

## Sustainability VISION

Toray Advanced Materials Korea 2025 Sustainability Report

**TORAY** 

Toray Advanced Materials Korea Inc.







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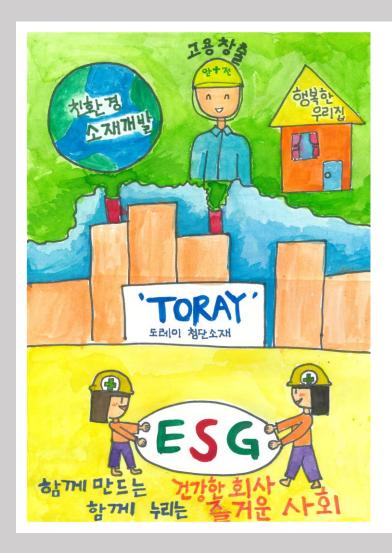
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## OVERVIEW



TAK leads the way in ESG

Created by Lee Ye-won

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## **CEO Message**

Aiming to achieve its long-term goal of the 'SUSTAINABILITY VISION,' Toray Advanced Materials Korea pledges to continue its corporate-level efforts to address the global issue of climate change, while fulfilling our role as a trusted 'corporate citizen' through ethical and transparent conduct. \*\*J



#### Dear stakeholders.

Toray Advanced Materials Korea has grown steadily through trust and collaboration with our customers and partners, continuously discovering future growth engines and creating new value.

Furthermore, we strive to provide differentiated value to our customers based on materials of the highest quality.

We promise that we will become a corporate citizen who takes the lead in realizing sustainable growth by fulfilling our social responsibilities.

We truly appreciate your support.
We ask for your warm encouragement
as you watch our journey toward becoming
a world-class company.

Kim Young-seop, CEO

Y. s. fain

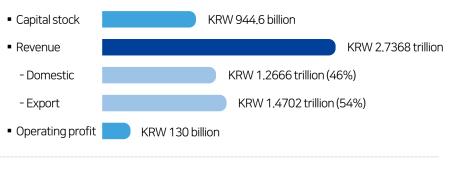
## Company Profile

"From basics to cutting-edge, we promise a better tomorrow based on change and innovation."

#### **Company Overview**

Since its establishment in December 1999, TAK has positioned itself as Korea's leading materials specialist, supplying essential materials for diverse industries from fundamental materials necessary for daily life, such as fibers, aramid, polyester film, IT materials, carbon fiber, polyester resin, and water treatment filters, to high-value-added specialty materials. By combining the advanced technological capabilities and global marketing strength of Japan's Toray Industries, a global advanced materials company with over 100 years of history, with the excellent technological capabilities and quality competitiveness inherent in Korea's chemical industry, TAK is continuously strengthening its position in the global market and growing as a global materials company.

#### Financial Performance (April 1, 2024 to March 31, 2025, Consolidated Financial Statements Standards)



#### **Human Resources** (As of the end of December 2024)



Contract35 employees

### VISION MAP



## **Global Business**

Toray Advanced Materials Korea has established a global business network of major domestic and overseas locations, including Seoul where its head office is located.

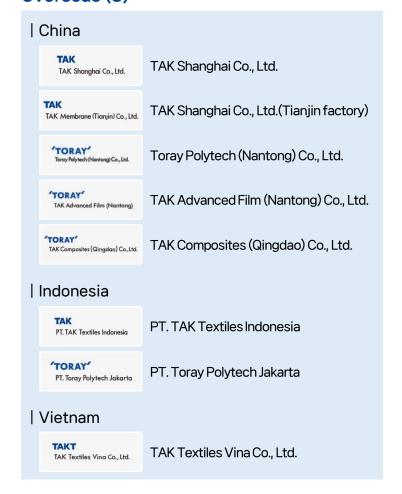
#### Korea (10)



#### Subsidiaries (7)

- TAK Textiles Korea Inc. (TATK)
- TAK Microfilter Inc. (TAMF)
- TAK Information System Inc. (TIS)
- TAK Spuntech Inc. (TAST)
- HanmeeEntec Co., Ltd. (TAHEC)
- Toray Battery Separator Film Korea Co., Ltd. (TBSK)
- Happy With (standard workplace for person with disabilities)

### Overseas (8)



# SUSTAINABILITY



#### Sustainable Life on Earth

Created by Park Chae-eun

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## Toray Group's Sustainability VISION

"We contribute to tackling global issues by providing innovative technologies and advanced materials."

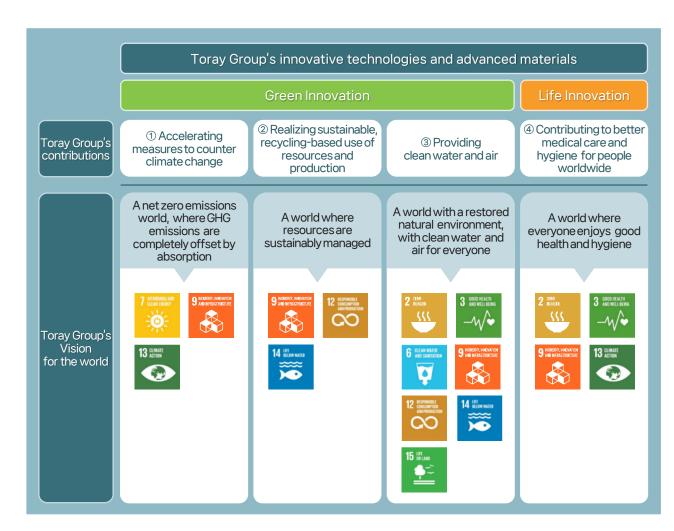
## Toray Group's Vision for the World in 2050

Sustainability is the most important global common issue in the 21st century. This is due to a number of increasingly serious global challenges, including a growing population that is expected to reach nearly 10 billion by 2050, an aging human population, accelerating climate change, water scarcity, and resource depletion.

We have kept it as the foundation of our existence to contribute to society, believing in the power of materials to change our society. I believe Toray Group's mission is to provide essential solutions by providing innovative technologies and advanced materials to address various global challenges surrounding the co-existence of 'development' and 'sustainability'.

While fulfilling our efforts of realizing our growth without negative impacts on global sustainability, we are keeping our corporate philosophy of "We contribute to society by creating new values."

We will continue to strive to work with our partners around the world to achieve global goals, including Paris Agreement and UN SDGs.



## Toray Group's Response to Climate Change

#### "Toward the World of Net Zero in 2050"

#### Climate Change Governance Framework

In May 2019, the Toray Group endorsed the recommendations of the Task Force on Climate-related Financial Disclosures(TCFD) and has since regularly published its TCFD Report based on these recommendations.

The Group assesses and analyzes risks and opportunities associated with climate change not only within itself but also across the entire value chain, from raw materials procurement to product processing, use, and disposal, and transparently discloses the outcomes both on the Toray Group's official website and through the TCFD reports.

In June 2024, the Toray Group published the "Toray Group TCFD Report VER.2.1," which newly incorporated quantitative scenario analysis of key climate risks based on the year 2040, climate change response strategies within business activities, and examples of collaboration with external partners.

The Toray Group will continue to accelerate its climate change response efforts while continuously and systematically implementing information disclosures in accordance with TCFD recommendations.

