Performance Highlights

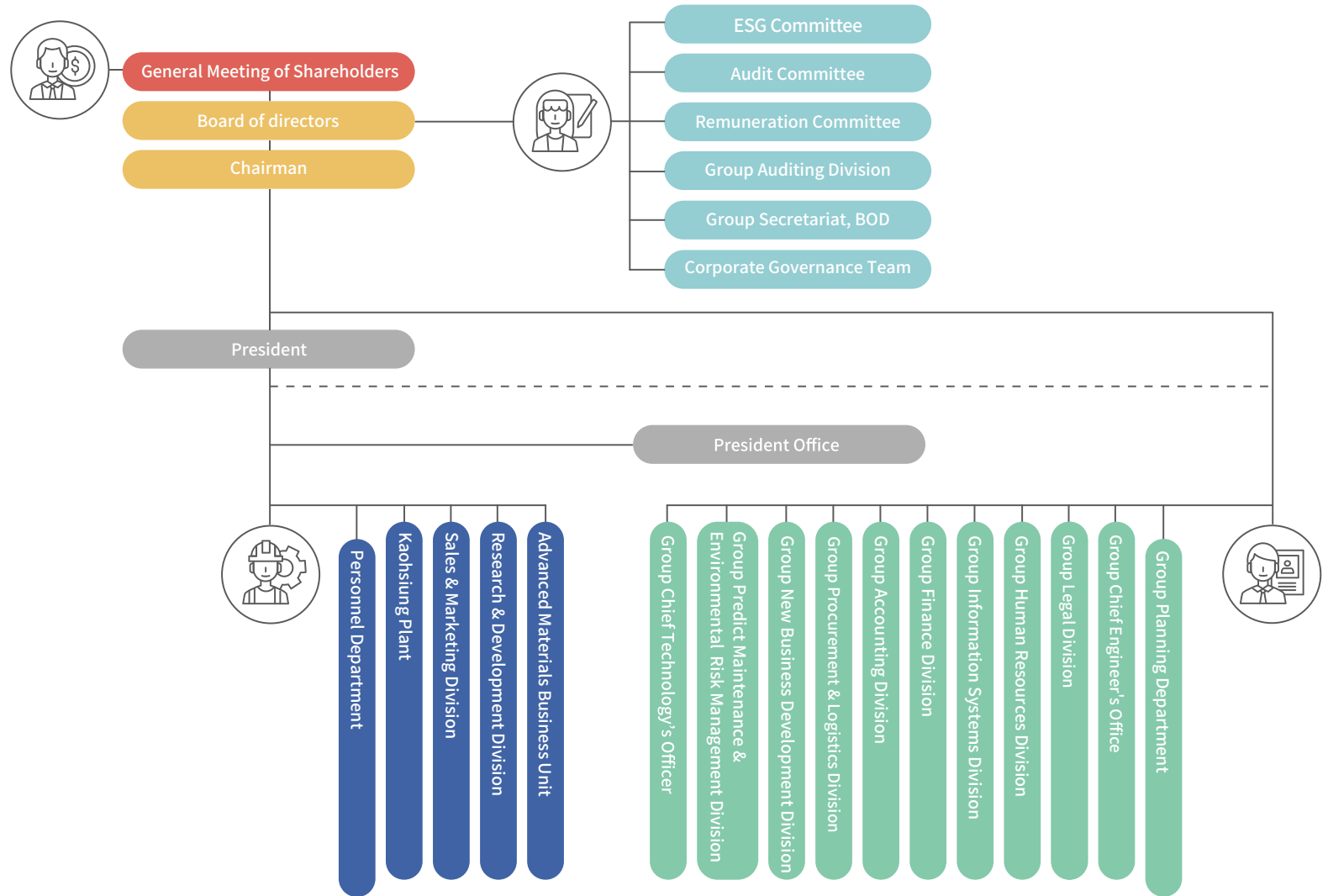
- Earnings per share (EPS): NT\$4.84, a new high in USI history.
- EVA sales increased by 12,107MT from 2020 to 147,000MT, a new high in history.
- Top 6 ~ 20% at the 8th Corporate Governance Evaluation
- Promotion by Taiwan Ratings to twA/twA-1 with a “steady” outlook.




2.1 Corporate Governance

GRI 102-18、102-19、102-22、102-23、102-26

USI Management Organization Framework




[About USI](https://www.usife.com/en-us/dirAbout/frmAbout4.aspx)
<https://www.usife.com/en-us/dirAbout/frmAbout4.aspx>


Board of Directors

Board composition and operation

The Board of Directors (BOD) is formed by nine directors, including three independent directors, with rich experience in respective professional fields. Each director is entitled to a term of three years and a second term. Candidates of directors and independent directors are selected through nomination. A total of 5 board meetings were held in 2021. For the details regarding board operations, please refer to page 31 of the USI Annual Report 2021.

2021 board performance assessment

Based on the “BOD Performance Assessment Regulations” amended in November 2019, the performance assessment of the board of directors (BOD), individual directors, the Audit Committee, and Remuneration Committee was completed in January 2022. The evaluation period was January 1-December 31, 2021. The evaluation result is good. Please visit: <https://www.usife.com/ESG/en-us/ESG21.aspx>



Recommendation and implementation ▶

Although directors did not make any specific recommendation, in view of the rising concern about environmental, social, and governance issues across the globe, we have implemented various measures according to the Governance 3.0-Sustainable Development Roadmap promulgated by the competent authorities. Besides making continual improvement in governance effectiveness, we also review, plan, and implement carbon reduction targets and green power development strategies in particular in order to meet international standards and accomplish the ultimate goal of sustainable business development.

Director professional competence enhancement in 2021

To improve the professional competence of directors, we provide information of related further education courses for directors and assist them with the registration. We arranged 6 hours of internal continual education courses and a total of 60 hours of external continual education courses. All 9 directors (including independent

directors) completed training for the length (hours) as stated in the Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEX Listed Companies. For the details regarding continual education courses and length, please refer to page 35-36 of the USI Annual Report 2021.

Chief corporate governance officer (CCGO)

To protect the rights and interests of shareholders and improve the competence of the board of directors, BOD made a resolution on May 13, 2019 to assign Director of Legal Division, Erik Chen to be the Chief Corporate Governance Officer (CCGO) as the top officer of USI’s corporate governance. Director Erik Chen has been the chief legal officer of a public company for more than 6 years, with handling the affairs of board meetings and meetings of shareholders as the main duty.

Please visit our corporate website at: <https://www.usife.com/zh-tw/dirInvestor/frmInvestor1.aspx> or refer to page 50-53 of the USI Annual Report 2021 for the details regarding the duties and continuing education.

Functional Committees

Under the BOD, we have established three functional committees: Audit Committee, Remuneration Committee, and ESG Committee by competence to establish and review policies that relate to the responsibility and authority of each committee to strengthen corporate governance.

Name	Audit Committee	Remuneration Committee	ESG Committee
Quintin Wu			✓
Ko-shun Wang			✓ Deputy Chief
Sean Chen	✓ Convener	✓	
Woody Tyzz-Jiun Duh	✓	✓	✓ Chief
Yancey Hai	✓	✓ Convener	✓

Audit Committee

- 1 The term of the current committee commenced on June 12, 2020 and will end on June 11, 2023. There are three seats in the committee formed by all independent directors.
- 2 The Audit Committee holds at least one committee meeting each quarter and extraordinary meetings as necessary. Five committee meetings were held in 2021, and the personal attendance rate of members was 100%.

Remuneration Committee

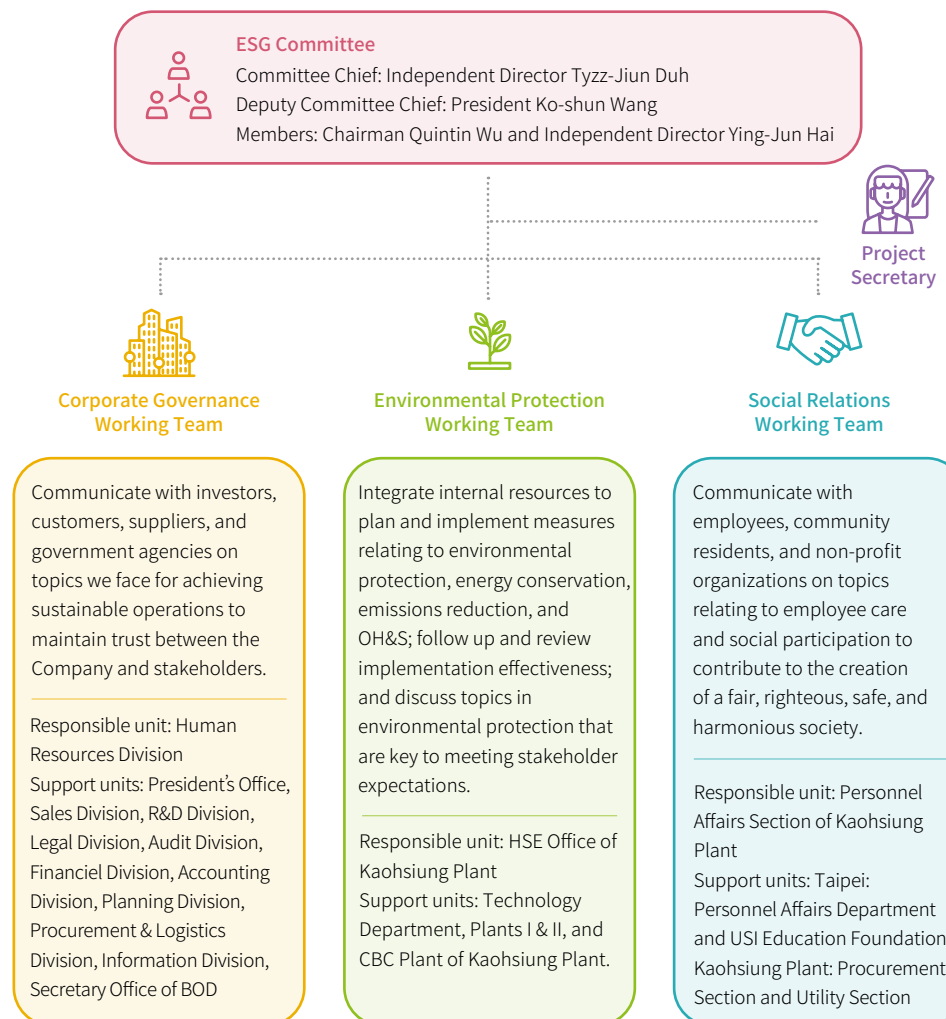
- 1 There are three seats in the committee formed by all independent directors.
- 2 The Remuneration Committee holds at least two committee meetings each year. Three committee meetings were held in 2021, and the personal attendance rate of members was 100%. Please visit our corporate website, refer to our annual report, or visit the Market Observation Post System (MOPS) for the details regarding the operations of this committee.
- 3 The committee establishes and periodically reviews the policy, system, standard, and structure of the salary and remuneration of directors and officers; periodically assesses and determines their salary and remuneration. [GRI 102-36](#)

ESG Committee

- 1 The term of the current committee commenced on June 15, 2020 and will end on June 11, 2023. There are four members in the committee, including the chairman, president, Independent Director Woody Tyzz-Jiun Duh, and Independent Director Yancy Hai.
- 2 Duties of the committee include:
 - Discussion and establishment of the ESG policy.
 - Discussion and establishment of ESG strategy planning, annual plans, and project plans.
 - Supervision of the implementation of ESG strategy planning, annual plans and project plans, and assessment of their performance.
 - Review of the ESG report.
 - Report of the annual ESG results to BOD every year.
 - Other assignments instructed by BOD.
- 3 The ESG Committee holds meetings at least two times each year. Two committee meetings were held in 2021, and the personal attendance rate of members was 100%.

Minutes of meetings over the years: <https://www.usife.com/ESG/en-us/ESG21.aspx>

- 4 We established three working groups for corporate governance, environmental protection, and social relations as shown below:



ESG Committee Annual Tasks and Next-Year Annual Plan:

Summary of ESG Performance in 2021 reported to the Board of Directors

- 1 Constantly implemented energy management at the USI Building.
- 2 Implemented carbon footprint and water resources management.
- 3 Awards
 - (1) Won the “Top 50 Taiwan Corporate Sustainability Awards” and “Platinum Corporate Sustainability Report Award” at the 2021 Taiwan Corporate Sustainability Awards (TCSA).
 - (2) 2021 GCSA Sustainability Reporting – Bronze Class
 - (3) Industrial Contribution Award at the 2021 TCIA Elite Award & Product Innovation Award.
- 4 Published the Chinese and English version of the 2020 CSR Report in June and August respectively.
- 5 Other sustainability-related activities, such as the 2021 USI Cup Weight Loss Competition; energy conservation, carbon reduction, and power saving plans; forestation adoption program; monetary and in-kind donations for epidemic control; and community care and social welfare activities.

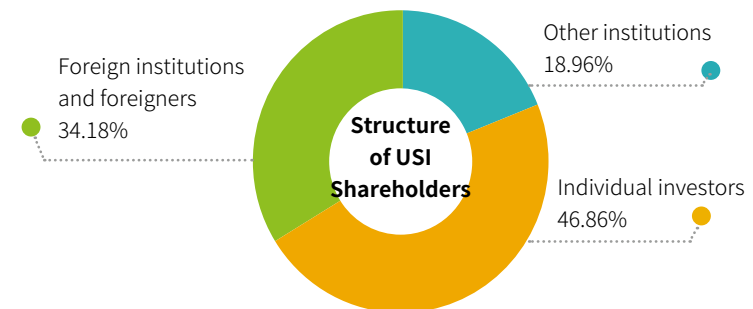
2022 ESG Work Plan

- 1 Constantly implement the USI 5-Year Operational Plan.
- 2 Seek opportunities for cooperation with external suppliers to promote green power development, carbon neutrality response, and the circular economy.
- 3 Participate in business sustainability ratings or awards.
- 4 Participate in social welfare activities.
- 5 Publish the Chinese and English version of the 2021 ESG Report in June and August respectively.
- 6 Continue to implement various ISO systems.

Maintenance and shareholder rights and interests and information transparency

By the April 2, 2022 the closing date of stock transfer for the 2022 AGM, individual and foreign corporate and individual investors are the major shareholders of USI. The name and stake of shareholders holding over 5% of USI shares and the top ten shareholders of USI are disclosed in our annual report.

https://www.usife.com/USIWebFiles/Meeting/MeetingP3_111.pdf#page=109



USI is committed to providing shareholders with transparent and real-time corporate information. In 2021, besides providing shareholders with the related information through two investor conferences, the AGM, MOPS, the investor section of the corporate website, annual report, and ESG report, we also constantly gathered shareholders' opinions for the reference of decision-making by the management team.

Every year, we hold investor conferences and the AGM regularly to state the company's financial performance and business status. In addition, we post information regarding our business performance, financial information, and material information on TWSE's MOPS. We have also set up the “Investors” section on our Chinese and English websites to disclose information relating to the company's governance, business announcements, financial statements, investor conferences, and latest news. We value the rights and benefits of foreign investors and the trend of enterprise internationalization. Therefore, since 2018, we began to enhance information disclosures in English in the annual report and on the MOPS and corporate website. Through various methods, we actively develop unfettered channels for two-way communication with shareholders to maintain their rights and interests.

Risk Management Organization Framework

For effective risk management, the BOD, Audit Committee, President's Office, Audit Office, all risk management units, and all subsidiaries participate in and operate the risk management mechanism.



Audit Committee and BOD

At USI, the President's Office supervises the corporate risk management and answers to the BOD and Audit Committee. The Audit Committee audits the effectiveness of the company's internal control system to ensure internal control is effectively implemented and supervises the control of inherent or potential risks. BOD approves the overall risk management policy and important decisions.



President's Office

Implement risk management and coordinate its operation, and report the performance of risk management to the Audit Committee and BOD at least once a year.



Group Audit Division

The Audit Division audits risk management within the company, timely provides management with the information of inherent or potential risks under internal control to ensure compliance with existing regulations and control procedures.



Risk Responsible Units

All risk management units should fully acknowledge the risks in their business, analyze the related risks within the unit, and include related risk management mechanism while establishing management regulations. All risk management units should also supervise the related risks within the unit to ensure the risk management mechanisms and procedures are effectively implemented.



Subsidiary

Each USI subsidiary shall clearly identify all risks within the subsidiary and implement the required operations and risk management according to the regulations to ensure the involved risks are controlled within the risk profile.

Please refer to 2.3 Risk Management of this report for the policy, process, and performance of the risk management.

2.2

Economic Performance

GRI 103-2、103-3

SDG 8

Sustainability Principle: Unity Governance

Significance and Strategy	<p>Significance to USI</p> <p>Sustainable business operations, legal compliance, pursuit of profit, maintenance of stakeholder rights and interests, and development of high value-added products.</p>	<p>Strategy and Approach</p> <p>Vertical integration to reduce feedstock and production costs, increase product added value, and enhance custom product development.</p>	<p>Commitment</p> <p>Maintain the rights and interests of shareholders and create profit constantly. Data scope: USI coverage 100%</p>
Achievement and Goal	<p>2021 Goals</p> <ol style="list-style-type: none"> Personnel management and differentiated assessment Construction of the production strategy system Equipment renewal Gulei Project 	<p>2021 Projects</p> <ol style="list-style-type: none"> Employee Reward Differentiation Project Development of new product specifications Control of startup and shutdown losses across the plant. Increase in VA recovery to reduce by-products. 	<p>2021 Achievements</p> <ol style="list-style-type: none"> EPS at NT\$4.84, a new high in USI history. EVA sales: 147,000 MT, a new high in USI history. Annual net income at NT\$3.52 billion, also a new high in USI history. Development of high-liquidity injection HDPE products. Commercial operations of the Fujian Gulei Project in December 2021.
Sustainable Development Milestone	<p>2022 Targets</p> <ol style="list-style-type: none"> Commercial operations of the Gulei Project Completion of the High-Value R&D Center Construction of the Kaohsiung Intercontinental Container Terminal Project Equipment replacement Development of high-value products 	<p>3-Year Goals</p> <ol style="list-style-type: none"> Equipment replacement Reduction of production cost and enhancement of materials recycling rate. High-value products Planning of and investment in the downstream development projects of the Gulei Project. Completion and operation of the Kaohsiung Intercontinental Container Terminal. Planning and implementing the circular economy 	<p>5-Year Goals</p> <ol style="list-style-type: none"> Constant development of HV products. Planning of and investment in the downstream development projects of the Gulei Project. Development of green energy and energy storage and response to carbon neutrality. Construction of an integrated management center.
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> Annual report Governance evaluation ESG Report 	<p>Grievance Mechanism</p> <ul style="list-style-type: none"> Meetings of shareholders “Investor Service” on the corporate website Investor conferences 	<p>Chapter Summary</p> <ol style="list-style-type: none"> Financial performance Major investments

The 2021 EPS was NT\$4.84, a new high in USI history. In 2021, the packaging material plant reduced production in response to the EVA supply shortage from Texas in the early year and EVA price escalation after Spring Festival. Alongside the introduction of new EVA capacity in mainland China, the EVA price began to fall in Q2. Due to the serious delay in machine installation and the government's introduction of various stimulation programs in mainland China during H1, the PV demand soared to boost the EVA price to a new high in history in October. However, the packaging material plant needed to adjust the EVA price when the inflation of material costs was unable to transfer. In terms of sales volume, EVA sales increased by 9% over last year to 147,000MT, a new high in history. The demand for HDPE products returned to normal due to the stable supply of face masks. In terms of production, through continual process improvement, old equipment replacement, production efficiency and quality improvement to reduce the production cost, and the active trial run of niche products, the annual production volume increased by 2% over last year to 249,402MT. We also actively improved industrial safety and environment protection, promoted process safety management (PSM), implemented

energy conservation and carbon reduction programs. For example, we invested in solar plants with a capacity of 5MW to generate green power up to 6 GWh and reduce carbon by 3,000 tCO₂e to achieve the goals of sustainable business development and carbon reduction. In R&D, besides continuing with the process optimization of the optical-grade cyclic block copolymer (CBC) for quality and performance improvement, we also engaged in the development of new specifications for special packaging materials. Additionally, we also made major breakthroughs in UVC application for disinfection and sterilization and passed the certification of new healthcare-related standards and regulations to actively promote UVC use in vials and pre-filled syringes. We also continued to diversify the application in ink, shoe styrene, and electrical wires/cables for high value-added EVA products. The production of high MI HDPE materials was stabilized, and sales and shipment of products for use in injection molding continued. We also made continual process improvement of existing PE products for quality improvement to promote products to advanced market applications.

USI Financial Performance 2019-2021 GRI 201-1

(Unit: NTD thousands)

Item	Basic Element	2019	2020	2021	
Direct economic value	Revenue (Note 1)	10,966,471	10,172,220	16,034,251	
Distributed economic value	Operating cost (Note 2)	10,263,751	9,263,780	12,512,341	
	Employee wages and benefits (Note 3)	585,451	665,430	864,134	
	Payment to investors (Note 4)	2019 cash dividends distributed in 2020	594,382	2020 cash dividends distributed in 2021	1,188,763
		Interest expense	104,366	Interest expense	105,041
	Payment to the government expense (Note 5)	21,282	133,648	156,246	
	Investments in community (Note 6)	4,229	3,623	4,337	
Residual economic value (Note 7)		1,281,364	2,409,778	5,191,394	

Note 1: Revenue refers to sales income.

Note 2: Operating cost refers to sales cost + operating expenses

Note 3: Employee wages and benefits are included in the said operating cost.

Note 4: Interest expense is included in the said operating cost.

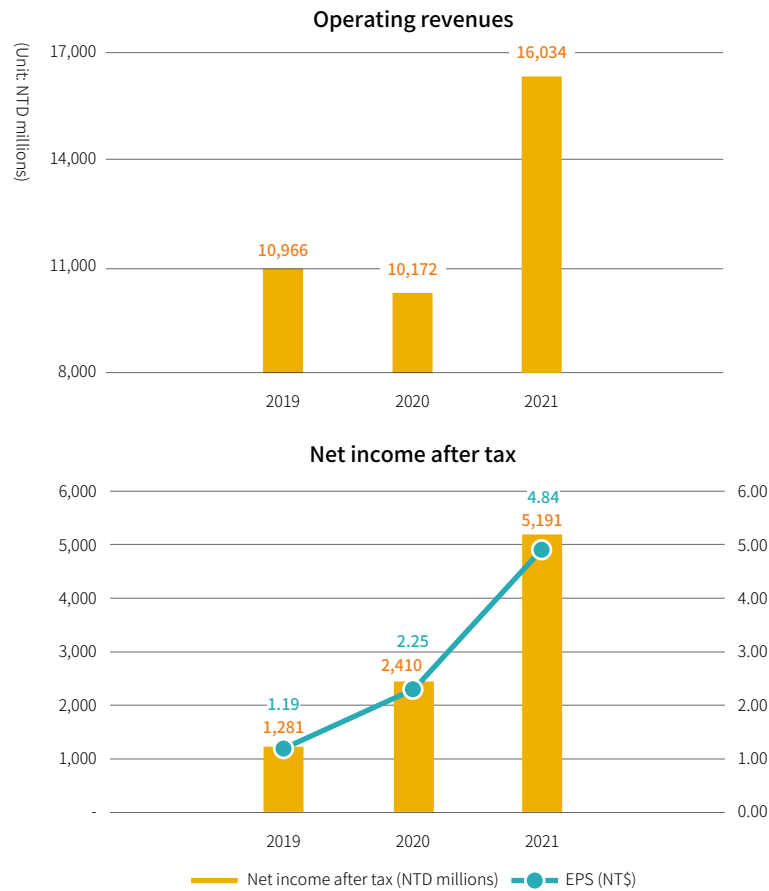
Note 5: Payment to the government refers to the business income tax.

Note 6: Investments in community include contributions to local communities and donations to USI Education Foundation. Both are included in the said operating cost.

Note 7: Residual economic value refers to net income after tax.

Profit distribution

In 2021, revenue was NT\$16,034,251 thousand, income tax (excluding estimates) was NT\$156,246 thousand, accounting for 0.97% of the individual revenue, distributable earnings were NT\$4.76 billion, and estimated cash dividend was NT\$2.2 per share. This profit distribution proposal was approved by the AGM on May 31, 2022.



Note 1: The 2021 revenue increased by 57.63% over 2020 to NT\$16.034 billion.

Note 2: The net income after tax attributed to USI in 2021 was NT\$5.191 billion, a new high in USI history.

Dividend distribution over the years
<https://www.usife.com/zh-tw/dirInvestor/frmInvestor4.aspx>



Financial statements over the years
<https://www.usife.com/zh-tw/dirInvestor/frmInvestor2.aspx>



Major Investments

Local Major Investments

Cyclic Block Copolymer (CBC)



This CBC project can be considered as one of the blueprint items for high-value petrochemical industry promotion and is the first “Process Scale-Up Project to Shorten Gaps in the Supply Chain for Key Chemicals” approved by the Industrial Development Bureau, Ministry of Economic Affairs. After acquiring CBC-related patented technologies in

2011, we have been implementing at full steam the CBC and other relevant projects in order to lead Taiwan’s petrochemical industry to transform toward a high-value petrochemical industry through collaboration among industry, government, academe and research.

Future Planning

The construction of the High-Value R&D Center already started in December 2020. Besides facilitating product optimization, the center can provide customers with more comprehensive samples, enhance process efficiency, and develop own technologies.

① HV R&D Center:

The application for the use license was completed, and service will start in 2022Q2. It will facilitate process and product optimization for CBC trail mass production factory, material quality and property improvement, added value and production efficiency enhancement, and energy consumption reduction.

② CBC Commercial Factory

Currently, although process improvement and equipment expansion can gradually upgrade the CBC trail mass production factory to the design capacity, as the products are less competitive compared to that of foreign manufacturers with a mass product scale, building a CBC commercial factory can fill the shortage of key materials in Taiwan’s high-tech industrial chain as quickly as possible to provide downstream customers with more cost-competitive materials.

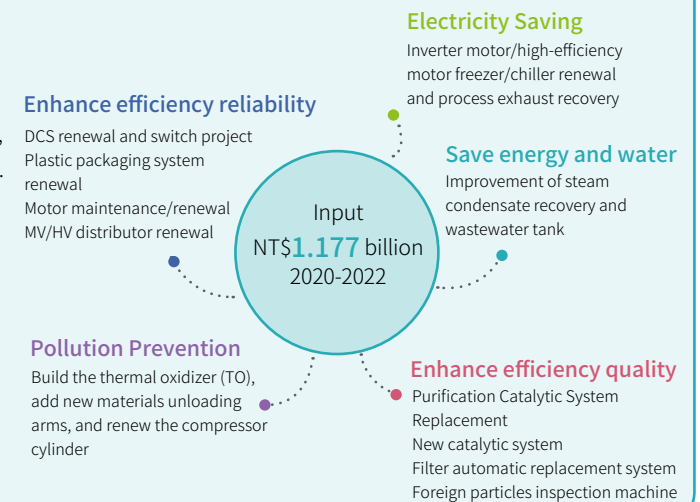
Ethylene Storage Tank Project of Kaohsiung Intercontinental Container Terminal

To increase the import sources of ethylene feedstock to secure sufficient supply, enhance future competitiveness, and ensure sustainable development, we built a new plant for the CGTD Kaohsiung Plant at the Petrochemical Oil Product Center in Kaohsiung Intercontinental Container S14 Terminal phase II with a total investment of NT\$5.221 billion.

On July 31, 2019, the construction of the new plant for CGTD Kaohsiung Plant started at the Petrochemical Oil Product Center in Kaohsiung Intercontinental Container Terminal phase II. USI has invested a total of NT\$906 million in the plant’s 80,000M³ ethylene storage tank and accessory systems. The construction has been running on schedule, and the storage tank’s foundation construction started in June 2020. However, after a significant industrial safety accident in January 2022, the mechanical completion scheduled in 2022Q2 will be delayed, and the actual date of completion will be re-assessed after the competent authorities approve work resumption.

Investment in Equipment Improvement of the Kaohsiung Plant

USI constantly improves various production processes and HSE equipment. In 2020, we invested in about NT\$419 million. In 2021, we invested in about 617 million. It is estimated that a total of NT\$141 million will be invested in 2022 to constantly engage in various energy conservation, carbon reduction, and new product development projects to improve product quality and increase custom products.



Major Overseas Investments

Gulei Project

Investment objective

Many changes have emerged in the global petrochemical industry in recent years. They included the rise of the petrochemical industry in emerging regions and shale oil mining in North America, which have brought not only huge impacts to the energy structure and petrochemical material supply but also significant changes to development of the petrochemical industry across the Taiwan Strait.

To get prepared for future trends and challenges, petrochemical companies of Taiwan and China co-established the Gulei Project to achieve the vertical integration of the mid- and down-stream products.

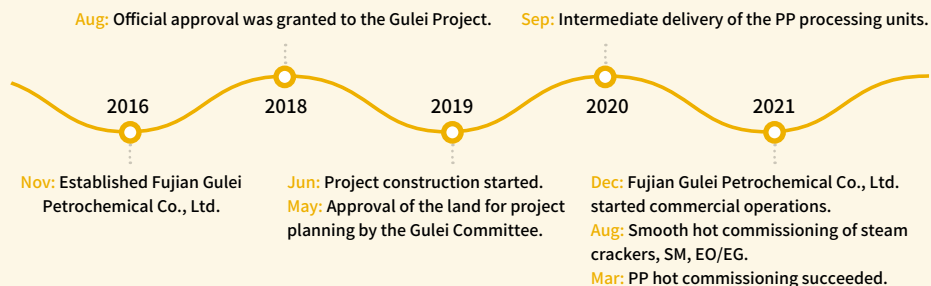
Investment Item

The project engages in the production and sales of petrochemical products including ethylene, propylene and butadiene, EVA, ethylene oxide (EO), and ethylene glycol (EG).

Investment amount and efficiency

- After the approval of the relevant competent authorities, re-investment in the Gulei Port Economic Development Zone Project in Zhangzhou, Fujian Province, mainland China, was made through a third region with a maximum amount of NT\$8 billion.
- In the future, the project can stabilize upstream materials supply, vertically integrate steam cracking, petrochemical intermediate materials, and plastic products, reduce transportation costs, and enhance competitive niche to facilitate deployment in the Greater China market and sales competition in the international market.

Project Milestones



Progress of Investment Items

- As the first set of processing units, the polypropylene (PP) facility was completed on time in September 2020.*
- The steam cracker is the core processing unit, and hot commissioning was completed smoothly in August 2021.
- The first shipment of ethylene monomers from Gulei Petrochemical was already sold to Taiwan in November 2021.
- Fujian Gulei Petrochemical Co., Ltd. started commercial operations in December 2021.

*Note: Intermediate delivery refers to the delivery of a construction project in the middle of the construction period. It suggests that the contractor has completed the construction of all processing routes, including running the pressure and utilities test, while the remaining projects will not affect the trail run.



Panorama of the Gulei Project



Aerial view of the steam cracking unit



First shipment of ethylene monomers sold to Taiwan



Completion and intermediate delivery of key processing units such as the ethylene cracking unit.

2.3

Risk
management

GRI 102-11、102-15

Based on ethical corporate management, we actively promote and implement the risk management mechanism to ensure steady operations and sustainable development and lower potential operational risk. In 2020, the BOD approved the establishment of the “Risk Management Policy and SOP.” Accordingly, the President’s Office shall supervise the operations and performance of each risk management unit, periodically assess risk every year, define different types of risk according to USI’s overall business policy, establish a risk management mechanism for the early identification, accurate measurement, effective supervision, and strict control of risks to prevent potential risks within the bearable range. The President’s Office should also keep track on the development of the risk management system at home and abroad to review and improve this policy and optimize the risk management method through continual adjustment, in order to enhance USI’s risk management effectiveness to protect the interests of USI, employees, shareholders, and stakeholders.

The President’s Office shall report the risk management performance of the year to the Audit Committee and BOD at least once a year and disclose related information in the annual report and on the corporate website.

A complete policy includes the risk management organization, risk management process, and risk management category and mechanism. Please refer to the “[Risk Management Policy and SOP](#)” for details.

Risk Management Process

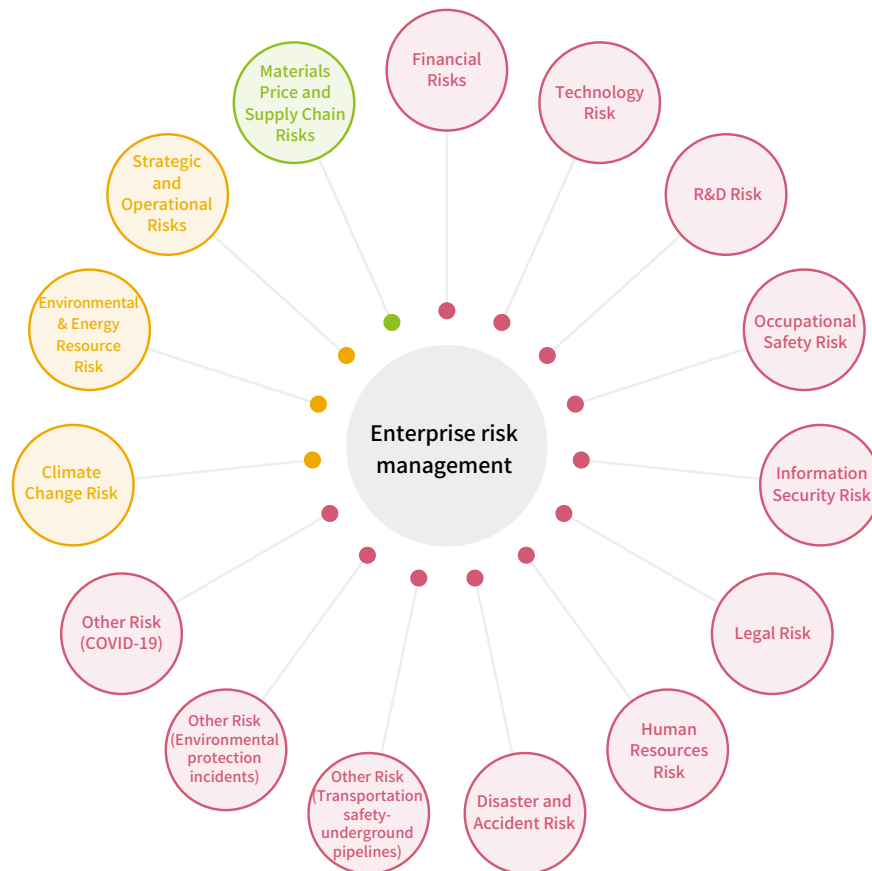
The risk management units of USI review the characteristics of their business and operations, identify the potential risk factors in business operations, develop a complete risk category framework, and establish appropriate measuring methods for the reference of risk management.

All risk management units shall constantly monitor the risks in their business and propose countermeasures, periodically report the risk status to the senior management for the reference of management, and ensure the normal operation of the management framework and risk control functions.

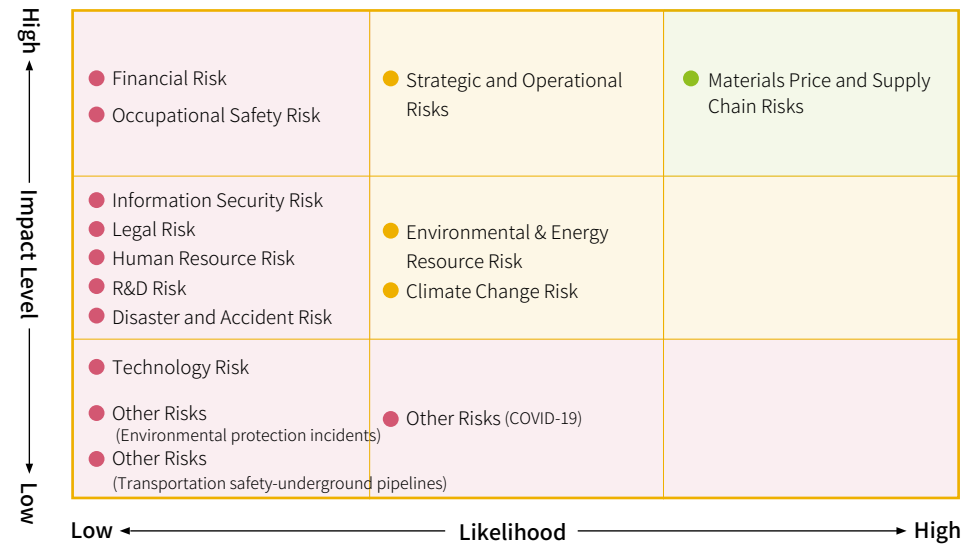


Scope of Risk Management

We establish the risk categories after integrating the major risk sources of business operations and considering the feasibility of mitigating controls. Each year the working group of the CSR Committee conducts a questionnaire survey to identify risks. In view of the increasing impact of global climate change, government energy, and related financial and taxation issues, in 2021, we identified one emerging risk: energy resource risk and included in the inherent risk category. After combining with the 15 risks found in 2021, we identified the likelihood of occurrence and degree of impact. Each risk management unit periodically adjusts the controls with respect to the changes in the internal (external) operational environment.



Risk Management Matrix



Operation of Risk Management

In November 2021, the president reported to the Audit Committee and board of directors the risks that USI was facing, mitigating controls, and performance of risk management.

Please refer to the [Risk Management](#) in the ESG section on the USI website for details.

Please refer to 4.5 Climate Change and Energy Management for the opportunities and risks of financial impacts from climate change.

Cybersecurity management

I. Strategy and framework of cybersecurity risk management

1 Framework of cybersecurity risk management

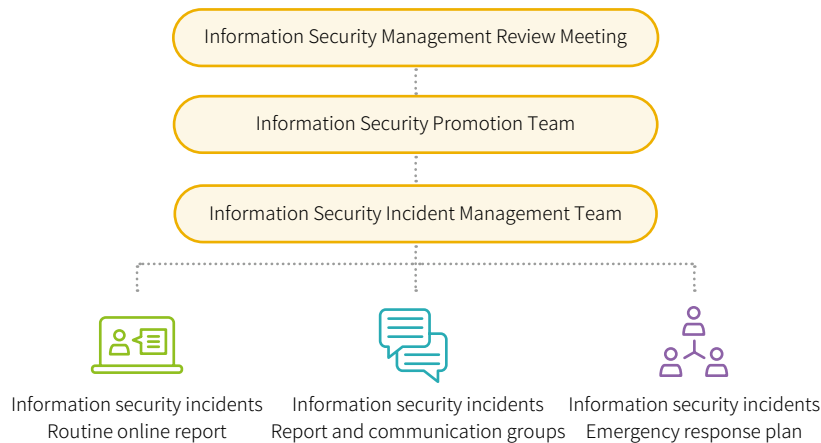
(1) Organization of information security governance

Each year the information security management review meeting is held to judge the six review inputs (the status of actions from previous management reviews, changes in external and internal issues that are relevant to the information

security management system, feedback on the information security performance, results of risk assessment and status of risk treatment plan, and opportunities for continual improvement) to achieve the information security management system.

(2) Framework of the information security organization

We have established the Information Security Promotion Team in accordance with the Regulations for Establishment of the Information Security Organization, an internal SOP, to supervise the operation of the group’s information security management and stipulate the roles and responsibilities of each promotion organization. The organization holds a regular meeting each year and extraordinary meetings when there are significant information security incidents. The director of the Information Systems Division will be the convener to form the information security promotion team meeting and resolve and determine meeting outcomes. Under the Information Systems Division, department heads are team members. The director of the Information Systems Division should report the significant information security incidents to the president or relevant department heads.



2 Information security policy

(1) ISO 27001 information security system:

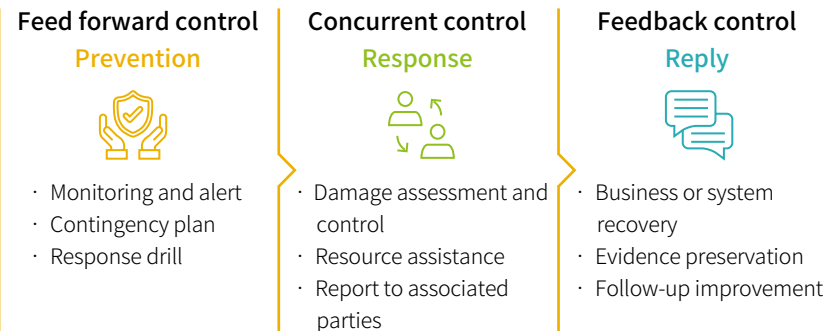
We applied the ISO 27001:2013 information security management system (ISMS) since 2014 and hired BSI Taiwan, an external third-party certification organization, to re-certificated and re-surveyed for 7 years continuously.

(2) NIST Cybersecurity Framework (CSF):

We also apply the Cybersecurity Framework (CSF) developed by the US National Institute of Standards and Technology (NIST).

(3) Base on the ISO 27001 ISMS and NIST CSF, we enhance our risk control, improve the capabilities and tolerance of information security events, therefore, we can get recovery rapidly from the disaster to keep on providing the key operation service.

Routine Operation and Management Procedures



3 Resources for cybersecurity management

- (1) SOP: Established 16 SOPs.
- (2) Information security standard: Passed the certification of ISO 27001 for 7 consecutive years.
- (3) Number of employees using cloud mail: 2,195 persons during 2021/4/28-2021/12/30.
- (4) Investment in information security: About NT\$8.8 million.
- (5) Information security notices: Issued 9 notices.
- (6) Social engineering drill: Held two drills for a total of 4,200 person.
- (7) Information security education and training: Organized 2 sessions for 74 persons at 4 hours/person.

Audit operations and reporting channels

Audit operations

An independent audit unit is established under BOD to help management inspect and review the internal control system, measure the effectiveness and efficiency of operations, and establish and implement the annual audit plan based on the identified risks. The chief auditor holds the certified internal auditor (CIA) certificate and practices based on objectivity and integrity. The chief auditor attends the Audit Committee and BOD meetings as a guest, reports material findings in the audit, and follows up the subsequent improvement. The internal audit is the unit specializing in accepting reports on illegal acts or unethical or dishonest behavior from the Audit Committee email or hotline.

In 2021, the internal audit unit implemented audits according to the annual audit program and completed 55 audit reports and 12 follow-up reports summarized as follows:

Audit Item	Recommendation	Improvement Status
Sales and collection cycle and legal compliance	Missing data in some forms, timely verification of content integrity was recommended.	Improved as recommended.
Production Cycle and Compliance Cycle	Some operations were not implemented as instructed, and some forms were inconsistent with the requirements. Unfailing supervision and revision were recommended.	Improved as recommended.
OH&S	Unfailing supervision should be implemented on some operations and forms should be timely updated.	Improved as recommended.
Subsidiary audits	Some production forms were incomplete or not reviewed, and some regulations were not timely updated. Unfailing implementation and timely update were recommended.	Improved as recommended.

Reporting Channels GRI 102-17

On August 10, 2017 BOD and the Audit Committee passed the proposal to establish the “Regulations for Handling Reports of Illegal and Unethical or Dishonest Behaviors” specifying the reporting and processing procedures and related protection mechanisms. Grievance channels include personal reports, telephone reports, and correspondence reports. The Regulations also specify the responsible units.

- I. Personal reporting: Face-to-face description.
- II. Phone reporting: (02) 2650-3783.
- III. Correspondence reporting: Audit Division, 7F, No. 37, Jihu Road, Neihu District, Taipei City.

We assure full protection of the confidentiality of informers, investigators and case contents to prevent them from unfair treatment or retaliation. If the informer is a USI employee, we guarantee no discrimination on him as a result of reporting a case.

No report was received so far.

2.4

Ethical corporate management and legal compliance

GRI 102-16、102-17

SDG 16

Ethical Corporate Management

To optimize ethical corporate management, we have established the Codes of Ethical Conduct for Directors and Managerial Officers, Ethical Corporate Management Best Practice Principles, Procedures for Ethical Management and Guidelines for Conduct, integrity-based policies, and a sound mechanism for governance and risk control. Please visit our corporate website: <https://www.usife.com/zh-tw/dirlInvestor/frmInvestor1.aspx> for more about our anti-corruption policies and Codes of Ethical Conduct for Directors and Officers.

Regulatory compliance

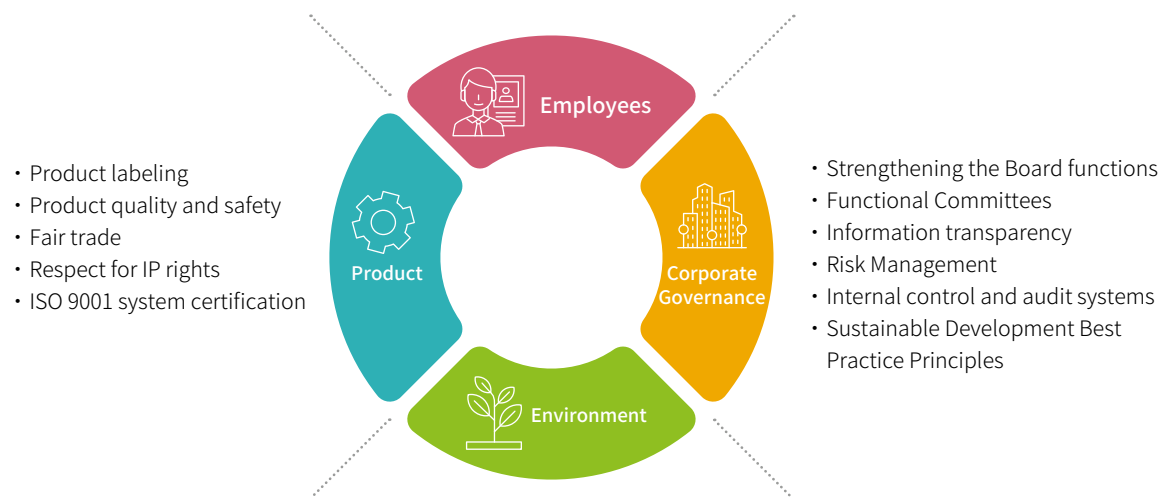
Sustainability Principle: Unity Governance GRI 103-1、103-2、103-3、SDG 16

Significance and Strategy	<p>Significance to USI</p> <p>Ethical corporate management and legal compliance are USI's belief in sustainable development,</p>	<p>Strategy and Approach</p> <ol style="list-style-type: none"> 1. Periodic compliance audit. 2. Keeping up with legal/regulatory updates and amendments. 3. Participation in association discussions on legal acts. 4. Internal awareness education, education, and training. 	<p>Commitment</p> <p>Strict legal compliance Data scope: USI coverage 100%</p>
Achievement and Goal	<p>2021 Goals</p> <p>No legal and/or regulatory noncompliance.</p>	<p>2021 Projects</p> <ol style="list-style-type: none"> 1. OH&S awareness education and equipment integrity introduction training by Labor Standards Inspection Office: 1 session. 2. Participation in legal publicity activities organized by government agencies. 3. Identification of HSE regulations. 	<p>2021 Achievements</p> <ol style="list-style-type: none"> 1. No violation or fine relating to product labeling was reported 2. No violation of economic laws and regulations. 3. IP management 4. Offense of environmental regulations and/or regulations: 1 offense 5. Offense of the Occupational Safety and Health Act: 1 offense
Management	<p>Effectiveness Assessment</p> <p>Monetary Fine and Non-Monetary Sanctions</p>	<p>Grievance Mechanism</p> <ul style="list-style-type: none"> • "Contact us" on the corporate website. • Stakeholder contact information • List of HSE Information 	

Management Approach Description

In addition to practicing ethical USI management, we emphasize legal compliance in all areas. Therefore, units within the organization keep track of the trends of statutory and regulatory changes to ensure our compliance with up-to-date legal requirements and to make early planning for their impacts.

- Respect for human rights
- Protection of freedom of association
- Compliance with labor laws and regulations
- Occupational safety and health laws and regulations



Management Approach

For employees to understand compliance-related topics, we publicize information and trends regarding the latest regulatory and statutory requirements through education/training activities for employees and departmental routine meetings for them to acquire information regarding new laws and regulations and amendments of existing laws and regulations. The Group Division also provides legal consultation and recommendations. Moreover, besides arranging internal training or external training courses, we further invite external legal experts to give talks or seminars to enrich employees' knowledge and competencies in business-related policies and regulations.


We investigate and identify non-conformities with law to find their causes and take action to control and correct them to reduce negative impacts and prevent their recurrence. Additionally, to supervise legal compliance in employees, we have included environmental protection and OH&S incidents as the evaluation items for productivity bonuses, and no bonus will be distributed for any monetary fine and non-monetary sanctions caused by environmental protection and OH&S offenses.

In 2021, neither monetary fine nor non-monetary sanctions for legal noncompliance relating to product labeling or for violation of economic laws and regulations was reported. However, we were sanctioned two times in 2021, including one time for violation of environmental protection laws and/or regulations and one time for violation of the Occupational Safety and Health Act. After completing corresponding corrective and preventive actions, we passed the re-inspection by the competent authorities for all violations. In the future, we will continue to implement and enhance HSE management to achieve the goal of five zeros: zero pollution, zero emission, zero accident, zero occupational hazard, and zero failure. [GRI 307-1, 419-1](#)

Monetary Fine and Non-Monetary Sanctions for Industrial Safety Incidents in 2021 and Improvement

Counts/Fine Total Amount Causes for Violation and Corrective Action

*Monetary fine and non-monetary sanctions in the year are based on the date of notice issuance.




offense of environmental regulations and/or regulations: Water pollution

1 case/NT\$18K

Ticketed defect
Construction before the approval of the Construction Site Runoff Effluent Reduction Plan

Corrective Action

- Submitted the Construction Site Runoff Effluent Reduction Plan to the Bureau of Environmental Protection for approval and recordation.
- Verify the related submittal approval processes for all new construction projects.



offense of the Occupational Safety and Health Act

1 case/NT\$70K

Two ticketed defects

1 Absence of the explosionproof structure appropriate to the dangerous zoning for equipment in the compressor room

Corrective Action

- Inspection and planning in accordance with the CNS 3376-16 across the plant.
- 3-stage improvement policy
 1. Use of positive pressure type explosionproof systems (pressure, flow, alert)
 2. Leakage fixing for fluid pipelines and alteration of the two-door entrance into the single-door access for the electrical inlet/outlet.
 3. Blower replacement (from 1.5HP*2 into 5HP*2)
- Provision of education and training to strengthen site management.

2 Failure to maintain the LV731 pressure gauge in normal operational condition

Corrective Action

- Immediate replacement of the pressure gauge.
- In-house inspection and assessment of similar equipment and planning replacement and corrective plans.
- Enhancement of walk-through inspection and arrangement of immediate repair for detected anomalies.

2021 IP Management Performance

1 Patent management

1.1. Innovation patent and invention application platform

We have established an application platform on the intranet. After registration, R&D personnel can record in detail their innovation ideas and experiment outcomes from work and store them in the encrypted folder. After data is complete and the review and approval of related supervisors, employees may apply for patents according to the procedures.

1.2. Patent

Title	Project No.	Country	Remarks
HYDROGENATED BLOCK COPOLYMER AND COMPOSITION THEREOF	US 10,450,455 B2 (application no.15/914,878)	USA	Awarded the patent (expired on 2038/03/07) on 2019/10/22.
Hydrogenated block copolymer and composition thereof	I660975	Taiwan	Awarded the patent (expired on 2038/03/05) on 2019/06/01.
MULTILAYER SHEET STRUCTURE FOR DENTAL APPLIANCE (orthodontic materials)	US-2020-0237478-A19383-A26025-US (Top Team number)	USA	US20200237478A1 (disclosed and response in progress)
Fire retardant composite structure (utility model patent)	M597795	Taiwan	Awarded the patent (expired on 2030/03/12) on 2020/07/01.

2 Trade secret management

The R&D Division stores the reports, documents, and related IPs from each R&D project individually in USI's internal encrypted web folders with access control. The system also automatically audits abnormal access and alerts the responsible supervisor to check the access to ensure the proper management of trade secrets.

2.5

Intelligent Management

Virtual reality (VR)-Tank car leakage emergency response training

While employees are our most valuable assets, the protection of employee safety is our prime mission. To reduce the hazards in an accident, we arrange emergency response training regularly, hoping that employees can activate effective emergency response management within the shortest time after an accident occurs. In 2021 we introduced VR in the emergency response training and tests to eliminate the limitation of people, events, time, places, and objects in the training processes in order to enhance the response skillfulness of personnel. Additionally, VR can present situational changes with virtual special effects to make the training effect more real and thereby reduce the panic feeling and shorten the response time of personnel in a real accident in order to significantly improve training effectiveness.



Cooling water energy conservation system

While the impact of climate change has been escalating in recent year across the globe, to achieve environmental and ecological protection, we have been actively promoting energy conservation and carbon reduction over the years and have even set long-term carbon reduction targets and enhanced energy efficiency with technology. We have built the cooling water energy conservation system to integrate process operating information and field ambient data and use AI model training to recommend the optimal mode for energy conservation in order to achieve stable quality and optimal energy conservation at the same time.



Chapter 3

Innovation and Supply Chain Service



Material topics in this chapter

- Technology R&D
- Product Quality

Performance Highlights

- New product development & improvement: 4
- Development of high-flow injection HDPE product-LH5590.
- Innovation and R&D accumulated 138 patents.
- Funds for R&D and innovation: NT\$160 million
- R&D staff account for 12% of all employees.
- Legal noncompliance of products: 0



3.1

Technology R&D

GRI 103-2、103-3

SDG 8、9、13

Sustainability Principle: Innovative Technology

Significance and Strategy	<p>Significance to USI</p> <p>Research and development are one of USI's core strategies for sustainable development. Through continual product improvement, customer demand research, and new product development, we achieve co-prosperity for USI and the environment and make continual profit.</p>	<p>Strategy and Approach</p> <p>Expand the R&D scale, blend the ESG (environmental sustainability, social participation, and corporate governance) concept to product development and improvement, reduce environmental impacts, and achieve sustainable development through fulfilling environmental and social responsibilities.</p>	<p>Commitment</p> <p>We implement the green design concept and engage in source governance to ensure the use safety, energy conservation, and eco-friendliness of products, provide quality products and services, and meet the customer requirements. Data scope: USI coverage 100%</p>
Achievement and Goal	<p>2021 Goals</p> <ul style="list-style-type: none"> • New product development and improvement: 4 pcs/year 	<p>2021 Achievements</p> <ul style="list-style-type: none"> • Success new product development: 4 1. Development of high-flow injection HDPE product-LH5590 2. Packaging ViviOn™ 8210XT 3. Ultrahigh impact-resistant ViviOn™ 0510HT 4. High transparency and impact-resistant ViviOn™ 0510T • In 2021 no legal noncompliance or fine in relation to product labeling was reported. 	<ul style="list-style-type: none"> • The medical grade ViviOn™ CBC successfully replaced quartz and entered the market of UVC LED portable UV disinfection products. Currently, commercialized cases include the disinfection cabinet by Sandra, a Taiwanese brand, the tablet stylus by Adonit, a US brand, and the disinfection cabinet by Moshi, a US brand.
Sustainable Development Milestone	<p>2022 Targets</p> <ul style="list-style-type: none"> • New product development and improvement: 4 pcs/year • Legal noncompliance of products: 0 • Constant development and promotion of eco-friendly products 	<p>Medium- & Long-Term Goals</p> <ul style="list-style-type: none"> • New product development and improvement: 5 pcs/year. • Legal noncompliance of products: 0 • Constant development and promotion of eco-friendly products 	
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> 1. Constant achievement tracing in the annual ESG report. 2. Successfully developed technology and R&D outcomes. 3. Reporting the sales of new products at the business meeting. 4. All USI products comply with the Restrictions on Hazardous Substances (RoHS) to reduce environmental impact. 	<p>Product & Service Development Mechanisms</p> <ol style="list-style-type: none"> 1. Customers make demands from the sales/R&D units by phone/email/internet; or irregular customer visits. 2. The president holds the product improvement meeting every month to analyze the markets, environment, and users of new projects. After approval, the plant makes product improvement or new product R&D and trial run. 3. 2021 customer technical service cases: 102. 	<p>Achievements and Directions of Technology R&D</p> <ol style="list-style-type: none"> 1. Advanced materials development 2. New Product Development 3. Developing high-value products 4. In recent years, investments in the R&D of energy-efficient products accounted for 8.16% of the consolidated revenue. 5. Funds for R&D and innovation: NT\$160 million 6. R&D staff accounted for 12% of all employees. 7. Innovation and R&D in 2021 accumulated 138 patents.

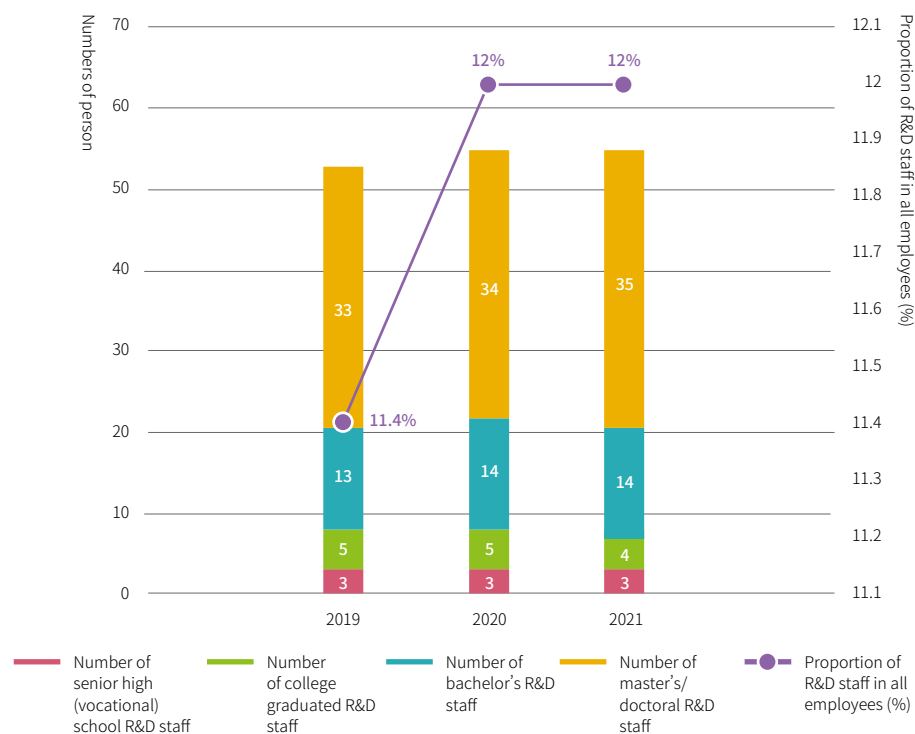
Innovative Operations and Management

Each year we invest a huge fund in R&D and actively recruit and cultivate professional talents. The R&D investments in 2020 and 2021 were NT\$117 million and NT\$160 million respectively. In 2020, although the trial mass production of some projects started, and the relevant fees were included in the operating cost, the annual investments in product and technology R&D was still NT\$117 million. In 2021 the High-Value R&D Center in Kaohsiung started operations to provide services including process and product optimization, material quality and property improvement, added value and production

efficiency enhancement, and energy consumption reduction. The R&D investment was thus increased to NT\$160 million, NT\$43.87 million more than that of 2020.

The number of R&D staff increased from 54 in 2019 to 56 in 2020 and 2021, accounting for 12% of all employees. In terms of education distributions in 2021, 62.5% of R&D staff hold a master's or doctoral degree, and the number of R&D staff is maintained at the specific level.

R&D personnel distribution



Investments in Innovation and R&D

unit: NTD

Item	2019	2020	2021
Operating revenues	10,966,471,000	10,172,220,000	16,034,251,000
R&D Funds	177,916,049	116,819,025	160,687,540
Number of employees	474	468	465
Number of R&D staff	54	56	56
Proportion of R&D staff in all employees.	11.4	12.0%	12.0%

Innovation Value and Culture

We mainly produce ethylene, the raw material for making plastics widely used in the daily life. To balance the ecosystem, we have implemented the green design concept in new product R&D. In recent years, we have developed a range of green products, such as the raw materials for the PV module packaging, eco-friendly sunshield coating, halogen-free fire-retardant materials, and so on to reduce energy consumption and hazardous substance emissions to lower the environmental impact.

Besides participating in the Process Scale-Up Project to Shorten Gaps in the Supply Chain for Key Chemicals of the Industrial Development Bureau, Ministry of Economic Affairs, we were also awarded the 17th National Innovation Award with the Cyclic Block Copolymer (CBC).



Accumulated 138 patents at home and abroad in 2021 ▶

By teaming up with top experts through industry-academia-government collaboration, the R&D Division gathers R&D capacity and acquires patents for global patent deployment. In 2021, we were awarded 9 Taiwan patent and 129 overseas patents.

Industry-Academia Demonstration and Exchange

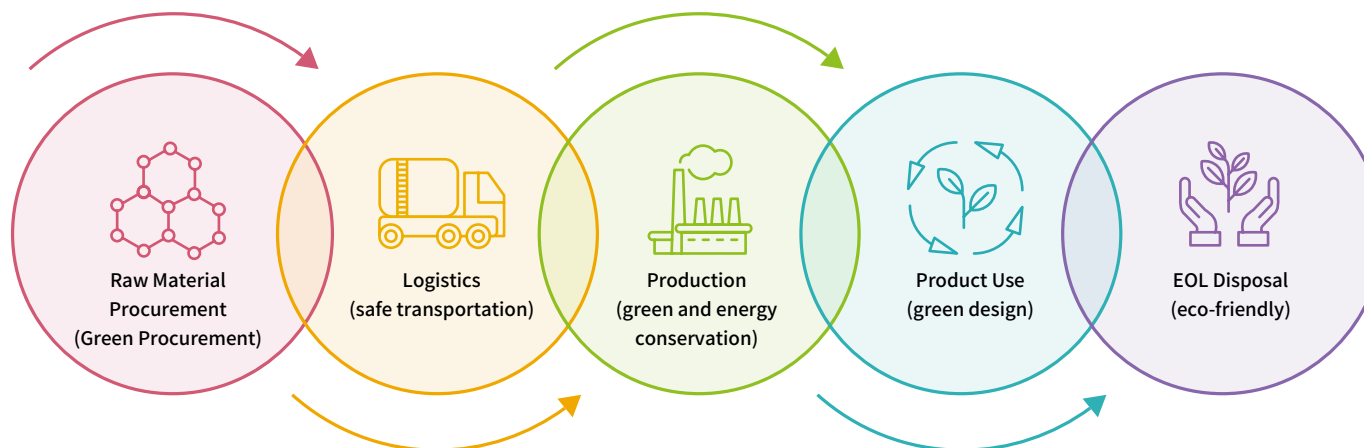
Besides actively engaging in new product R&D, we never forget to encourage students to experience the actual field operations.

In recent years, we have been organizing teaching demonstration with Tatung University, National Taiwan University of Science and Technology, “Kaohsiung Ren Da Petrochemical Talent Stream” Cooperation Program. In the process, besides introducing USI’s scope of services to teachers and students on their visits, we also arrange R&D instructors to operate and demonstrate extrusion, pelletizing, foaming, injection, and film-blowing machinery for students associate theories learned from school to practice. Besides vitalizing teaching, strengthening school competitiveness, and cultivating base-level talents for the future with corporate resources, teaching demonstration can attract outstanding students to enhance local employment rate, hoping to create a win-win situation for enterprises, schools, and local communities through such an industry-academia collaboration model. The fruit was eventually borne in 2018 and 2020 when outstanding students from these schools joined USI’s big family. Besides cultivating locally, we have achieved the vision of sustainable development toward social co-prosperity.



Sustainable Products

Based on the product lifecycle concept, we minimize resource and energy consumption from strict materials control at upstream to the product end-of-life (EOL) disposal at downstream through close cooperation with upstream and downstream suppliers, in order to lower the environmental and social impacts of products.



Lifecycle	Raw Material Procurement	Logistics	Production	Product Use	EOL Disposal
Environmental and Social Impacts	We emphasize labor human rights, health and safety, environmental protection, and ethics and integrity, and actively promote the Supplier Code of Conduct.	We transport up to 96% of raw materials for production via underground pipelines to significantly reduce CO ₂ emissions than tanker transportation. Therefore, we have established the underground pipelines operations and maintenance plan to ensure public safety for citizens.	We promote energy conservation, water conservation, waste reduction, and workplace environment improvement to achieve the five zero's goal: "zero pollution, zero emissions, zero accidents, zero occupational hazards, and zero failures".	We lower environmental impact right from product design and develop a range of green, energy-efficient products (e.g. PV module packaging, eco-friendly sunshield coating, and green fire-retardant materials.)	Through the third-party verification of RoHS conformity, we ensure products are free of hazardous heavy metals to prevent residual hazardous substances from entering the food chain through soil and thereby reduce environmental impact.
References	3.3 Sustainable SCM	5.1 Transportation Safety Management	Chapter 4 Environmental Sustainability and Climate Change	3.1 Technology R&D	3.2 Product quality

Benefits of Product Innovation

R&D is one of our core strategies for sustainable development. Each year we invest over NT\$100 million in R&D and actively recruit outstanding talents from home and abroad to the R&D team in order to optimize processes and maintain sustainable product development. Additionally, we have also implemented the "green design" concept to constantly innovate and optimize products and make upstream and downstream deployment to create sustainable value for enterprises in collaboration with suppliers.

In 2021, we developed the industry-leading high-flow injection HDPE product-LH5590 for energy conservation

Following the introduction of two high-flow injection HDPE products in 2019: LH5544 (MI: 44g/10min) and LH5564 (MI: 64g/10min), in 2021, we successfully developed the high-flow injection HDPE product LH5590 (MI: 90g/10min) ahead of the industry. It is the HDPE product with the highest melt index (MI) in the market so far. Its high flow property can significantly shorten the processing time, increase productivity, reduce process energy consumption, and thereby lower environmental impact and reduce production costs for customers. We realize sustainable operations and share win-win with customers. Alongside other properties including good processability, stiffness, and so on, the LH5590 is very suitable for thin wall injection molding, powder coating, and masterbatch.

Three new ViviOn™ CBC products for 2021: 8210XT, 0510HT, and 0510T plastic-reduced products

● Packaging ViviOn™ 8210XT

The ViviOn™ 8210XT has passed the materials safety certification of many countries. Due to its high PE/PP compatibility, the ViviOn™ 8210XT can be directly mixed with dry PE/PP pellets to enhance the stiffness and rigidity of packaging films to favor lightweight and thin films for plastic reduction. As it is lightweight, it reduces fuel consumption in transportation to bring positive effect to the environment. Additionally, the ViviOn™ 8210XT can reduce film tearing strength for linear easy tear to facilitate consumer use. Developed market applications include: easy tear film, heat shrinkable film, medical device package, food package.

➤ Please visit ViviOn™ - Cyclic Block Copolymers (CBC)



● Ultrahigh impact-resistant ViviOn™ 0510HT

In 2021 we developed the ultrahigh impact-resistant ViviOn™ 0510HT, with 2-3 times higher impact resistance than the CBC floatable glasses introduced in 2019 to significantly reduce the risks brought by glasses damage caused by impacts during exercise. Additionally, the ViviOn™ 0510HT has ultralow density floating property that consumers can feel very light when wearing. It is suitable for making any sports goods and outdoor leisure products, particularly for those related to water games because it will not sink in water to prevent loss in order to reduce marine waste, prevent human economic activities from deteriorating marine ecology, and contribute ourselves to environmental protection.



● High transparency and impact-resistant ViviOn™ 0510T

The ViviOn™ 0510T makes a big step forward in impact-resistant performance while maintaining high transparency at the same time to provide customers with more choices in materials.

Successful replacement of quartz and entry into the market of UVC LED portable UV disinfection products by ViviOn™ CBC

The medical grade ViviOn™ CBC is characterized by its high UVC penetrability, anti-ageing against UVC performance, and lightweight portability to allow easy disinfection in the daily life. It has successfully replaced quartz and entered the market of UVC LED portable UV disinfection products. Currently, commercialized cases include the disinfection cabinet by Sandra, a Taiwanese brand, the tablet stylus by Adonit, a US brand, and the disinfection cabinet by Moshi, a US brand.



Promotion of all-purpose eco-friendly water-based sunshield coatings

On July 30, 2021 TSMC Charity Foundation held the “Charitable Green Energy Model Activation--Solar Panels and Sunshield Coating Completion Ceremony” together with USI and National Cheng Kung University. Besides further promoting green energy, this model also helps cut electricity bills for vulnerable groups and reduce the operational pressure for power plants.

Through the arrangement of TSMC Charity Foundation, USI Chairman Quintin Wu provided USI’s all-purpose eco-friendly water-based sunshield coatings for this charitable collaboration project. With total solar reflectance (TSR) up to 90% and low urban heat island effect, these coatings can effectively reduce indoor temperature, aircon use, energy consumption, and carbon footprint.

Please visit <https://www.usife.com/ESG/zh-tw/ESGNewsDetails.aspx?Passcode=2021081804> for related news reports.



TV promotion of USI sunshield coatings

A special report on USI sunshield coatings on September 18, 2021, Channel 37 of Azio TV.

Please visit <https://www.youtube.com/watch?v=IDCAs-WFoyQ> for details.



Participation in Internationally Indicative Shows and Exhibitions

When COVID-19 swept across the globe in 2021, we strictly followed the epidemic controls and showcased the applications of ViviOn™ CBC in medical devices, biomedical tests, and UVC disinfection at the CHINAPLAS, a leading international exposition for plastic and rubber industries, and the China Association of Clinical Laboratory Practice Expo (CACLP).



3.2

Product quality

GRI 103-2、103-3

SDG 8

Sustainability Principle: Innovative Technology

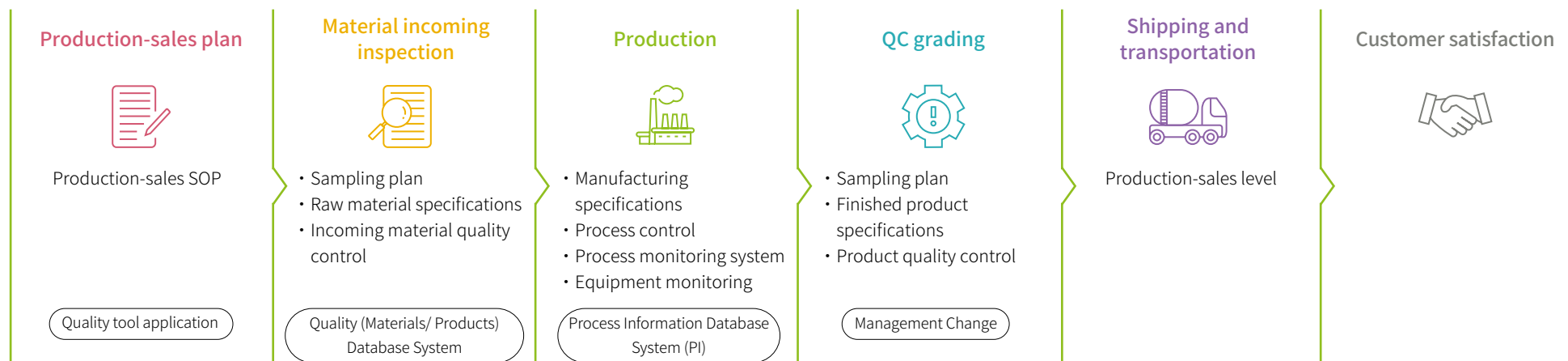
Significance and Strategy	<p>Significance to USI</p> <p>Product quality is the foundation of corporate sustainable development. Total participation in quality is the key to success of USI's quality culture development.</p>	<p>Strategy and Approach</p> <p>Constantly enhance product yield rate and improve service quality.</p>	<p>Commitment</p> <p>Continual equipment improvement, quick capture of product quality, and reduction of customer complains Data scope: USI coverage 100%</p>
Achievement and Goal	<p>2021 Goals</p> <ol style="list-style-type: none"> Confirmed customer complaints: Plant I <6 and Plant II <8. Controllable defect rate of plants I/II: <0.3/<0.8% 	<p>2021 Projects</p> <ol style="list-style-type: none"> Plant II New Catalyst System Construction and Commissioning Plant II Filter Automatic Replacement System Construction 	<p>2021 Achievements</p> <ol style="list-style-type: none"> Confirmed customer complaints of plants I/II: 6 cases /3 cases Controllable defect rate of plants I/II: <0.12/<0.5%
Sustainable Development Milestone	<p>2022 Targets</p> <ol style="list-style-type: none"> Confirmed customer complaints: Plant I <6 and Plant II <8. Controllable defect rate of plants I/II: <0.3/<0.7% 	<p>3-Year Goals</p> <ol style="list-style-type: none"> Increase the proportion of new catalyst products at Plant II, promote products to customers, and enhance customer satisfaction. Resolve the automation bottleneck of compounding equipment. 	<p>5-Year Goals</p> <ol style="list-style-type: none"> Development and mass production of HV products. Reduction of annual customer complaints. Reduction of controllable defect rate.
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> Target trace at the monthly quality improvement meeting. Review of customer complaints and quality issues at the biannual management review meeting. New product sales condition. 	<p>Grievance Mechanism</p> <p>Customers send requests/response by telephone/mail/internet</p>	

Product Quality System

Product quality is the foundation for USI’s sustainable development. To provide customers with products and services of excellent quality, USI has established the ISO 9001 QMS. Apart from building stringent management systems in the “production-distribution plan”, “materials incoming inspection”, “production/manufacture”, and “inspection/ judgement”, we establish the quality database system and process data database PI system with the information technology. In addition to providing

information of real-time monitoring and process parameters to ensure the final quality of products, these systems help produce statistics, analyze, and trace product quality, process parameters, and materials quality.

In addition, the computer change management system ensures stringent evaluation and management of process changes to ensure risk-less changes to stabilize process and product quality.



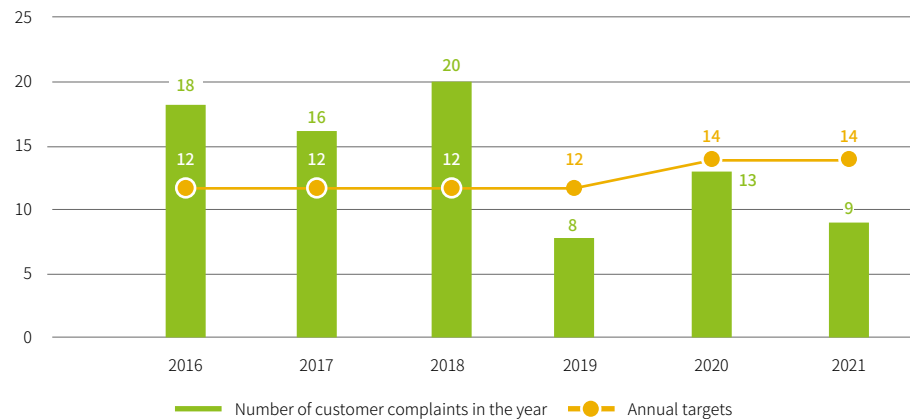
Major Quality Improvement Projects

2021	2022 Items	Contents and Schedules for 2022
Plant II New Catalyst System	Increase the proportion of new catalyst products at Plant II and promote products to customers.	<ul style="list-style-type: none"> Inorganic residue reduction, high quality, customer promotion, customer satisfaction enhancement Projected completion in December 2022
Plant II Filter Automatic Replacement System	Plant I M/P renewal	<ul style="list-style-type: none"> Equipment reliability and quality stability enhancement Projected completion in September 2023
New product trial run on compounding equipment	Resolve the automation bottleneck of compounding equipment.	<ul style="list-style-type: none"> Enhance production efficiency Projected completion in December 2022
Plant II Storage Tank Blending Improvement	Plant I Catalyst Pump Renewal	<ul style="list-style-type: none"> Equipment reliability and quality stability enhancement Projected completion in March 2024
New Cake Removal Equipment	Continuation of cake removal equipment construction, with projected completion in April 2023.	<ul style="list-style-type: none"> Enhance production stability/prevent emergency stop Projected completion in April 2023

To ensure ongoing “employee quality improvement”, “technology advancement”, and “TQM approach optimization”, we encourage employees of all levels to engage in and propose improvement. We also organize group-wide improvement case presentations to encourage employees to embark on self-growth and plants to learn from one another. In 2021, a total of five important quality-related improvement projects were implemented.

Quality improvement is a persistent process. With continual enhancement of product yield rate and continual reduction of customer complaints as the long-term goals, we have achieved the yield rate goal in recent years. For self-optimization, we raise the yield rate target every year. Through long-term improvement, customer complaints have also reduced continuously.

Confirmed customer complaints: count/year



Note: We began to separate the customer complaint targets for plants I and II in 2020, 6 and 8 respectively.

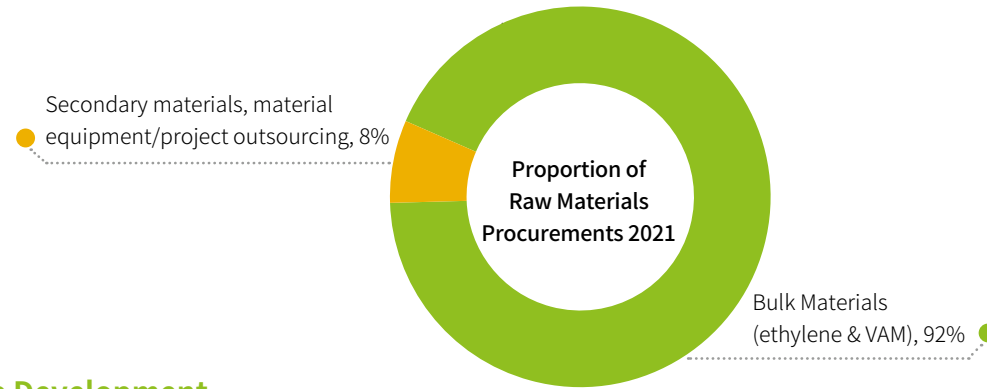


3.3

Sustainable SCM

GRI 102-9

With the rise in the awareness of the issues related to sustainable development and supply chain risk management, besides proactively performing social responsibilities and contributing to society, we have gradually realized the need to understand the supplier’s ESG impacts on USI’s in order to implement supplier management.