#### Index of TCFD Recommended Disclosure Items

TOPIC	Recommendation	Toray's Response
Governance	a) Describe the board's oversight of climate-related risks and opportunities.	Discuss business expansion and environmental load reduction at Sustainability Committee
	b) Describe management's role in assessing and managing climate- related risks and opportunities.	<ul> <li>Deliberate and vote on key activities at the board</li> </ul>
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	<ul> <li>Toray Group's long-term business</li> </ul>
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	vision • Analyze climate scenarios for 2040
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	<ul> <li>Establish response strategies for climate-related risks and opportunities</li> </ul>
Risk Managemer	<ul> <li>a) Describe the organization's processes for identifying and assessing climate-related risks.</li> </ul>	Climate-related risk management:     Collaboration among key committees
	b) Describe the organization's processes for managing climate-related risks.	(Sustainability, CSR, Risk Management, Safety Health Environment, and Technology Committees)
	<ul> <li>c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.</li> </ul>	Establish and implement climate-related measures to realize carbon neutrality
Metrics and Reduction	<ul> <li>a) Disclose the metrics used by the organization to assess climate- related risks and opportunities in line with its strategy and risk management process.</li> </ul>	<ul> <li>Set metrics for the Group's long-term sustainability targets and manage performance</li> </ul>
Targets	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions, and the related risks.	<ul> <li>Establish GHG emissions targets for 2030 (including supply chain) and</li> </ul>
	c) Describe the targets used by the organization to manage climate- related risks and opportunities and performance against targets.	promote the calculation of carbon footprint

## TAK's ESG Management

#### "Materials for Earth & Us"

#### ESG Management Promotion System

Toray Advanced Materials Korea deeply resonates with the Toray Group's Sustainability Vision, sharing and implementing it company-wide. As core activities to achieve the Sustainability Vision, we are focusing on advancing sustainability innovation initiatives, researching and developing products that contribute to the circular economy, and driving the Challenge50+ project.

In March 2022, we officially declared the implementation of ESG management, using this as an opportunity to formally establish a company-wide ESG management system. Following the ESG management paradigm, we identified key management issues such as climate change response, human rights promotion, supply chain sustainability, and governance transparency, setting up 17 key ESG indexes to address these issues comprehensively.

Through this, we operate 118 focus metrics to ensure that each employee's daily work naturally connects to ESG practices, while reviewing the outcomes of these metrics annually. Furthermore, we proactively diagnose our ESG management activities in response to changes in the external business environment and are building response systems for areas requiring improvement.

Although we are an unlisted company with no mandatory ESG disclosure obligations, we publish an annual Sustainability Report to disclose our ESG performance.

#### **ESG Key Index**

#### Environmental (5)

Responding to climate change, such as reducing GHGs Preserving biodiversity



**Energy Management** 

**GHG** Emissions

Water Resource Management

Pollution Prevention & Chemicals Management

Waste Management

#### Social (9)

Practicing respect for human rights Establishing sustainable supply chain



Human Rights

Diversity and Equal Opportunity

Talent Acquisition and Development

Occupational Safety and Health, Health Improvement

Stakeholder Engagement

Work-life Balance

Supply Chain Management

Product Quality and Safety

Corporate Social Responsibility

#### Governance (3)

Securing transparent governance Risk monitoring



Corporate Governance

Risk Management

Compliance, Anti-corruption and Bribery

## TAK's ESG Management

#### Toray Group's SI Projects

The Toray Group's Sustainability Vision defines SI (Sustainability Innovation) products as products, technologies, and services that contribute to realizing the 'Four Worlds We Aim to Achieve for 2050.' The SI projects include ones that contribute to addressing resource and energy challenges and supporting disaster response, healthcare, sanitation, and safety. These projects are categorized into three types— Circular Economy, Nature Positive, and Carbon Neutrality—to drive their continuous advancement.

#### TAK's ESG Projects

We define our ESG projects as projects focused on sustainable products and technologies contributing to solving global climate issues. These projects are further categorized into three types: Eco-friendly Products, Eco-friendly Technologies, and Recycling, As of 2024, TAK has established and is implementing a total of 44 ESG projects.

#### CE (Circular Economy)

Products contributing to the use and production of sustainable circular resources

- 1) Recyclina
- ② Biomass
- ③ Valuable materials separation/recovery

#### | NP (Nature Positive)

Products that contribute to reducing environmental load by delivering safe water and air

- 1) Water treatment
- ② Air purification
- ③ Environmental load reduction

#### CN (Carbon Neutrality)

Products that contribute to accelerating the achievement of climate change countermeasures

- ① Energy saving ② Renewable energy
- 3 CO<sub>2</sub> absorption and resource utilization

SI Type ESG Type

Total 44 Projects

19 18

14 17

\* Managed by mapping between Toray Group's SI projects and TAK's ESG projects

#### Eco-friendly Products

- 1 Utilization of eco-friendly raw materials (biomass, biodegradable, etc.)
- 2) Projects that contribute to carbon and waste reduction and biodiversity through product application in eco-friendly industries

#### Eco-friendly Technologies

Projects that contribute to water resource management and biodiversity by applying eco-friendly technology (e.g., removal of harmful substances) in the product manufacturing process

#### Recycling

**ENVIRONMENTAL** 

Projects that contribute to carbon and waste reduction through resource recycling

- 1) Post Industrial Recycled
- 2 Post Consumer Recycled

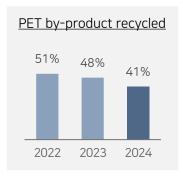
## Realizing a Circular Economy

#### "GO CIRCULAR"



#### | R-Project

TAK is promoting the Recycle Project (R-Project) to participate in realizing a circular economy society. Specifically, we focus on maximizing the utilization of by-products generated within our internal processes to reduce waste generation, and on utilizing and converting waste recovered from our customers into products to reduce carbon emissions. Furthermore, we manage the plans and outcomes of these projects, including holding quarterly review meetings with management participation and conducting follow-ups on recycling projects.



#### **I ECOWAY**

TAK utilizes both mechanical recycling, employing post-consumer recycled flake chips, and chemical recycling, utilizing depolymerization technology, to produce polyester yarn. We are expanding its application beyond regular offerings to include various differentiated products.

This recycled yarn achieves a 70-80% reduction in carbon emissions compared to virgin products and has obtained GRS1) certification, enabling compliance with various climate change regulations.



 Functional recycled yarn produced based on the recycling process and advanced spinning technology



· Recycled fiber using PET bottle flakes

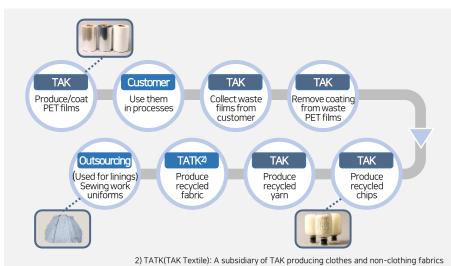
#### 1) GRS (Global Recycled Standard): An international standard certifying the use of recycled raw materials

#### | Closed Loop Recycled Project

We strive to build a recycle ecosystem together with our customers. We are implementing manufacturing processes to contribute to a circulatory economy, such as recycling waste collected from our customers, reducing waste and carbon emissions.

In fact, we collected waste release films from our customers, removed their coating with our unique technology and made them into recycled chips, which can be used in manufacturing processes. With this process, we made work uniforms for our customers, with their linings made of 100% recycled fabric. We are reviewing and developing recyclable materials through collaboration with our customers.

#### Customer Collaboration Case: Mechanical Recycling



## Alignment with UN SDGs

The Sustainable Development Goals are specific goals proposed by the UN for sustainable development. To join efforts for the UN SDGs, Toray Advanced Materials Korea is implementing sustainability activities in line with the objectives under the SDGs.

UN-SDGs	Objectives	Activities	UN-SDGs	Objectives	Activities
3 GROON REALTH  AND WELL REING  ———————————————————————————————————	Ensure healthy lives and promote well-being for all at all ages.	<ul> <li>Develop materials for public hygine</li> <li>Support health checkup for all employees</li> <li>Operate a safety, health, and environment committee</li> </ul>	12 ESPINICIAL CONCLUPION AND PRODUCTION	Ensure sustainable consumption & production patterns.	Operate a chemical management system     Increase the purchase of eco-friendly products (recycled, bio)
4 ENALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	<ul> <li>Operate Korea Toray Science         Foundation         Provide scholarship for natural science and engineering college students     </li> </ul>	13 CLIMATE ACTION	Establish immediate measures to combat climate change and its impacts.	<ul> <li>Challenge50+ GHG emissions reduction</li> <li>Invest in GHG emissions reduction facilities</li> <li>Discover energy improvement themes</li> </ul>
5 ELUMIN	Achieve gender equality and improve rights and interests of all women and girls.	<ul> <li>Childbirth and childcare support programs</li> <li>In-house daycare center</li> <li>Acquired family-friendly workplace certification</li> </ul>	14 BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development.	Promote the recycling of water based On water treatment technology     Invest in the development of biomaterials
6 CLEAN WAITER AND SANIERIEN	Ensure availability and sustainable management of water and sanitation for all.	<ul> <li>Seawater desalination technology business</li> <li>Challenge50+ Water usage reduction</li> <li>Investment in wastewater treatment facilities</li> </ul>	15 ON LAND	Protect and restore the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss	Develop biomass materials     Acquire ISO-14001 environment     certification     Gumi Plant acquires Green Company     certification from the Ministry of Environment
7 AFTORDABLE AND CLEAN EMERY	Ensure access to affordable, reliable, sustainable, and modern energy for all.	Expand use of renewable energy at sites     Carry forward eco-friendly energy (wind)     projects	17 PARTHESIANS	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.	<ul> <li>Toray Group establishes a strategic material control system</li> <li>Toray Group receives safety and environment audits</li> </ul>
10 REDUCED INEQUALITIES		· Operate a standard workplace for people			

Reduce inequality in Korea.

with disabilities

· Establish TAK's Human Rights Policy

**ENVIRONMENTAL** 

13





#### Safety Starts with Habits

Created by Oh Se-ah

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## **Energy Management**

#### **Energy Improvement Themes**

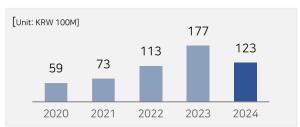
Every year, Toray Advanced Materials Korea establishes concrete energy reduction targets and discovers and implements various energy improvement themes to achieve them. As part of this, we have established a permanent energy assessment system in line with our long-term plan and promote energy reduction activities across the organization to achieve annual energy reduction targets.

We are also taking the initiative in constant energy reduction activities to make energy-efficient workplaces, including recovering and recycling waste heat from steam boilers, introducing new energy reduction technologies, conducting task force activities for energy reduction and expanding the uses of renewable energy, such as solar power.

#### | Operation Process of Energy Improvement Themes



#### | Performance of Energy Improvement Themes



Recognized for such efforts, Toray Advanced Materials Korea won the 2020 Gyeongsangbuk-do Energy Award and was selected among Top 100 Companies for Carbon Neutral Management 2021 by Korea Management Certification.

In 2023, we were selected an Excellent Company for energy efficiency improvement at the Energy Assessment Awards by Korea Energy Agency. At the Gyeongsangbukdo Energy Awards 2023, we received a governor citation for our response to climate change in Gyeongsangbuk-do Province.

#### | Key Energy Improvement Projects

	Year	Project	Annual saving (KRW)
		Film process heat recovery and recycling	2.4B
	2022	Power/heat recovery and replacement with high efficiency facility	0.9B
	2023	Introduction of external steam at 4th Plant	1.8B
		Introduction of carbon waste heat boilers	0.6B
	2024	Introduction of chilled water thermal energy storage system at 4th Plant	0.6B
		Replacement with high efficiency turbo compressor at 3rd Plant	0.4B

#### Renewable energy

We have established a long-term plan for phased expansion of the use of renewable energy. We have secured power generation capacity by building solar power facilities at each site in a phased manner, and Gumi Plants 1 and 3 use bio-gases, contributing to the reduction of LNG consumption for boilers. For phased achievement of RE100, we are also considering and implementing a range of measures, including attracting external investments in solar power and participating in government-supported projects.

#### | Solar Power Capacity and Output by Site

Site	Capacity(kW)	Output in 2024 (kWh)
R&D Center	121	145,704
Gumi Plant 1	91	125,595
Gumi Plant 3 <sup>note)</sup>	46	50,744
Yugu Plant	69	82,780
Gunsan Plant	67	75,209
Total	394	480,032
Gunsan Plant	67	75,209

\* Note) The output of Gumi Plant 3: All sold to KEPCO

#### | Solar Power Facilities by Site



## **GHG Emissions**

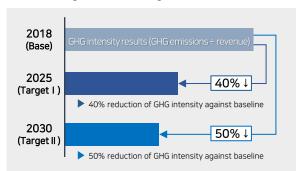
#### Challenge50+

We are committed to contributing to the realization of carbon neutral by 2050 by expanding new sustainable growth drivers, such as renewable energy, hydrogen, and eco-friendly materials, and carrying out activities to reduce GHG emissions. We are seeking to reduce GHG emissions by, for example, using sustainable energy and raw materials in the development of products and processes and applying innovative processes.

In its efforts to realize carbon neutral, Toray Group declared the Sustainability VISION in July 2018 and has since promoted the 'Challenge30' initiative designed to achieve a 30% reduction of GHG intensity by revenue by 2030 compared with the baseline year.

In March 2023, Toray Group declared the 'Challenge50+' initiative, which raised the reduction target from 30% to 50% or above, accelerating its response to climate change.

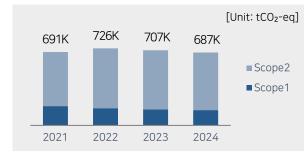
#### | TAK's Long-term Challenge 50 + Goals (GHG)



※ For TAK's Challenge50+, the baseline year is set as 2018, which is the reference year for the South Korean government's 2050 carbon neutrality goal. Aligning itself with Toray Group's GHG emissions reduction strategy, Toray Advanced Materials Korea is also spurring its efforts to reduce carbon dioxide in production, with the 'Challenge50+' initiative reflected in its GHG emissions management targets.