Sustainable Development



Supply Chain Sustainable Development Policy ▶

- Optimize partnership and share sustainable business opportunities
- Enhance workplace safety and enforce environmental protection
- Take social responsibility and enhance competitiveness

Supplier Sustainable Development Strategy and Goals

As an indicative enterprise in Taiwan, and it is our responsibility to call on suppliers to jointly undertake corporate social responsibility. Therefore, we have established the Supplier ESG Commitment to request suppliers to make commitment for compliance with human rights, industrial safety, health, environmental protection, and conflict minerals. The performance of future planning are as follows:

Short-Term Goals (1 year)

We already revised the SOPs in 2021 to include the “Supplier ESG Commitment” as a supplier selection criterion.

Medium-Term Goals (3 years)

- All suppliers signed the "Supplier ESG Commitment".
- On-site supplier audits.
- Include social and environmental assessment in the supplier evaluation.
- Guidance of improvements for suppliers fails the social and environmental assessment.

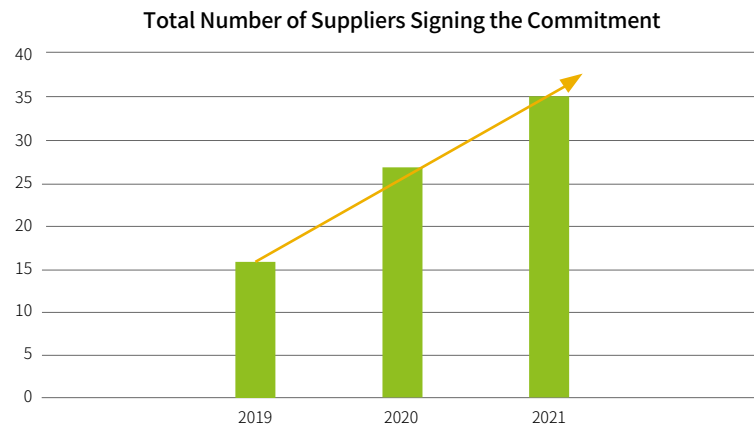
Long-Term Goals (5 years)

- All suppliers comply with USI's social and environmental assessment criteria.

Promotion of “Supplier’s Code of Conduct” (Supplier ESG Commitment)

In 2020, we added the Supplier ESG Commitment as an incentive. From 2022, the Supplier ESG Commitment is a prerequisite for priority assessment of all new suppliers.

By 2021, a total of 35 suppliers sent back the commitment. We already progressively requested suppliers to sign and abide by the commitment and revised the internal SOPs to add the commitment as one of the criteria for new supplier evaluation. Currently, new suppliers of major production materials are requested to sign the commitment. In the future, we will perform irregular onsite audits on the compliance with the commitment.



SCM mechanism

With quality, ability, and environmental policy as conditions, we perform corporate social responsibility in collaboration with outperforming suppliers on a long-term basis. We also communicate with contractors and transporters our environmental policy, comply with the EU’s RoHS directive, enhance environmental education and training, and care about the safety of contractors working in our plants in order to ensure the safety of all operations, protect the life, safety, and health of personnel, and optimize risk management.

<https://www.usife.com/ESG/en-us/ESG52.aspx>

Management of raw materials suppliers

At USI, supplier evaluation is implemented centrally by the procurement department. Only suppliers passing the evaluation are included in the Quality Supplier List. The evaluation mechanism is as above:

Results of raw material supplier evaluation in 2019-2021

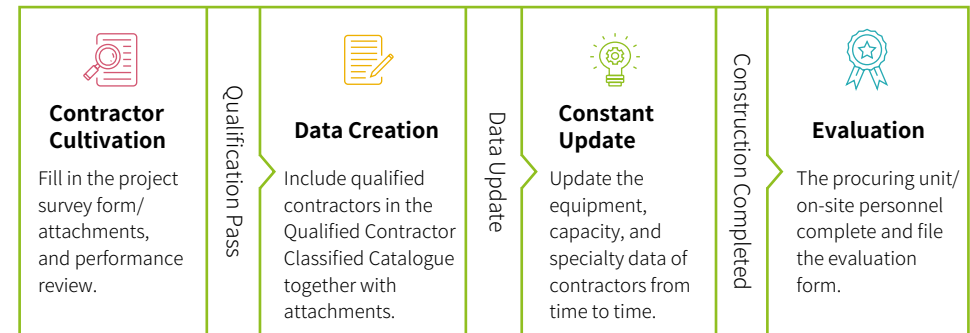
Year	2019	2020	2021
Suppliers Evaluated	72	76	51
Pass Rate	100%	100%	100%

We have 51 qualified materials suppliers. In 2021, all 51 suppliers were evaluated. Besides a 100% evaluation, all suppliers passed the evaluation, with a 100% pass rate.

Management of construction contractors

We outsource construction contracts mainly to local contractors, and on-site personnel of the plant supervise and manage them during the construction period. In addition to construction projects, we care about HSE, occupational safety, human rights and labor practices.

Establishment of a qualified contractor selection process:



Contractor qualification items:

Capital	Total Amount of Two Major Projects in the Last 2 Years	Cumulative Amount of Projects each over NT\$200K in the Last Year	Factory Scale	Amount of Equipment Investments	Numbers of employees
10%	20%	10%	20%	20%	20%

Project construction evaluation: During project construction, we will evaluate a contractor according to the following ESG standards:

Construction quality	Safety and health measures	Coordination performance	Site manager	Environment maintenance	Construction progress
40% (G)	20% (S)	10% (G)	10% (S)	10% (E)	10% (G)

Note 1: The pass mark is 50 points. We will stop enquiries from contractors with a score of 30-49 points for one or two years and disqualify contractors with a score below 30 points.

Note 2: (E), (S), (G) represent respectively environmental, social, and governance aspects.

Results of construction contractor evaluation in 2019-2021

Year	2019	2020	2021
Suppliers Evaluated	111	124	0
Pass Rate	100%	100%	0%

The Kaohsiung Plant transfers project outsourcing to the Group's Procurement Department II. From 2021, only two projects were outsourced by the department, and no construction evaluation was implemented.

Supply Chain Risk Management

<http://www.usife.com/ESG/en-us/ESG51.aspx>



The procurement amount of plasticizing materials (ethylene and VAM) is the highest every year. The 2021 procurement of such materials accounted for 92% of the total. Currently, ethylene and VAM are the major raw materials of USI products. In consideration of the risk of supply shortages, we have adopted the following solutions:

Type	Potential Risk	Strategy	Practice
Materials Risk	Supply interruption	Source dispersion	Cultivate new sources across the world.
		Supply contract	Sign long-term supply contracts with important suppliers.
		Strategic procurement	Analyze market movements regularly and adjust the optimum procurement strategy.

To secure the sustainable supply of material sources and stimulate market circulation, we actively cultivate new material sources and increase bulk material suppliers to 16 companies, including 5 domestic suppliers and 11 foreign suppliers.

Sources of major materials in 2021

Locations/Materials	Ethylene	VAM
Taiwan	73%	83%
Foreign	27%	17%
Source	13 domestic and overseas suppliers in total.	3 domestic and overseas suppliers in total.

Note: The percentage in the table represents the proportion of purchasing amounts of bulk materials.

Green Procurement

<http://www.usife.com/ESG/en-us/ESG54.aspx>

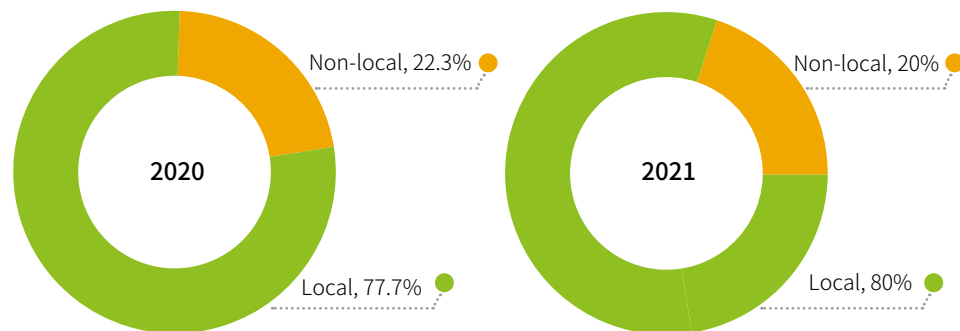


Support for procurement from local suppliers

Taiwan is our operational and production base. When the procurement conditions are similar, we prioritize procurement from local suppliers in order to achieve the following goals:

- ✓ Establish long-term, sustainable cooperation
- ✓ Promote local economic development
- ✓ Increase job opportunities
- ✓ Reduce transportation processes

In 2021, we increased the local procurement of secondary materials by about 2.3% over 2020.



Energy-efficient and eco-friendly equipment

In addition to continuously promoting environmental protection and energy conservation policies, we have been encouraging all units to use energy-efficient and eco-friendly materials in recent years. These materials include energy-efficient devices (e.g., inverters, high-performance IE3 motors, anti-explosion LED lighting fixtures, aircon chillers, UPS) and ecolabel products (e.g., energy-efficient and eco-friendly IT equipment).

Amount of procurement of energy-efficient products in 2021

(expressed in NTD)

Equipment purpose	Total amount
Inverter drive	26,500
IE3 high-performance motor	1,814,975
Energy-efficient and eco-friendly IT equipment	690,400
Anti-explosion LED lighting fixtures	1,465,000
Aircon chiller	350,000
UPS	34,000
Grand Total	4,380,875

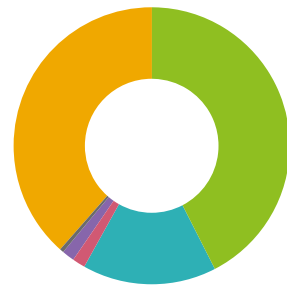
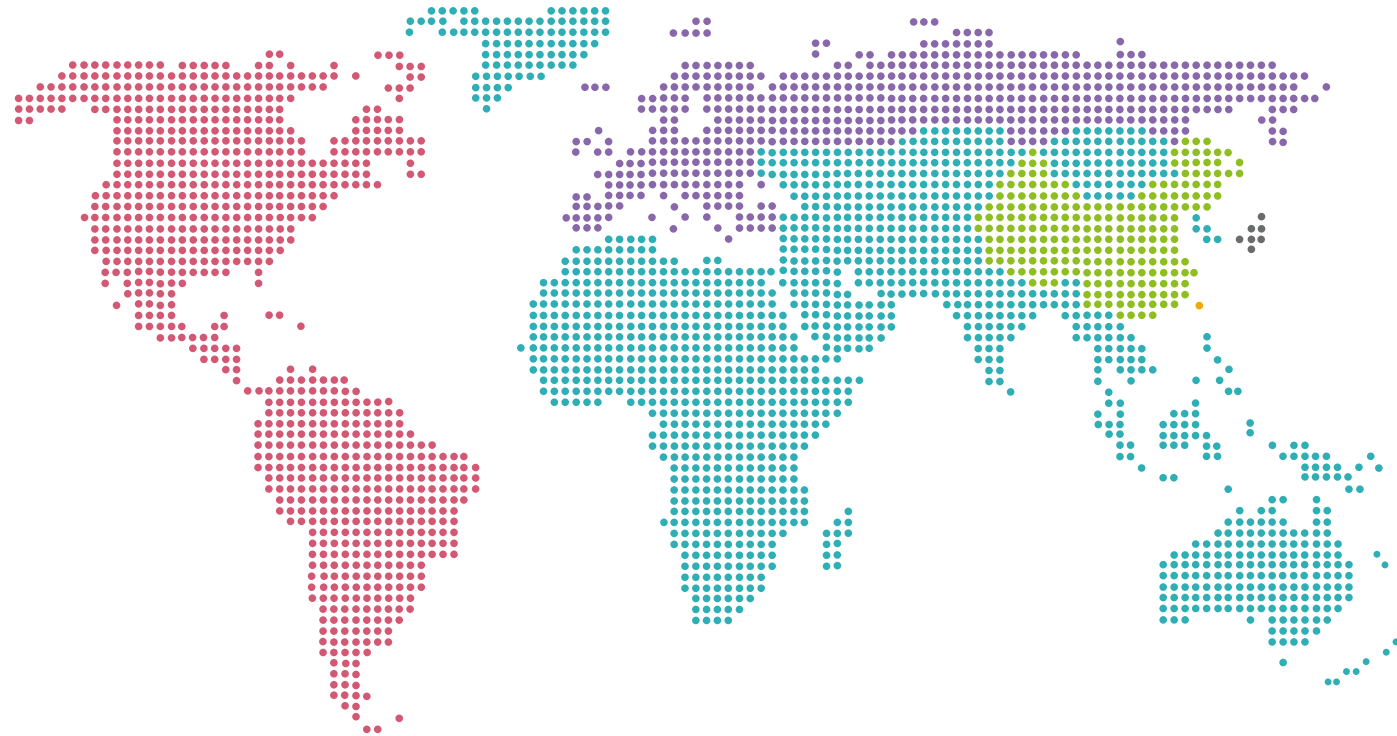


3.4

Sales and customer services

GRI 102-2、102-6






USI products are distributed mainly to a total of 325 customers in Europe and Asia. Products exported by ranking are EVA, HDPE, LDPE, and LLDPE. The chart below shows the sales distributions and market distributions of USI products in 2021. All were calculated by sales volume.



2021 Sales Distribution

- Domestic 38.5% ● Taiwan 38.5%
- Export 61.5% ● China and Hong Kong 42.5%
- Other countries 15.6% (Vietnam, Malaysia, Thailand, Indonesia, Bangladesh, Pakistan, and India)
- Americas 1.9% (Paraguay, Mexico, the USA, Brazil, Peru, and Chile)
- Europe 1.4% (Turkey, Russia, Ukraine, Poland, Germany, Belarus, Spain, Belgium, the UK, France)
- Japan 0.1%

Sales Services

 <p>Technical Support</p>	<ul style="list-style-type: none"> Establishing the “Customer After Sales Technical Service Policy” In the “Product” section of our corporate website, we provide complete information regarding the specifications, properties, functions, application manual, and safety data sheet (SDS) of our current and new products Setting up an enquiry hotline In 2021 no legal noncompliance or fine in relation to product labeling was reported. GRI 419-1 Providing customers with a small quantity of samples for test runs and continuous technical support 	
 <p>Product Responsibility</p>	<ul style="list-style-type: none"> All USI products comply with the Restrictions on Hazardous Substances (RoHS) Provision of quality inspection reports as requested by customers 	
 <p>Customer privacy</p>	<ul style="list-style-type: none"> To ensure the utilization of customer’s data is secured and appropriate, the Group Information Systems Division has established a series of regulations regarding information security management, including the General Provisions of the Information Security Management Policy, System Development and Maintenance Management Regulations, Directions for Going Live Management of Application Systems and Programs, and Directions of Database Management to protect and control all types of privacy information in terms of information security management. In addition, by enhance the firewall management, authority control, to segment the test and production environments, and de-identification of data for containing personal information to prevent the risk of data leakage. In 2021 no damage or leakage of customer privacy was reported. 	
 <p>Customer Complaints</p>	<ul style="list-style-type: none"> Establishing the “Customer Complaint Handling Procedure” to process all customer complaints about products. Customer complaints processing procedures <div style="display: flex; justify-content: space-around; align-items: flex-start; text-align: center;"> <div style="width: 15%;"> <p>1 Receipt of customer complaints</p> <p>Referring complaints to the sales unit</p> </div> <div style="width: 15%;"> <p>2 Acceptance of customer complaints by the sales unit</p> <p>Filling in the “Customer Complaint Notice”</p> </div> <div style="width: 15%;"> <p>3 Causes investigation of customer complaints</p> <p>by implementation unit. Recommendation of solutions</p> </div> <div style="width: 15%;"> <p>4 Reply Customers</p> <p>Filling in the customer complaint closure report</p> </div> <div style="width: 15%;"> <p>5 Effectiveness Confirmation</p> <p>Proposing corrective and preventive actions Confirmation and follow-up of effectiveness.</p> </div> <div style="width: 15%;"> <p>6 Closure</p> <p>Completing the customer complaint closure report</p> </div> </div> <ul style="list-style-type: none"> We have adopted the following procedures to ensure that all customer complaints are addressed and resolved: computer processing and recording of customer complaints processing; discussion of each complaint at the monthly meeting; effective implementation of quality improvement activities; dedicated personnel for cause analysis, follow-up of corrective and preventive actions, and tracing the effectiveness of corrective and preventive actions. 	

Customer Satisfaction

<p>Survey Frequency</p>	<p>A customer satisfaction survey is conducted semi-annually.</p>																																																
<p>Sampling Method</p>	<p>Fifty, including 30 domestic buyers and 20 overseas buyers, from the top one hundred buyers by purchasing quantity are surveyed during the H1 and H2 of each year.</p>																																																
<p>Contents and Results</p>	<p>In 2021, all aspects were above the “satisfied” level, and up to 98.9% of investigation feedback for investigations in the year was either “highly satisfied” or “satisfied”, achieving the 2021 target ($\geq 94\%$). The charts below show the survey results in “comparison with other suppliers” and “comparison with the previous year performance” in the past three years.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="412 644 1093 1362"> <p>Comparison with other suppliers</p> <table border="1"> <caption>Comparison with other suppliers (2019-2021)</caption> <thead> <tr> <th>Category</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Overall impression</td> <td>4.4</td> <td>4.4</td> <td>4.6</td> </tr> <tr> <td>Export transportation</td> <td>4.2</td> <td>4.5</td> <td>4.6</td> </tr> <tr> <td>Domestic sales transportation</td> <td>4.6</td> <td>4.5</td> <td>4.6</td> </tr> <tr> <td>Service quality</td> <td>4.7</td> <td>4.2</td> <td>4.7</td> </tr> <tr> <td>Product quality</td> <td>4.7</td> <td>4.4</td> <td>4.7</td> </tr> </tbody> </table> </div> <div data-bbox="1128 644 2069 1362"> <p>Comparison with last year performance</p> <table border="1"> <caption>Comparison with last year performance (2019-2021)</caption> <thead> <tr> <th>Category</th> <th>2019</th> <th>2020</th> <th>2021</th> </tr> </thead> <tbody> <tr> <td>Overall impression</td> <td>4.4</td> <td>4.4</td> <td>4.6</td> </tr> <tr> <td>Export transportation</td> <td>4.2</td> <td>4.4</td> <td>4.6</td> </tr> <tr> <td>Domestic sales transportation</td> <td>4.6</td> <td>4.4</td> <td>4.6</td> </tr> <tr> <td>Service quality</td> <td>4.6</td> <td>4.2</td> <td>4.7</td> </tr> <tr> <td>Product quality</td> <td>4.7</td> <td>4.4</td> <td>4.7</td> </tr> </tbody> </table> </div> </div> <p>Note: “5” for highly satisfied; “4” for satisfied; “3” for fair; “2” for unsatisfied; and “1” for highly unsatisfied.</p>	Category	2019	2020	2021	Overall impression	4.4	4.4	4.6	Export transportation	4.2	4.5	4.6	Domestic sales transportation	4.6	4.5	4.6	Service quality	4.7	4.2	4.7	Product quality	4.7	4.4	4.7	Category	2019	2020	2021	Overall impression	4.4	4.4	4.6	Export transportation	4.2	4.4	4.6	Domestic sales transportation	4.6	4.4	4.6	Service quality	4.6	4.2	4.7	Product quality	4.7	4.4	4.7
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Chapter 4

Environmental Sustainability and Climate Change

Material topics in this chapter

- Water resources management
- Air pollution control
- Waste management
- Climate change and energy management

Performance Highlights

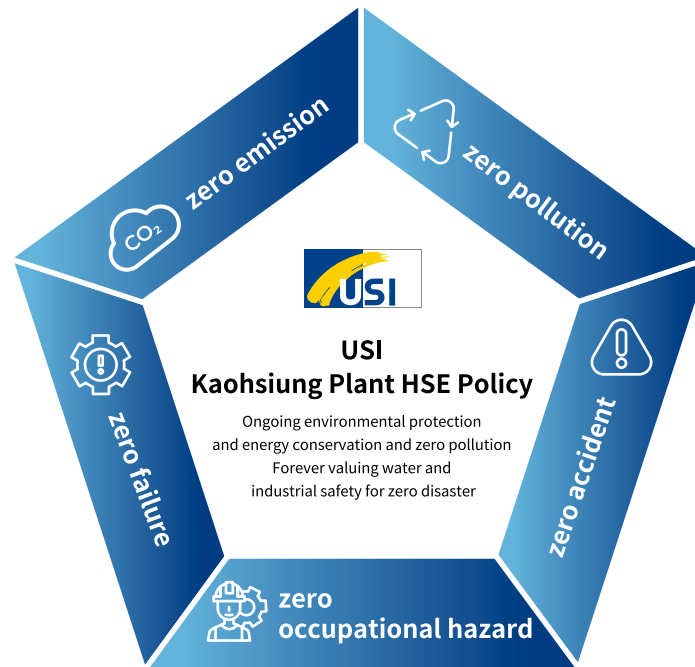
- Environmental Expenditure: approx. NT\$135.67 million, up by 16.8%.
- Electricity less by 0.75% (2015-2021 average: 1.38%), energy less by 5.10%, carbon less by 2.39%, water less by 4.26%
- Increased materials recycling rate to 12.3%.
- Constant implementation of ISO 14064-1 Greenhouse Gases Inventory and Verification and scope 3 inventory.
- Implementation of the ISO 46001:2019 Water Efficiency Management System and completion of verification.
- Implementation of ISO 14067:2018 Carbon Footprint of Products and verification.



4.1

Environmental management system

In 1998 we established the ISO 14001 environmental management system (EMS), with 100% coverage. EMS provides USI with a good environmental protection framework for controlling and reducing environmental impacts, preventing accidents from impacting the environment, and ensuring legal compliance. Following international trends, we have integrated the EMS and the health and safety system to draw up an HSE (health, safety, and environmental protection) policy and the “five zero goal”.



Upholding and realizing the business philosophy of Chairman Wu, we optimize HSE to protect the health and safety of employees and maintain the environment and ecosystem. This is our wish and the responsibility of every employee. To promote sustainable development, fulfill ESG with due diligence, and support clean production and environmental protection, Kaohsiung Plant will make continual improvement of the workplace environment, operation safety, process waste reduction, water efficiency, energy conservation, and carbon reduction in order to achieve the “five zero goal: zero pollution, zero emission, zero accident, zero occupational hazard, and zero failure”.

Environmental objectives and management programs

2021 Environmental Protection Targets and Management Programs

Policy	Goals	Program	Effectiveness
Zero Emission	Reduce the fugitive emissions of VOCs of equipment/component and measured leakage rate <0.5%	Enhancement of equipment/component self-management, periodic inspection and review of maintenance and repair progress, identification and improvement of equipment/component with a high leakage rate, reduction of the quantity equipment/component or replacement of equipment/component with a lower leakage rate or without a shaft, and enhancement of inspection for equipment/component with a high leakage rate and more motions.	2021 measured VOCs leakage rate 0.038%
	Improve process equipment and pipelines to reduce the fugitive emissions of VOCs.	<ol style="list-style-type: none"> 1 Construction and improvement of process emission pipelines 2 Process equipment improvement 	<ol style="list-style-type: none"> 1 Improved the process equipment and pipelines of 2 assembly lines to reduce the fugitive emissions of VOCs. Improvement of other assembly lines will continue in 2022. 2 Added 3 tanker unloading arms and completed the improvement of 6 catalyst mixing tanks to effectively reduce the fugitive emissions of VOCs.
	Reduced GHG emissions by 1,004 tCO ₂ e	Five plant electricity conservation projects	In 2021, electricity was saved up to 1,972,419kWh accumulatively and emissions were reduced up to 1,004 tCO ₂ e.
	Reduce water discharge by 5,280 MT	Continuous monitoring and reclamation of effluents	In 2021, a total of 10,986 MT of water was reclaimed from the effluent reclamation system.
Zero Pollution	Prevent equipment corrosion from causing the leakage of organic substances	Equipment cooler renewal project	Completed the renewal project to ensure no leakage due to equipment corrosion.
	Improve effluent water quality to 60% effluent standard (COD<60 mg/L)	Effluent Quality Control Enhancement	In 2021, effluent COD was 14.4 mg/L in H1 and 25.5 mg/L in H2
	Complete the construction of the block control and wastewater treatment equipment to prevent wastewater anomalies from occurrence.	<ol style="list-style-type: none"> 1 Improvement of the operation of wastewater treatment plants. 2 Effective block and control abnormal wastewater leakage 	<ol style="list-style-type: none"> 1 In 2021, the COD, SS, and grease in effluents complied with the discharge standards. 2 In March 2021, new major separator valves and sampling points were added to effectively block and control wastewater at the source.
	Prevent environmental contamination caused by plastic resin pellet leakage	Prevention and management of plastic resin pellet leakage	<ol style="list-style-type: none"> 1 Enhanced publicity of dust zone cleaning and tanker loading area cleaning. 2 Ensured that the unloading pipe is inserted in the inlet and surroundings are covered with dust screens before unloading in the tanker loading operating process to prevent materials from splashing. 3 Revised and released the WI-KHB-810-51 work instructions of the Finished Product Section and included the plastic leakage management system. 4 Inventoried the leakage prevention and management measures of plastic resin pellets at the processing area and recovered 12.87MT of plastic resin pellets in 2021.

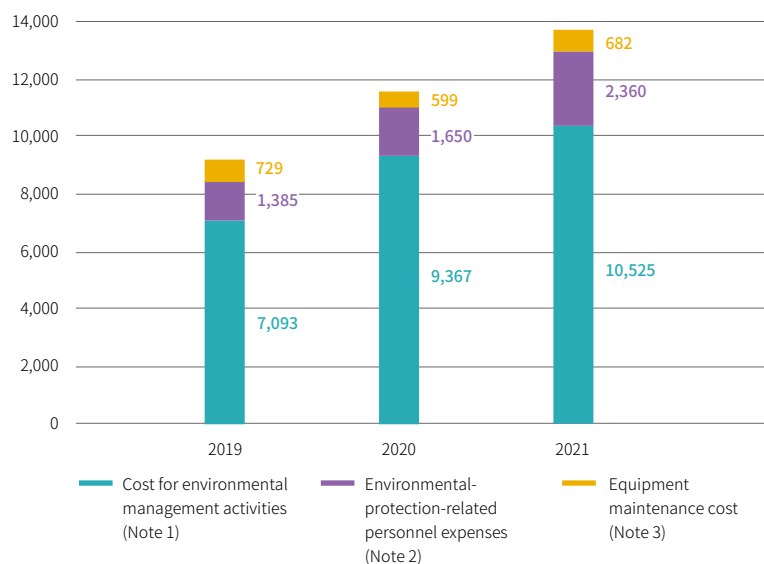
Environmental Expenditures



Our environmental management costs include the cost for environmental management activities, environmental-protection-related personnel expenses, and equipment maintenance cost.

- ▶ In 2021, we will actively promote the improvement of process safety equipment, waste treatment, and the professional training of environmental protection personnel.
- ▶ In 2021, the total amount of environmental expenditures increased by **16.8%** over 2020 to about **NT\$135.67** million.

Environmental Expenses in the Past 3 Years (NT\$ 10 thousands)



Note 1: The cost for environmental management activities includes the fees for air pollution control, water pollution prevention, waste disposal, noise pollution prevention, management of toxic and concerned chemical substances, industrial safety improvement, depreciation of fixed assets and others (e.g., cleaning and mowing).

Note 2: Environmental-protection-related personnel expenses include personnel expenses and environmental protection-related training fees.

Note 3: Equipment maintenance cost includes the fees of environmental-related equipment and the fees for equipment maintenance.



4.2

Water resources management

GRI 103-2、103-3

SDG 6

Sustainability Principle: Sustainable Development

Significance and Strategy	<p>Significance to USI</p> <p>In response to global climate change, valuable water resources are reclaimed for reuse through water conservation and emission reduction measures.</p>	<p>Strategy and Approach</p> <ol style="list-style-type: none"> 1. Reduce pollution and emission through process and source improvement and then end-of-the-pipe treatment promote water resource recycling and reuse. 2. Constantly invest in discharge reduction management, implement water conservation, and water resource reclamation management. 3. Promote the water efficiency management system 	<p>Commitment</p> <p>Annual water conservation >1% Data scope: USI coverage 100%</p>
Achievement and Goal	<p>2021 Goals</p> <ol style="list-style-type: none"> 1. Save energy at 1% each year. 2. Reclaim or reduce water discharge at 5,280 MT. 	<p>2021 Projects</p> <ol style="list-style-type: none"> 1. Water reclamation management 2. Continuous effluent monitoring and reclamation 3. Implement the ISO 46001:2019 Water Efficiency Management System 	<p>2021 Achievements</p> <ol style="list-style-type: none"> 1. Water conservation: 4.26% 2. Reclaimed water: 10,986MT
Sustainable Development Milestone	<p>2022 Goals</p> <ol style="list-style-type: none"> 1. Save energy at 1% each year. 2. Increase water reclamation to 12,000MT 3. Reduce water consumption by 2,880MT/year through process improvement. 4. Implement and pass the certification of the ISO 46001:2019 Water Efficiency Management System. 	<p>3-Year Goals</p> <p>Further water conservation management</p>	<p>5-Year Goals</p> <p>Reducing water withdrawal and consumption to enhance water recycling and reuse.</p>
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> 1. Water conservation volume 2. Wastewater reclamation volume 	<p>Grievance Mechanism</p> <ul style="list-style-type: none"> • “Contact us” on the corporate website. • Stakeholder contact information • Stakeholder questionnaire 	<p>Key Programs of this Chapter</p> <ol style="list-style-type: none"> 1. Water resources management 2. Promote the water efficiency management system 3. Prevent and manage plastic resin pellet leakage

Water resource management GRI 303-1:2018、303-3:2018、303-4:2018、303-5:2018

The circular economy is an industrial system designed for recovery and regeneration to replace “end of life” with “recovery” in order to turn waste into resources and thereby achieve waste reduction. By constantly implementing the circular economy, we implement water conservation and drainage reduction through improvement programs to reclaim and recycle valuable water resources for reuse and set the annual water conservation target at “1%”. The actual conservation in 2021 was 4.26%. The boundary of water resource and effluent management is the Kaohsiung Plant, with data coverage of 100%.

In terms of water stress distributions, based on the water stress by country in the ‘Aqueduct Water Risk Atlas’ published by the World Resources Institute (WRI), the water stress of Taiwan falls at the low to medium level, with water stress at 10-20%.

According to the 2020 water resources statistics published in the Water Resources Agency Register Statistical Report, MOEA, the water consumption of Kaohsiung City was 280,439 ML, including 94,101 ML of water for domestic use or public use, 85,677 ML of water for industrial use, 80,177 ML of water for agricultural use, and 20,485 ML of water for other uses. The 2020 total water withdrawal of Kaohsiung Plant was 1,029.036 ML, accounting for about 0.4% of Kaohsiung City’s total water consumption. USI withdraws water mainly from tap water supplied by the Pingding Waterworks and Cheng Ching Lake Waterworks for product production, equipment cooling, boiler, domestic use of employees, and other uses. Compared to 2020, water withdrawal in 2021 reduced by about 31 ML to 998.098 ML.

2021 Water Withdrawal, Discharge, and Consumption

Total Water Withdrawal 998.098 ML

Low-medium water stress area Water stress 10-20%

- Third-party water-fresh water (≤ 1,000mg/L TDS): 998.098 ML
- No runoff, groundwater, seawater, output water.

Note: 1. Based on NIEA W210.58A, the 2021 TDS was 344mg/L, the 2022 TDS was 372mg/L, fresh water was withdrew.
2. Withdrawal is subject to the readings on the water meter (flow meter).

Total Discharge: 305.265 ML

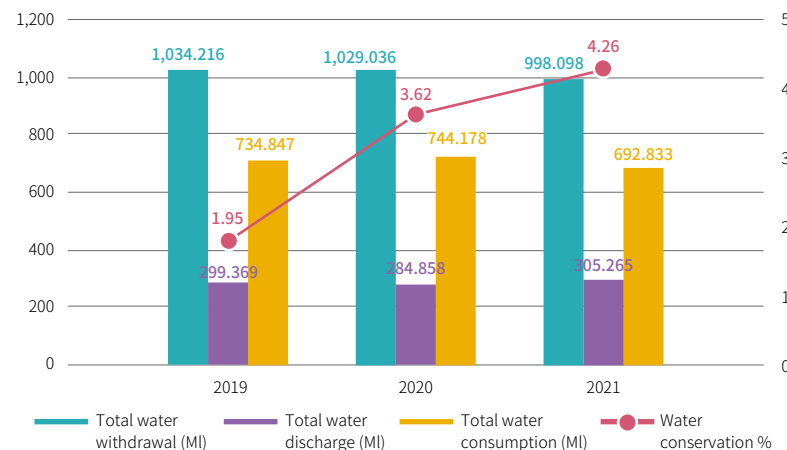
Ammonia nitrogen total volume control area

- Runoff- fresh water (≤ 1,000mg/L TDS): 305.265 ML
- Discharge contains no groundwater, seawater, and third-party water.
- NH4 in H1 and H2 was 0.78 mg/L and 0.48 mg/L, far below the effluent standard (20 mg/L).

Note: 1. Based on NIEA W210.58A, the 2021 TDS was 863mg/L, the 2022 TDS was 912mg/L, fresh water was discharged.
2. Discharge is subject to the readings on the effluent meter (flow meter).

Total Consumption = Total Withdrawal – Total Discharge = 692.833 ML.

Water Status in the Last 3 Years



Water conservation and reclamation GRI 303-1:2018

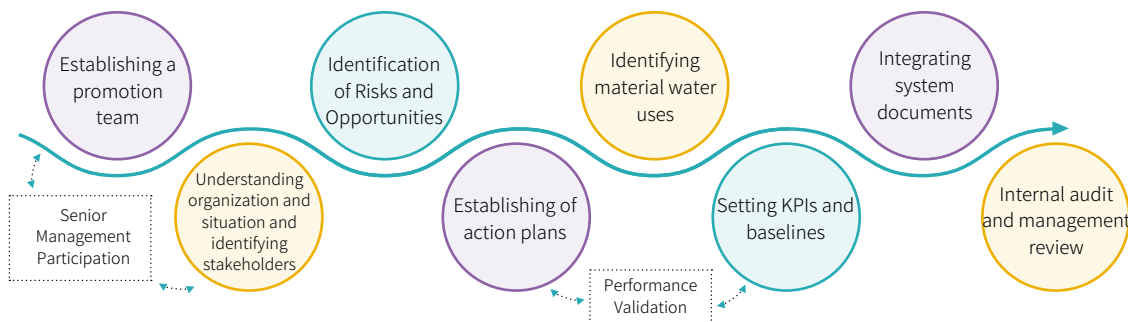
Following the rising water demand, escalating climate change impact, and expanding sustainability pressure, we keep a constant track on water shortages and endeavor to reduce water consumption or enhance water reclamation in response. When the water shortage was severe in Kaohsiung during April-May 2021, the Kaohsiung City Government rationed water supply for industrial use by 7% at phase I and 11% at phase II. In response to the government's industrial water rationing policy and promote water conservation and consumption control, we advocated the cessation of using tap water for irrigation, washing building exterior walls, cleaning ditches, washing cars, and taking shower, which would consume more water. We also enhanced leakage inspection of pipelines and control valves to save water across the plant.

Water reclamation program	Effectiveness
Enhancing the recycling rate of water resources	We have improved the steam condensate recovery system. After the completion and operation of the Kaohsiung Plant's new steam boiler, the condensate reclaimed from steam can be reused in the new boiler for re-use. The water reclaimed is approximately 47,520MT/year. Calculation ▶ The project was completed in 2016. After field tests, we found that the reclamation volume is 6MT/hour. Based on 330 days a year, the annual reclamation volume is 47,520MT.
Recycling spillage water reclaimed from pellet cutting	Spillage water reclaimed from pellet cutting is first transported to the sedimentation tank. Then, it is pumped into the reclaimed water treatment plant before being further transported to the cooling tower for re-use to reduce tap water consumption and process effluents. The water reclaimed is approximately 27,720MT/year. Calculation ▶ The project was completed in 2016. After field tests, we found that the reclamation volume of the system is 14MT/batch. Based on six batches a day and 330 days a year, the annual reclamation volume is 27,720MT.
Continuous monitoring and reclamation of effluents	Continuous monitoring of the in-house effluent quality to enhance effluent treatment and response capacity and ensure that effluents comply with the discharge standards. After reclaiming by the system, effluents are treated before being transported to the cooling tower for re-use to reduce tap water consumption and process effluents. Calculation ▶ Based on the readings of pumps on-site, the total wastewater reclamation in 2021 was 10,986MT.
Detention basin and storm water reclamation channel	Pipelines will be installed from the existing detention basin and storm water reclamation channel to the cooling tower. After filtering by the storm water separator next to the cooling tower, storm water will be re-used by the cooling tower. The water reclamation in 2021 is about 15,914MT. Calculation ▶ The project was completed in 2017 and started operation in 2018. The plant catchment area is 3,500m ² , the tank site dike area is 3,300m ² , Kaohsiung's annual rainfall in 2021 was 2,600mm. Based on a reclamation rate of 90%, the estimated water reclamation is about 15,914MT/year.
MRT Steam Condensate Recovery	Steam condensate is recovered for reuse in the boiler to reduce tap water consumption. The project annual recovery is 17,500MT. Calculation ▶ Steam condensate recovery at 2.2MT/hour. The number of workdays is 330 days/year. The annual recovery is thus $2.2 \times 24 \times 330 \doteq 17,500$ (MT/year).

Note: The estimated volume of reclaimed and recycled water in 2021 was 119,640MT; the total water withdrawal was 998,098MT; the volume of reclaimed and recycled water was 12% of the total water intake.

Water Efficiency Management System GRI 303-1:2018

In 2021 we implemented the ISO 46001:2019 Water Efficiency Management System and completed system certification in February 2022. By inventorying the current status and ways of water consumption across the plant, through identifying, planning, managing, and improving the risks and opportunities of water with systematic water consumption management, and thereby optimizing water demand management, we effectively achieved the goals of water conservation and discharge reduction to enhance water efficiency and reduce water costs.



In 2022, we will enhance wastewater system management and optimize operation to reduce wastewater discharge and increase wastewater reclamation up to 12,000MT (projected). We will also implement process improvement and reduce MRT steam use to save water up to 2,880MT/year (projected).