In particular, we have applied new  $\mathrm{CO}_2$  reduction technologies to our processes and facilities to minimize GHG emissions from production. In addition, our R&D part is striving for R&D activities to reduce GHG emissions from our products and production processes by, for example, focusing on developing bio and recycled raw materials.

#### | GHG Emissions by Year



Modifications in the report
 (p16, p20)

GHG Metrics for 2022	Initial value N	/lodified value	Reason
GHG emissions (tCO <sub>2</sub> -eq)	715,888	725,681	
Direct emissions (tCO <sub>2</sub> -eq)	161,488	161,488	Change in
Indirect emissions (tCO <sub>2</sub> -eq)	554,406	564,199	steam emission factor for 2022
Emission intensity (tCO <sub>2</sub> -eq/KRWMillion)	0.331	0.336	

#### **Product Carbon Footprint**

Toray Advanced Materials Korea is a B2B company which manufactures materials for a wide range of industries and supplies to customers. Recently there are growing demands of our customers for the information on carbon emissions from our production processes.

Our GHG management team monitors GHG emissions from each of our sites. In particular, we used a specialized agency to calculate the carbon footprint information for each product required by our customers.

Upon request from our customer, we also conduct a life cycle assessment training for the team in charge so that they can improve their understanding of PCF calculation and respond to the customer's request accurately.

In 2024, we are advancing our internal PCF calculation capabilities by introducing an LCA system that enables the acquisition and calculation of product carbon information databases.

#### List of Products Subject to PCF Calculation

Product	Model	
Polyester yarn (recycled)	◆DW 180/60 ECO-I NCY	
Polyester yarn (virgin)	◆DW 180/60 NCY-D	
Polyester film (recycled)	◆XG7PH8-50	
LM Staple Fiber	★FDT01174, FDT01167	

※ Outsourced agency: ◆ Intertek Testing Services Korea ★ Calculated internally by TAK

SOCIAL

## Water Resource Management

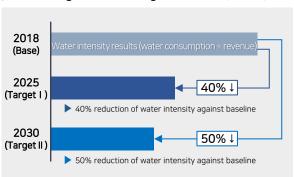
#### Challenge50+

As declared in its Sustainability VISION, Toray Group has set targets for water intensity reduction by 2030 and manages water resources accordingly. It recognizes the impact of water stress and other related factors on the environment and promotes the Water Resource 3R (Reduce, Reuse, Recycle) campaign, improving manufacturing processes, saving water consumption, and utilizing recycled water.

Toray Advanced Materials Korea also recognizes how important water is to humans, and strives to tackle global water resource challenges. As part of this effort, we conduct appropriate control over water resources, including reducing waster consumption, recycling water, and managing the quality of effluent.

In particular, in line with the 'Challenge50+' initiative, we set a target of reducing the water intensity by revenue by 50% or more against the baseline year by 2030, and has actively pushed ahead with it.

#### TAK's Long-term Challenge 50+ Goals (Water)



#### Water Quality Management

Each of our sites has a special team for water quality control, and we strive for continuous improvements through monitoring of the waste water treatment system at each site. We have also built a process automation system designed for integrating the operation of waste water treatment systems among adjacent sites.

Additionally, based on our proprietary water purification technology utilizing NF/RO filters, we are establishing a Zero Liquid Discharge (ZLD) system at Gumi Plant 3 and plan to expand its implementation to Gumi Plant 5.

To realize a safe water resource management, we set our own permissible levels of water pollutants, such as TOC, BOD, T-P, and T-N, to not greater than 50% of the regulatory standards, and manage them systematically to ensure they do not exceed the limits.

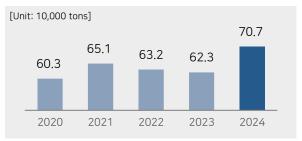
In our water resource management business, we are promoting water quality improvement and the circular

#### | Gumi Plant's Integrated Water Treatment Station



use of water resources by leveraging the advanced water treatment and membrane technologies of Hanmi Entec we acquired in March 2023. Through low-energy operation methods and a smart wastewater management system, we are recycling treated effluent for industrial and agricultural water use. We plan to continue to actively respond to climate change based on continuous water resource management solutions while actively strengthening water resilience.

#### Recycled Water by Year



#### | Water Consumption Reduction Projects

Year	Project	Annual saving (ton)
2022	Reduction of waste water from filter cleaning facilities	29,900
2023	Recycling of waste water from resin processes	75,600
2023	Recovery of water from polymerization process	35,405
	Recovery and recycling of underground effluent from film production	162,586
2024	Reducing waste water volume by utilizing industrial water as makeup water for coolant	54,531

## Pollution Prevention & Chemicals Management

#### **Chemicals Management**

Toray Advanced Materials Korea's chemical business recognizes that reducing chemical emissions into the atmosphere is one of the top priorities for environment, and accordingly strives to tackle global challenges caused by chemical emissions.

To ensure the safety of our employees and protect our assets, we strictly controls the handling of hazardous chemicals, including their permission, import, manufacturing, and use, and complies with competent laws and regulations, including the Act on the Registration and Evaluation, etc. of Chemical Substances and the Chemicals Control Act.

Furthermore, we have established and are operating a chemical pre-screening system to prevent risks arising from the handling of hazardous chemicals. We have also established a "chemical life cycle management system" to control the use of all chemical substances, including hazardous ones.

As regulations on chemicals are tightened across the world and countries increase the number of chemicals subject to regulation, we have built a database on chemicals to search for regulations by chemical and find their MSDS1) status.

#### | Pre-screening System for Chemicals

- A system where our Environment and Safety team checks and approves the safety and compliance of the chemicals to be purchased.
- We check compliance with the 「ACT ON REGISTRATION AND EVALUATION OF CHEMICALS」, 「CHEMICAL SUBSTANCES CONTROL ACT」, 「OCCUPATIONAL SAFETY AND HEALTH ACT」, and the 「ACT ON THE SAFETY CONTROL OF HAZARDOUS SUBSTANCES」, and centralize the management of chemical product data such as MSDS and LOC.

This allows our employees to easily check the status of chemicals they need to use. Furthermore, we regularly conduct environmental training covering air, water quality, and waste, as well as chemicals, for staff handling hazardous chemicals, environmental technicians, process managers, and operators to enhance their environmental management capabilities.

For new chemical products or regulatory changes, we update databases on a regular basis, and also established a 'procedure for control of hazardous chemicals' and ensure it is strictly followed to minimize risks.

#### Air Pollutant Reduction

TAK has established an 'Air Environment Management Procedure' to reduce emissions of air pollutants generated during production and manufacturing processes. Based on this, we implement a strict management system for air emissions and provide regular employee training.

#### | Performance of Air Emission Prevention Facilities

Site	Key Outcomes of 2024
Gumi Plant 1	<ul> <li>Addition of NRP crusher bag-filter<sup>2)</sup> (1 unit)</li> <li>Addition of KL-5, KL-9, and 10 bag-filter (2 units)</li> <li>Addition of B/T polymerization bag-filter (1 unit)</li> </ul>
Gumi Plant 3	<ul> <li>Addition of bag-filter for film raw material process (4 units)</li> <li>Addition of bag-filter for polymerization CPS-6, CPS-9, and PD-3 (3 units)</li> </ul>

2) Bag-Filter: A type of highly efficient dust collector to remove particulate matter from processes

Focusing on three key elements-policy-centered, technology-centered, and personnel-centered approaches-we are strengthening our air pollution prevention capabilities, while promoting innovation in processes and facilities, such as expanding prevention facilities such as bag filters and converting energy fuels.

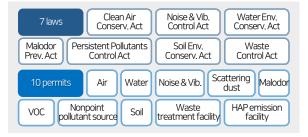
In particular, we continuously pursue reduction activities for major pollutants such as PRTR (Pollutant Release and Transfer Register), NOx (Nitrogen Oxides), and SOx (Sulfur Oxides), and we not only comply with environmental regulations but also strengthen our sustainable air environment management.

#### **Integrated Environmental Permit**

In 2024, we obtained an Integrated Environmental Permit for our Gumi Plants 1,3, and 4, consolidating the management of emission facilities-previously managed separately by pollution medium-into a single, comprehensive permit per site. Gumi Plant 5 additionally obtained an Integrated Environmental Permit in April 2025. Through this advanced environmental management approach, we are establishing an environmental management system that comprehensively considers environmental impacts and minimizes pollutant emissions.

#### | Integrated Environmental Permit

: Consolidation of 7 laws + 10 permits/notifications



<sup>1)</sup> MSDS (Material Safety Data Sheets): A document that lists information required to use and control chemical substances in a safe manner

## Waste Management

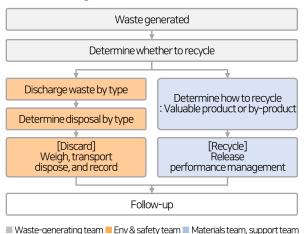
#### Waste Management

Toray Advanced Materials Korea is making efforts to manage waste appropriately to realize a sustainable circulatory economy. In particular, we set the target for recycling rate of waste generated from our sites to more than 90% and strive to achieve the target.

Our waste management team has established a 'procedure for waste management' that defines overall procedures for the generation, identification, storage, transport, and disposal of waste. Through this, we are managing waste to prevent its generation and dispose of the generated waste in an eco-friendly manner to minimize its environmental impact.

Our Environment and Safety team provides wastegenerating teams with training on the appropriate discharge and storage of waste, and strives to prevent safety incidents caused by waste, such as fires, explosions, and leakages.

#### | Waste Management Process



In particular, when waste contains any corrosive or hazardous substances, we get the relevant information and take action in a timely manner to minimize risks. Waste-generating teams prioritize waste reuse as their first consideration. When reuse is not feasible and waste must be outsourced for disposal, they ensure compliance with waste disposal regulations before proceeding. For outsourced waste, they conduct regular inspections based on the 'Waste Disposal Company Operational Standards'.

Additionally, we are advancing the Recycle Project, which focuses on resource recovery research utilizing waste and byproducts and the development of recycled materials, primarily through our R&D center. We report the project's progress to management quarterly to follow up on its outcomes and environmental impact.

#### | Waste Recycling Rate



#### **Promotion of Circulatory Resources**

TAK has obtained circulatory resource certification for a total of 12 items, mainly at its four plants in Gumi. We will continue to strive to increase the number of circulatory resource-certified items to minimize waste and contribute to a circulatory economy.

Gumi Plant 3 has been designated a Green Company in recognition of its contributions to environmental improvement, including reducing resource and energy consumption and pollutant emissions, enhancing the environmental performance of its products, and establishing a green management system. Since first receiving Green Company certification in 2001, Gumi Plant 3 has maintained this certification for over 20 years.

### Certificate of Green Company



#### | Circulatory Resource-certified Items

Site	ltem	Qty
Gumi Plant 1	PET bulk by-products, PET edge rolls, defective rolls	3
Gumi Plant 3	PET bulk by-products, PET edge rolls, defective rolls	6
Gumi Plant 4	IT films (PET), defective rolls, edge rolls	1
Gumi Plant 5	PP non-woven bulk, PET non-woven bulk	2

## SOCIAL



Stakeholder Engagement

#### We Make Us Safe Together

Created by Hwang Yoon-chan

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## **Human Rights**

#### **Human Rights Management Policy**

"We respect human rights and ensure a workplace where we can work with peace of mind."

The Toray Group prohibits all discriminatory treatment on the basis of the value of 'respect for human rights.' It also designs work environments in compliance with relevant laws and regulations in each country. Human rights-related matters are explicitly stated in its Ethics and Compliance Code of Conduct, emphasizing respect for human rights and the empowerment of its employees.

The Toray Group also continuously addresses global human rights issues based on its 'Human Rights Policy,' considering the culture, customs, and social norms of each country.

TAK has similarly established its own 'Human Rights Management Policy' based on this, setting the direction for its human rights policy and reflecting the guidelines of the Ministry of Justice and the National Human Rights Commission of Korea. In September 2022, we declared this policy company-wide.

As a corporate citizen, we support international standards on labor, such as the <sup>r</sup>Universal Declaration of Human Rights, and the FUN Guiding Principles on Business and Human Rights, and are determined to fulfill our responsibilities in compliance with labor laws and regulations in each country and region.

#### TAK's Human Rights Management Policy

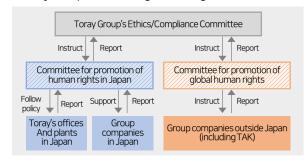


#### **Human Rights Management System**

Our human rights management framework is based on the Toray Group's ethics and compliance dissemination activities and is systematically linked to the Group's domestic and international affiliates.

We also share the status of our human rights management initiatives and improvements through the Toray Group's Human Rights Promotion Committee. As an overseas affiliate of the Toray Group, we continuously monitor human rights risks across the entire Group, including establishing human rights response measures based on local laws and regulations, thereby minimizing risks associated with concerns.

#### Toray Group's Human Rights Management Framework



#### | Employee Training for Human Rights Management

Item	Course	Length
	Improving disability awareness	1 hour
No Discrimination	Workplace harassment prevention training	1 hour
	Workplace sexual harassment prevention training	0.5 hour
Human rights protection	Personal information protection training	0.5 hour

**ENVIRONMENTAL** 

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## **Diversity and Equal Opportunity**

#### Personnel Management without Discrimination

TAK runs various personnel programs to respect the human rights of individual employees and create a non-discriminatory workplace.

We ensure that no personal condition, such as gender, marital status, pregnancy, or childbirth, influences hiring or working conditions, and we publicly declare this principle.

We adhere to the principles of fair competition and equal opportunity in our recruitment process, and regularly provide interviewers with training on prohibition of discrimination and hiring fairness. As an institutional measure to eliminate employment discrimination and promote employment equality, TAK implements 'Affirmative Action' and continues institutional efforts to expand the recruitment of women and social minorities.

Regarding promotions and compensation, we provide all employees with opportunities and feedback based on fair standards, following our Performance Assessment Guidelines, Personnel Assessment System, and Promotion Operation Guidelines.

#### Interviewer Training on Gender Equality

"Ensuring Equal Hiring Opportunities Through Non-Discriminatory Recruitment"

[Legal Ground]



Fair Hiring Procedure Act



Equal Employment Opportunity and Work-family Balance Assistance Act

Furthermore, we conduct regular training for all employees to prevent discrimination, including disability awareness training and workplace harassment prevention training, while building an organizational culture where everyone is respected and can work safely.