Water as a shared resource GRI 303-1:2018

In 2021 we planned the firewater connection project with the plants (Grand Pacific Petrochemical Corporation) in the nearby Dashe Industrial Park. Besides dispatching water to support firefighting through water as a shared resource, this also strengthened the emergency response capability. Currently, Grand Pacific Petrochemical Corporation has connected firewater with TSRC Corporation in a firewater storage tank of about 4,500m³. Currently, the effective capacity of our firewater storage tank is 4,297m³. After the completion of the connection project at the end of 2022, the total volume of firewater as a shared resource will be about 8,797m³.

Effluents Management GRI 303-1:2018

Wastewater from the plant is the main source of effluents from USI. According to KSEPB's effluent runoff discharge permit, effluents that cannot be reused after treatment and comply with the environmental protection laws and regulations can be discharged to the surface water body—Houjing River. According to the data of the Soil and Water Pollution Control Division, Kaohsiung Bureau of Environmental Protection, the 2020 discharge of the effluent catchment of the Houjing River was about 77,280CMD, including 58,832CMD of domestic sewage, 18,341CMD of industrial wastewater, and 107CMD of livestock wastewater. The approved discharge of USI Kaohsiung Plant is 980CMD, accounting for about 5.3% of the industrial wastewater at the effluent catchment of the Houjing River. The total discharge in 2021 was 305.265 ML.

Wastewater discharge from the plant includes process wastewater and domestic wastewater from employees. Wastewater is transported to the water treatment plant for treatment via wastewater pipelines. The wastewater treatment system includes the pre-treatment and primary (physical) treatment. Through trash screening, oil removal, sedimentation, and chemical treatment, and the sludge treatment unit for wastewater solid-liquid separation, effluents meet the drainage quality before discharge.

To reduce the environmental impact of discharge and promote water recycling and reuse, besides complying with environmental protection laws and regulations, we optimized the functions of the wastewater (sewage) treatment plant in 2020, including adding the sludge concentration tank, improving the bottom sludge removal system of the sedimentary tank, and building the sludge rinsing system for the flotation system to enhance sludge treatment and collection efficiency. In 2020-2021, we constantly added major separator valves and sampling points to effectively block and control abnormal wastewater leakage to reduce the load of the treatment system and lower the environmental impact of effluents to achieve process source control.

Water quality monitoring and management GRI 303-2:2018 · 303-4:2018

Every half a year, we hire environmental analysis organizations approved by the Environmental Analysis Laboratory (EAL) to examine water quality of effluents from our plants, including NH4 required for total volume control. Every year, effluent test items required for reporting are well-followed the effluent standard. According to previously amended and promulgated “Effluent Standards”, the water quality control of discharge from the petrochemical industry includes 22 items, including 7 general water quality items and 15 specific water quality items. In our 2020 untreated wastewater and effluent quality tests and analysis, the measurement of 11 specific water quality items were below the method detection limits (MDLs). Hence, the inspection for these 11 items was exempted after reporting to the Bureau of Environmental Protection. In 2021 we continued to enhance the operation of the wastewater treatment plant, and the all water quality items of discharge complied with the regulatory limits.

Additionally, after discharging effluents to the Houjing River in Kaohsiung, a NH4 total volume control area, the NH4 detection limit is below the regulatory requirements over the years. According to the inspection data during January-April 2021 of the Kaohsiung Bureau of Environmental Protection, the detection limit of NH4 at the Houjing River was 11.68 (mg/L). The 2021 NH4 value of the Kaohsiung Plant was far below the effluent standard, with the lowest detected value at below 3.9%.

Results of Water Quality Examination in Last 3 Years

Water Quality Indicator	2019		2020		2021		Effluent Standard (Petrochemical Industry)
	H1	H2	H1	H2	H1	H2	
SS (mg/L)	9.2	24.8	3.7	8.5	9.0	5.7	30
Grease (mg/L)	9.6	8.3	6.3	2.6	6.6	4.5	10
COD (mg/L)	27.4	45.3	28.7	52.8	14.4	25.5	100
NH4 (mg/L)	0.14	0.88	1.27	0.28	0.78	0.48	20

Prevention and Management of Plastic Resin Pellet Leakage

The US Plastics Industry Association and American Chemistry Council co-promote the Operation Clean Sweep (OCS) campaign dedicated to preventing plastic resin pellets, flakes,

and power loss from entering the ocean to cause environmental pollution.

In 2020, we implemented the prevention and management of plastic resin pellet leakage through in-house inspection and inventory of plastic resin pellet leakage management. We also arranged education/training for contractors. In 2021, we performed the on-site walk-through inspection of contractors and comprehensive process area inventory to understand the methods that contractors and employees adopted to clean up and prevent the leakage of plastic resin pellets. We also established new or revised related control documents to ensure the collection of plastic resin pellets, flakes, and powder to prevent them from polluting the environment by rainfall or sewage. In 2021, we recovered a total of 12.87MT of plastic resin pellets across the plant.

Operation management

- On-site inspection and review
- Enhancement of employee awareness
- Establishment of procedure documents
- Follow-up of implementation results

Workplace

- Ensure venue ground flatness
- Enclosure installation
- Provision of cleaning equipment for employees

Personnel training

- Education/training
- Enhancement of SOP conformity of employees
- Workplace publicity

Management measures

- Materials unloading management
- Transportation packaging management
- Regional cleaning
- Collection management



4.3

Air pollution control

GRI 103-2、103-3

SDG 11

Sustainability Principle: Sustainable Development

Significance and Strategy	<p>Significance to USI</p> <p>Continuous environment improvement to achieve “zero pollution and zero emission”.</p>	<p>Strategy and Approach</p> <ol style="list-style-type: none"> 1. Reduce pollution and emission through process source improvement in support of end-of-the-pipe treatment. 2. Constant investment in environmental pollution control (prevention) management. 3. Compliance with the Gaoping total volume control. 	<p>Commitment</p> <p>Enforce zero pollution and zero emission. Data scope: Kaohsiung Plant</p>
Achievement and Goal	<p>2021 Goals</p> <ol style="list-style-type: none"> 1. Equipment/component VOC leakage <0.5%. 2. Improve process equipment and pipelines to reduce the fugitive emissions of VOCs. 	<p>2021 Projects</p> <ol style="list-style-type: none"> 1. Reduce equipment/ component VOCs effusion. 2. Improve process equipment and pipelines 	<p>2021 Achievements</p> <ol style="list-style-type: none"> 1. VOCs equipment component leakage: 0.038% 2. Improved the process equipment and pipelines of 2 assembly lines, added 3 tanker unloading arms and improved 6 catalyst mixing tanks to reduce the fugitive emissions of VOCs. 3. No sanction for leakage was found in the equipment/ component spot checks inhouse and by the environmental protection competent authorities.
Sustainable Development Milestone	<p>2022 Goals</p> <ol style="list-style-type: none"> 1. Equipment/component VOC leakage <0.5%. 2. Improve process equipment and pipelines to reduce the fugitive emissions of VOCs. 	<p>3-Year Goals</p> <p>Implement VOCs reduction programs</p>	<p>5-Year Goals</p> <ol style="list-style-type: none"> 1. Reduction of equipment/component leakage. 2. Reduction of pollutant emissions.
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> 1. VOCs test report 2. Emission data 	<p>Grievance Mechanism</p> <ul style="list-style-type: none"> • “Contact us” on the corporate website. • Stakeholder contact information • Stakeholder questionnaire 	<p>Chapter Summary</p> <ol style="list-style-type: none"> 1. Management methods 2. Management performance

Management Approach Description

USI is located in Kaohsiung City within the Gaoping Total Volume Control Area and the level 3 control area of PM₁₀, PM_{2.5}, and O₃. Therefore, air quality improvement has always been our prime target. To fulfill our corporate social responsibility, we spare no effort in implementing environmental improvement, hoping to achieve the “zero pollution and zero emission” goals in the five zero’s policy and contribute to air quality improvement.

Management Targets

We constantly promote pollution reduction, replace fuels with clean energy, and effectively collect exhaust to control equipment for proper treatment. We also cooperate with the total volume control and reduction of the Gaoping River to achieve the goals of zero pollution and zero emissions. In 2020, the construction and commissioning of the thermal oxidizer (TO) were completed to treat VOCs at high and low intensities with a damage and removal efficiency >99% to effectively reduce VOCs emissions. In 2021, we implemented equipment operation and maintenance training, established the management system, and arranged education and training. After rerouting exhaust emissions through the TO during the annual repair in December 2022, this can effectively reduce exhaust emissions via the flare tower.

Management Approach

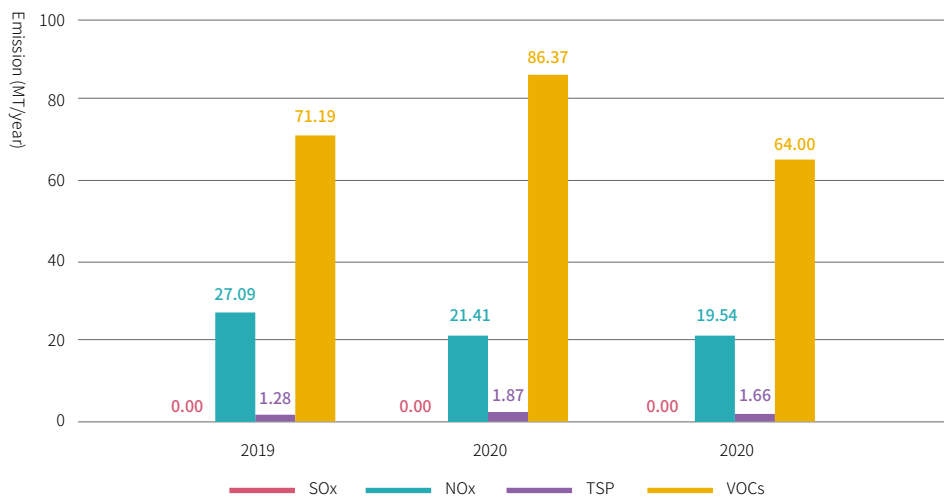
In addition to regularly testing and reporting air pollutants, we have planned the following reduction programs to effectively reduce air pollutants:

<p>VOCs Reduction</p>	<p>We implemented the equipment/component management plan. Besides establishing SOPs and creating master files for equipment/component management, outsourcing quarterly external inspection, and purchasing monitoring and measuring equipment and gauges and performing periodic instrument calibration, all plants also enhance equipment/component self-management, periodically review and follow up the inspection and service progress, run equipment maintenance and repair re-inspection, identify and improve equipment/component with a high leakage rate, reduce the quantity of equipment/component or replace with equipment/component with a lower leakage rate or leakage resistance, and enhance the inspection of equipment/component with a high leakage rate and more motions.</p> <ol style="list-style-type: none"> 1. In 2021, we continued to implement the management of the fugitive emissions of VOCs for equipment/component. The in-house environmental protection section performed equipment/component spot checks on 468 points and found no leakage. The environmental protection competent authorities performed 3 spot checks on a total of 1,200 points and found no leakage for sanction. In 2022, we will analyze the changes in the trend of VOCs leakage inspection results to facilitate leakage control. 2. In 2021, we built 3 tanker unloading arms and improved 6 catalyst mixing tanks. In 2021-2022, we improved the pipelines for VOCs collection in the process to effectively reduce the fugitive emissions of VOCs.
<p>Effective VOCs Treatment</p>	<p>In 2019, we built a TO system for processing high-intensity VOCs in-house and acting as the standby system of the RTO. The TO system was completed in 2020. The commissioning showed that the reduction rate of high-intensity VOCs at 4ppm is >99.9% and the low-intensity VOCs at 6ppm is >99.3%. In 2021 we implemented the equipment operation and maintenance training, established management systems, and arranged education and training.</p>
<p>Reduction of Pollutant Emissions</p>	<ol style="list-style-type: none"> 1. In 2021 we applied for cancellation of the emergency use of 540Kl of fuel oil by the steam boiler to switch to clean energy--natural gas. 2. In 2021 we planned the boiler NOx emissions reduction program and discussed De-NOx with professional contractors to improve the assessment report.
<p>Emergency Response to Air Quality Deterioration</p>	<p>In response to the deterioration of air quality at all levels, we activated the “Air Quality Deterioration Control Plan” and enhanced equipment patrol and inspection, periodic inspection and maintenance of diesel forklifts, and process reduction for emissions reduction. In 2020-2021, we implemented the air quality deterioration response drill to enhance the response ability of employees and review the opportunity for improvement after the drill.</p>
<p>Managing hazardous air pollutants (HAPs)</p>	<p>In 2022, we will arrange the hazardous air pollutants (HAPs) inspection and establish our own pollutant fingerprint database.</p>

Management Performance GRI 305-7

Major air pollutants emitted by USI include sulfur oxides (SOx), nitrogen oxides (NOx), total suspended particulate (TSP), and volatile organic compounds (VOCs). Fuel burning of the steam boiler is the main source of SOx, NOx and TSP detected in the plant, while RTO, flares, storage tanks, and equipment components are the main sources of VOCs emissions. Over the years, we hired EAL-accredited environmental engineering companies to test USI pipeline emissions, and the emission test results have been consistently well below the EPA emission standards.

Air Pollutant Emissions in Last 3 Years



Note: Air pollutant volume was reported based on the air pollution control fee.

Testing Results of Boiler Discharge Pipes in the Last 3 Years

Pollutant	2019	Standard (announced 2017)	2020	2021	Standard (announced 2020)
SOx(ppm)	ND	100	ND	ND	50
NOx(ppm)	100	150	90	54	100

Note 1: The results of VOCs emissions of Kaohsiung Plant comply with the statutory requirements over the years, with a reduction rate over 95%.

Note 2: ND means not detected.

Testing Results of the RTO Discharge Pipes in the Last 3 Years

Pollutant	2019	2020	2021	Standard
SOx(ppm)	ND	ND	ND	100
NOx(ppm)	2	2	2	150
TSP(mg/NM ³)	5	<1	-	100
VOCs(ppm)	53	52	52	Reduction rate>95% or <150ppm

Note 1: The results of VOCs emissions of Kaohsiung Plant comply with the statutory requirements over the years, with a reduction rate over 97%.

Note 2: According to the regulations, an inspection must be performed before applying for TSP extension (May 2, 2023). No TSP inspection was performed in 2021.

4.4

Waste management

GRI 103-2、103-3

SDG 11、12

Sustainability Principle: Sustainable Development

Significance and Strategy	<p>Significance to USI</p> <p>Continuous environment improvement to achieve “zero pollution and zero emission”.</p>	<p>Strategy and Approach</p> <ol style="list-style-type: none"> 1. Strengthen the waste management system. 2. R&D of waste reduction. 	<p>Commitment</p> <p>Enforce zero pollution and zero emission. Data scope: Kaohsiung Plant</p>
Achievement and Goal	<p>2021 Goals</p> <ol style="list-style-type: none"> 1. Enhance the flow control of waste disposal. 2. Test the waste reduction program in the process. 	<p>2021 Projects</p> <ol style="list-style-type: none"> 1. Audit waste disposal contractors. 2. Waste reduction programs. 	<p>2021 Achievements</p> <ol style="list-style-type: none"> 1. Enhancement of the flow control of waste cleanup and disposal by performing spot checks on 10 waste cleanup contractors and 7 waste disposal contractors, and no nonconformity was found. 2. Process tests were implemented to waste reduction to effectively remove impurities and VA.
Sustainable Development Milestone	<p>2022 Goals</p> <p>Establishing the waste audit and management systems.</p>	<p>3-Year Goals</p> <ol style="list-style-type: none"> 1. Establishing the waste audit and management systems. 2. Implementing waste reduction 	<p>5-Year Goals</p> <p>Implementing waste recycling and reuse</p>
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> 1. Waste reporting data. 2. Targeted research reports. 	<p>Grievance Mechanism</p> <ul style="list-style-type: none"> • “Contact us” on the corporate website. • Stakeholder contact information • Stakeholder questionnaire 	<p>Chapter Summary</p> <ol style="list-style-type: none"> 1. Management methods 2. Management performance

Management Approach Description

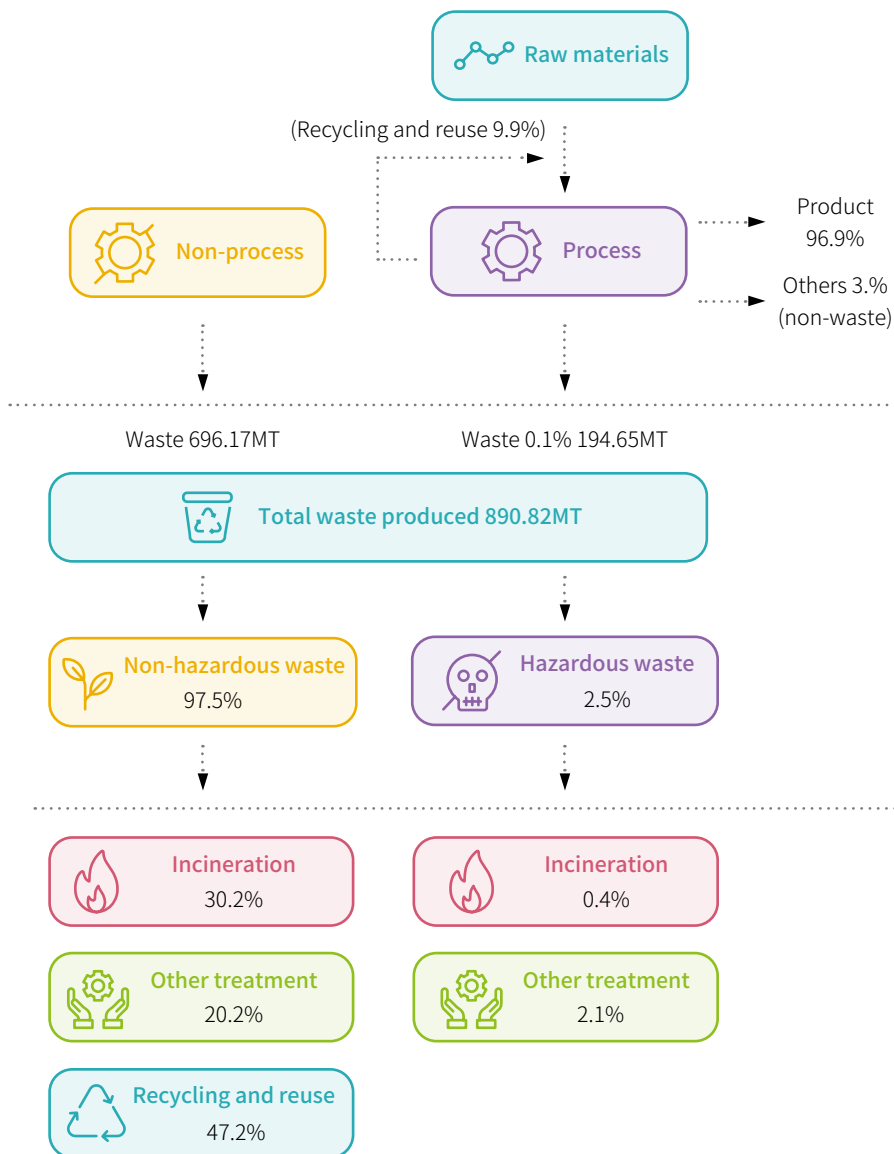
For proper waste disposal, we hire licensed contractors to dispose of such waste according to laws and regulations related to waste disposal. Apart from reviewing the qualifications of contractors and requesting them to provide support documents for proper waste disposal on a regular basis, we perform onsite inspections on contractors to verify their waste disposal performance, in order to perform our supervision obligation.

Management Approach

We produce mostly general industrial waste and dispose of such waste by incineration, physical treatment and cleaning. In recent years, the QC lab has been constantly assessed the reviewed the methods for analyzing hazardous waste management to reduce solvent consumption and effectively reduce the output of hazardous industrial waste. In addition, after washing and processing by qualified contractors, waste plastic containers are crushed and sliced for recycling to achieve the circular economy of resources.

In 2021 we continued with the comprehensive review of waste legitimacy, compared and proofread the monthly report data to facilitate accurate control of waste information. Additionally, industrial waste is sorted by the property of major composition before storing in the storage site, and the storage sites, containers, and facilities are properly labeled. We also built covered waste storage sites equipped with blocking ditches to prevent groundwater and water from runoff contaminations. In 2021, we audited waste storage sites every month, and all sites complied with the related regulations.

Waste Management Process GRI 306-1:2020



Use of Output Waste/Resources

- Waste collection and sorting management
- Periodic online report of waste output and storage.
- Monthly storage zone walk-through inspection to ensure legal compliance.
- Source management review to reduce waste production.
- Promotion of waste reduction programs

Waste Transportation Management

- Online report of the weight of waste disposed out of the plant.
- Real-time tracking system (GPS) of waste transportation
- Retention of tripartite order for outsourced common disposal, control, and delivery.
- Cleaning contractor audit and management

Waste Disposal, Management and Recycling

- Online report of the weight of received waste by contractors.
- Retention of proper disposal documents for reference.
- Contractor audit and management
- Consolidation of resource recycling records

Waste Disposal Contractor Audit and Management GRI 306-2:2020

We only hire licensed waste disposal contractors to clean up and dispose of waste by law. In 2021 we performed spot checks on 10 waste cleanup contractors and 7 waste disposal contractors with the items stated in Annex 2 of the “Regulations Governing Determination of Reasonable Due Care Obligation of Enterprises Commissioning Waste Clearance” (amended on February 23, 2021) to understand the storage, removal, disposal, and recycling of waste of disposal contractors, and no nonconformity was found.



Waste disposal contractors audit and management

- 1 Basic document review**
 - Environmental Protection Contractor Permit
 - ISO management system
- 2 Waste storage/disposal**
 - Degree of legal compliance
 - Compliance with disposal methods and contracts/receipts
- 3 Waste final disposal**
 - Verification of final disposal methods and flow
 - Compliance with final disposal methods and contracts/receipts



Management effectiveness GRI 306-3:2020 · 306-4:2020 · 306-5:2020

We are also committed to waste sorting to classify, collect, and manage recyclable resources. They are weighed and recorded before shipping out of the plant. We also hire licensed contractors to recycle waste metal. In 2021, we recovered 417.66MT of waste metal and hired nearby resource recycling contractors to dispose of the 3.21MT of paper waste. The total volume of waste recycling was 47.2% of all waste, up by 29.3% from 2020. This is mainly because of the replacement of process requirement and the expansion of the R&D building, leading to a higher volume of waste metal. The total waste output in 2021 was 890.82MT. In 2021, no oil, fuel, waste, or chemical substance leakage was reported.




Waste Production, Transfer, and Disposal in the Last 3 Years

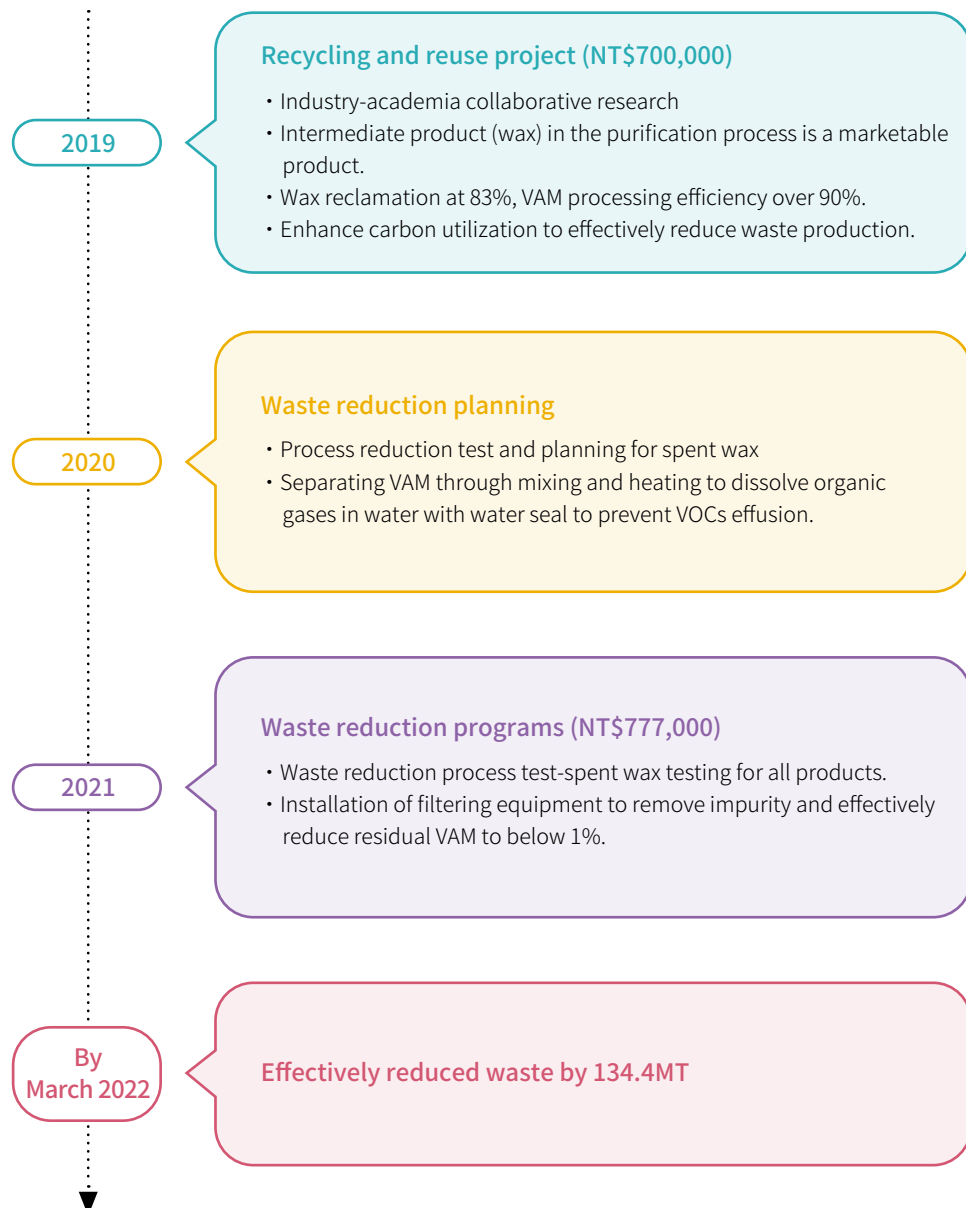
Waste		Disposal/Recycling	2019	2020	2021	
Hazardous waste	Toxic Industrial Waste	Incineration (including nonrecyclable waste)	1.86	1.05	3.46	
		Other treatment	17.53	15.67	18.77	
	Direct disposal					
Total weight of hazardous waste			19.39	16.72	22.23	
Non-hazardous waste	General Industrial Waste	Incineration (including nonrecyclable waste)	245.42	201.22	269.40	
		Other treatment	240.97	171.14	178.32	
	Direct disposal					
	Total weight of non-hazardous waste			486.39	372.36	447.72
	Recycling	Recycling for reuse	230.42	84.92	420.87	
Resource recycling rate (%)		31.3	17.9	47.2		
Total weight of non-hazardous waste			716.81	457.28	868.59	
Total weight of waste (MT)			736.20	474.00	890.82	

Note 1: Data regarding the production, transfer, and disposal of waste were extracted from the Waste Report and Management Information System of the Environmental Protection Administration. Data of recycling were extracted from in-house records and accounting documents.

Note 2: Waste is transported by licensed cleanup contractors to the qualified disposal contractors for disposal. Waste for recycling was recycled for reuse outside of the plant.

Waste reduction programs

 <p>Reinforcement of awareness education</p>	<p>Reinforce the awareness education of the need for waste sorting and labeling to increase waste recovery volume and reduce the disposal volume of general waste.</p>
 <p>Clean production</p>	<p>Strengthen process management to minimize end-of-pipe treatment and reduce the output of sludge and other industrial waste.</p>
 <p>Hazardous waste Reduction management</p>	<ol style="list-style-type: none"> 1. After washing and processing by qualified contractors, waste plastic containers are crushed and sliced for recycling. 2. In analysis method improvement, the QC lab skipped the extraction process in inhibitor analysis to stop using solvents. As a result, solvent consumption reduced significantly. In addition, solvents are recovered for reuse in washing to reduce the consumption of washing solvents. In the future, we will continue to assess and review the analysis methods to effectively promote the reduction of hazardous waste.



4.5

Climate change and energy management

GRI 103-2、103-3

SDG 7、13

Sustainability Principle: Sustainable Development

Significance and Strategy	<p>Significance to USI</p> <p>Drawing up of related energy conservation and emissions reduction measures, enhancing climate change responsiveness, reducing GHG emissions, lower operating cost, raise process efficiency, and enhance competitiveness.</p>	<p>Strategy and Approach</p> <p>Reduce unit product energy consumption and GHG emissions</p>	<p>Commitment</p> <p>Annual electricity conservation >1% Data scope: USI coverage 100%</p>
Achievement and Goal	<p>2021 Goals</p> <p>Implement 8 energy conservation and carbon reduction projects to reduce electricity by 0.75%</p>	<p>2021 Projects</p> <p>Implemented 5 energy conservation projects.</p>	<p>2021 Achievements</p> <p>Implemented 5 energy improvement projects to reduce electricity by 0.75%, with an annual conservation rate (2015-2021) of 1.38%, energy by 5.10%, and carbon by 2.39%.</p>
Sustainable Development Milestone	<p>2022 Goals</p> <ol style="list-style-type: none"> Each year: 1% electricity less, 1.2% energy less, and 1.5% carbon less. Implement 10 energy conservation projects to reduce electricity by 1.71% Implement GHG inventory 	<p>3-Year Goals</p> <ol style="list-style-type: none"> Build the AI intelligent management platform to advise energy conservation operations. Annual average energy conservation 2020-2025: 1.2% 	<p>5-Year Goals</p> <p>Green energy development.</p>
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> Unit product energy consumption. Energy conservation volume. Energy review and identification table (monthly) HSE/Energy Management Committee meeting (quarterly) GHG inventory. 	<p>Grievance Mechanism</p> <ul style="list-style-type: none"> “Contact us” on the corporate website. Stakeholder contact information Stakeholder questionnaire 	<p>Key Programs of this Chapter</p> <ol style="list-style-type: none"> TCFD climate change risks and opportunities. Factory smart energy management system Carbon footprint

*Commitment and target of annual electricity conservation rate: Based on the energy conservation targets set for energy users and the regulations of the implementation plan, energy users are required to save electricity by over 1% each year on average during 2015-2024.

Management Performance

Climate Change: Addressing climate change brings the opportunities for sustainable development

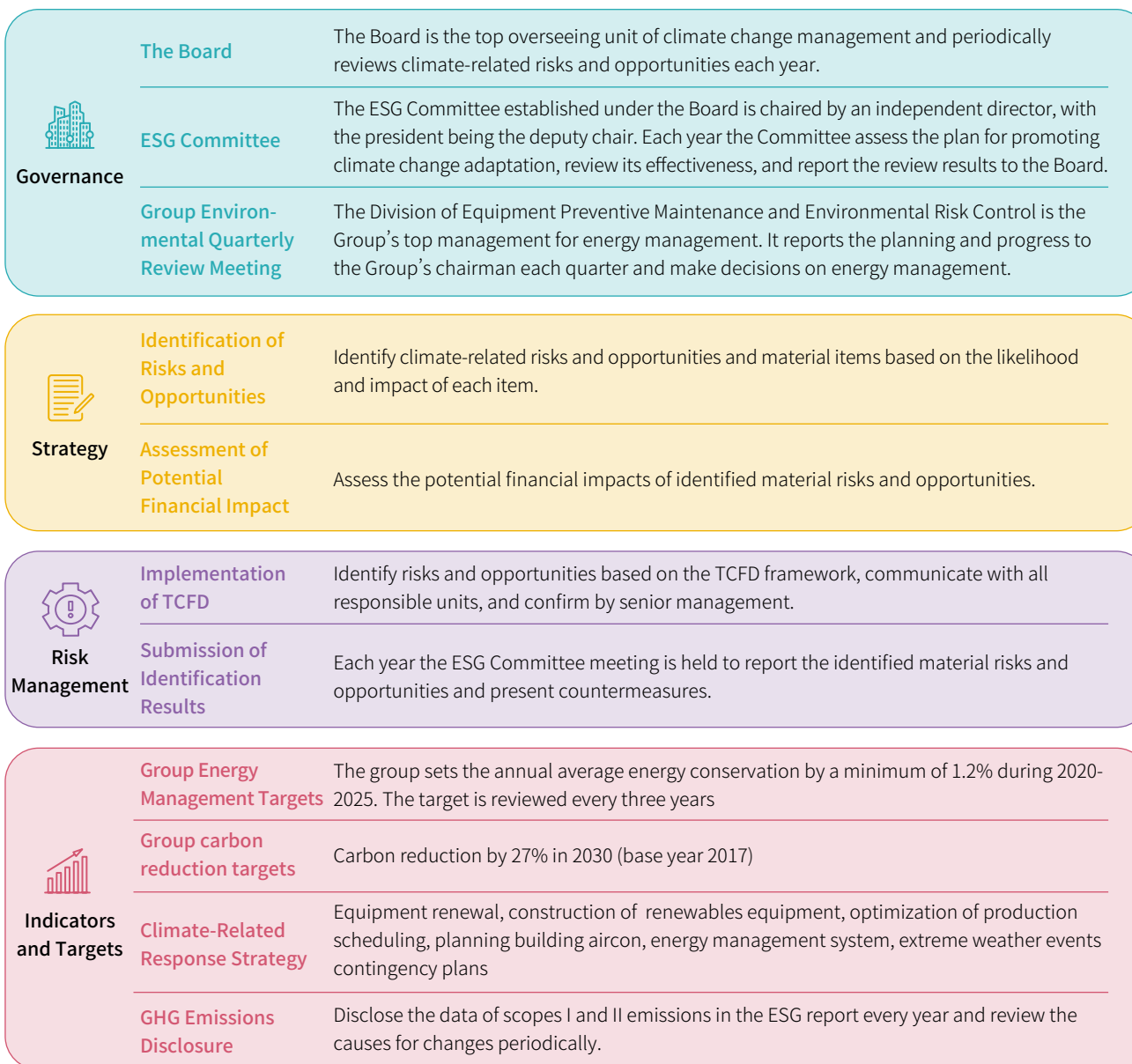
TCFD Climate Change Risks and Opportunities

Following the execution of the Glasgow Climate Pact at the UNFCCC COP26, Taiwan has announced amending the Greenhouse Gas Reduction and Management Act into the Climate Change Adaptation Act. After re-assessing our own carbon emission structure, we set a new carbon reduction target to 27% less emissions over 2017 by 2030, actively implement corresponding countermeasures and management mechanisms, request domestic core manufacturers to plan and implement the relevant action plans, and actively engage in the Group's renewables planning. In 2021, we already developed solar generation of nearly 5MW.

To adapt to the impact from climate change, we identified climate risks and opportunities and assessed the potential financial impact based on the climate-related financial risk disclosures developed by the Task Force in 2019 on Climate-related Financial Disclosures (TCFD) created by the Financial Stability Board (FSB) in order to set contingency plans based on the identification outcomes. In November 2020, we became one of the 1,846 global TCFD supporters. [GRI 102-12](#)

Please visit <https://www.fsb-tcfid.org/supporters/> for details.

USI TCFD Framework

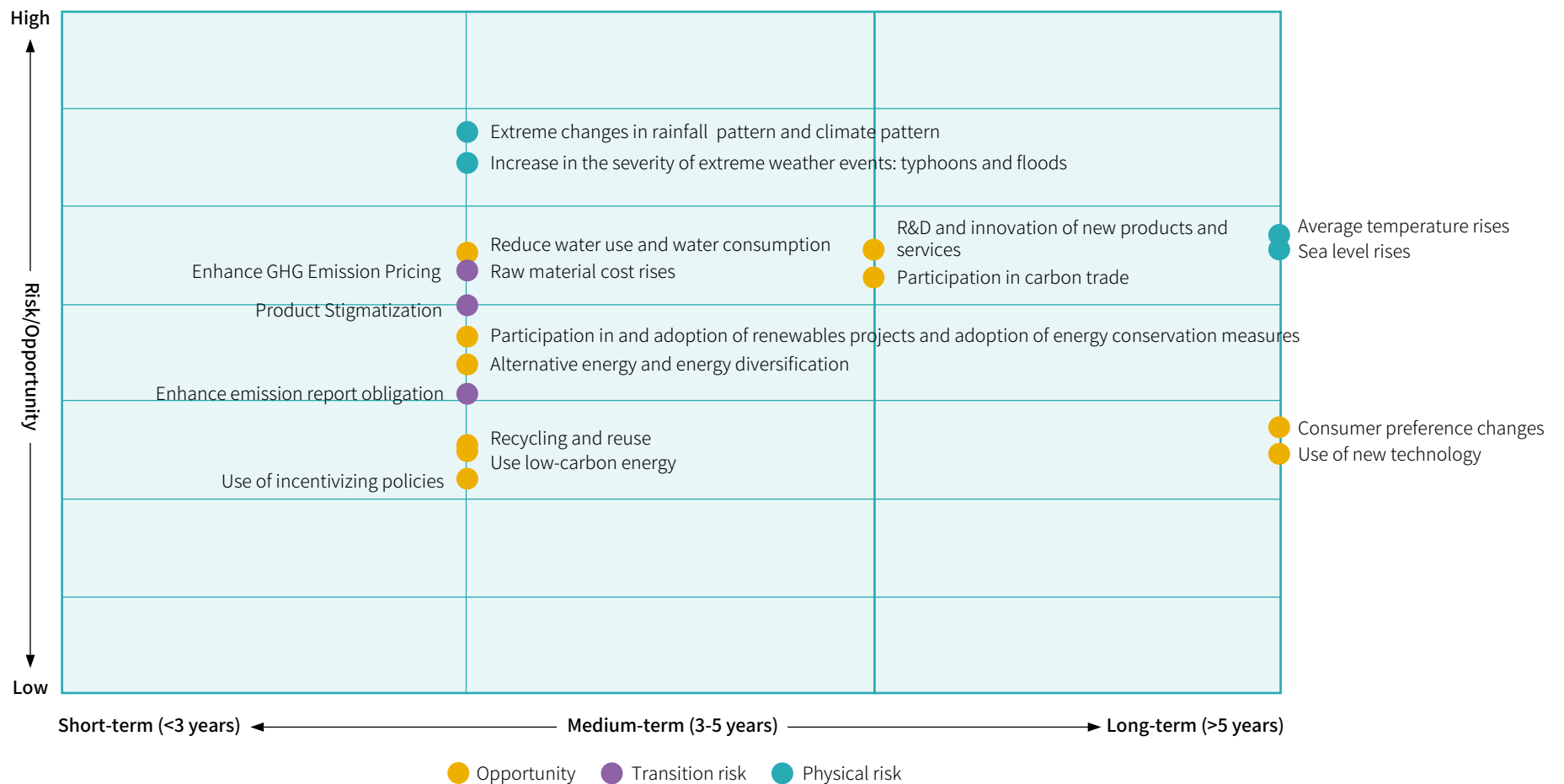


※Please refer to 2.3 Risk Management for the details of the risk management process and mechanism.