#### Inclusion between Generations

TAK strives to foster a healthy organizational culture based on mutual understanding and inclusion across generations within our organization. In particular, we conduct an annual employee satisfaction survey targeting employees at the staff level, including first-year new hires, and regularly gather opinions on organizational culture, stress, and communication styles experienced by each generation through surveys and individual interviews.

This helps us recognize generational differences in perspective and derive directions for improving organizational culture that reflect the challenges and expectations each generation experiences in the workplace. Survey outcomes serve as a core benchmark for improving our HR and training systems. They are actively incorporated into creating systems and environments that embrace the values and work styles of younger generations, including millennials and Gen Z.

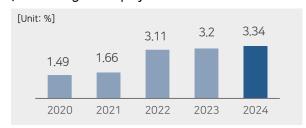
We plan to continue developing a generation-inclusive organizational culture where all members feel empathy and belonging, based on mutual respect and understanding across generations.

#### Standard Workplace for the Disabled

We also make efforts to create a foundation for social integration by expanding the employment of underprivileged people. In April 2022, we established a subsidiary-type standard workplace for persons with disabilities in partnership with the 'Korea Employment Agency for Persons with Disabilities' to create jobs in the local communities.

As of the end of 2024, 31 employees with disabilities currently work for 'Happy With', mainly in the areas of environmental beautification, healthcare, and recycling, and we continue to seek to expand the areas of business available for the disabled.

#### | Percentage of Employees with Disabilities



#### Happy With', a Standard Workplace for the Disabled



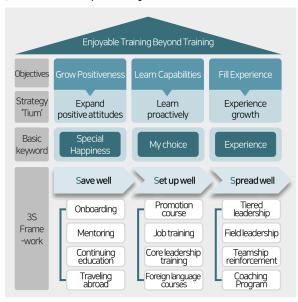
## Talent Acquisition and Development

#### Sustainable Growth Framework

TAK operates an integrated talent growth framework with the vision of 'Enjoyable Training Beyond Training,' simultaneously pursuing the growth of each individual member and the sustainable development of the organization. This framework reflects our commitment to realizing the values of training and inclusive growth.

TAK's growth framework is built around three strategic objectives: 'Cultivate Positive Thinking (Grow Positiveness)', 'Strengthen Autonomous Capabilities (Learn Capabilities)', and 'Accumulate Practical Experience (Fill Experience)'. It enhances employee engagement and training satisfaction through the keyword of 'proactive experience'.

#### | Talent Development System



In particular, we implement a phased talent development system called the '3S Framework (Save Well, Set Up Well, Spread Well)' to empower members to grow alongside the organization.

- The 'Save Well' phase builds foundational skills and supports organizational adaptation through onboarding training, mentoring, and overseas visits.
- The 'Set Up Well' phase promotes systematic competency development through promotion programs, job-specific training, and core leadership training.
- The 'Spread Well' phase operates tiered leadership and coaching programs to spread leadership and embed organizational culture.

TAK's systematic growth framework contributes to realizing the core pillars of its ESG management-securing sustainable talent and fulfilling social responsibility-beyond short-term performance improvement.

#### **Talent Development**

TAK has established the Learning experience Platform (LXP), a growth-oriented learning platform, to realize a customized training system considering each member's capabilities, growth pace, and job characteristics. This platform was introduced with the goal of enabling mutual development between our members and organization, aiming to shift from a standardized competency management-centered training approach to a growth support-centered one.

LXP is designed to expand learning choice, allowing individuals to freely select content based on their needs and interests, and enhances learning accessibility and engagement by offering diverse learning methods such as e-learning, book learning, YouTube learning, and study groups.

We also regularly develop and update content that reflects trends to enhance training efficiency and expertise, while continuously optimizing content to strengthen program relevance and effectiveness.

We decided this platform name as 'Tium' through an internal contest, to reinforce its identity as an educational brand and enhance employees' sense of belonging and participation.

We are creating a learning environment centered around 'Tium' where our members can grow autonomously and enjoyably. We will continuously cultivate future-oriented talent capable of responding to rapidly changing environments, such as generational diversity and shifts in the global value chain, thereby realizing our talent development strategy under our people-centered sustainable management.

#### I 2024 Curriculum Overview

Frame	Course	Target
	<ul> <li>Toray Korea Group Onboarding</li> </ul>	Group's new employees
Save well	<ul><li>Junior Overseas Training</li></ul>	Third-year employees
	Growth Follow-up Course	2nd-to 3rd-year employees (technical post)
	<ul> <li>Job Expertise Enhancement Training</li> </ul>	Sales, Field Operations and Production Management
Set up well	Promotion Course	Promoted employees
	<ul> <li>Manager-level Overseas Training</li> </ul>	Selected manager-level employees
	<ul> <li>Team Leader Refresh Training (Jeju Island)</li> </ul>	Team leaders
Spread well	Core Talent Group Coaching	New executives and core team leaders
	<ul> <li>Field Management Enhancement Training</li> </ul>	Field team leaders and section managers

## Occupational Safety and Health, Health Improvement

#### Safety First Management

**'TORAY'** 안전 Slogan : 안전 최우선 무재해 달성 "<mark>안전규칙 준수 기본철저, 좋아!</mark>"

Within the Toray Group in Korea, all employees, from top management to field staff, strive to create a safe and healthy workplace.

The Group holds the 'Toray Korea Safety Summit' annually, attended by the CEOs and production executives of each Group company, reporting on key safety initiatives and sharing the commitment to achieving zero accidents.

The 11th session of the Toray Korea Safety Summit held in November 2024, centered on six Group companies in Korea, highlighted the importance of proactive management for safety compliance, including: thorough prevention of major disasters, making it a habit to prevent environmental and fire accidents, and strengthening safety management for our suppliers.

#### | Toray Korea Safety Summit



TAK actively encourages voluntary adherence to basic rules, such as writing a safety pledge based on the '10 Safety Principles' and setting personal action goals, to strengthen employees' safety awareness.

Under this safety-first management policy, we have obtained the Occupational Health and Safety Management System (ISO-45001) certification and consistently maintain a top-tier rating in the Ministry of Employment and Labor's Process Safety Management (PSM) assessment.

#### I PSM Assessment Status

Site	Gunsan Plant	Gumi Plant 3	Gumi Plant 4
Grade	Р	S	S

#### | TAK's 10 Principles of Safety

- Safety precedes all else.
   Superiors must protect the safety of their subordinates.
   You must protect the safety of yourself and your colleagues.
   Observe basic rules and work standards in any circumstances.
  - 5 Predict hazards carefully before you start a task.
  - 6 Practice pointing and calling in any circumstances.
  - 7 Never touch any rotating part.
  - 8 Follow 3S thoroughly, and practice a disciplined life.
  - 9 Make it a habit to point out safety issues to each other to Make safety a habit.
- 10 Observe traffic rules in any circumstances.

#### **Serious Accident Prevention**

TAK operates a dedicated Safety & Health Team to secure the safety, health, and environment of its employees and protect them from industrial accidents.