Identification of Climate-Related Risks and Opportunities

The impact of climate change on USI’s operations has been increasing. To tackle the potential risks and capture the potential new business opportunities, we have spared no efforts in implementing programs to enhance energy conservation and carbon reduction, improving production efficiency, and replacing old equipment with high-efficiency equipment. We adopted the TCFD method to identify the transition risk and physical risk in business transformation and the emerging opportunities from climate change. As a result, we identified 8 major risks and 10 major opportunities. In the future, we will review the countermeasures every year and develop a resilient climate change culture.

Map of Climate-Related Risks and Opportunities



Potential Financial Impact of Risks and Opportunities and Countermeasures

Type	Climate Related Risk	Time Range	Risk Level	Potential Financial Risk	Countermeasures	USI Specific Description
Transition	Enhance GHG Emission Pricing	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬆️ capital expenditure ⬆️ operating costs 	<ol style="list-style-type: none"> 1. Implement the energy management system. 2. Invest in green power, energy conservation, and carbon reduction equipment, and increase the expense of carbon fee. 	Own-brand manufacture (ODM) is our core business. The electricity cost accounts for 7.9% of the total production cost. The annual electricity conservation target at 1% and energy conservation at 1.2% can help save over NT\$5 million. With reference to the example of Singapore, based on the carbon fee of NT\$100/MT, the annual expense on carbon fee will exceed NT\$15 million.
	Raw material cost rises	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬆️ capital expenditure ⬆️ operating costs 	Accelerate AI production scheduling to enhance efficiency and reduce material losses from number plate change.	Ethylene is our major material. To increase ethylene sources, we invested in the Gulei Project (nearly NT\$8 billion) and the Ethylene Storage Tank Project of Kaohsiung Intercontinental Container Terminal Project (NT\$906 million).
	Product Stigmatization	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬇️ asset value ⬇️ revenue 	<ol style="list-style-type: none"> 1. Accelerate transformation 2. Invest in green energy equipment and use green products. 3. Recycling and reuse of plastic materials. 	In 2020, we approved a budget of NT\$110 million for building the R&D building to accelerate the R&D pace.
	Enhance emission report obligation	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬆️ operating costs 	<ol style="list-style-type: none"> 1. ISO 14064-1 and promote Scope 3 and the product carbon footprint verification under ISO 14067. 2. Enhance website and media disclosures. 	<ol style="list-style-type: none"> 1. We invested about NT\$56,000 in ISO 14064-1 guidance and verification (2019-2021). In 2021 we invested about NT\$26,000 in implementing product carbon footprint verification under ISO 14067. 2. Invested IT workforce in website construction to disclose related information.
Physical	Extreme changes in rainfall pattern change and climate pattern	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬆️ capital expenditure ⬆️ operating expense 	<ol style="list-style-type: none"> 1. Build an AI water information system to establish countermeasures based on the precipitation in reservoirs. 2. Implement the ISO 46001 Water Efficiency Management System. 3. Improve the wastewater reclamation system and enhance operational management to increase the capacity of water reclamation. 	<ol style="list-style-type: none"> 1. In case of water shortages, we need to purchase water from outside. In case of water scarcity, we need to reduce production line output or shut down operations. It is estimated that water purchase will increase production costs by over NT\$0.1 million/day. In case of production line shutdown, the loss will increase to about NT\$2.5 million/day. In case of operation suspension, the loss will be over NT\$10 million/day. 2. In 2021 we invested about NT\$32,000 in implementing the ISO 46001 Water Efficiency Management System. 3. In 2021 a total of 10,986MT of water was reclaimed, and the volume will increase to 12,000MT in 2022.
	Increase in the severity of extreme weather events: typhoons and floods	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬆️ capital expenditure ⬆️ operating expense 	Build flood control and drainage facilities.	To reduce the loss on operation suspension caused by floods, we progressively plan budgets of about NT\$14 million to build flood control and drainage facilities. Otherwise, the loss on operation suspension will be about 650MT/day.
	Sea level rises	Long-term	Medium-High	<ul style="list-style-type: none"> ⬆️ capital expenditure ⬆️ operating expense 	<ol style="list-style-type: none"> 1. Raise the equipment foundation. 2. Build flood control and drainage facilities. 	Countermeasures corresponding to the rainfall pattern change and extreme weather events such as typhoons and floods.
	Average temperature rises	Long-term	Medium-High	<ul style="list-style-type: none"> ⬆️ capital expenditure ⬆️ operating expense 	<ol style="list-style-type: none"> 1. Use eco-friendly sunshield coatings, reduce the fugitive emissions of VA gases, and reduce aircon uses. 2. Modify cooling towers with inverter control. Enhance the heat insulation of pipelines and equipment. 	Countermeasures corresponding to the rainfall pattern change and extreme weather events such as typhoons and floods.

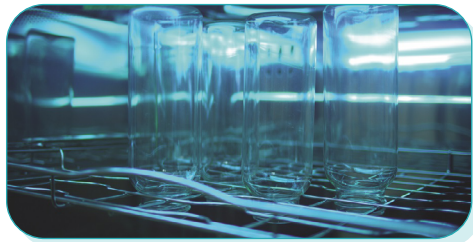
Type	Climate Related Risk	Time Range	Risk Level	Potential Financial Risk	Countermeasures	USI Specific Description
Resource Efficiency	Reduce water use and water consumption	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬆️ capital expenditure ⬇️ operating costs 	<ol style="list-style-type: none"> 1. Invest in wastewater reclamation equipment. 2. Improve process equipment and operation to reduce steam use. 3. Constantly develop water conservation programs. 	<ol style="list-style-type: none"> 1. In 2020 a total of NT\$1.6 million was invested in the reclamation of condensate from the process steam to reclaim up to 17,500MT of water. In 2022 we will improve process operation to reduce steam use to save water up to 2,880MT/year (projected). 2. Constantly develop water conservation programs.
	Recycling and reuse	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬆️ revenue ⬇️ operating costs 	<ol style="list-style-type: none"> 1. Wax recycling and reuse 2. Materials recycling improvement 	<ol style="list-style-type: none"> 1. The cost of wax recycling equipment is NT\$776,574. In 2021, the profit from wax recycling was NT\$71,430. 2. Materials recycling: 12.3%.
Energy source	Participation in carbon trade	Medium-Long Term	Medium-High	<ul style="list-style-type: none"> ⬆️ operating costs 	Constantly trace related laws and regulations and seek transaction opportunities.	Constantly trace related laws and regulations and seek transaction opportunities, and participate in related seminars from time to time.
	Use low-carbon energy	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬆️ asset value 	Engage in renewables programs within three years.	Constantly assess and seek appropriate programs to engage in renewables programs within three years.
	Use of new technology	Long-term	Medium-High	<ul style="list-style-type: none"> ⬆️ asset value ⬇️ operating costs 	<ol style="list-style-type: none"> 1. Constantly enhance process carbon efficiency. 2. Engage in high-performance investments. 3. Purchase Green Mark equipment 	In 2021, we activated the smart factory system to constantly keep track on equipment energy consumption.
	Use of incentivizing policies	Short-Medium Term	Medium-High	<ul style="list-style-type: none"> ⬇️ capital expenditure 	Coordinate with the Renewables Incentivization Regulations	Propose corresponding actions according to the Renewables Incentivization Regulations
Products and Services	R&D and innovation of new products and services.	Medium-Long Term	Medium-High	<ul style="list-style-type: none"> ⬆️ asset value ⬆️ revenue ⬆️ capital expenditure 	Cultivate new markets and engage in industrial transformation, and develop plastic-reduced and low-energy-consumption products.	In 2020 we invested in a new R&D center to cultivate new markets and engage in industry transformation.
	Consumer preference changes	Long-term	Low-Medium	<ul style="list-style-type: none"> ⬆️ revenue 	Develop CBC new materials	Develop CBC new materials in response to the pandemic.
Resilience	Participation in renewables projects and adoption of energy conservation measures	Medium-Long Term	Medium-High	<ul style="list-style-type: none"> ⬆️ asset value ⬇️ operating costs 	Constantly participate in related activities.	Constantly participate in related activities, engage in local procurement, and implement green procurement.
	Alternative energy and energy diversification	Medium-Long Term	Medium-High	<ul style="list-style-type: none"> ⬆️ asset value 	Invest in green power.	Actively seek suitable sites for green energy development. In 2021, we invested in solar generation of about 5MW.

Companies within the group constantly invest in innovative materials and products to reduce the impact from climate change

ViviOn™ Cyclic Block Copolymer (CBC)



The new cyclic block copolymer (CBC) is a medical plastic characterized by its high UVC penetrability. It is suitable for making reusable food containers and tableware. By integrating with UVC disinfection, it enhances UVC disinfection validation and extends product lifespan to reduce environmental impacts and enhance living quality. Additionally, adding a small quantity of CBC to PE/PP can increase the stiffness and rigidity of PE/PP films to reduce the overall consumption of packaging materials by thinning films.



Water-based sunshield coatings



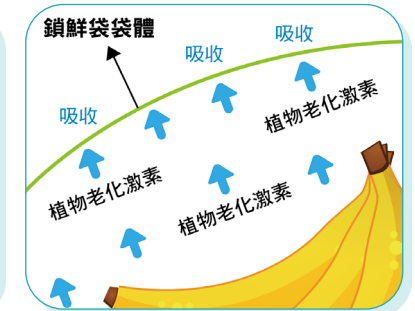
In 2019, we developed different colors of water-based sunshield coatings with the industry. When using on chemical storage tanks, they can effectively block heat transmission to reduce 80% of time for water spray for cooling in summer. Besides saving water, they help maintain the quality and stability of chemicals in the tank.



USii Zipper Bag



According to the FAO statistics, up to 45% of fruit and vegetables are soiled or spent during their lifespan. We develop a technology to keep fruit and vegetables fresh by absorbing their spoilage agents to extend their lifespan and thereby reduce food wastage. In addition, the reusable PE bags can indirectly reduce resource wastage.



USii Zipper Bag-Bag for Foods



When the cut of meat comes in contact with air, oxidation takes place to deteriorate meat. Hence, blocking oxygen is key to meat preservation. We develop a food zipper bag that can block oxygen 500 times better than any other technology in the market for total oxygen blockade to mitigate meat oxidation and thereby improve meat preservation quality. Additionally, it is reusable to extend the extend meat preservation time.



High-liquidity injection HDPE-LH5590

In 2021 we successfully developed the high-liquidity injection HDPE product LH5590 (MI: 90g/10min) ahead of the industry. It is the HDPE product with the highest melt index (MI) in the market so far. Its high liquidity property can significantly shorten the processing time, increase productivity, reduce process energy consumption, and thereby lower environmental impact and reduce production costs for customers.



Energy management GRI 302-3

● Group Energy Management Targets

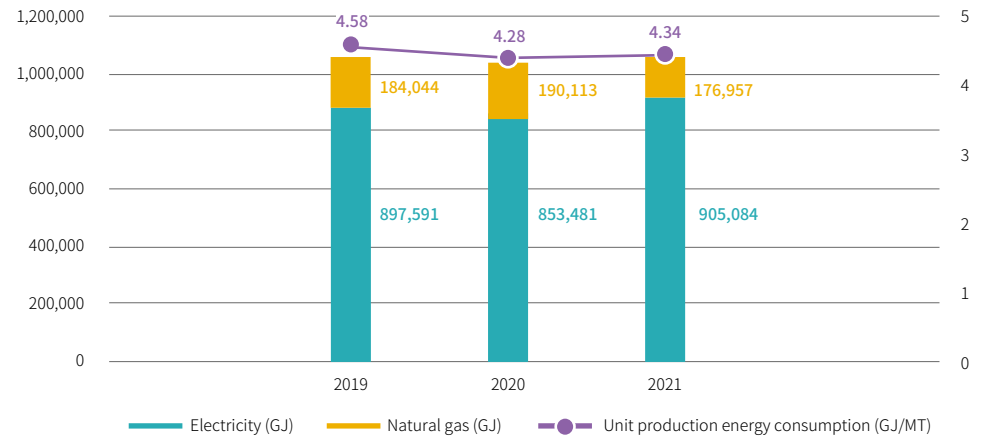
In 2019 we set the energy management target at 7.2% less in 6 years during 2020-2025. We kept tracking the international trends and national policies to make dynamic reviews and requested all USI businesses to maintain an average of 1.2% less each year, with plants planning related action plans. To effectively manage energy performance and make continual improvement, we implemented the ISO 50001 EnMS at all USI plants. By 2021, 9 plants have passed ISO 50001 certification. In 2022, one plant will implement the system. Through constant energy conservation and carbon reduction, we hope to demonstrate our influence to reduce environmental impact.

Every year USIG holds the “plant technology exchange meeting” and several and “northern/Kaohsiung plants resource integration meetings” for plants to share resources and exchange technologies to improve performance in energy conservation and carbon reduction. At the “plant technology exchange meeting” in December 2021, the group organized the case sharing in the form of competition based on the subjects of “HSE”, “predictive maintenance”, and “energy conservation and carbon reduction”. Through

case submission and documentary review, 7 cases eventually entered the final for senior officers and all presenting plants to elect the top 3 cases. The group chairperson also presented the certificate and bonus to winners in order to encourage technology improvement within the group through competition and mutual learning.



Energy Consumption and Unit Product Energy Consumption in the Past 3 Years



Note 1: As diesel consumption is far lower than that of electricity and natural gas, it cannot be shown in the chart. Please refer to the table below for details.

Note 2: Energy consumption does not include the consumption of the CBC plant (which is at the test run stage).

Energy Consumption and Unit Product Energy Consumption in Last 3 Years GRI 302-1

Energy Type	Unit	2019	2020	2021
Electricity	GJ	897,591	853,481	905,084
Natural gas	GJ	184,044	190,113	176,957
Diesel	GJ	458	527	581
Total consumption	GJ	1,082,093	1,044,121	1,082,623
Production	MT	236,410	244,162	249,402
Unit product energy consumption	GJ/MT	4.58	4.28	4.34

Note 1: Referring to the Energy Heating Value Per Unit Product Table announced by the Bureau of Energy, Ministry of Economic Affairs, the conversion factor of energy consumption of electricity, LNG, and diesel is as follows: 860 kcal/kWh, 9,000kcal/m³, and 8,400 kcal/L; where 1 cal = 4.187 kJ.

Note 2: Sources of natural gas and electricity consumption: fuel bill statistics.

Note 3: Source of diesel consumption: Material collection forms.

Note 4: Only non-renewables is used.

Note 5: Energy data coverage rate=100%.

Note 6: Energy consumption does not include the consumption of the CBC plant (which is at the test run stage).

● Factory smart energy management system

After applying to IDB for the Factory Smart Energy Management Demonstration Guidance Program in 2020, we engaged in active construction. With the assistance of IDB and Taiwan Green Productivity Foundation (TGPF), we progressively achieved the KPIs of energy management system.

1. Establish energy performance indicators and baseline requirements.
2. Develop the data collection and analysis and control and management capabilities of plant personnel.
3. Practice the application of smart production and management.
4. Provide decision-making references of corrective action for management.

5. Reduction of management workforces and costs.
6. Discover the room for improvement of energy conservation and references for improvement of energy performance supervision.

In March 2021, we were selected as a demonstration plant for the smart energy management system. Besides sharing the results of energy conservation and arranging onsite demonstration for other businesses in the same industry, Kaohsiung Plant earned critical acclaim from them. In October 2021, we were invited by the Taiwan Chemical Industry Association to share our practice in energy conservation and carbon reduction using the ISO 50001 Energy Management System with other members.

To extend the spiritual framework of the energy management system, we selected the AI Energy Conservation Assessment--Chiller System as the target in 2021, hoping to further enhance energy efficiency using IoT data as the implementation strategy in the big data era.



Assessment of directions for energy conservation Chiller

Targets Chiller W-237 (eccentric chillers x 3)



Energy conservation target

Analyze process and chiller historical data to recommend the optimal energy conservation parameter configuration of each month. Provide operational instructions for onsite personnel to lower energy consumption without affecting product quality.



Modernized data analysis and visualization

Near-synchronous data display with the distributed control system (DCS)
Integrate DCS+ and onsite tests to assess more sophisticated systems



Up-to-date

Real-time updated and recommended operation solutions for onsite personnel.



User operation and customization

Energy portfolio optimization
Baseline automation construction
Energy conservation parameters recommendation

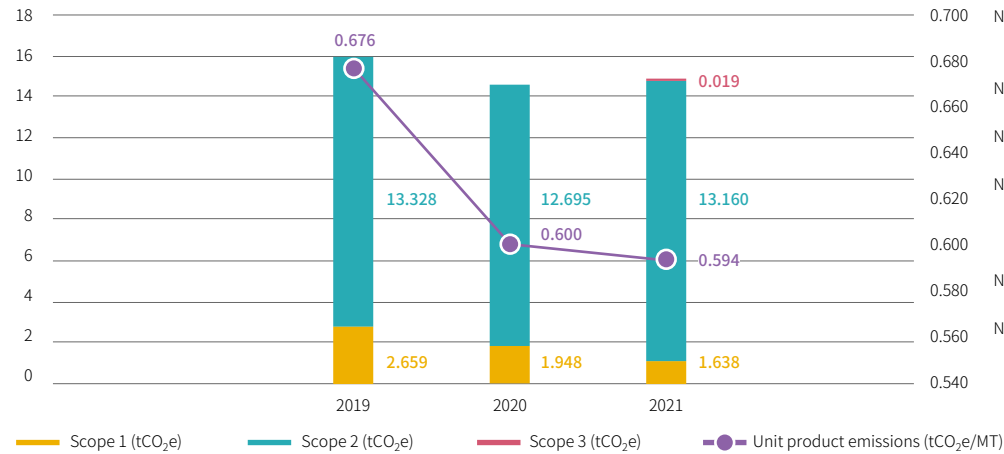


● **GHG management** GRI 305-1、305-2、305-3

Based on the ISO 14064-1:2018 GHG inventory standard and the GHG Emissions Inventory and Registration Guidelines of EPA, we performed GHG inventory, consolidation, and system establishment with the assistance of external experts. We set organizational boundary for GHG inventory based on the “operational control method”, The organization has 100% of GHG emissions from facilities under its operational control. GHGs under inventory include CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃. The emission coefficients are cited from EPA’s GHG Emission Coefficient Management Table V.6.0.4, and the global warming potential (GWP) is reported based on IPCC’s AR5 (2013).

In 2021, the direct (Scope 1) GHG emissions were 16,380tCO₂e, the energy indirect (Scope 2) GHG emissions were 131,790tCO₂e, and the combined direct and indirect GHG emissions were 148,170tCO₂e. We will continue to implement energy conservation and carbon reduction measures to progressively plan and implement the inventory of other indirect (Scope 3) GHG emissions to effectively review the environmental impact of CO₂ in order to achieve the win-win of environmental protection and profit together.

GHG Emissions in the Past 3 Years



- Note 1: Scope 1 refers to major emission sources including stationary combustion, mobile combustion, process, and fugitive emissions.
- Note 2: Scope 2 refers to indirect emissions of purchased electricity.
- Note 3: Scope 3 refers to the indirect emissions produced from the treatment of solid and liquid waste.
- Note 4: The electricity emission coefficient is subject to the latest data announced by the Bureau of Energy: 0.509 tCO₂e/MWh for 2019-2020 and 0.502 tCO₂e/MWh for 2021.
- Note 5: Diesel containing no biofuel was used in 2021. The combustion emission of biofuel was 0 kgCO₂e.
- Note 6: Verification according to the ISO 14064-1:2018 standard by SGS Taiwan Limited.

● **Energy conservation and carbon emissions targets and performance** GRI 302-4

The 2021 targets and performance for energy conservation and carbon emissions and the 2022 targets for energy conservation and carbon emissions are tabulated below:

Year	2021		2022	
	Item	Targets	Performance	Targets
	Electricity Conservation (%)	0.75	0.75	1.71
	Energy Conservation (%)	0.58	5.10	7.36
	Emissions Reduction (%)	0.67	2.39	4.07
	Water Conservation (%)	3.63	4.26	3.63

- Note 1: Energy conservation types were reduction of electricity and LNG consumption.
- Note 2: Emissions reduction covers emissions from energy consumption.

The table below shows the programs and performance of energy conservation and emissions reduction in 2021. The energy conservation volume reported to the Bureau of Energy in 2021 was 1,972,419 kWh, equivalent to 1,004tCO₂e. [GRI 305-5](#)

Item	Type	Program	Energy Saved kWh/Year	Carbon Reduced tCO ₂ e/year	Period (2021)
1	Electricity Saving	Improved the C/E/F FKC water pump with the high-efficiency motor.	2,272	1.2	Jan-Apr
2	Electricity Saving	Low-pressure steam condensate recovery	11,171	5.7	Jan-Dec
3	Electricity Saving	Process Exhaust Recovery	1,084,007	551.8	Jan-Dec
4	Electricity Saving	Suspension of TO	691,545	352	Oct-Dec
5	Electricity Saving	Demand bid	183,424	93.4	Jan-Dec
Total			1,972,419	1,004	

Note 1: Electricity to emission conversion coefficient is 0.502tCO₂e/MWh.

Note 2: Based on the 2021 Report on the Annual Energy Saving Audit System of Energy Users of the Bureau of Energy.

Note 3: Electricity conservation of item1 was calculated based on the design value/measured value and operating time of equipment before and after replacement.

Note 4: The energy conservation volume of items 2-4 is converted based the measured value or flowmeter readings, operating duration with the heating value.

Note 5: Energy conservation volume: 1kWh = 64,345 GJ. Energy conservation types included electricity and LNG.

The energy conservation program reported to the Bureau of Energy in 2022 included the high-efficient motor replacement for the dicing pumps and chillers; renewal of the freezers and cooling water pumps; compressor inlet pressure reduction; compressor operating pressure reduction; compressor backflow pipeline addition; steam consumption reduction of suspended equipment and recovery towers; and modification of exhaust processing. A total of 4,564,644kWh of electricity is projected to conserve in 2022, with a conservation rate of 1.71%.

Electricity Conservation Rate in the Past 3 Years

Item	2019	2020	2021
Electricity Saved (kWh)	3,355,494	4,230,976	1,972,419
Electricity Conservation (%)	1.33	1.67	0.75

Note 1: Source: Based on the 2021 Report on the Annual Energy Saving Audit System of Energy Users of the Bureau of Energy.

Note 2: Subject to the energy audit equation of the Bureau of Energy, reported energy saved divided by the total electricity consumption.

Energy conservation and carbon reduction plan

Forestation Adoption Program

In response to energy conservation, carbon reduction, and environmental protection, we promoted the "Forestation Adoption Program" in collaboration with the Experimental Forest, College of Bio-Resources and Agriculture, National Taiwan University to grow more trees with the technical assistance of professional teams. Additionally, the program allows the public to understand the benefits of growing trees for CO₂ adsorption by soil and water and its importance to environmental protection.

In December 2021 we signed the agreement to donate NT\$9 million for forestation through adopting 7,500 trees occupying area of about 5 hectares for a term of 20 years, with a total carbon fixation capacity of 1,350tCO₂e, equivalent to the capacity of about 3.5 Daan Parks. (According to the Council of Agriculture, the per hectare carbon adsorption of forests is 15tCO₂e/year. The area of Daan Park is 25.8 hectares, i.e., its annual carbon adsorption capacity is about 384.6tCO₂e.)

Cross-Sector Collaborative GHG Reduction Program

In response to the government's Cross-Sector Collaborative GHG Reduction Program 2020-2021, we supported and actively implemented energy conservation and carbon reduction affairs for two consecutive years with outstanding achievements, earning us the certificate of appreciation from the Kaohsiung Bureau of Environmental Protection. In 2021, we sponsored Dawan Junior High School to replaced the energy-efficient fluorescent lamps at the sports ground. A total of 3,628 kgCO₂e of GHG is projected to reduce.

Supported "Earth Hour", a global energy conservation activity.

During 20:30-21:30 on March 27, 2021, we joined the "Earth Hour" activity with the world by turning off the landscaping lights of the plant exterior walls and unnecessary lighting fixtures in order to advocate the idea that everyone, regardless of age and socioeconomic status, has the ability and responsibility to protect Earth in climate change.

We supported the government's energy conservation and carbon reduction policies and activities in real action. Besides reducing energy use and lowering the cost, we also hope to encourage the public and businesses to value energy conservation and carbon reduction by setting an example through participating in Earth Hour.

During the activity, we turned off a total of 98 skyline lamps and 1 signboard lamp to save about 1.18kWh of electricity, reducing carbon by about 0.6kgCO₂e.

● Product carbon footprint

In 2021 we promoted the product carbon footprint standard and verification. Based on the data of lifecycle assessment, the GHG emissions from direct and indirect activities or accumulated in the product are considered according to the product lifecycle from materials acquisition or natural resource production to disposal at the end of life is considered. Verification for conformity to the ISO 14067:2018 product carbon footprint standard was completed on EVA, the target product, according to ISO 14064-3:2006. The declared/functional unit is per kilogram (including package).



Lifecycle GHG Emissions

Lifecycle Stage	Declared Unit of Emissions of Target Verification Product (kgCO ₂ e)			Functional Unit Emissions (kgCO ₂ e)
	Materials	Manufacturing	Total	
EVA®UE2828	2.270	0.689	2.96	2.96
EVA®UE649-04	2.128	0.689	2.82	2.82
EVA®UE659	2.223	0.689	2.91	2.91

● Low-carbon office building for USI Headquarters

The energy management system was implemented at USI Building in 2019 to implement building energy conservation and carbon reduction through scientific and digitized management. By analyzing and diagnosing electricity consumption with the energy management system, we proactively implemented building and office energy conservation and carbon reduction in terms of four aspects: equipment improvement, operation improvement, management improvement, and awareness education.

In the future, we will assess the replacement of old-styled chillers with high-efficient chillers for the building. Through constantly aircon temperature control and management and aircon compressor on/off time adjustment, the overall electricity consumption of the USI Building and offices was 7.43% less than that of 2020, with significant effect. We hope to change the energy use concept of employees through a series of measures for employees to develop energy conservation and carbon reduction habits.

4.6

Raw materials management

Our main products are: LDPE, EVA, HDPE, and LLDPE. Major raw materials include ethylene, VAM, and butene. Major secondary materials include Iso-Paraffin Solvent, propylene, n-Hexane, and isopentane. Raw materials are only used by Kaohsiung Plant, with a coverage rate of 100%.

In the product manufacturing process, we are committed to enhancing the recovery efficiency of raw materials, hoping to reduce raw materials consumption. Recovery methods included the improvement of the high-pressure recovery system, monomer refine tower (MRT), connection of new and existing tanks, installation of the condenser at the frontend of the ethylene purification tower (EPT), addition of the compressor leak gas recovery system, and others at Plant II. As a result, the recovery rate of raw materials increased from 12.2% in 2020 to 12.3% in 2021.



Chapter 5

Health, Safety and Social Inclusion

Material topics in this chapter

- OH&S
- Talent attraction and retention

Performance Highlights

- Zero job-related injuries
- Annual employee health checkup: 99.5% coverage
- Promotion of AI safety protection and recognition
- Employment of full quota of persons with disabilities
- Turnover (excluding retirement) rate: 3.4%.
- Education/training: 23.8 hours/person



5.1

Transportation safety management

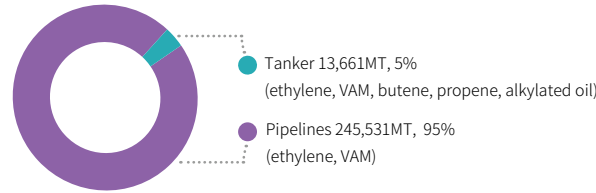
Materials and product transportation management

<https://www.usife.com/ESG/en-us/ESG46.aspx>

Transportation Methods

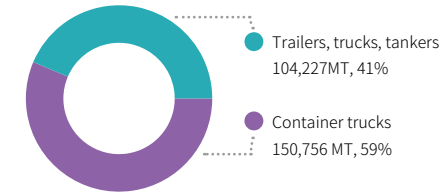
2021 Feedstock Transportation Methods (MT)

95% of feedstocks required by the Kaohsiung Plant are transported via underground pipelines, and 5% by tankers.



2021 Product Transportation Methods (MT)

All USI products are transported with trailers, trucks, tankers, and container trucks through contractors.



Implementation Plan and Effectiveness

- ✓ No transportation-related accident was reported in the last decade
- ✓ The maintenance, test, and integrity management of underground pipelines have passed third-party verification. The underground pipeline operations and maintenance plans are reviewed and approved by the Kaohsiung City Economic Development Bureau to confirm that pipeline operations will not be affected by corrosion, third-party damage, or human errors in order to protect the public safety of citizens living nearby underground industrial pipelines and the operation safety of workers. Each year it is implemented and operated according to the underground pipelines operations and maintenance plan.
- ✓ Double protection including corrosion zone and impressed current cathodic protection (ICCP) is implemented for all underground pipelines. Apart from the periodic CP test and pipeline pressure holding test, irregular pipeline pressure holding tests are performed to ensure pipeline safety. In 2021 we completed 36 times of cathodic corrosion rectifier check; 176 times of cathodic corrosion test; inspection of 2 insulation flanges; and thickness test (overground sections) on 2 pipelines.
- ✓ Kaohsiung Plant and other plants in the same regional joint defense organization built the cloud platform of the underground pipelines information management system and commissioned a professional security company to patrol the platform every day. Implement in-process inspection through systematic, digital, and automatic computer management to enhance the management efficiency of pipeline maintenance.
- ✓ In 2021 we participated in the "Test of the Emergency Response Capability and Performance of Industrial Pipeline Joint Defense" organized by the Kaohsiung Economic Development Bureau and was ranked 2nd and 14th respectively in two simulated tests.
- ✓ All tankers are qualified tankers for transporting chemical substances; each contractor has good emergency response ability, and well-established emergency response plans. Transportation is implemented according to the relevant control regulations and management measures.
- ✓ Legally registered transporters.
- ✓ Passed ISO 9001 certification and equipped with trained, qualified health and safety management personnel.
- ✓ Semi-annual evaluation of performance, efficiency, cooperation and quality and proposals for improvement programs based on customer feedback at the transportation review meeting.
- ✓ Regular vehicle examinations according to the relevant regulations. Holding safety meetings quarterly to ensure that contractors can safely transport products to the destination to minimize environmental impacts caused by transportation.
- ✓ During 2020-2021, we constantly implemented transportation safety and quality evaluation. Besides reviewing the results of agreed improvements from last year, we verified the degree of legal compliance of onsite operations and equipment condition in order to capture and manage the transportation safety of contractors. The result of the 2021 transportation safety and quality evaluation of contractors was grade A.

In-House Product Loading Safety Management GRI 403-7:2018

Management Approach Description

All products from Kaohsiung Plant are transported by De Yuan Transport Ltd. Apart from shipping products with trucks every day, the transporter designates resident loading personnel at Kaohsiung Plant. In addition to requiring them to comply with Kaohsiung Plant's access control and HSE regulations, we have established related controls to supervise their work alongside onsite and industrial safety OH&S personnel. We also constantly request them to enhance product loading safety to strictly control personnel operation safety.

Management Approach

In response to the massive use of forklifts for loading and stacking finished products at the warehouse in routine work, we identified the forklift operation hazards during product loading in 2021. We also implemented the AI industrial safety image-recognition system with partners to perform workplace verification with AI intelligent image-recognition technology and effectively detect if workers use related personal protective equipment (PPE) properly through the image captured by the real-time recognition system in order to comply with the in-house PPE regulations, enhance the strength of in-house industrial safety walk-through inspection, improve contractor operation management, and reduce the risk of industrial safety accidents.

During 2020-2021, we continued to implement the transportation safety and quality evaluation of product in terms of the following eight items: corporate condition, driver record, safety policy and communication, SOPs and instructions, safety equipment, driver evaluation, vehicle condition control, and transportation quality. Additionally, to enhance the control of recommended improvements after the evaluation, we determine the audit frequency based on the evaluation score and notify transporters to make early improvements of the audited problems.

Score Range	Grade	Subsequent Evaluation Frequency
Over 90	Excellent	
80-89	A	1/annually
70-79	B	2/annually
Below 69	C	Once a quarter.

Management Performance

In 2021, we implemented the warehouse forklift operation safety protection recognition (AI system construction) to perform safety inspection on finished product warehouse personnel. After frequent discussions, onsite inspections, system analysis and revision, and onsite use verification, the AI recognition system can effectively recognize the correct use of PPE including safety helmets, helmet straps, goggles, and driver seatbelts. By combining with the recognition results and safety publicity, the system effectively reduce unsafe behavior and occupational accidents.



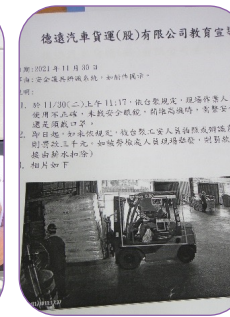
In the 2021 transportation safety and quality evaluation, besides re-auditing the improvement of recommended items of Deyuan's documented SOPs, records, and announcements in the previous year, we also verified its achievements in safety management optimization. We also conducted onsite spot checks on its field operation, vehicle condition, and related PPE. The integrated score was grade A. We also informed Deyuan of the evaluation results for the reference of future improvement of overall operational safety.



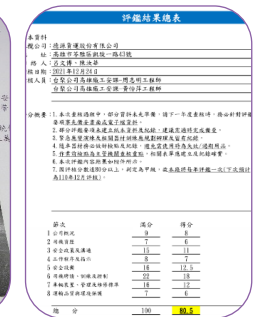
Verification of the functions of the vehicle surveillance system.



Truck dispatch data and driver interview.



Education/training records.



Evaluation results

5.2

Occupational Health and Safety

GRI 103-2、103-3

SDG 3、8

Sustainability Principle: Sustainable Development

	Significance to USI	Strategy and Approach	Commitment
Significance and Strategy	Take care of employee health. Prevent industrial accidents. Enhance employee OH&S protection. Develop the emergency response capacity and self-imposed safety management of employees.	<ol style="list-style-type: none"> Enhance personnel training and occupational safety awareness. Strengthen work environment safety management 	<p>Create a safe workplace environment and reduce industrial safety accidents.</p> <p>Data scope: Kaohsiung Plant, contractors, and transportation contractors</p>
Achievement and Goal	<p>2021 Goals</p> <ol style="list-style-type: none"> Incident Rate <1.28 Frequency-Severity Indicator (FSI) <1.27 Monitored Nonconformities =0 Shutdowns caused by key equipment =0 	<p>2021 Projects</p> <p>Implemented 15 projects, including 3 underground pipeline operations and maintenance projects.</p>	<p>2021 Achievements</p> <ol style="list-style-type: none"> Incident rate = 0, equipment improvement and renewal, inspection and maintenance enhancement, periodic walk-through inspection, education and training, and OH&S management. Frequency-Severity Indicator (FSI)=0. Rust removal, supplementary welding, screw replacement, and paint maintenance of equipment and pipelines according to the work instructions. Monitoring indicator excess=0. Completed onsite monitoring on Type 2 organic solvents, specific chemical substances, noise, and CO₂. The effectiveness of new QC fume hoods was also inspected. No nonconformity is found. Downtime caused by key equipment=1, machinery maintenance by the engineering department = 5,048 units.
Sustainable Development Milestone	<p>2022 Goals</p> <ol style="list-style-type: none"> Incident Rate = 0 Frequency-Severity Indicator (FSI) =0 Monitored Nonconformities =0 Shutdowns caused by key equipment =0 	<p>3-Year Goals</p> <ol style="list-style-type: none"> Comprehensive industrial safety check. Reduction of disabling injury. PSM system promotion. Underground pipeline assessment Smart contractor management 	<p>5-Year Goals</p> <ol style="list-style-type: none"> Outstanding OH&S enterprise Reduction of disabling injury. PSM system promotion. Underground pipeline assessment Smart operation safety management
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> Employee health checkup Reduction of injury of disability and work-related accidents Contents and statistics of work-related accidents 	<p>Grievance Mechanism</p> <p>Labor-Management Meeting Union Board Meeting Occupational Safety and Health Committee</p>	<p>Chapter Summary</p> <ol style="list-style-type: none"> Occupational health and safety OH&S management and general check Management of work-related injuries and absenteeism

In 2001 we began to constantly implement the OH&S management system across the plant and promote system certification. We also set it as part of the company’s sustainable development strategy to maintain workplace environment safety and employee health. In 2020, we completed the certificate renewal certification and acquired the certificate for ISO 45001:2018. [GRI 403-1:2018](#)

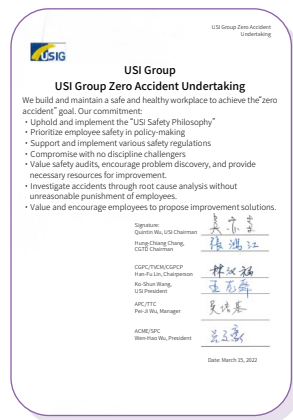
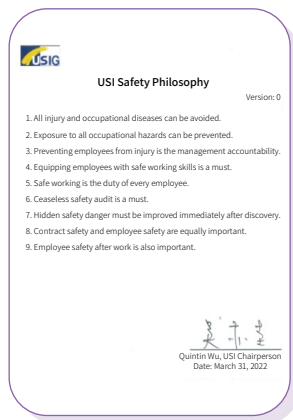
In 2021, 1,486 personnel were covered by the OH&S management system, including all USI employees and contractors. All operations were planned and implemented according to the OH&SMS, including hazard identification, risk assessment, audit, and accident investigation.

Workers covered by OH&SMS in 2021 [GRI 403-8:2018](#)

Type	Numbers of person	Proportion
USI Employees	465	31%
Contractor Personnel	1,021	69%

*Contractor personnel include 30 contractor resident personnel (De Yuan Transport) and 991 personnel of qualified contractors.

<https://www.usife.com/ESG/en-us/ESG43.aspx>



OH&S Goals and Management Program 2021

Policy	Goals	Program	Effectiveness
Zero accident	Incident Rate <1.28	R/T cooler leakage improvement, reduction of pipeline corrosion and inspection of equipment affecting safety.	1. Completed the six-month check of 37 coolers. 2. After the static equipment service and replacement of one cooler in 2021, no leakage was further detected. Two more coolers will be replaced in 2022.
		D-line reactor standby plan to prevent impact on production due to sleeve breakage and leakage during startup and shutdown.	Verified leakage at 3 welding points (irrecoverable by welding) on the bottom expansion ring. Applied for purchasing a new reactor in May 2021. Will be delivered at the end of 2022.
		Addition of one new M/P and a standby M/P in C-line, and enhancement of the QC capability of UE4055.	Completed the pipeline Tie-in and C-line pipeline vibration correction project. Tests will be performed in 2022.
		Use of mobile booms for tanker unloading to make tanker unloading more convenient and safer.	Completed the installation and the education and training for on-site workers for the mobile tanker unloading arm.
		Addition of the swivel arm unloading system to enhance materials unloading safety.	Constructed the new swivel unloading arm systems for ethylene, VA, butene, and propylene.
		Prevention of pipeline corrosion hazards and steam injection point inspection	Completed the inspection of 140 steam injection points in the year.
		Replacement of recycle train cooler	Replaced the D-1 train cooler, and the coolers of EF-line and B-line will be replaced during downtime in 2022.
		Renewal of corroded pipelines of recycle train cooler	Renewed the corroded pipelines of the recycle train cooler in January 2022.
		Renewal of M/P outlet corroded pipelines of D-line	Verified the scope of pipeline renewal: M/P outlet to the main pipe and completed replacement in January 2022.
		Addition of the explosionproof and soundproof glass to the D/EF-line in the processing shop	Added the explosionproof and soundproof glass to the processing shop. New explosionproof and soundproof glass will be added to the compressor area in 2022.
		Improvement of the corrosion of the condensate underground pipelines of the processing shop.	Completed inventory and improvement.
		Maintenance and inspection of underground pipeline [Underground Pipeline Operation and Maintenance Plan]	Completed visual inspection and thickness check of the overground pipeline sections in July and November 2021.
		Education and training for pipeline tour inspection personnel [Underground Pipeline Operation and Maintenance Plan]	Completed 12 hours of on-site IPQC education and training in August.
Routine tour inspection of underground pipelines [Underground Pipeline Operation and Maintenance Plan]	Completed the daily walk-through inspection and recordation and the bimonthly self-imposed walk-through inspection and audit.		
Completion of the water pumping works at the pressure relief valve area of the liquid breaker in zones CBC 700 and 800.	Completed the water pumping works at the pressure relief valve area of the liquid breaker in August.		
Zero occupational accidents	Frequency-Severity Indicator (FSI) <1.27	Corrosion of stairs and railings in the processing room and silo enhance risk of personnel injury.	2021 Frequency-Severity Indicator (FSI)=0. Rust removal, supplementary welding, and paint maintenance according to the work instructions.
	Monitored Non-conformities =0	Improvement of work environment	Completed workplace environment monitoring in H1 and H2. Implemented personnel tests for 2 organic solvents, specific chemical substances, noise, and CO ₂ . The effectiveness of new QC fume hoods was added in the monitoring for the first time. No nonconformity was found.
Zero Failure	Shutdowns caused by key equipment =0	Shutdowns caused by key equipment = 0 (machinery and instrumentation)	Downtime caused by key equipment=1, machinery maintenance by the engineering department = 5,048 units.

Note 1: Incident Rate (IR) = Number of incidents x 200,000/total hours worked 2. Frequency-Severity Indicator (FSI) = $\sqrt{[(FR \times SR)/1000]}$

OH&S Organization and Operation GRI 403-4:2018

USI establishes the OH&S Committee with respect to the “Regulations for Occupational Health and Safety Management” to establish OH&S policies, make recommendations for OH&S management, and review, coordinate, and advise OH&S affairs.

Members of the OH&S Committee include the committee chair (the plant general manager), executive secretary (industrial safety chief), committee members (department chiefs/unit chiefs/industrial safety staff/labor representatives). Labor representatives are elected by employees. Currently, there are 9 labor representatives (35%) and 17 management representatives, totaling 26 members. The committee holds a committee meeting every quarter. Labor representatives voice for all employees and discuss, coordinate, plan, and decide on HSE issues with the management to ensure employee participation, consultation, and communication.

2021 OH&S Committee Statistics

OH&S Committee	Committee Members	Committee Proportion
Labor representatives	9	35%
Management representatives	17	65%
Total	26	100%

Hazard identification and risk assessment GRI 403-2:2018 、 403-9:2018

To prevent operations, activities, or services from harming employee health and safety and causing financial losses to the Company, early intervention is implemented. Through constant identification of hazards, risks, and opportunities relating to OH&S, we take appropriate precautionary actions, implement necessary controls, or eliminate hazards. We also find opportunities to make improvements to control risks within an acceptable range in order to enhance OH&S performance.

Every three years, we identify hazards and assess risks on current, changing (potential or transitional), and future activities within the plant, hazards outside of the plant, and underground pipelines. The baseline review team formed by the section chiefs of all

units provided professional training on hazard identification and risk assessment for the baseline review team and employees in 2021. We assess and screen risk levels using semi-quantitative descriptive statistics. Then, we establish targets and plans based on the graded control, OH&S objectives, and the Regulations for Management of Management Plans to reduce the risk to an acceptable range by prioritizing means such as elimination, replacement, engineering controls, labels/warnings/or management controls, and PPEs.

OH&S Management GRI 403-8:2018

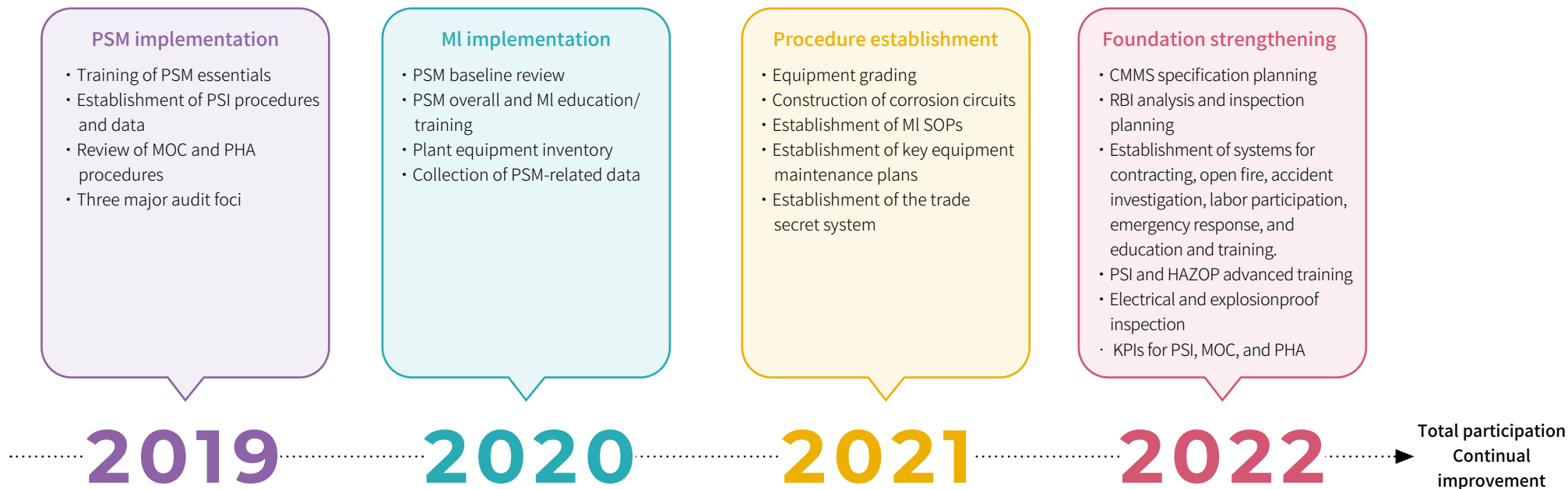
Management Approach Description

In consideration of the increasing industrial safety accidents in Taiwan in recent years, IDB has progressively implemented joint supervision on large petrochemical plants and found that those implementing process safety management (PSM) have significantly better performance in industrial safety. Therefore, in addition to arranging PSM education and training for employees, labor inspection units have constantly revised OH&S laws and regulations based on PSM. They also provide guidance and advice for petrochemical plants to implement PSM to enhance the employee’s awareness of process safety in order to reduce fires, explosions, leakages, intoxication, and occupational accidents.

Management Approach

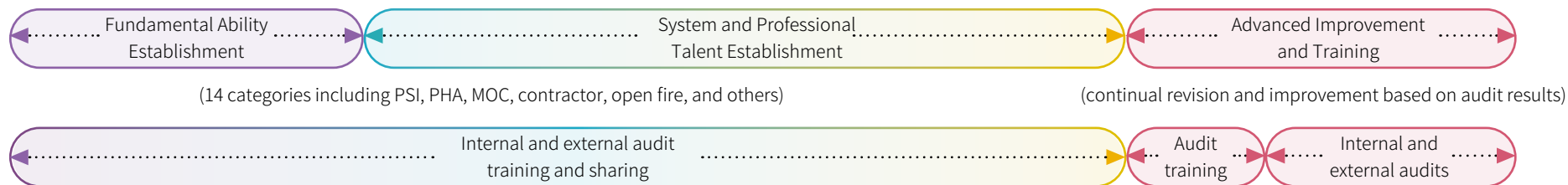
PSM is implemented in main consideration of the relevant regulations at home and aboard, such as the “Process Safety Management of Highly Hazardous Chemicals” (29CFR 1910.119) announced by the US Occupational Safety & Health Administration (OSHA), the Hazardous Workplace Review and Inspection Regulations, and the “Regulations of Implementation Regarding Regular Process Safety Evaluation”. A total of 14 categories were concluded for overall planning and review. PSM conformity was identified through compliance audit to review its ability to improve the plant’s process safety and industrial safety protection.

Process Safety Management Plan



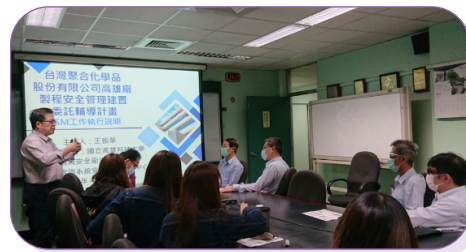
Note: Management of Change (MOC), Process Hazard Analysis (PHA), Mechanical Integrity (MI)

Key Practices

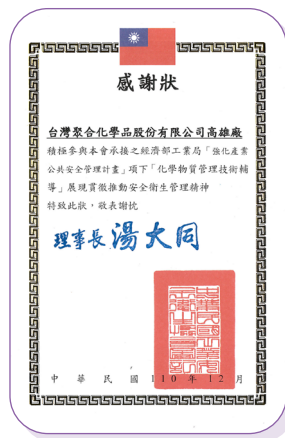


Management Performance

In 2021, the achievements in PSM implementation included the establishment and revision of many SOPs, full-house update of safety data sheets (SDSes), equipment grading, corrosion circuit construction, establishment of maintenance programs, personnel education and training, review and revision of existing data, and baseline audit of various key contents. Overall, a total of 43 sessions of education and training were completed for 329 participants over a total of 1,902 hours. Additionally, President Wang and Vice Plant Director Chen also hosted all periodic review meetings. Besides encouraging employees to constantly improve and implement the PSM items, timely coordination and advice were made with the unit supervisors to communicate the importance of process safety to employees to ensure that PSM is not merely a slogan or establishment or revision of SOPs but also a goal to be achieved through top-down practice with total participation.



To enhance the safety assessment of workplace environments, in 2021 we applied to IDB for participation in the “Project for Strengthening Public Safety Management of High-Risk Industry” to receive technical guidance for chemical substance management, i.e., assessment of the potential reactive hazards of chemicals with the chemical reactivity worksheet (CRW) and the leakage and spread of chemicals with the Areal Locations of Hazardous Atmospheres (ALOHA) software in order to help identify and respond to the plant’s chemical hazards and enrich the process safety information (PSI) for process safety management (PSM). Additionally, we were awarded a certificate of appreciation from the Industrial Safety



and Health Association of the ROC for our full cooperation with PSM implementation, demonstrating our determination to make continual PSM improvement.

Process Safety Management Performance

Item	Process Safety Management Performance 2021
Total Count of Process Safety Incidents (PSIC)	0
Process Safety Total Incident Rate (PSTIR)	0
Process Safety Incident Severity Rate (PSISR)	0

Note 1: Employees are only permanent employees. The total hours worked in 2021 were 764,444 hours

Note 2: PSTIR = The cumulative (annual) count of incidents x 200,000/total hours worked by workers

Note 3: PSISR = The total severity score of process safety incidents x 200,000/total hours worked by workers

Equipment safety management

We regulate and perform periodic inspection of dangerous machinery and equipment by law to ensure equipment operation safety. In 2021 we inspected 5 dangerous machines and 229 sets of dangerous equipment, and all were qualified. Additionally, we replaced and suspended 9 sets of dangerous equipment to maintain operation safety and production continuity.

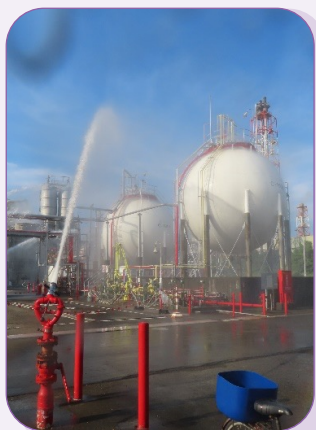
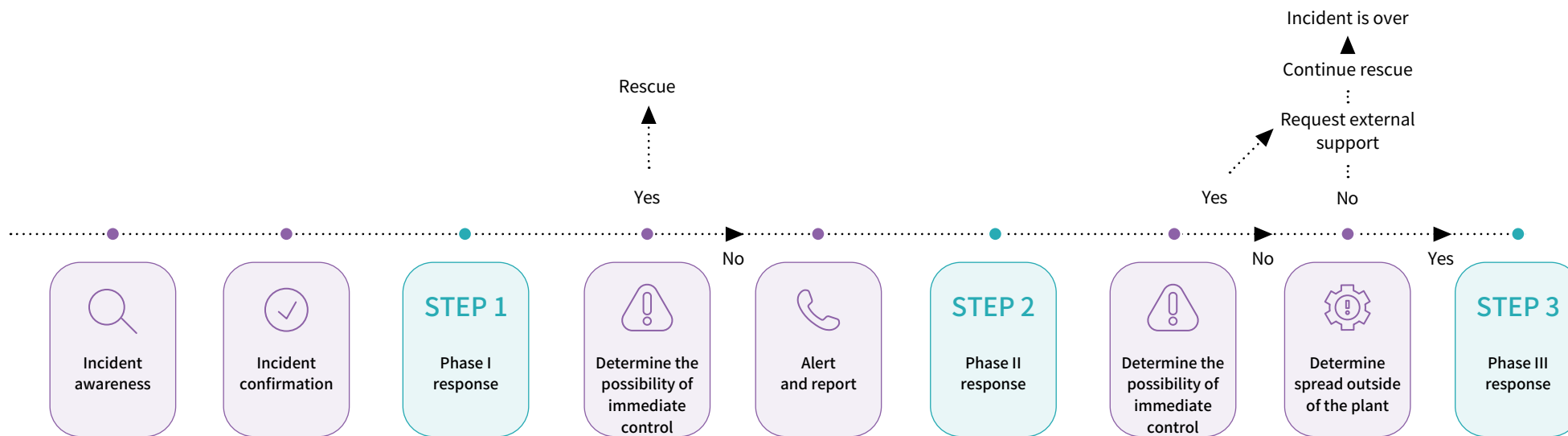
Emergency Response Mechanism

We organize emergency response and fire safety drills and OH&S general training half-yearly and refer to the emergency response guide and manual to facilitate emergency mobilization, take corrective actions, effectively control disasters, and reduce losses in emergencies.

Please visit <https://www.usife.com/ESG/en-us/ESG43.aspx> for the details of emergency response procedures.

In 2021 we reviewed the composition of the in-house self-defense fire organization. Besides the ordinary day-shift personnel, personnel working on holidays and night shifts were also included in the organization. Additionally, we equipped each plant with a total of 4 leakage response vehicles and arranged emergency leakage response training for employees to ensure effective response and handling of accidents.

Emergency Response Flowchart



Underground pipeline emergency response

To improve emergency preparedness and response ability to underground pipeline occurrences, we perform emergency response assessment on high-consequence areas (HCAs) based on the analysis results. In 2021 we assessed sensitive receptors including Fengnan Road and National Freeway 1. The process covered a full-scale assessment, including the simulation of chemical spread after a pipeline leakage, people evacuation, receptor contacts, communication and coordination of external support, hoping to help improve the preparedness and efficiency of emergency response to underground pipeline accidents.

Simulation and assessment of emergency response plans



Emergency response drills on toxic and concerned chemical substances

In 2021 we held the emergency response drills on toxic and concerned chemical substances, including one comprehensive response drill and two unannounced tests and drills. Additionally, we also sent personnel to receive external training for different levels of emergency response personnel to toxic and concerned chemical substances, including one for the expert level, 2 for the commander level, 8 for the technologist level, and 4 for the operator level, to improve our independent responsiveness to toxic and concerned chemical substances.



Work-related injury and absenteeism GRI 403-9:2018

Given that “zero accident and zero injury” are the objectives of USI’s management of work-related injuries, a low injury rate (IR) and low absenteeism rate (AR) are two key indicators for evaluating the OH&S of employees and contractors.

In 2021 no work-related injury from employees and contractors was reported. In commuter accidents, we do not arrange commuter services or vehicles for employees, and 2 work-related traffic accidents of employees were reported in 2021. Between 7 April 2020 and 31 December 2021, the cumulative total working hours without disabling injury totaled 1,344,071 hours. In addition, no work-related injury was reported from Taipei Office and Guishan R&D Division in 2021.

2021 OH&S Management Performance

Item	Employees		Contractors	
	Male	Female	Male	Female
F.R.	0	0	0	0
S.R.	0	0	0	0
Frequency-Severity Indicator (F.S.I.)	0	0	0	0
Number and rate of recordable work-related injuries	0/0	0/0	0/0	0/0
Number and rate of high-consequence work-related injuries	0/0	0/0	0/0	0/0
Number and rate of fatalities as a result of work-related injury	0/0	0/0	0/0	0/0

Note 1: Employees are only permanent employees. The total hours worked in 2021 were 764,444 hours

Note 2: Disabling injury frequency rate (F.R) = Injury frequency × 200,000/total hours worked (rounded down to two decimals)

Note 3: Disabling injury severity rate (S.R.) = Injury days lost × 200,000/total hours worked (rounded down to two decimals)

Note 4: Frequency severity index (F.S.I.) = $\sqrt{[(F.R \times S.R.)/1000]}$ (rounded down to two digits)

Note 5: Rate of recordable work-related injuries: Number of recordable work-related injuries (including work-related fatalities) × 200,000/total hours worked (rounded down to two digits)

Note 6: Rate of high-consequence work-related injuries = Number of high-consequence work-related injuries (excluding fatalities) × 200,000/total hours worked

Note 7: Rate of fatalities as a result of work-related injury = Number of fatalities as a result of work-related injury × 200,000/total hours worked

Industrial safety audit and follow-up

When contractors enter the plant, besides checking their physical and mental condition and performing vehicle control at the entrance, security guards will timely conduct a sobriety test to ensure personnel and vehicle safety before their entry. Each day personnel of the industrial safety section perform walk-through inspection on every workplace to eliminate the occurrence of unsafe behavior and register the inspection results in the HSE

Management Platform and report them to the quarterly OH&S Committee meeting to effectively capture all defects and manage and follow up the improvement results. The Group’s audit division performs an audit and provides guidance half-yearly, and plants also make improvements and follow up the audited defects. Additionally, the president will perform the 6S walk-through inspection with levels 1 and 2 supervisors across the plant from time to time. The audited units will immediately review the defects and make division of responsibility for the improvement. Through total industrial safety audit and management, we improve occupational safety and process safety.

Focus of Action (audit unit)	Frequency
Contractor entry physical and mental condition check (security guards)	Irregularly
Contractor coordination organization meeting (Industrial Safety Section)	Daily
Workplace inspections and records (Industrial Safety Section)	Daily
Defect and improvement review and publicity (Industrial Safety Section)	Quarterly (OH&S Committee)
HSE & regulatory audit (Audit Division)	Semiannually
Plant 6S inspection (senior management)	Irregularly

Incident investigation GRI 403-2:2018

We have established investigation procedures to record, investigate, analyze, and review incidents, covering disabling injuries, non-disabling injuries, and near misses, relating to plant production activities to prevent accidents or near misses from recurrence and thereby protect employee safety and health.

[Please visit https://www.usife.com/ESG/en-us/ESG43.aspx](https://www.usife.com/ESG/en-us/ESG43.aspx) for the details of incident investigation

In September 2021, the petrochemical plant organized training on the failure tree analysis (FTA) technique to enrich the employee’s knowledge and professional skills in industrial safety through education and drilling. Additionally, the plant reviewed and revised the relevant SOPs to added the FTA or incident FTA technique to facilitate the effective trace of potential causes or attributions in order to prevent the possible causes and take precautionary action. In 2022 we will review the incident investigation process and add the evidence collection list and checklist to facilitate and strengthen accident investigation and analysis and organize education and training on accident investigation and analysis techniques.

Contractor Management GRI 403-5:2018

At USI, contractor or supplier safety management is equally important to us. In 2021 we revised the "Contractor Management Regulations" and "Contractor Plant Entry Instructions"; emphasized the importance of toolbox meetings and included it in working permit management; publicized the work contents, potential workplace hazards, safety protection, and regulations; and completed the safety inspection of onsite construction equipment and tools. Additionally, contractors are requested to participate in the HSE education and training and pass the evaluation before plant entry to ensure the hazard notification of the workplace environment. We also arranged the work safety meeting and coordination organization meeting.

To enhance contractor entry safety management and enforce the supervision and management duty of occupational safety and health management personnel, the industrial safety section performs walk-through inspection of all in-house projects every day to confirm if preparatory inspection of machinery is completed and if there is unsafe incident in the construction. If a nonconformity is detected, industrial safety staff will immediately request contractors to stop construction and complete all improvements before carrying on construction. If a serious nonconformity is detected, re-education and re-training will be arranged for that contractor. Before implementing high-risk work, we run a risk assessment process to identify hazards, assess risk, take precautionary measures, and review the emergency response plan. We also hold communication and coordination meetings with contractors from time to time to ensure operation safety. In 2021, the accident rate per one thousand persons at the Kaohsiung Plant was zero. (Contractor accident rate per 1,000 persons = Total number of contractor accidents/ total number of contractors x 1,000)

Additionally, to capture the in-house operation safety of contractors, we measure the blood pressure and run the sobriety test on workers every day before they work in-house to ensure that all workers are in the best shape. Through continual training, publicity, and demands, we urge contractors to voluntarily comply with our OH&S regulations to achieve the goal of zero accidents.

Additionally, in 2021 we added the contractor self-imposed health management system and installed the automatic body temperature scanner in response to the pandemic to effectively control the pandemic and capture the health condition of contractors. In 2021, a total of 6,292 contractors reported normal after self-imposed health management, and no health anomaly was reported.

Contractor Works Distribution by Type in 2021

Type of Works	No. of Works	Proportion
1. Open Fire	300	54%
2. Confined Space	44	8%
3. Others	213	38%

HSE Education and Training GRI 403-5:2018

Education, training, and publicity are the fundamentals for promoting HSE awareness to employees and contractors. By establishing the "Labor Safety and Health Education and Training Regulations", we provide knowledge and skill training for different categories of employees and contractor personnel based on their actual needs. In 2021, we provided a total of 1,166 hours of HSE education and training for 3,555 person-times in 123 sessions.

Statistics on HSE Education and Training 2021

Type	Hours/ person	Sessions	Person	Total hours
New employee training	6	13	19	114
On-the-job training	3	8	156	468
Contractor Personnel	3	102	991	2,973

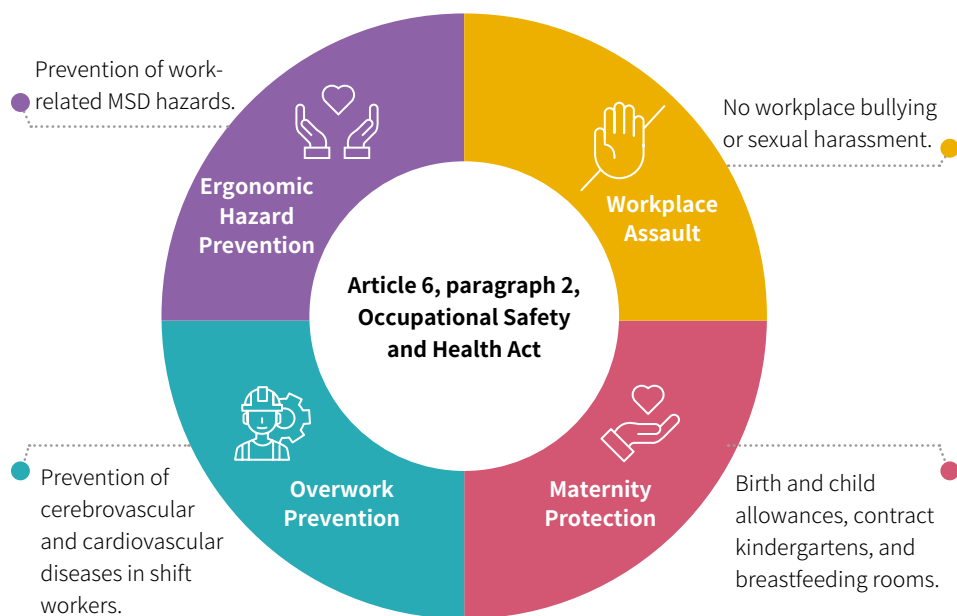
With respect to the legal requirements, domestic and overseas industrial safety accidents, and in-house hazard identification, we organize a series of training courses. In 2021, we organized 69 training activities with 1,576 participants for employees to value operation safety and understand professional knowledge. Through drills and training, we develop the positive attitude towards learning new skills in employees.

In addition to HSE training, at the quarterly safety meeting, each unit discusses unsafe acts and behaviors in their operations and explore industrial safety incidents occurring at home and abroad to prevent their recurrence. Through this process, employees can better understand safety knowledge and USI's safety culture.

Health concerns

please visit link: <https://www.usife.com/ESG/en-us/ESG43.aspx>

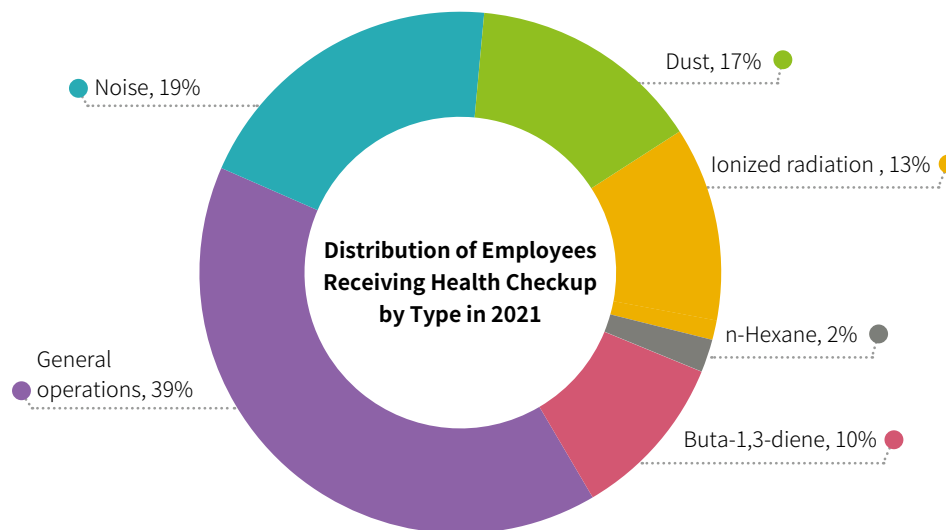
Workplace Health Keeper



We value the rights and interests of every employee. Therefore, we establish a preventive program according to the “Occupational Safety and Health Act” for each USI employee to feel happiness and the sense of belonging. Apart from retaining people, this can create better work performance.

Health Care GRI 403-3:2018 · 403-10:2018

USI cares about the physical health of employees. Therefore, we arrange complete health checkups better than the legal requirements for employees every year and follow up their health condition periodically. Additionally, we combine the environmental monitoring data of statutory special operations to identify the risk of potential health hazards and arrange special health checkups for employees exposing to noise, dust, n-hexane, ionizing radiation, and 1,3-butadiene in order to capture the health condition of employees and provide a reference for employees to implement self-health management to achieve the aim of “prevention is better than cure” and create a safe workplace environment. In addition, every month we arrange labor health service physicians to provide in-house service, free medical consultation, and health and new healthcare knowledge promotion. We also develop the awareness and execution power of self-health management in employees through various thematic health talks.



Note 1: The number of employees qualified for the health checkup in 2021 totaled 455 persons (Taipei Office, Guishan R&D Division, and Kaohsiung Plant), with a checkup rate of 99.5%.

Note 2: All employees received the general health checkup, other items are additional special examinations.

Graded health management GRI 403-10:2018

In 2021 special checkups were arranged for 280 employees, and health management was implemented based on the graded health management by risk level, hoping to identify high-risk groups, provide individual health instructions and notification, and reduce the risk of work-related ill health through early detection of the high-risk group in order to build a healthier and more comfortable workplace environment through continual source improvement and terminal health care.

Health Checkup Item	Numbers of person	Grade 1 management	Grade 2 management	Grade 3 management	Grade 4 management
Noise operation	87	41	46	0	0
Dust	77	75	2	0	0
Ionized radiation	61	27	34	0	0
n-Hexane	9	9	0	0	0
Buta-1,3-diene	46	34	12	0	0

Level I Management

No anomaly

Provision of health instructions

Level II Management

Partial anomalies unrelated to work

1. Provision of health instructions
2. Indication of not suitable jobs by physicians

Level III Management

Partial anomalies Work-related anomalies

1. Health follow-up and instructions by occupational specialists
2. Operation assessment by occupational specialists
3. Re-grading based on operation assessment
4. Report to competent authorities

Level IV Management

No anomaly Work-related anomalies

1. Hazard control
2. Engineering improvement
3. Administrative improvement
4. Health management measures
5. Report to competent authorities

Checkup quality and achievements GRI 403-10:2018

It is our obligation to ensure the quality of medical institutions providing the health checkup service to ensure that checkup results are effective and valid for reference. We select only checkup institutions accredited by the Occupational Safety and Health Administration (OSHA) and medics accredited by the Kaohsiung Department of Health. After the checkup, besides explaining the results and giving health instructions and education to employees by health professionals, we enable employees to understand more about their health condition and promote health and acquire correct health care knowledge.

Care for contractors GRI 403-3:2018

It is our obligation to maintain workplace safety and health. Therefore, we arrange education and training for all contractors, including the contents of operation and hazard identification. We also ensure the health condition of contractor personnel working in-house with sobriety tests and blood pressure measurement. We further inhibit personnel with hypertension and cardiovascular disease from engaging in work at height, work at high temperature, work in confined spaces, and work requiring physical strength in order to prevent potential work-related ill health.



Occupational disease analysis GRI 403-7:2018、403-10:2018

To enforce OH&S, we take precautionary actions relevant to the physical, chemical, ergonomic, and sociopsychological health hazards according to the "Occupational Safety and Health Act". For related hazard factors, potential work-related ill health and precautionary management actions, please visit <https://www.usife.com/ESG/en-us/ESG43.aspx>. No occupational disease from employees or contracts has been reported over the years.

2021 Statistics of Occupational Diseases

Item	Employees		Contractors	
	Male	Female	Male	Female
Number of cases of recordable work-related ill health	0	0	0	0
Number and rate of fatalities as a result of work-related ill health	0/0	0/0	0/0	0/0

Note: Rate of fatalities as a result of work-related ill health = Number of fatalities as a result of work-related ill health x 200,000/hours worked

Health control for shift workers (overwork prevention) GRI 403-3:2018

Besides prohibiting shift workers from working excessive extra hours, we plan and screen checkup items for the high-risk group of cerebrovascular and cardiovascular diseases, including ECG, myocarditis diagnosis, personal fatigue index, and Framingham Risk Score. We also implement administrative and health management on the high-risk group, including limiting the night shift frequency, active follow-up of medical attention and drug use condition, developing the habit of daily blood pressure measurement. We also provided them with health instructions. In 2021, we invited smoking cessation team of St. Joseph Hospital to inculcate the no-smoking concept in employees.



Workplace Violence-Education and Training Against Workplace Bullying GRI 403-2:2018、403-3:2018

We are committed to maintaining the rights and interests of employees and protecting them against workplace assaults. Therefore, we establish and implement the “Workplace Extortion Prevention Program” to implement work adaptive assessment and early identification of hazard factors and for employees to reflect workplace assaults through the grievance channels. The case acceptance unit will participate in the investigation and

coordinate with the case in collaboration with labor representatives before nurses follow up the case and provide related assistance. If an employee leaves the workplace as a result of the workplace hazard factors or report to the competent authorities, we will make a written statement. The company should make efforts to protect the employee against unfair treatment or retaliation. If this happens, the company will handle the case according to the internal disciplines and regulations. Furthermore, we state in the emergency response plan that when discovering a life-threatening situation in the workplace, employees should immediately withdraw from the situation to protect employees against such threats. Each year we arrange education and training for mental health promotion to help employees relieve stress and provide them with proper channels for relieving stress and speaking their mind.



Education and training for musculoskeletal injury prevention GRI 403-2:2018

To prevent workplace musculoskeletal injury, besides regularly checking out if employees work in correct postures, we actively ask if they have musculoskeletal disorder, plan education and training for musculoskeletal injury prevention, demonstrate postures that may cause musculoskeletal injury in the daily life and their corrections, including the correct postures to handling objects, neck protection for using computer, communications and consumer electronics, hoping to reduce the possibility of musculoskeletal injury and enhance work efficiency.



Health promotion GRI 403-6:2018

<https://www.usife.com/ESG/en-us/ESG43.aspx>

Group Tour

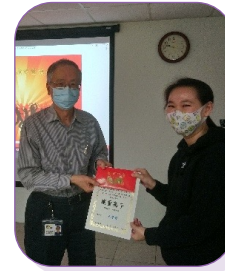
We arrange different employee tours. Every year, we plan at least two tours for employees. There are also various sports clubs, such as the cycling club, table-tennis club, basketball club, karaoke club, and mountaineering club. Apart from helping employees develop friendship and release stress, exercise can help promote health.



Medical Consultation and new health science knowledge

Every month, we arrange labor health service physicians to provide in-house service, including free medical consultation and health talks. To prevent employees from missing the opportunity for in-time medical attention due to busy work, by effectively analyzing the physical and mental health problems of employees through interviews, we provide appropriate referral service. We also develop the awareness and execution power of self-health management in employees through various thematic health talks.

Every month, nursing staff responsible for labor health service edit new health science knowledge, measure blood pressure and provide them with health instructions for employees across the plant. Apart from correcting their medical misconceptions, they enhance the employee's intention in self-health management.



Weight Loss Competition

In 2021, we organized the six-month 4th USI Cup Weight Loss Competition. A total of 78 employees participated in the competition to lose a total of 77.2kg and an average of 1.9% of body fat.



Organization of Health Talks

We organized health talks in coordination with the weight loss competition and related to chronic disease prevention, including the development of healthy diet concept and chronic disease prevention, to introduce new diet concepts for effective chronic disease prevention.



Blood Donation

Besides taking care of the employee's physical health, we encourage employees to contribute to society with fraternity. Therefore, we organize blood donations. A total of 124 employees donated a total of 180 bags of blood.

Friendly Workplace: Birthrate Enhancement

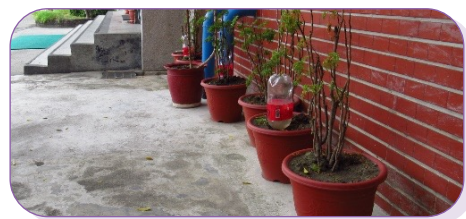
Apart from providing birth and preschooler allowances, we sign contracts with kindergartens for employees to work without worrying about their preschool children. We also establish well-lighted, well-furnished, and clean breastfeeding rooms with refrigerators, sofa, aircon, and curtains for female employees to use without worries.



Community residents

We care about the disease prevention and risk control for the residents in local communities. Besides constantly reducing pollution, we replaced boiler fuel with clean energy--natural gas, added pollution control equipment including RTO and TO, and reduced air pollutant emissions to maintain the air quality of local communities. In addition, we implemented in-house OP-FTIR surveillance in coordination with the Kaohsiung Environmental Protection Bureau to effectively control the air quality of local communities.

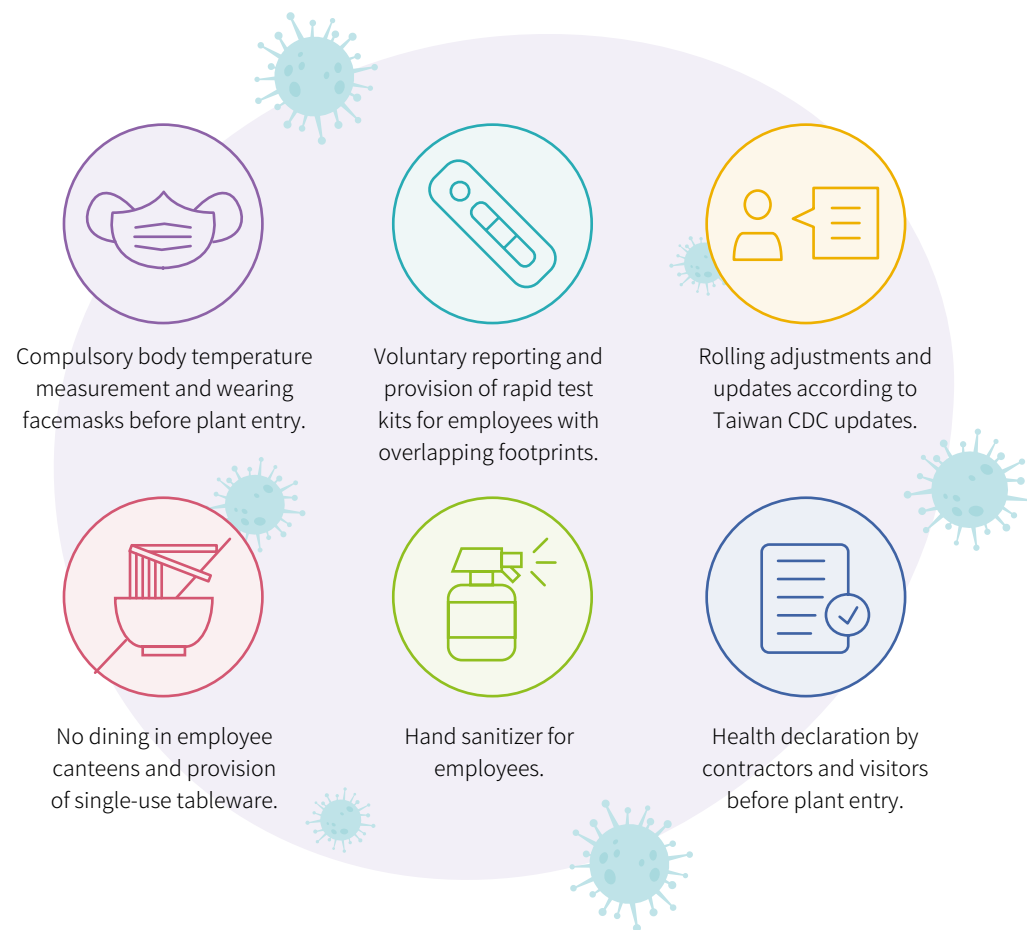
We value the health of the workplace environment. Besides drawing up the Dengue Fever Prevention Plan, we assign special dengue fever management personnel and request all units to implement in-house environmental check every week to eliminate stagnant water through the “check-empty-clean-brush” cycle. We release fish in specific fountains to effectively eliminate vector mosquito breeding. We post related publicity materials and articles on the bulletin board to raise the employee’s awareness of epidemic prevention. In 2021, no dengue fever infection was reported at USI.