We have also established a Serious Accident Prevention Committee to share company-wide safety and health promotion directions quarterly and conduct in-depth discussions on compliance with relevant laws and regulations and key safety and health matters. Key topics include performance related to compliance with the Serious Accidents Punishment Act, such as  $\triangle$  follow-up actions on metrics related to serious accidents  $\triangle$  company-wide accident occurrence status  $\triangle$  safety and health investment status  $\triangle$  safety and health assessment outcomes for new suppliers  $\triangle$  risk assessment and improvement status.

Furthermore, we actively promote joint safety and health activities with our suppliers, including conducting safety control inspections and deriving improvement measures based on these findings.

Through such continuous improvement and prevention activities, we are steadily progressing toward realizing an accident-free workplace where all our employees and suppliers can feel secure.

#### | Serious Accident Prevention Committee



## Occupational Safety and Health, Health Improvement

#### Company-wide Special Safety Campaign

TAK has implemented a 'Company-wide Special Safety Campaign' in the second half of 2024, aiming to achieve 'Complete Zero Accidents', to strengthen the safety activities we have continuously pursued and thoroughly prevent major accidents by clarifying accountability.

To this end, we conducted a comprehensive assessment of all company-wide risk factors and reinforced our prevention-focused safety management system. For routine operations, we placed emphasis on executing procedures based on work standards, and conducted a comprehensive re-examination on the 11 major special safety focus themes: ①rotating machinery, ②hoists, ③ knives, ④forklifts, ⑤heavy loads, ⑥working at height, ② chemical substances, ⑧hot objects, ⑨nighttime/holiday work, ⑩construction and contractor management, and ⑪ prevention of careless/inattentive accidents. This enhanced our ability to respond to relevant regulations and minimized legal risks.

To enhance pre-work safety assurance activities, we redefined the criteria for '1-Minute STOP', which is our hazard anticipation activity, and strengthened practical education and case-based training. We also provided safety management training to subcontractor managers and foremen, guiding their safety management standards to align with our standards and building a safety management system based on mutual growth.

Furthermore, to create a safety culture grounded in management leadership, we expanded on-site communication activities by executives, including the CEO, and conducted on-site inspections of high-risk operations in sites.

Our 'Special Safety Campaign' went beyond a single campaign; they were conducted as part of our sustainable management activities aimed at creating a safe workplace. With continuous follow-up, we conducted the campaign with the goal of achieving practical safety implementation and spreading a safety management culture.

#### **Employee Health Improvement**

We strictly comply with our legal obligations under the Occupational Safety and Health Act and strive to create a pleasant working environment to promote the safety and health of our employees.

To this end, we regularly conduct an assessment of the adequacy of the working environment in production sites and continuously conduct workplace measurements for hazardous factors1). For hazardous processes2), we perform detailed diagnostics on production processes and equipment, and for improvement recommendations derived based on the findings, we implement systematic management, including monthly reviews of improvement progress through the Safety and Environment Committee.

We provide annual health checkups for all employees to improve the health of each employee. We also plan to complete the implementation of a 'Smart Healthcare Platform' by 2025, which integrates functions such as health check-up scheduling, medical history management, and follow-up management for individuals with findings. Through this, we aim to realize more systematic and efficient employee health management, foster a healthy workplace, and spread a prevention-centered health management culture.

- 1) Noise, dust, acid/alkali, organic compound, etc.
- Loud noise, high temperature, heavy objects, tasks placing strain on the musculoskeletal system, etc.

#### | Health Checkups (Unit: persons)

Item	2021	2022	2023	2024
Employees (yearly)	2,178	2,201	2,361	2,283
Spouses (Biennial)	556	1,001	608	979
Total	2,734	3.202	2,969	3,262

TAK has continuously maintained its 'Healthy Workplace NAVI' certification from Gumi City since 2020. In particular, we received high assessment for operating a 1:1 health promotion program tailored to individual employee characteristics by in-house medical professionals. This led to our selection as an 'Outstanding Workplace for Worker Health Promotion Activities' by the Korea Occupational Safety and Health Agency. We will continue to lead the way in creating a healthy workplace through ongoing health promotion activities.

#### | Health Promotion Training for Employees

Course	Target
Office Stretching Practice for Preventing Musculoskeletal Disorders	_
First Aid Theory and Practice	Company- wide
Understanding Mental Health and Managing Job Stress	Employees
Risk Assessment Theory and Practice	
Automated External Defibrillator (AED)     Manager Training	Health managers

#### | Healthy Workplace Certification



## Stakeholder Engagement

#### Win-Win Labor-Management Partnership

TAK respects labor union activities, does not give disadvantages to employees for joining a labor union or participating in collective bargaining, and strives to solidify labor-management partnerships based on co-existence and cooperation.

In June 2021, Toray Advanced Materials Korea and its labor union agreed on the principle of one company and one union with the employer supporting the unified labor union to reach a stable settlement.

We conduct collective bargaining with labor unions on wages and benefits to improve the working environment, discusses changes in major systems and businesses, and strives to strengthen communication between labor and management. We also publish the finalized collective bargaining agreement between the labor union and the employer in a booklet and actively implement it.

TAK and its labor union operate a regular labormanagement council every three months to enhance mutual trust and foster stable relations through cooperation. The council discusses matters to improve employee welfare, including employee grievances, safety and health, and improvements to work processes.

Labor-Management Collective
Bargaining Agreement Signing Ceremony



The employer is also faithfully providing information to the union about its management.

Our labor union is seeking to revitalize the local economy and promote shared growth with local residents based on labor-management partnerships. In January 2025, the head of Gumi Site and the senior vice president of the labor union visited the Gumi City Hall and delivered the donation of KRW 10 million made by our employees to Gumi City. The donated funds will be used for projects supporting underprivileged people in Gumi City through the Gyeongbuk Community Chest of Korea. TAK has consistently donated funds for the local community every year since 2014, in collaboration with its labor union.

As part of our ESG management practices, we actively participate in the 'TAK Employee Ploking<sup>1)</sup> campaign to create a cleaner Gumi City, and our labor union actively participated in the event, demonstrating our deep affection for the local community and realizing social value together.

1) Ploking: combination of the Swedish word 'plocka up (to pick up)' and 'walking', which refers to walking while picking up litter.

#### | Charity Donation to Gumi City



#### Internal Communication Culture

We operate programs to enhance communication between management and employees and foster a positive work environment. We establish communication channels through initiatives such as producing a company newsletter with participation from both management and employees, hosting talk concerts where the CEO interacts with new hires, and holding annual team-building events at the company-wide or division level.

Furthermore, considering employee opinions and the work environment, we have fully implemented a casual dress code for employees working in Seoul and also expanded the flexible work hours system to accommodate individual life cycles, enabling employees to focus on their work. Through these programs and systems, we are establishing diverse communication channels.



#### CEO Talk Concert



## Work-life Balance

#### Family/Mental Care Support

TAK operates diverse welfare systems and support programs to enable employees to achieve work-life balance and work in a highly engaged environment. Believing that their mental stability within the organization leads to selfdevelopment and work engagement, we continuously enhance systems to realize work-life balance.

We provide welfare benefits considering the life cycle of employees' children across various aspects, including vacation systems, work arrangements, and cost support. Given our diverse work locations, we also operate familyfriendly programs such as weekend transportation expense support for employees experiencing work location transfers and long-term leave systems for married couples within the company facing overseas assignments.