COVID-19 Control Measures

In response to the high likelihood of droplet transmission of COVID-19, we have established an epidemic control team to provide multilevel epidemic controls to prevent COVID-19 from spreading. Employees, visitors, and contractors are all requested to measure body temperature and report the contact history before plant entry. We also keep up with Taiwan CDC’s pandemic updates to provide rolling information for employees to feel safe and no worries in the workplace.

USI epidemic control measures



First Aid Education/Training

Emergency Medical Services

We equip four automated external defibrillators (AEDs) in-house. While workers are working shift, to equip each of them with the first response capability, besides requesting all units to send staff to receive EMT1 certificate training and form the first response team with 17 members, we also arrange education and training for each unit every year, hoping that all employees can get familiar with the correct first aid process to give help to others in emergencies to enhance survival and cure rate. To prevent chemical splattering, we have purchased the savior of acid/alkaline splattering: Diphoterine® solution and installed it in the control room of all units and as the PPE of employees. We also organized the education and training for the use of Diphoterine® solution. Besides educating the hazards of organic solvents, we also explained the use of Diphoterine® solution.



PPE Education/Training

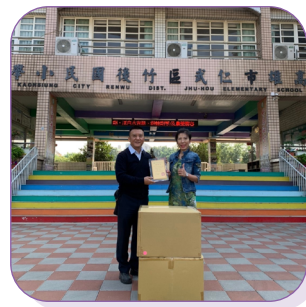
Respirator Education/Training

We have established the respiratory protection plan, identified risks in the workplace environment, and selected the correct PPE. We also equip each worker with a 3M respirator and plan respirator education/training and tightness test for 183 persons to ensure PPE can demonstrate its protection.

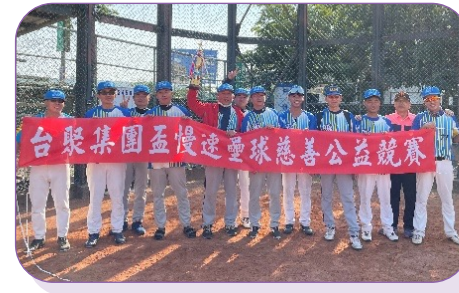


Social Contribution

We keep constant track on the COVID-19 situation and the epidemic control needs of schools in local communities. We donated facemasks, bleach (sodium hypochlorite), and other epidemic control supplies to schools (Renwu Elementary School, Zhuhou Elementary School, and Renwu Special Education School) in local communities to help teachers and students prevent the pandemic and disinfect the environment.



We organized the 2nd (2021) USI Cup Charity Softball Competition to integrate sports with charity. Besides donating the registration fees to the Children Are Us Foundation, we also purchased food from the Children Are Us Bakery for the competition. Kaohsiung Plant was awarded the certificate of appreciation from the Children Are Us Foundation. We specifically invited the Occupational Safety and Health Administration, Ministry of Labor, to kick off the event. The person catching the lucky ball could get a big cash prize. Besides boosting team morale, the kickoff added fun to the competition form employees and their family to enjoy the game and food, while doing charity at the same time.



5.3

Talent attraction and retention

GRI 103-2、103-3

SDG 3、4、5、8、16、17

Sustainability Principle: Unity Governance

Significance and Strategy	<p>Significance to USI</p> <p>While talents are the Company's irreplaceable core asset, and maintaining steady and continuous workforce growth is the cornerstone of sustainable operations, we encourage employees to keep making self-improvement through well-planned training courses, welfare system, and salary in order to achieve the personal career development of employees and thereby enhance overall corporate performance.</p>	<p>Strategy and Approach</p> <ol style="list-style-type: none"> 1. Recruit eligible talents through a fair, open, transparent and efficient recruitment system. 2. Value and respect the rights, interests, and opinions of employees, and build comprehensive and unfettered publicity and communication channels. 3. Providing a safe and healthy workplace environment 4. Build a total career development platform for employees. 	<p>Commitment</p> <ol style="list-style-type: none"> 1. 14 months of base salary plus allowances and bonuses, travel allowance, free meals, and employee travel. 2. Complete and solid retirement system and planning 3. Periodic healthcare and medical assistance for employees <p>Data scope: USI coverage 100%</p>
Achievement and Goal	<p>2021 Goals</p> <ol style="list-style-type: none"> 1. Turnover (excluding retirement) of all employees: ≤ 5%. 2. Complete employee insurance and medical coverage 3. Competitive pay and reward policy 4. Harmonious labor-management relations 	<p>2021 Projects</p> <ol style="list-style-type: none"> 1. Implement reward differentiation. 2. Hold labor-management meetings periodically. 	<p>2021 Achievements</p> <ol style="list-style-type: none"> 1. Turnover (excluding retirement) of all employees: 3.4%. 2. Employment of full-quota (4) of persons with disabilities by law. 3. Provided well-designed group insurance plans and contributed pension by law to protect the later life of employees. 4. Annual employee health checkup 5. Completion of labor-management meetings
Sustainable Development Milestone	<p>2022 Targets</p> <ol style="list-style-type: none"> 1. Turnover (excluding retirement) of all employees: ≤ 5%. 2. Continuous employment of persons with disabilities 3. Unfailing two-way communication with employees 4. Local talent recruitment increasing local job opportunities and benefiting local communities. 5. Constant campus cultivation with opportunities for industry-academia collaboration and internships 	<p>3-Year Goals</p> <ol style="list-style-type: none"> 1. Constantly provide complete learning resources 2. Review the pay and reward policy periodically 3. Build fair and impartial promotion and transfer channels. 	<p>5-Year Goals</p> <ol style="list-style-type: none"> 1. Enhancement of talent inventory and the evaluation system 2. Integration of workforce rotation and promotion mechanisms 3. Implementation of the overall performance and talent development system
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> 1. Turnover (excluding retirement) of all employees: ≤ 5%. 2. Welfare policy better than the regulatory requirements 3. Employee engagement survey 4. Performance evaluation mechanism 	<p>Grievance Mechanism</p> <ol style="list-style-type: none"> 1. Labor union and employee welfare committee 2. Establish the Employee Grievance Regulations and the whistleblower policy in the Ethical Corporate Management Best Practice Principles 3. Employee suggestion box. 	<p>Chapter Summary</p> <ol style="list-style-type: none"> 1. Pay and reward policy 2. Health care benefits 3. Employee rights and benefits 4. Harmonious labor-management relations

Workforce Structure

2021 Personnel Data GRI 102-8

Numbers of employees 465 persons; Male 430 persons (approx. 92%); Female 35 persons (approx. 8%)

Average age 42.6 years

Average service length 13.6 years

- Summary**
1. All USI employees are from Taiwan, mainly distributed in the Taipei and Kaohsiung areas.
 2. By the end of 2021, full quota of persons with disabilities were hired by law, accounting for 0.9% of all employees.
 3. About 84% were college and university graduates.

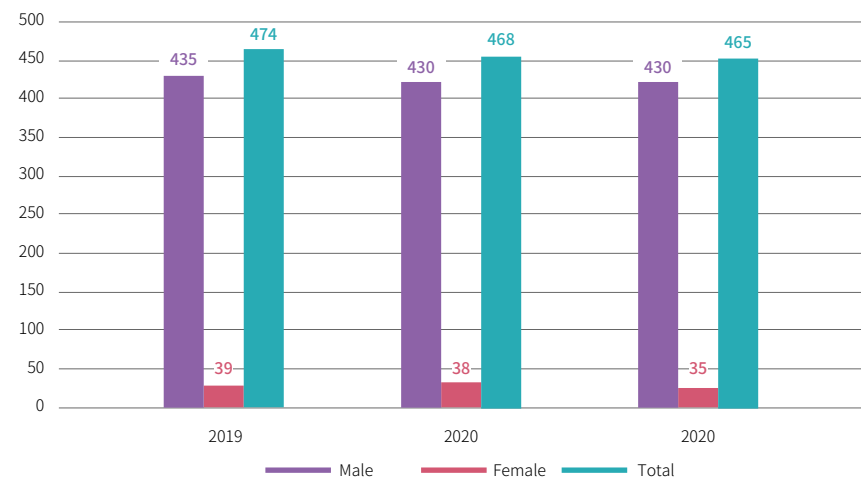
Note 1: Due to the characteristics of the petrochemical industry, male employees are more than female employees.

Note 2: Personnel data were obtained from the human resources system.

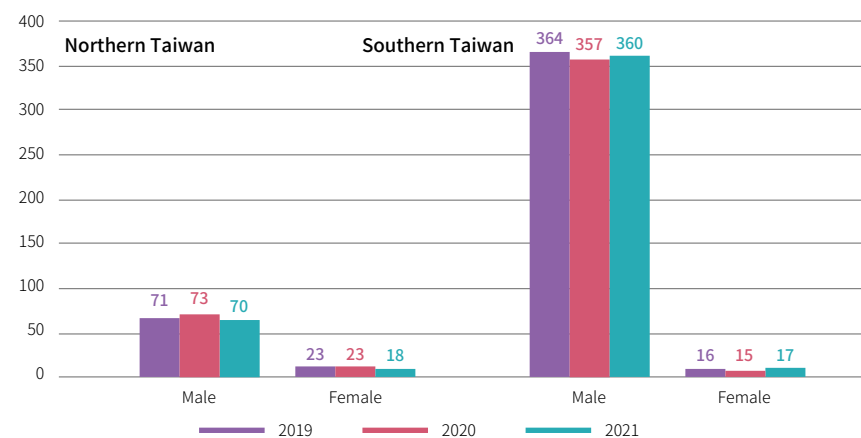
Northern Taiwan				
	Non-fixed-term contract employees	Fixed-term contract employees	Full-time	Part-time
Male	70	0	70	0
Female	18	0	18	0

Southern Taiwan				
	Non-fixed-term contract employees	Fixed-term contract employees	Full-time	Part-time
Male	359	1	360	0
Female	15	2	17	0

Number and Gender Distributions of Employees in 2019-2021



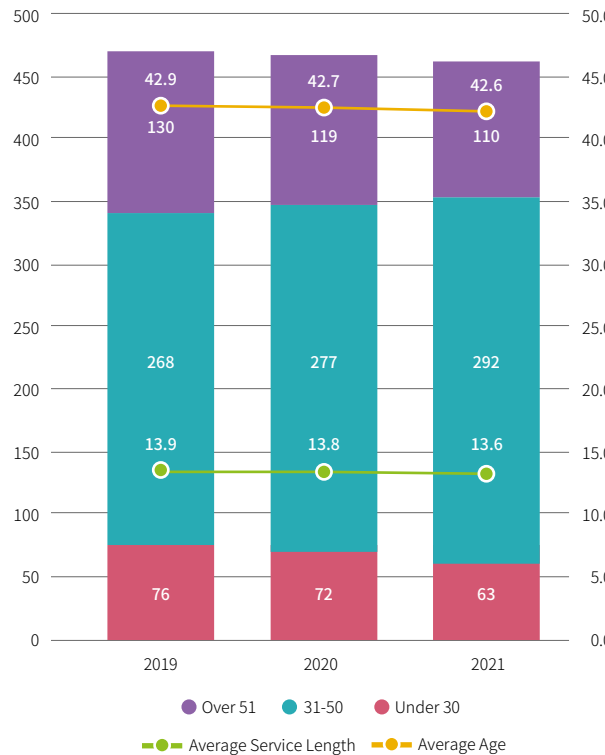
Region and Gender Distributions of Employees in 2019-2021



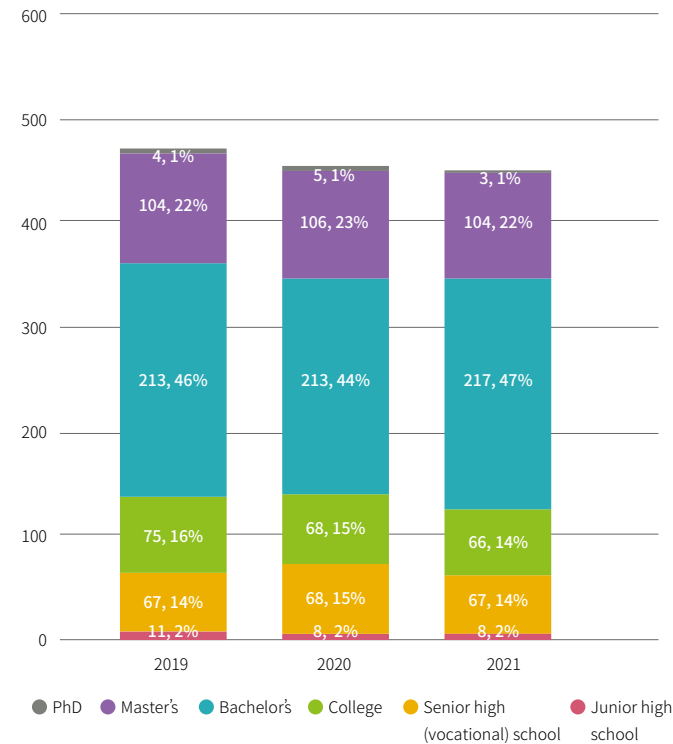
Duty Distributions of Employees in 2019-2021



Age Distributions of Employees in 2019-2021



Education Distributions of Employees in 2019-2021



Employee turnover GRI 401-1、404-3

Recruitment, Selection, and Evaluation

To stabilize human resources, we recruit excellent talents with a fair, open, transparent, and efficient recruitment system in order to build a strong organization. In addition to maintaining diversity and equal opportunities, we do not engage in discrimination based on race, color, age, gender, sexual orientation, gender identity and expression, ethnicity or national origin, disability, pregnancy, religion, political affiliation, union membership or marital status in hiring. In routine operations, we maintain workforce composition control and workforce structure balance and we analyze and improve employee turnover.

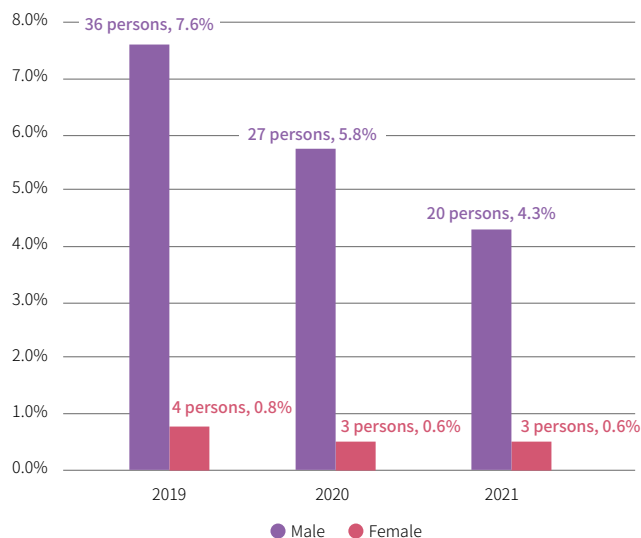
When new or existing positions need to be filled or the workforce needs to be expanded due to business needs, organizational planning or employee resignations, the workforce-requesting unit must complete the “Personnel Replenishment Request Form”, After the request is approved, we will first recruit personnel from within the organization or transfer eligible candidates by announcing the openings over the employee portal or by email. With the approval of their current supervisors, active employees interested in such openings may voluntarily submit their resume to the human resources unit. After further

screening, the human resources unit will forward the resumes of eligible candidates to the supervisor of the requesting unit to provide multiple options to the unit and a better career development mechanism for employees. We also recruit employees from outside of the organization through newspapers, human resources websites, human resources consulting agents, schools and employment service stations. For job openings at the Kaohsiung Plant, we give priority to local citizens as a way of giving back to the local communities.

Except for senior management, such as vice presidents and senior officers, fixed-term contract employees, and employees arriving at USI in and after October every year who do not need performance evaluation, 100% of employees receive a performance evaluation at planned intervals.

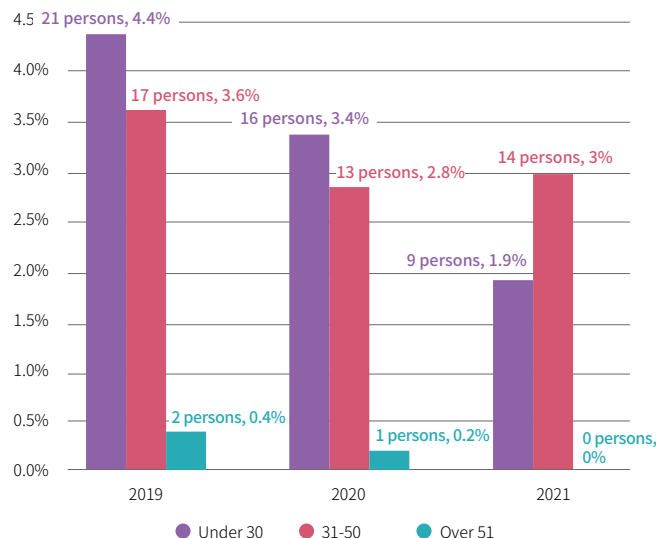
In 2021, we hired a total of 23 new employees, accounting for 4.95% of all employees. The tables below show the gender, age, and region distributions of these new employees.

Gender Distributions of New Employees in 2019-2021



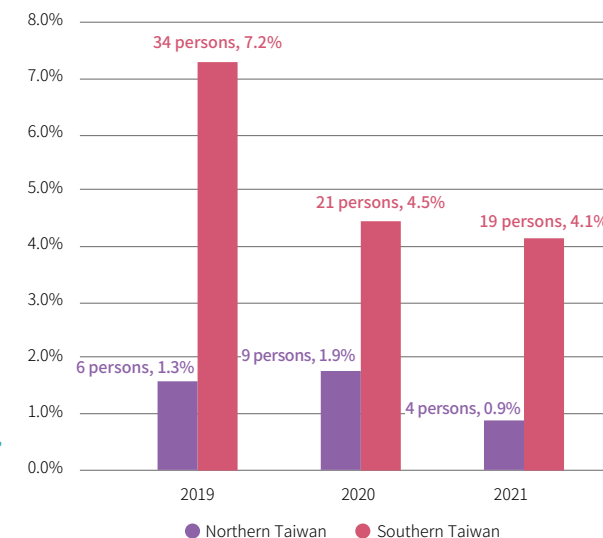
Note: New Employee Rate = Number of New Employees/End-of-Year Active Employees

Age Distributions of New Employees in 2019-2021



Note: New Employee Rate = Number of New Employees/End-of-Year Active Employees

Region Distributions of New Employees in 2019-2021



Note: New Employee Rate = Number of New Employees/End-of-Year Active Employees

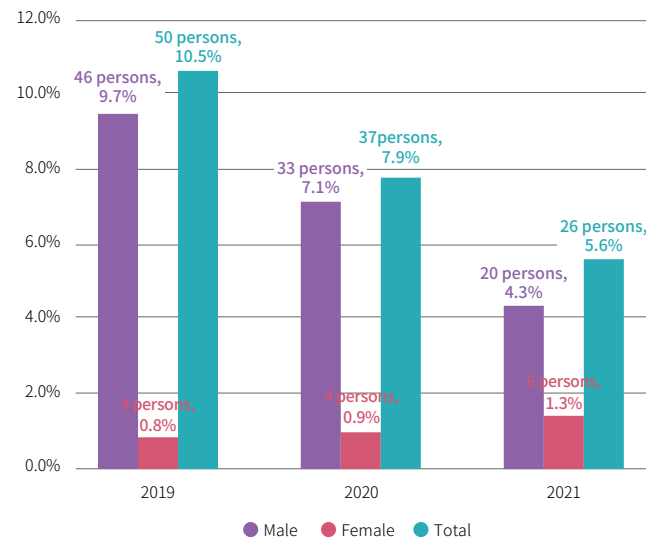
Turnover Rate

All employees are entitled to the voluntary termination of employment by law. Their labor conditions are subject to local laws and regulations, including the minimum wage, working hours, overtime pay, Labor Insurance, National Health Insurance, redundancy pay, and pensions. We also provide employees with group insurance and various employee benefits.

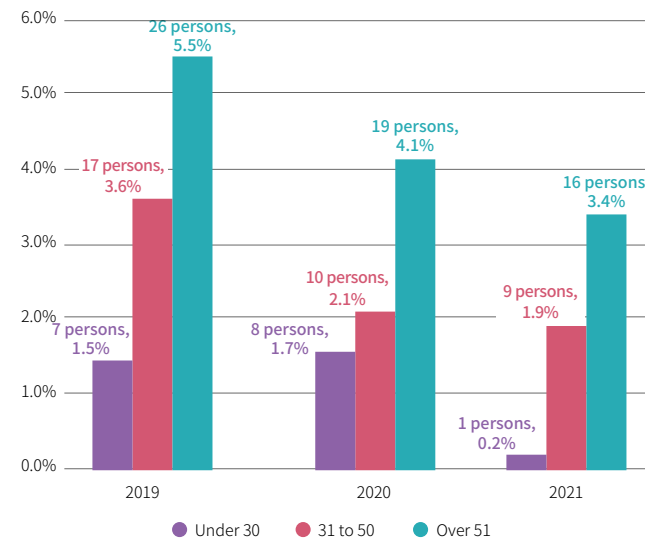
According to the employee turnover rate analysis in the Workforce F.B.I. Report (<https://blog.104.com.tw/104-fbi-2021-stay-and-leave-rate/#02>) published by 104 Corporation in 2021, the 2020 turnover rate (excluding retirement) of enterprise employees was 12.3%. In terms of the traditional manufacturing industries, the employee

turnover rate (excluding retirement) was 11.7%. At USI, the employee turnover rate 3.4%, far lower than that of the report and the expected rate at 5%. This suggests that our pay, reward, benefit, and retirement policies are competitive to attract and retain talents and encourage employees to create performance and make continuous contributions, demonstrating the effectiveness of our care and work protection for employees. To keep the employee turnover rate (excluding retirement) below 5%, we periodically review our pay and reward policies and continuously offer employees benefits better than the regulatory requirements, periodical health checkups, and medical assistance to take care of both the mental and physical health of employees.

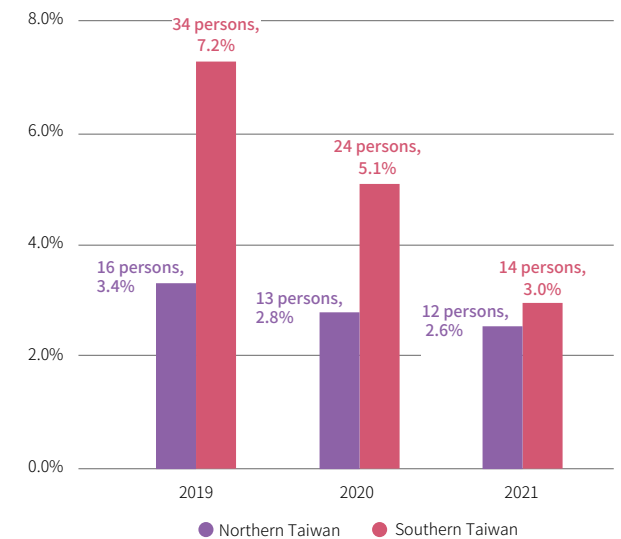
Gender Distributions of Employee Turnover in 2019-2021



Age Distributions of Employee Turnover in 2019-2021



Region Distributions of Employee Turnover in 2019-2021



Note: Employee Turnover Rate = Number of Employee Turnover/End-of-Year Active Employees

Human Rights Policy and Management Programs

ESG: <https://www.usife.com/ESG/en-us/ESG45.aspx>

Human Rights Policy

To fulfill CSR and protect human rights, we establish the human rights policy applicable to USI and USIG affiliates with respect to internationally accepted human rights standards, such as the International Bill of Rights and the Declaration on Fundamental Principles and Rights at Work, in order to eliminate behavior prejudicing and violating human rights. Apart from providing employees with a reasonable and safe workplace environment, we ensure employees to enjoy reasonable and dignified treatments at USI.

Human rights risks mitigation

We undertake to provide a reasonable, safe workplace environment for employees, respect and protect their dignity, promote environmental protection in business activities, and uphold business ethics and integrity. To make this commitment a reality, besides respecting employees by law and with dignity, we designate special staff to enforce OH&S, ceaselessly publicize, educate, and implement the human rights policy in the routine, and arrange reasonable grievance channels.

Concerns of Human Rights and Practice

We have passed the certification of ISO 14001 and ISO 45001 systems through proactive energy conservation, disaster prevention, and pollution control in order to provide employees with a reasonable and safe workplace environment through various improvement activities.

Besides providing employees with a safe and healthy workplace environment by law, we have also established an OH&S responsible unit and committee, hired medical specialists and nurses, and arranged periodic education and training relating to OH&S and fire prevention to take necessary precautionary actions to prevent occupational accidents and thereby reduce risk factors in the workplace environment.

We value the equality of human rights and eliminate discrimination to reasonably ensure equal job opportunity and no child labor or forced labor, help employees maintain physical and mental health and work-life balance. Please visit (link above) for more information.

Training and Practice of Human Rights Protection

In 2021, we organized training of 4,451.5 hours in total for 1,068 participants to promoting human rights protection. Please visit the ESG section of our corporate website at <https://www.usife.com/ESG/en-us/ESG45.aspx> or the details regarding the concerns and practices of human rights, training methods, and promotion of human rights protection.

Grievance system

We have established unfettered grievance channels for employees to report all internal problems to supervisors at all levels or the Human Resources Division. To maintain gender equality at work and provide employees and jobseekers with a work and service environment free of sexual harassment, we have established a dedicated mailbox and email for sexual harassment grievances. All information will be kept confidential during the investigation. Neither the name nor the data valid for identifying the complainant will be disclosed to ensure complainant protection. Please refer to page 44 of this report.

Employee Benefits

Employee benefits are our focus, and every USI employee are entitled to the following benefits: [GRI 401-2](#)

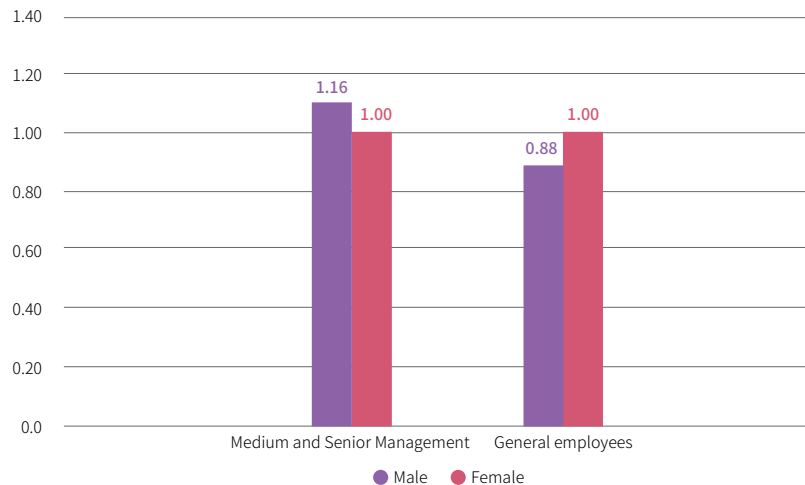
Item	内容
Bonus	Year-end bonus and performance bonus
Leave	Parental, menstrual, family care, pregnancy checkup, pregnancy checkup accompaniment, and paternity leaves.
Insurance	Labor Insurance, National Health Insurance, travel insurance for business trips, employee/dependent group insurance, pension contributions
Food	Employee canteens and meal allowances.
Transport	Employee parking spaces and travel allowances
Entertainment	Employee gym, employee tours, and regular employee gatherings.
Allowances	Subsidies for on-the-job training, domestic/overseas further education
Other benefits	Wedding/childbirth/funeral subsidies, employee tour subsidy, citation for senior employees, bonuses for three major folk festivals, children education allowance, employee savings plan, periodic health checkups and healthcare plan.

Employee compensation plan

Upholding the belief to share profits with employees, we attract, retain, cultivate, and encourage all kinds of outstanding talents and have established a comprehensive and competitive employee remuneration plan. All new employees are paid better than the statutory minimum wage. Allowances vary according to the position and educational attainment of employees. The year-end bonus is distributed according to the employees' performance. Most importantly, the base salary is equal regardless of gender. Due to the characteristics of the petrochemical industry, the proportion of wage for female and male

employees is slightly different. To stabilize the workforce and retain outstanding talents, apart from adjusting the pay for employees according to the consumer price index and personal performance of the employees every year, we participate in a compensation survey of the petrochemical industry to estimate pay standards in the market to make appropriate adjustments and planning. We also give a special raise to employees with outstanding performance to ensure that our pay is competitive with the market.

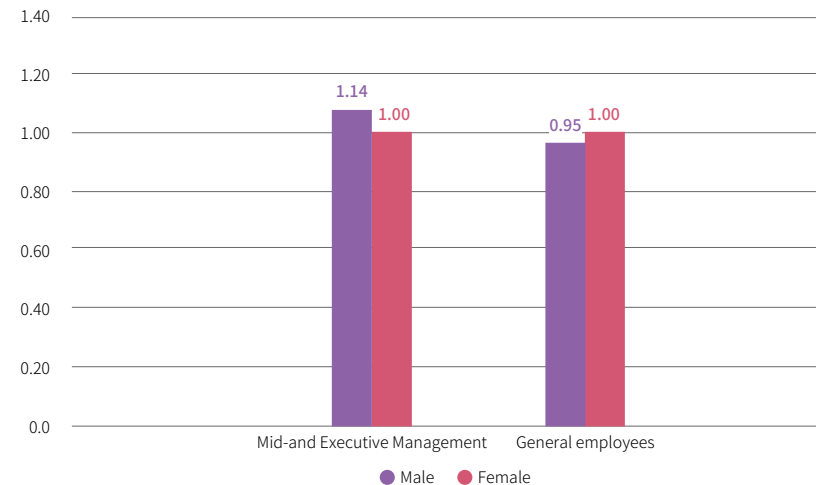
Women-to-Men Ratio of Salary and Remuneration in 2021 (Base Salary)



Note 1: The base for female employees is "1", Remuneration in 2021 is the base salary of male and female employees. The calculation does not include contractual employees.

Note 2: Medium and senior management are employees of grades 8 or higher, while general employees are grades 7 and below.

Women-to-Men Ratio of Salary and Remuneration in 2021 (Full Pay)



Note 1: The base for female employees is "1", including wage, bonuses and benefits. The calculation does not include contractual employees.

Note 2: Medium and senior management are employees of grades 8 or higher, while general employees are grades 7 and below.

Item	Contents	2021	Difference from the previous year	Description of Difference
1	Number of non-management full-time employees	460	+7	Major factors for average wage increase: 1. Annual raise 2. The 2021 year-end bonus was more than that of 2020.
2	"Average Wage" of non-management full-time employees (NTD thousand)	1,471	+269	
3	"Median Wage" of non-management full-time employees (NTD thousand)	1,318	+228	

Health care benefits

Every year we arrange periodic health checkups for employees. Our Taipei Office is equipped with a gym and the Kaohsiung Plant has qualified nurses who offer lifestyle advice and medical assistance to the employees there. We provide menstruation leave and individual breastfeeding space for female employees and have cooperation with kindergartens and educational organizations to provide daycare services for employees. In addition, we periodically organize outdoor activities for employees to maintain a balance between work and life.

In 2021 a total of 20 employees applied for the childbirth subsidy. Employees in need of parental leave can apply for the leave when their children are under 3 years of age. In 2021 a total of 54 employees were qualified for the leave, and only one applied for the parental leave of absence for six months (September 2021-February 2022). We have designed perfect plans for employees to return to work after parental leave. When an employee returns after the unpaid parental leave, we will arrange reinstatement education/training for the employee to protect their right to work and ensure their smooth return to work. GRI 401-3

	Item	Male	Female	Total
Year Status	Number of employees entitled to parental leave	53	1	54
	Number of employees took parental leave in the year	1	0	1
Return to work Status	A) Total number of employees due to return to work after taking parental leave	-	-	-
	B) Total number of employees that did return to work after parental leave	-	-	-
	Return to work rate=B/A	-	-	-
Retention Status	C) Total number of employees returning from parental leave in the prior reporting period	-	-	-
	D) Total number of employees retained 12 months after returning to work following a period of parental leave	-	-	-
	Return to work rate=D/C	-	-	-

Pension contribution GRI 201-3

We have established a set of retirement regulations for all full-time employees and contribute every month the employee pension reserves to the personal pension account at the Labor Insurance Bureau for each employee in accordance with the Labor Standards Act. See the information on the retirement benefit plan disclosed in Note 21 of the 2021 individual financial statement for details.

https://www.usife.com/USIWebFiles/Meeting/Finance4I_110.pdf#page=44

Item	Proportion of Contribution	Employee Participation in the Retirement Plan
Pension under the Labor Standards Act (old system)	Employer contribution: 12% of the employee's monthly wage.	100%
Pension under the Labor Pension Act	Employer contribution: 6% of the employee's monthly wage. Employee contribution: 0-6% of the employee's monthly wage.	100%

Labor union

We have a labor union and protect the right to collective bargaining and freedom of association of the employees. This fully demonstrates our determination to maintain labor rights and benefits. Every year, representatives elected by the employees attend the “labor-management-meeting” held periodically by the management to negotiate and discuss matters relating to labor conditions and employee welfare. In addition, relevant officers from management attend the “board meeting” and the “member representatives’ annual congress” held by the union to listen to the voices and appeals of employees and engage in face-to-face communication with the member representatives in order to arrive at a consensus, promote labor-management cooperation and create a win-win situation for both parties through this process.

By the end of 2021, the labor union had a total of 355 members, including 13 female members and 342 male members. Except for employees of the Taipei Office who are unable to join the union for the geographic reason, and the unit chiefs and personnel staff of Kaohsiung Plant who are not allowed to join the union by law, all employees of Kaohsiung Plant are union members, with a 100% participation rate. In addition, representatives of labor and management have formed the “Pension Reserve Supervisory Committee”, the “Employee Welfare Committee”, and the “Occupational Safety and Health Committee”. These committees hold meetings at planned intervals to provide a channel for labor and management to communicate and thereby maintain labor rights and benefits. [GRI 102-41](#)

[Please visit https://www.usife.com/ESG/en-us/ESG42.aspx](https://www.usife.com/ESG/en-us/ESG42.aspx) for the details of the labor union organization.

2021 Member Representatives' Annual Congress



Note: We have not signed any collective bargaining agreement.

Employee Welfare Committee

Each month we contribute 0.15% of the sales turnover as the fund for the "Employee Welfare Committee (EWC)" for employee tour subsidies, preschool entertainment subsidy and study grants for the children of employees to repay the devotion of employees. In 2021 a total of 228 employees applied for the preschool entertainment subsidy and study grants, and a total of 364 children received the funds, i.e., an average of 1.6 children/person, higher than the Taiwan's average at 1.07/person (2021 prediction of US CIA: <https://reurl.cc/yQjb7q>). This suggests that our employee welfare policy has brought influence to the domestic society. In terms of employee clubs, we have 11 employee clubs so far, including a badminton club, a baseball club, a cycling club, a tennis club and so on. The Company and EWC guide and sponsor them. Employees can relieve their work stress and promote their health with club activities, and thereby improve their organizational commitment.



Please visit <https://www.usife.com/ESG/zh-tw/ESGNewsDetails.aspx?Passcode=2021122201> for the details of club activities.



Employee Activity 1



Employee Activity 2



Cycling Club



Badminton Club



Baseball Club



Tennis Club

Employee Engagement Survey

To enhance employee care and fulfill the employee's demands, we conduct the employee engagement surveys (EES) from time to time to measure their satisfaction and work faithfulness and gather their opinions regarding USI's policies, performance management, employee relationships, and salary and benefits for the reference of future improvement.

The 2021 EES was performed with a six-point scale. The score of all items fall above the industry's average, suggesting the our policies for promoting employee development and employee care have earned employee recognition. Additionally, we also plan and make rolling improvement with reference to employee feedback to build a happy workplace environment for employees.

We keep promoting various policies for employee benefits, employee rewards, employee development, and employee communication.



Performance evaluation ▶

With respect to the "Employee Performance Evaluation Regulations" and "Employee Performance Supervision and Guidance Regulations", officers and employees establish the annual performance evaluation targets together for the periodic performance evaluation. We also supervise and guide employees failing to meet the company's performance requirements and maintain persistent observation to maintain organizational competitiveness.

To distinguish employees with excellent performance from those requiring guidance, we implement the "Employee Performance Supervision/Guidance" program for employees graded C and below in the annual performance evaluation. We will also terminate the employment contract with those who fail the program.

Reward for improvement proposals ▶

We constantly combine USIG's proposal reward scheme and the real-time reward scheme to establish the "Regulations for Rewarding Outstanding Performance and Improvement Proposals".

Year-end bonus differentiation ▶

We integrate USIG's year-end bonus distribution to combine the year-end bonus with reward and punishment to reward the merits and punish the demerits.

The year-end bonus is distributed according to the "Employee Performance Evaluation Regulations". For employees with poor performance, unwilling to take orders from their supervisors, or with other gross negligence, we will cancel or cut their year-end bonus with the president's approval.

5.4

Talents cultivation and development

Sustainability Principle: Unity Governance

Significance and Strategy	Significance to USI	Strategy and Approach	Commitment
Achievement and Goal	<p>2021 Goals</p> <ol style="list-style-type: none"> 1. Annual training for indirect labor: 8+hours. 2. Plan and activate a level-specific management competence training mechanism. 3. Provide supervisors and employees with comprehensive training courses. 4. Develop a talent cultivation system. 	<p>2021 Projects</p> <ol style="list-style-type: none"> 1. Level-specific management competence training mechanism 2. Talent matrix inventory 	<p>2021 Achievements</p> <ol style="list-style-type: none"> 1. Average hours of employee training in 2021: 23.80 hours. 2. 2021 training total length: 10,776 hours. 3. 2021 training fees per person: approx. NT\$2,582 4. On-site workers acquired a total of 75 required professional certificates. 5. Completed workforce planning and talent matrix inventory for all units.
Sustainable Development Milestone	<p>2022 Targets</p> <ol style="list-style-type: none"> 1. Annual training for indirect labor: 8+hours. 2. Implement a level-specific management competence training mechanism. 3. Enforce annual circulating courses. 4. Continue to enhance talent inventory and the evaluation system. 	<p>3-Year Goals</p> <ol style="list-style-type: none"> 1. Assess stage results after assessing training courses and training. 2. Establish channels for equal career development. 3. Enforce a level-specific management competence training mechanism. 	<p>5-Year Goals</p> <ol style="list-style-type: none"> 1. Integration of workforce rotation and promotion mechanisms 2. Strengthen overall performance and the talent development system. 3. Eliminate interruption in talent succession for corporate sustainable development.
Management	<p>Effectiveness Assessment</p> <ol style="list-style-type: none"> 1. Annual training for indirect labor: 8+hours. 2. Acquire various professional licenses and certificates. 3. Annual training fees per employee 4. Performance evaluation mechanism 	<p>Grievance Mechanism</p> <p>Labor union, Employee Grievance Regulations, whistleblower policy in the Ethical Corporate Management Best Practice Principles, and employee suggestion box.</p>	<p>Chapter Summary</p> <ol style="list-style-type: none"> 1. Education/training 2. R&D personnel training plan 3. Diversified and complete employee development framework 4. Talent Development 5. Employee development.

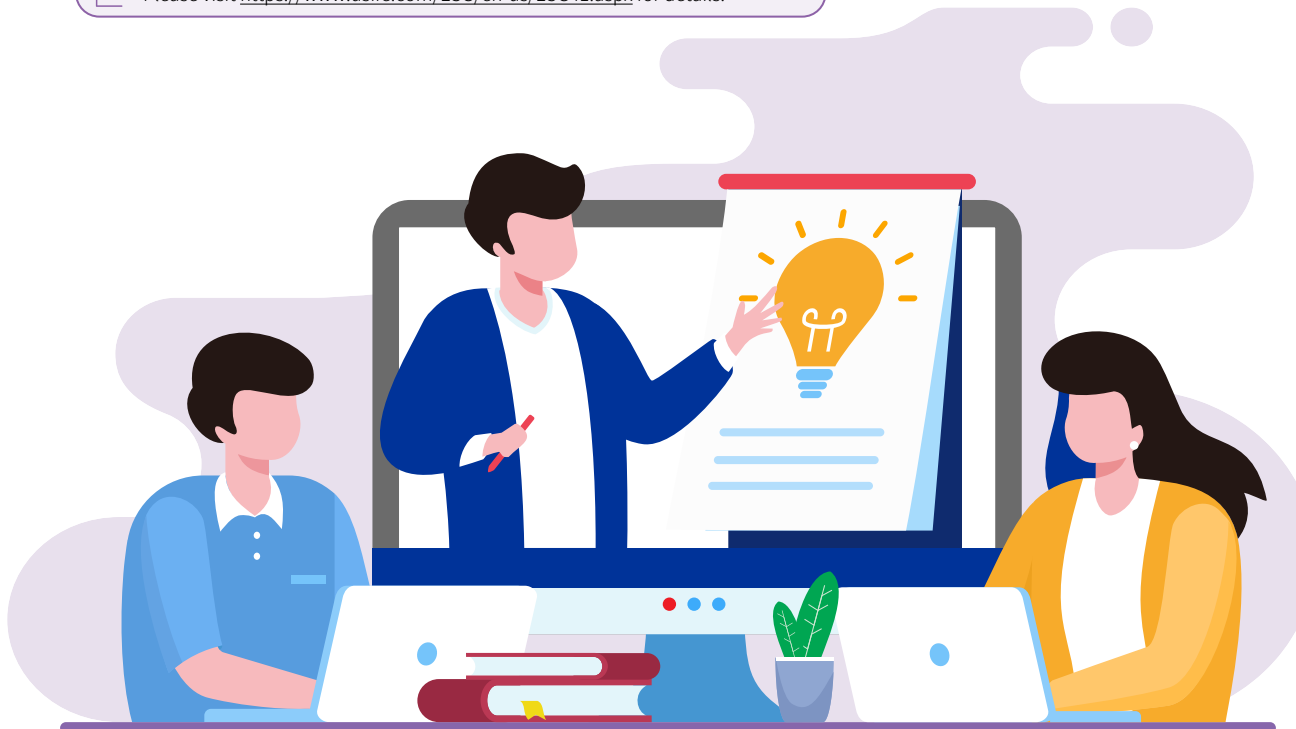
Multidimensional and Complete Personnel Development Framework

The system for “overall performance management” is a management system operated based on the anticipated outcomes from the key performance indicators and performance associations developed upon the “company → department → position” cycle.

Talent Cultivation

In “talent cultivation”, we plan various complete and up-to-date education and training activities and set management competencies, professional training items, and evaluation methods of all levels. Additionally, we activate the annual circulating courses with contents covering five major courses: marketing skills, sales skills, supervisor management competencies, communication and negotiation skills, and general finance administered through internal and/or external training. We also follow up the actual work performance and implementation of trainees.

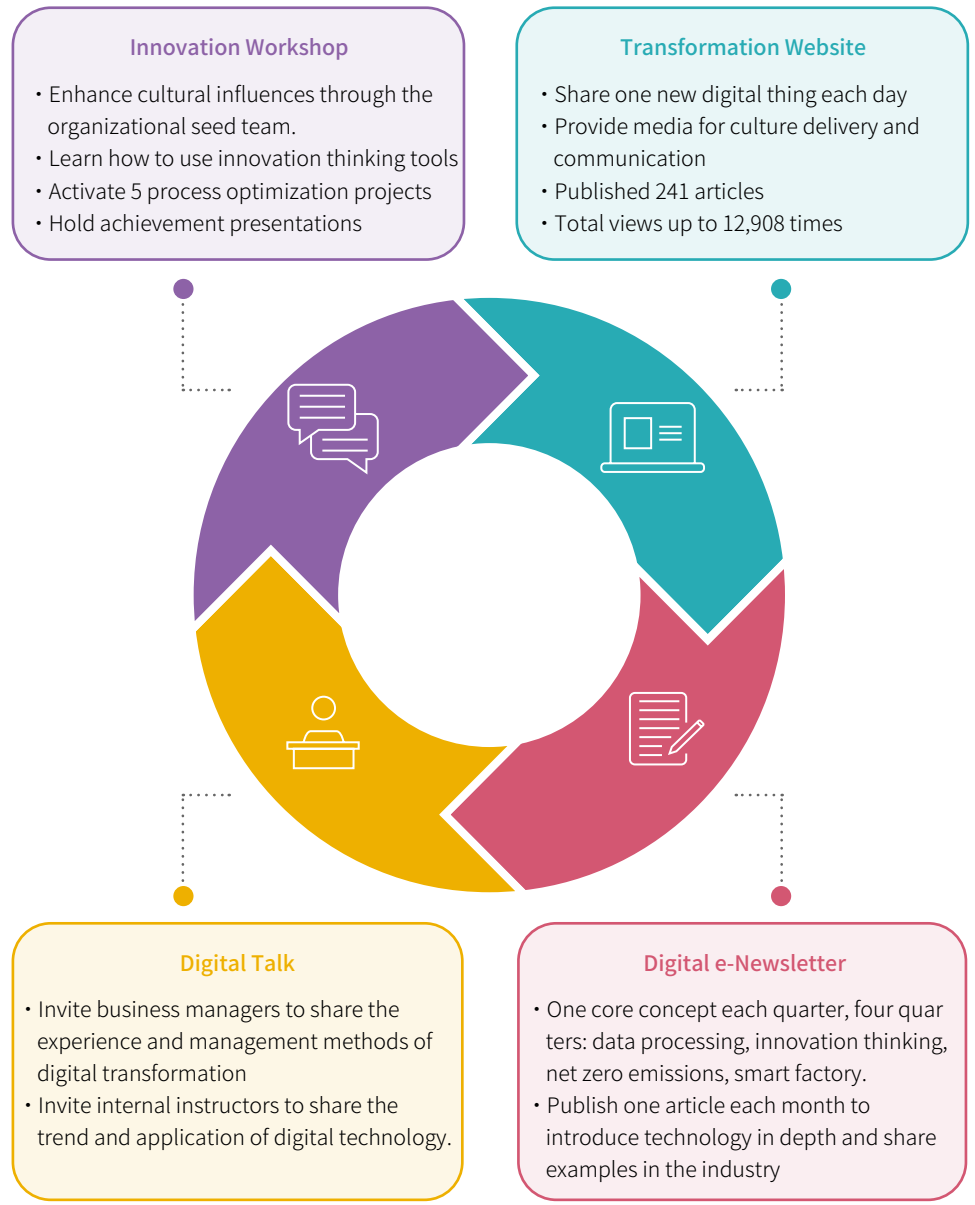
Please visit <https://www.usife.com/ESG/en-us/ESG41.aspx> for details.



Cultivation of talents for digital transformation

The digital wave arose following the technology innovation in recent years. Pushed by the pandemic, digital transformation has become a heat in all industries, and there is no exception to USI. Besides engaging in industry-academia collaboration with academic units, we all invited professional instructors to give instructions to constantly transform toward smart manufacturing.

Besides the application of technology, we understand that digital transformation needs a new way of thinking in employees and a change in the organizational culture. Hence, we have actively implemented data-driven and process improvement in the organization through talents cultivation. All employees can learn digital transformation through the Group's transformation website, e-newsletter, and digital talks in order to enhance their awareness of digital transformation. We also held workshops and AI training courses for seed members to practice digital transformation in real work to enhance promotion.

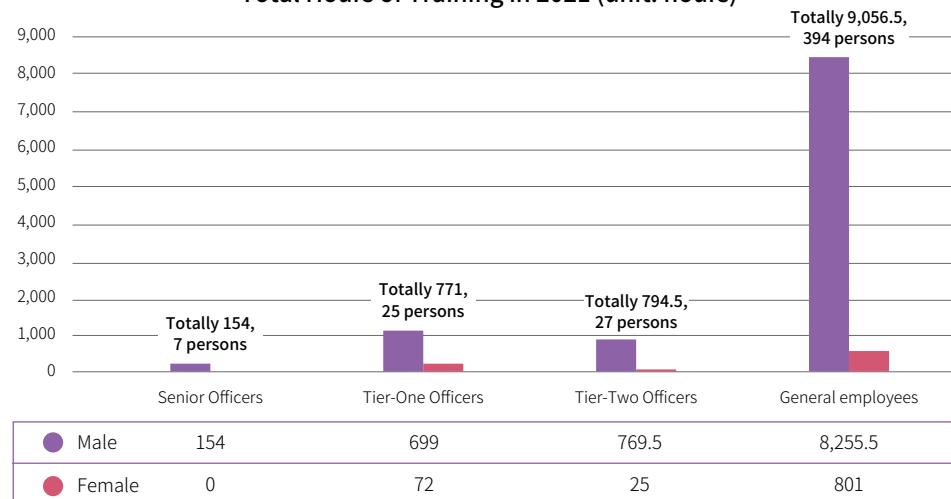


Education and training

In 2021, we provided employee training for a total of 10,776 hours (including training courses participated by employees and organized by the group). The average training length was 23.8 hours/person, with a training expense of about NT\$1.201 million. As most male supervisors were from production departments, they needed a long HSE license training than female supervisors. We are committed to building a continuous and rich learning environment to systematically provide employees of different jobs with a series of general and special education courses and management courses. Apart from hiring external experts as instructors, we also cultivate internal instructors to pass on USI's important knowledge and technology.

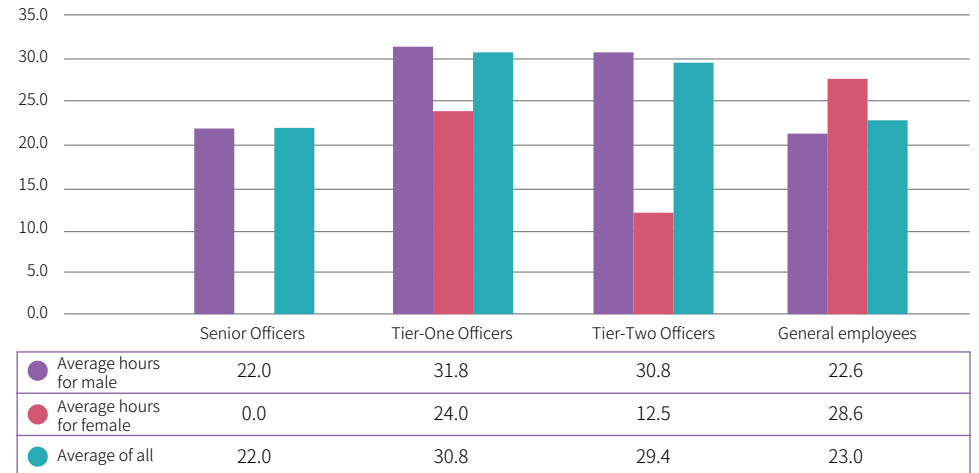
In addition, we provide multidimensional learning channels and resources, including on-the-job training, job guidance, mentoring, job rotation, onsite instruction, and e-learning. For employees with high learning intentions and developmental potential, we finance them to pursue continuing education in domestic universities and adjust their duties for training, in order to cultivate business successors.

Total Hours of Training in 2021 (unit: hours)



Note: Senior officers are employees of grades 13 and higher; tier-one officers are employees of grades 10-12; tier-two officers are employees of grades 8-9; and general employees are employees of grades 7 and below.

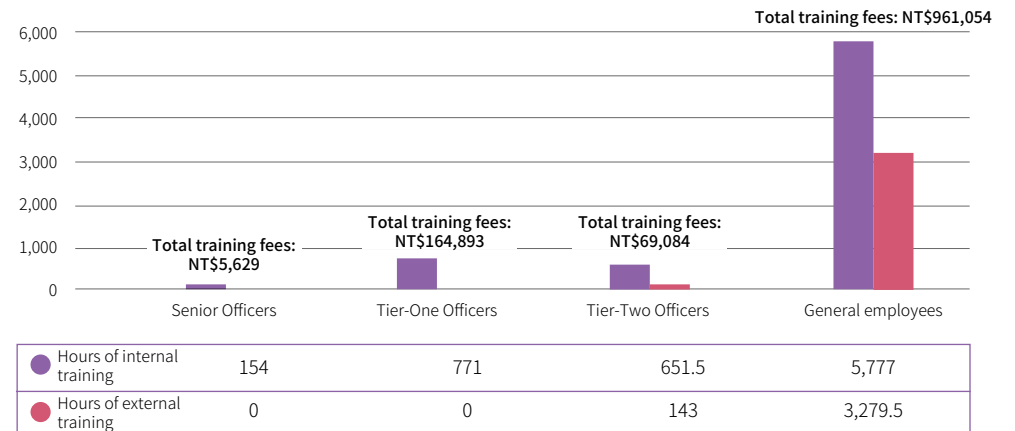
Average Hours of Training Per Employee in 2021 (unit: hours/person)



Note: Senior officers are employees of grades 13 and higher; tier-one officers are employees of grades 10-12; tier-two officers are employees of grades 8-9; and general employees are employees of grades 7 and below.

As shown in the distributions of internal training and external training, we offer well-planned internal and external training resources to employees. Apart from hiring external professional instructors to give classes in the facility, employees can also apply for training at external professional training organizations through the online application system.

Distributions of Internal/External Training 2021 (unit: hours)



Note: Senior officers are employees of grades 13 and higher; tier-one officers are employees of grades 10-12; tier-two officers are employees of grades 8-9; and general employees are employees of grades 7 and below.

5.5

Charity and Community Participation

Community care

In addition to caring for the education of the vulnerable, education in remote areas, and environmental education, upholding the spirit of “Giving Back”, we spare no effort in expressing our care for the communities, local groups, and schools in the vicinity of the Kaohsiung Plant to maintain and develop positive relationships with these neighbors.

Therefore, we encourage USI employee clubs and employees to participate in social and community charitable activities, such as irregular employee donations and mountain cleanups. Recently, we have launched the local neighborhood cleanup and pandemic prevention activities. In addition to donating supplies for pandemic control to local residents, schools, and fire stations, we have also helped local communities clean the environment and prevent the pandemic through USI volunteers, in order to demonstrate our “social inclusion” concept and fulfill our ESG for a common living circle.

Community support

Community development associations, education and culture, volunteer police and firefighters, community groups, local folk festivities and emergency relief.

Job opportunities

Where appropriate, we hire local residents for job openings and encourage contractors to hire local residents.

Community involvement

Community activities, group representatives, environmental protection groups, religious activities

Contributions to Communities Around Kaohsiung Plant in the Past 3 Years

(unit: NT\$)

Year	2019	2020	2021
Religion and culture	63,000	20,000	20,000
Communities and social groups	50,000	68,000	57,000
Volunteer police and volunteer firefighters	70,000	205,000	50,000
Schools and education	243,030	68,600	78,200
Community development associations	203,000	262,000	132,000
Total	629,030	623,600	337,200

Industry-academia collaboration

In response to the low fertility rate in recent years, schools are developing more sophisticated and unique education approaches and programs to provide students with a high-quality and comprehensive learning environment. In the context of the population and education trends in Renwu and Dashe districts, Kaohsiung Plant and other 13 other plants (including Formosa Plastics Renwu, the Chang Chun Group, and the Dashe Industrial Park Enterprises Association) of Renda Industrial Park and Renwu Senior High School have established an industry-academia collaboration model to cultivate a talent pool for the future and for local schools to develop dynamic learning models and strengthen their ability to attract more top students through their linkages with enterprises.

This collaboration model among industry, government and academe aims to develop high-caliber students with market-relevant skills and sound employment prospects. Enterprises will have direct access and warm relationships with specifically trained talent, and they can develop positive relationships with neighboring communities in a substantial way. Moreover, the government can promote local prosperity, close the urban-rural gap, bolster regional economic development, and minimize brain drain. Thus, the project will produce a win-win situation for the students, schools, enterprises, communities and the local government.



2021 Domestic Offsite Learning:
Visit on the USI R&D Center



2021 Domestic Offsite Learning: Visit on National Taiwan University of Science and Technology



Weekend Featured Courses: IoT Construction



Seminar with the senior students of the "Kaohsiung Renda Petrochemical Talent Stream" Cooperation Program.

"Kaohsiung Renda Petrochemical Talent Stream" Cooperation Program

Period	August 1, 2018 to July 31, 2023 (three graduation classes for five years)
Partner	Kaohsiung Municipal Renwu Senior High School
Target	Students with household registrations in Renwu, Dashe, Dashu, Niaosong, and Nanzi districts near Renda Industrial Park, 35 tenth graders a year.
Internship	<ol style="list-style-type: none"> In addition to the general tenth grade curriculum, electives relating to the petrochemical industry and professional ethics are emphasized. Students on the program will visit USI during the summer break or on Saturdays to further understand the industry and job environment.
Vacancy	10 students each year, totaling 90 for three graduation classes in five years.
Scholarships and grants	Three graduation classes in five years: NT\$1.08 million Subsidization for the hourly pay for professional courses in three years: NT\$330,000 USI sharing for three graduation classes in five years based on the program MOU: NT\$140,000.
Preferential hiring	<ol style="list-style-type: none"> USI will recommend one student from the top-ten graduating students studying at the relevant departments recognized by businesses at the Ren Da Industrial Park to be the trainee of an USI supplier. Students who choose to further their studies will be priority candidates for hiring by companies in the Ren Da Industrial Park Service Center as long as they pursue studies in relevant disciplines
Summary	<ol style="list-style-type: none"> In 2020 a total of 27 students graduated from the Kaohsiung Renda Petrochemical Talent Stream program enrolled to the Star Plan and were accepted by national universities, demonstrating outstanding performance. The contract for the second Kaohsiung Renda Petrochemical Talent Stream program was signed on April 20, 2018 and initiated in August. In view of the program's heated acclaim, we continued with the third program (2021-2025), with the contract signed on December 20, 2020. Due to the pandemic, overseas visits were not organized in 2021 and replaced with the offsite learning project in the country.

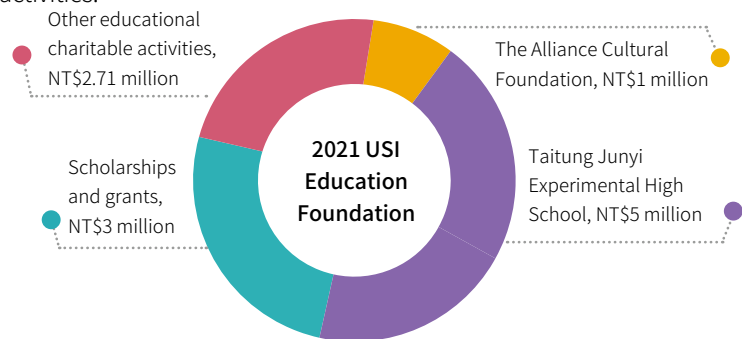
USI Education Foundation

USI Educational Foundation was established on December 30, 2011 and funded with the donations from USI and APC. The foundation officially started operations in 2012 to promote educational charitable affairs, with a focus on the care for the education of the disadvantaged, education in remote areas, and environmental protection. The foundation advances its goals by establishing scholarships and grants, donating to charities, and sponsoring educational and charitable activities.

To further expand the scale of charity, CGPC and Taiwan VCM Corporation (TVCM) joined the foundation in 2017. In 2018, Taita Chemical Co., Ltd. also joined the foundation to enable investments of more resources in rural education and environmental sustainability in order to give back to society.

Charity Events

In 2021, USI Education Foundation sponsored various activities with a total amount of NT\$11.71 million, including NT\$3 million for scholarships and grants; NT\$1 million for The Alliance Cultural Foundation, NT\$5 million for Junyi Experimental High School in Taitung; and NT\$2.71 million for other educational and charitable activities.



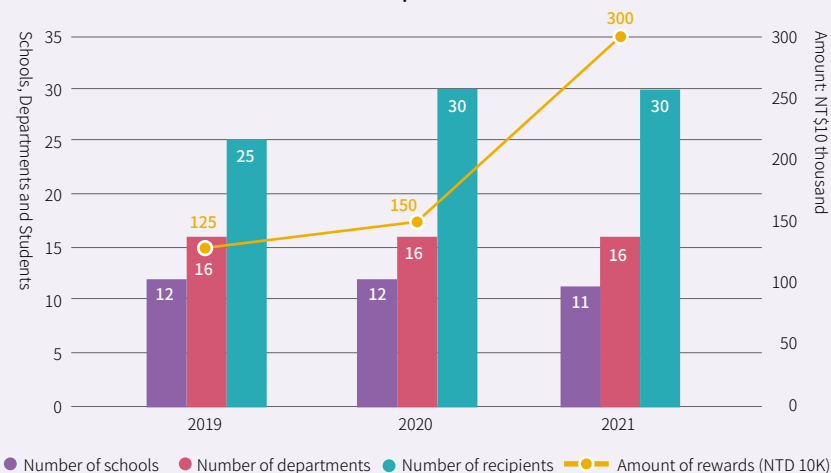
Scholarships and grants

We offer scholarships to students from low-income families with outstanding performance and specializing in disciplines relating to chemical engineering, materials science, chemistry, and applied chemistry of 15 public and private universities to promote education and talent cultivation in related fields, encourage university students of related disciplines to study hard and cultivate outstanding industrial talents for society. 2021 marked the 10th anniversary of USI scholarships. Over the last decade, we have accumulatively granted scholarships amounting to NT\$14.1 million to 266 students.



In 2021, we offered scholarships and grants of NT\$3 million in total to 30 students from 16 departments of 11 public and private universities, including 16 from doctoral programs, 9 from master's programs, and 5 undergraduates, and 17 of them were from low-income families. To encourage scholarship-winning students, the presentation and commendation ceremony was held at noon on December 10, 2021. USI officers attended the event to exchange opinions and experience with students, wishing them to keep learning in order to demonstrate positive influence and contribute to society.

Distribution of Scholarships and Grants in Last 3 Years



The Alliance Cultural Foundation and Taitung Junyi Experimental High School

● Junyi—Realization of Education for the Rural

To invest more resources in rural education and the sustainability of Hualien and Taitung, the foundation sponsors the Alliance Cultural Foundation and Junyi Experimental High School on a long-term basis. Chairman Stanley Yen of The Alliance Cultural Foundation hopes to provide economically vulnerable schoolchildren with an opportunity to flip through rural education reform and innovative experimental education implementation. Hence, he has established the “Rural Education Seeds Cultivation Program” to sponsor economically vulnerable schoolchildren of Hualien and Taitung. After 10 years of efforts, a total of 185 schoolchildren have been benefited, and 80% of them are indigenous peoples, including Amis, Puyuma, Bunun, Paiwan, Drekey, Tao, and Truku.

Schoolchildren in remote townships with less resources need connection with the world more in order to create more possibilities for their hometowns. Hence, in 2017 the Alliance advocated the overseas study program and established the “Innovation and Overseas Study Education Fund” to provide scholarships for highly potential students of Junyi Experimental High School to apply for overseas study at two-year community colleges or the United World College before high school graduation like taking over others on the lane. Besides providing students with a new start to connect with the world, this program enables students to develop specialties and broaden their international view, so that they can become the power to change their communities and hometowns in the future. Since program establishment, 14 students have studied overseas under the

program, 8 students have completed their study and successfully enrolled to their ideal universities or colleges to further their study, and 2 of them even earned the scholarship from US universities.

When the pandemic swept across the rapidly changing world, educators began to rethink the purpose of education, believing that development children’s self-learning ability should be the ultimate goal of education, so that they can face future challenges. This coincides with the educational goal of Junyi Experimental High School. To develop core competence in “character, life, and skill” is the core concept of Junyi Experimental High School. Hence, Junyi aims to equip students with good character, skills for life, living competence, international view, and self-learning ability for them to become world citizens. Hence, it plans courses including Life Exploration, Creativity Modules, and International Linkage to guide students to engage in self-exploration, find self-confidence and self-development. The school also arranges “self-learning” courses for students to develop the ability in independent time management for self-learning and fully absorb knowledge in different areas. Additionally, with interdisciplinary courses and through collaboration with external units, the school enriches the learning contents of students to develop lifelong learning in students and realize the concept and value of “inspiring talent, positive innovation, local connection, and bilingual international”.



The long-lasting “Life Exploration” course of the high school section includes cycling, mountain skills, and water skills, splitting as of grade 11. The photo shows the mountaineering course in mountain skills.



The thanksgiving reunion in November was prepared by the students taking the International Hospitality course of the “Creativity Module”. Besides the learning culinary, reception, and service skills, the module aims to develop the life and social skills of students.



At the “Sing for the Wildlife Hospital” charitable sale, teachers led students keen on singing and dancing of the high school section to participate in the Service Learning course to demonstrate their talent and specialty to support wildlife in real action.



The Contemporary Arts course of the Creativity Module invited professional photographers to guide students investigate interdisciplinary sociocultural issues with images through entries of international photography competitions and learn photography and curating arts exhibitions and performances. Below are the works of Junyi students. *The annual art festival and achievement presentation in May was canceled due to the pandemic.



When learning from home began in May 2021 due to the pandemic, Junyi prepared for each student a learning kit containing books, a drawing album, craft and easy bakery materials, snacks, and a short message from the teacher for students to feel the concerns from teachers during the summer break. The school also planned online common modules. Academic and non-academic staff demonstrated their expertise to offer different interest-based common modules, such as calligraphy and subject extension learning activities for students to enjoy a richer summer life. After the school reopened, the school found that students valued more about class interaction after a long separation and became significantly less dependent on mobiles.

The Alliance Cultural Foundation: "Listener Program"

When the pandemic broke out in 2020, observations of its impact on education in different countries found that the prolonged distance learning because of the pandemic was unfavorable to schoolchildren's self-development and character formation due to the lack of interpersonal interaction. Seeing that the adolescent mental health on campus has become an issue requiring concerns, teachers in remote townships are younger and lack social experience, and the experience succession of senior teachers and professionals is exceptionally valuable, The Alliance Cultural Foundation introduced the Listener Program online course with 49 videos produced with counseling psychologists and education workers, hoping to help novice teachers to shorten the trial and error process. Though the self-learning basic observation ability, frontline teachers were trained to be the listeners of adolescents by learning how to develop a trust relationship and positive communication with them to provide growing adolescents with psychological support, hoping to equip these teachers with solid power to support themselves and the internal resilience of others.



Toufen Junior High School Music Program

By integrating with the Harvest 365 Music Program of the Harvest365 Foundation, The Alliance Cultural Foundation collaborated with Toufen Junior High School to introduce the Toufen Junior High School Music Education Program in September 2021. By teaming up with the music teacher of Toufen Junior High School, professional choir instructors of Harvest365 Foundation instructed the choir formed by students of the 7th and 8th grades to help students grow by singing art songs and inspire their learning motivation by giving performance at the annual music festival to develop self-confidence.

Instead of selecting talents for competitions, this Music Program enables children to learn happily and sing for happiness. Through this choir course, we hope to let every child develop self-confidence and the courage to challenge through singing and develop their character and team spirit through the choir.

Student practiced in the choir.



Sponsoring other educational and philanthropic activities

In 2021 we also sponsored other educational and philanthropic activities, including Boyo Social Welfare Foundation and Teach for Taiwan Association, Teach for Taiwan, Azure Alliance, Bulareyaung Dance Company, and Hunter School. To provide steady support for these units highly recognized by society and to constantly help more students, the USI Education Foundation will continue to support them.



1 Founded in 2002, Boyo Social Welfare Foundation provides free “remedial instruction” after-school club services for junior high school and elementary school students from low-income families in the belief that “education gives hopes for children living in poverty”, in order to achieve its mission “End Poverty with Education”. Five days a week and 2-3 hours a day, it equips every student from vulnerable groups with basic skills to improve their social competitiveness and give them chances to beat poverty through “right education for the right person” and strict “quality control”. Additionally, the foundation provides “care guidance” to remedy learning instability for each child from vulnerable groups to own an appropriate education environment, in order to develop their basic capacity and social competitiveness to end poverty in the future with own ability. The pandemic made vulnerable families the prime victims and marked out the digital divide between the urban and the rural and the rich and the poor. At the beginning of school shutdown, up to 70% of schoolchildren did not have digital

equipment. Boyo Social Welfare Foundation thus prepared for each schoolchild an learning from home kit to extend schooling to the home of schoolchildren, hoping that they can keep learning even in the absence of the internet service. Since Boyo Social Welfare Foundation was established 19 years ago, each year it invests a large amount of labor and resources in curriculum design, develops remedial teaching materials, and trains parents in the community. Currently, there are 17 locations to provide after-school club service for over 2,000 students.

2 Founded in 2013 Teach for Taiwan (TFT) was inspired by the concept and model of Teach for America, hoping to create equal opportunities in education for every child. Believing that education is an everyone’s matter and the process where “life influences life”, TFT provides teacher training for competent youth with a sense of responsibility before sending them to teach at elementary schools in low-income rural communities for at least two years in order to demonstrate the positive influence from classrooms to outside of classrooms, from schools, families to communities. By doing so, TFT hopes to provide each child with quality education and the opportunity for self-development to end the poverty circle regardless of their backgrounds. TFT also aims to resolve the long teacher shortage and high turnover rate problems in the rural area. In 2014, it sent nine the first group of TFT teachers to eight schools in Taitung and Tainan, making this the onset of a change. To date, TFT has sent over 269 youth to the rural, including Taitung, Tainan, Pingtung, Yunlin, Hualien, and Nantou, to help over 6,000 children from vulnerable groups.



3 Established in 2017, Azure Alliance advocated the “Fight for Azure--Marine Debris Cleanup Project” to clean up marine debris in Taiwan fishery waters with the smart marine cleanup robot called Azure Fighter with a high price-performance ratio, easy operation, and high reliability to turn sea bays into the last line of defense of marine debris and promote the transformation of Taiwan’s marine cleaning industry in order to regain the initial azure of oceans. In 2021 Azure Alliance completed the environmental investigation of 106 harbors across Taiwan and conducted tests at 5 harbors. In early 2022 it further established the first demonstration harbor in Zhuwei Fishing Harbor in Taoyuan to accelerate marine debris cleanup. For more people to understand the importance of marine environmental education, Azure Alliance has organized 79 marine environmental education activities and delivered speeches on campuses and at enterprises.

4 Founded in 2015, Bulareyaung Dance Company established a foundation in the following year to disseminate indigenous culture with dance. Besides giving travel performance and talks at different indigenous communities, it also holds workshops to share dance and body development. It was founded by indigenous choreographer Bulareyaung Pagarlava (aka Bulareyung). As an indigene of Puyuma origin, he returned to his hometown in Taitung on the search of his identity, hoping to create with indigenous children and share their creations with the world. Hence, he introduced the “Dance at Home-Indigenous Travel Performance” project. Over the past six years, the company has travelled to 14 indigenous communities to give 16 performances. According to Bulareyung, indigenous communities are the most beautiful theaters for the company. He hopes to take dancers to perform in indigenous communities every year to inspire indigenous children who love dance and art creation, make indigenous seniors feel proud to dance on the stage, let indigenous tribes see the other side of indigenous dance, and put the theaters in remote townships.

5 The Hunter School was established in 2004 by indigenous writer Sakinu Yalonglong. As the laureate of many literary awards, Sakinu vividly depicts the tribal growth experience and indigenous hunter culture inherited from seniors into wonderful stories, hoping to share the indigenous wisdom to future generations, let the public understand

indigenous culture, and allow different ethnic groups to respect one another. These beliefs have become the fundamentals of the Hunter School. Sakinu turns his home in the indigenous community into the school base. Besides passing on the essence of traditional indigenous culture and wisdom, he also teaches people how to apply the hunter spirit in the daily life, including getting along with oneself, overcoming fear, and discovering own potential. He also leads youth to develop own value and identity to realize dreams in different education systems.



Chapter 6 **Appendices**

6.1

GRI content index

GRI 102-55

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	GRI 401: Employment 2016	401-1 New employee hires and employee turnover	5.3 Talent Attraction and Retention	117	
		401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	5.3 Talent Attraction and Retention	119	
		401-3 Parental leave	5.3 Talent Attraction and Retention	121	
	GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	5.3 Talent Attraction and Retention	117	
		404-3 Percentage of employees receiving regular performance and career development reviews	5.3 Talent Attraction and Retention	117	

6.2

Chemical industry
SASB index

Item	Code	Accounting Metric	Unit of Measure Type	Corresponding Section	Page
Greenhouse Gas Emissions	RT-CH-110a.1	Gross global Scope 1 emissions (tCO ₂ e), percentage covered under emissions-limiting regulations	Quantitative	4.5 Climate change and energy management	82
	RT-CH-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets and an analysis of performance against those targets			
Air Quality	RT-CH-120a.1	Air emissions of the following pollutants:	Quantitative	4.3 Air pollution control	75
		(1) NO _x			
		(2) SO _x			
		(3) volatile organic compounds (VOCs)			
(4) hazardous air pollutants (HAPs)					
Energy management	RT-CH-130a.1	(1) Total energy consumed (GJ)	Quantitative	4.5 Climate change and energy management	82
		(2) Percentage grid electricity			
		(3) Percentage renewable			
		(4) Total self-generated energy (GJ)			
Water management	RT-CH-140a.1	(1) Total water withdrawn	Quantitative	4.2 Water resources management	70
		(2) Total water consumed			
		(3) Percentage of each in regions with high or extremely high baseline water stress and the proportion of (1) and (2)			
	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations		2.4 Ethical Corporate Management and Legal Compliance	45
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks		4.2 Water resources management	70
Hazardous Waste Management	RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	Quantitative	4.4 Waste management	70
Community Relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests		N.A.	

Item	Code	Accounting Metric	Unit of Measure Type	Corresponding Section	Page
Workforce Health & Safety	RT-CH-320a.1	(1) Total recordable incident rate (TRIR) (Number of Incidents x 200,000)/Total Hours Worked (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	5.2 Occupational health and safety	97
	RT-CH-320a.2	Description of efforts to assess, monitor and reduce exposure of employees and contract workers to long-term (chronic) health risks			
Product Design for Use-Phase Efficiency	RT-CH-410a.1	Revenue from products designed for use-phase resource efficiency		3.1 Technology R&D	50
Safety & Environmental Stewardship of Chemicals	RT-CH-410b.1	Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances		N.A.	
		Percentage of such products that have undergone a hazard assessment			
	RT-CH-410b.2	Discussion of strategy to manage chemicals of concern and develop alternatives with reduced human and/or environmental impact			
Genetically Modified Organisms	RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)Percentage of products by revenue that contain genetically modified organisms (GMOs)		N.A.	
Management of the Legal & Regulatory Environment	RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Description	2.4 Ethical Corporate Management and Legal Compliance	45
Operational Safety, Emergency Preparedness & Response	RT-CH-540a.1	Total Count of Process Safety Incidents (PSIC)	Quantitative	5.2 Occupational health and safety	97
		Process safety total incident rate (PSTIR) (= The cumulative count of incidents x 200,000/total hours worked by workers)			
		Process safety incident severity rate (PSISR) (= The total severity score of process safety incidents x 200,000/total hours worked by workers)			
	RT-CH-540a.2	Number of transport incidents			

6.3

Assurance statement



INDEPENDENT ASSURANCE OPINION STATEMENT

USI Corporation 2021 ESG Report

The British Standards Institution is independent to USI Corporation (hereafter referred to as Abbreviation in this USI) and has no financial interest in the operation of USI other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of USI only for the purposes of assuring its statements relating to its sustainability report, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by USI. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate. Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to USI only.

Scope

The scope of engagement agreed upon with USI includes the followings:

1. The assurance scope is consistent with the description of USI Corporation 2021 ESG Report.
2. The evaluation of the nature and extent of the USI's adherence to AA1000 AccountAbility Principles (2018) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

This statement was prepared in English and translated into Chinese for reference only.

Opinion Statement

We conclude that the USI Corporation 2021 ESG Report provides a fair view of the USI sustainability programmes and performances during 2021. The sustainability report subject to assurance is free from material misstatement based upon testing within the limitations of the scope of the assurance, the information and data provided by the USI and the sample taken. We believe that the performance information of Environment, Social and Governance (ESG) are fairly represented. The sustainability performance information disclosed in the report demonstrate USI's efforts recognized by its stakeholders.

Our work was carried out by a team of sustainability report assurers in accordance with the AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that USI's description of their approach to AA1000AS v3 and their self-declaration in accordance with GRI Standards: Core option were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- a top level review of issues raised by external parties that could be relevant to USI's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 5 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of key organizational developments.
- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018).

Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness and Impact of AA1000AP (2018) and GRI Standards is set out below:

Inclusivity

This report has reflected a fact that USI has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for the information of Environment, Social and Governance (ESG) in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the USI's inclusivity issues.

Materiality

USI publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of USI and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the USI's management and performance. In our professional opinion the report covers the USI's material issues.

Responsiveness

USI has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for USI is developed and continually provides the opportunity to further enhance USI's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the USI's responsiveness issues.

Impact

USI has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. USI has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization. In our professional opinion the report covers the USI's impact issues.

GRI Sustainability Reporting Standards (GRI Standards)

USI provided us with their self-declaration of in accordance with GRI Standards: Core option (For each material topic covered by a topic-specific GRI Standard, comply with all reporting requirements for at least one topic-specific disclosure). Based on our review, we confirm that sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported or omitted. In our professional opinion the self-declaration covers the USI's sustainability topics.

Assurance level

The moderate level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

Responsibility

The sustainability report is the responsibility of the USI's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of Lead auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:


Peter Pu, Managing Director BSI Taiwan



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