In addition, our in-house childcare center has earned an Agrade in assessments conducted by the Ministry of Health and Welfare and has been selected as an institution excelling in meal management, establishing a safe and highly trustworthy workplace where employees can confidently entrust their children.

Childcare Support for Different Stages of A Child's Life

Additionally, to foster mental stability among our members and cultivate a healthy organizational culture, we operate the 'Mind Cafe', a mental counseling center, centered on our Gumi site, in partnership with an external mental counseling institution. From April 2023 to December 2024, a total of 83 members requested counseling, receiving professional mental counseling support to other business sites.

policies aimed at improving the quality of life for each individual member.

#### mental counseling services across 845 sessions. This initiative has vielded tangible positive effects, enhancing the emotional stability of participating members and effectively resolving interpersonal conflicts within the organization. Participant satisfaction levels were also exceptionally high. Based on this success, we are gradually expanding our In 2024, we were also recognized for exemplary operation of various family-friendly programs supporting work-life balance, earning us 'Family-Friendly Company Certification'. We received high assessments particularly for our high parental leave utilization rate and pre/post-childbirth employment retention rate. We will continue to strengthen

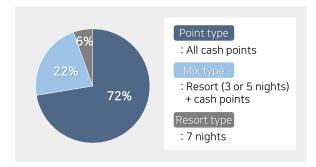
#### **Living Wage Policy**

TAK reviews the regional living wages announced annually by Seoul Metropolitan Government and Gveongsangbukdo Province to ensure the basic livelihood and quality of life for all employees. We regularly check whether the wages of our lowest-paid employees meet the living wage standards by comparing them to the announced living wage benchmarks, continuously strengthening the institutional foundation to ensure stable livelihoods for our members

#### Selective Benefits Program

TAK operates a selective welfare benefits program to respect employee diversity and enhance the effectiveness of our welfare programs. Under this program, our employees can either use the company-provided resort for the number of nights they designate or receive the monetary value of unused nights as points on their company welfare card and use them autonomously within the budget. This enables us to provide customized welfare benefits tailored to individual lifestyles.

#### Usage of Selective Benefits Program by Type



Planning for Pregnancy	Childbirth	Childcare
✓ Maternity leave	✓ (Spouse) Childbirth leave	✓ (Spouse) Childcare leave
✓ Subfertility treatment leave	✓ Childbirth congratulatory money & gift	✓ Family care leave
✓ Subfertility medical cost assistance	✓ Reduction of working hours f	or pregnancy period
✓ Reduction of working hours for period of childcare	✓ Flexible working system (stag	ggered, flexible, etc.)
✓ Leave for prenatal diagnosis		✓ Workplace daycare center

## Supply Chain Management

#### **CSR Procurement Policy**

The Toray Group is committed to establishing a procurement system that considers not only quality and supply stability but also sustainability factors such as ethics, the environment, society, and human rights as it conducts diverse businesses in the international community. To this end, the Group has established the "Toray Group CSR Procurement Policy" and the "Toray Group CSR Procurement Action Guidelines," has declared policies for building a responsible supply chain both internally and externally, and operates a sustainable procurement system. In particular, all staff involved in procurement activities sign a 'Procurement Ethics Pledge,' ensuring fair and transparent procurement practices are embedded throughout the organization.

\* Percentage of those who signed Procurement Ethics Pledge as of Feb. 2025: 97% (232 out of 240)

We also share the "Toray Group CSR Procurement Guidelines" with our suppliers and require their compliance, thereby strengthening ESG responsibility fulfillment throughout the entire supply chain. When selecting new raw material suppliers and conducting the assessment of existing suppliers, we also verify whether the supplier has established a CSR policy and operates a sustainability goal management system.

The Toray Group manages risks through its "CSR Procurement Working Group." As an overseas affiliate, TAK regularly reports on the status of CSR procurement and risk management. We also collaborate with suppliers, contract manufacturers, logistics companies, and others to build a sustainable supply chain.

#### | Toray Group CSR Procurement Policy

- 1 Establish an internal framework for implementing CSR in the supply chain and ensure that it is implemented.
- 2 Comply with domestic and international laws and social norms in procurement and promote fair trade in accordance with our corporate ethics.
- 3 Consider the impacts of procurement on labor environments and safety and health.
- 4 Implement raw material sourcing considering its environmental impacts while managing chemicals appropriately and quickly prepare for potential risks.
- 5 Promote mutual cooperation with stakeholders, including business partners.
- 6 Maintain and improve the quality and safety of products.
- Respect human rights and make efforts to create a workplace without discrimination. Do not engage in human rights abuses in supply chain, including forced, slave, child, and exploitative labor practices.
- 8 Do not use minerals that originate from conflict and at-risk regions and have a clear history of involvement in conflict or human rights abuses.
- Prevent leaks of confidential information and respect intellectual property.
- When selecting suppliers, consider social responsibilities such as compliance with laws and regulations, respect for human rights, and environmental protection, and strive to promote CSR throughout the supply chain by requiring suppliers to comply with Toray Group CSR Procurement Code of Conduct.

#### Management Framework

TAK has introduced an electronic bidding system and operates the electronic procurement system 'TEPS' to foster transparent communication with the supply chain and create a fair trading environment. We use TEPS to systematically manage key procurement procedures including:  $\triangle$  supplier bidding  $\triangle$  electronic contract execution  $\triangle$  request for quotation  $\triangle$  purchase request and order placement  $\triangle$  supplier assessment. Furthermore, to prevent and respond to potential misconduct and corruption during the procurement process, we operate an internal whistleblowing system (Green Reporting) and a reporting channel on our website. These measures enable us to continuously strengthen our internal control and monitoring systems to ensure a fair and transparent trading environment.

In January 2025, in accordance with our Ethics and Compliance Code of Conduct, we sent a formal notice titled "A Message to Our Partners" to a total of 1,606 suppliers in an effort to strengthen cooperative relationships based on mutual trust and to practice ethical management and legal compliance. This notice informed our suppliers that sanctions, including termination of transactions, may be applied for violations of corporate ethics and related norms, conveying our strong commitment to building a sustainable supply chain.

#### | TEPS (Toray E-Procurement System)



## Supply Chain Management

#### **Shared Growth**

TAK has established a core project of building sustainable win-win partnerships with suppliers, actively implementing this approach and striving to embed a culture of mutual growth. As of 2024, out of a total of 1,733 suppliers, 103 companies are designated and managed as key suppliers, which account for approximately 68% of total procurement spending. Aiming to ensure supply stability and strengthen quality management with key suppliers, we conduct regular comprehensive assessments. Based on the assessment outcomes, we identify areas for improvement and pursue continuous mutual growth cooperation with suppliers.

We continuously refine our supply chain management system to meet the standards of the Shared Growth Index (SGI); we provide practical support activities, such as operating the Shared Growth Mutual Benefit Fund, which was jointly established with our deposit and a bank to offer interest rate reduction benefits to SME partners we transact with.

#### Key Supplier Selection Criteria

- Purchasing Team: Raw material transaction amount of KRW 1 billion or more
- Equipment Purchasing Team: Suppliers stationed in our construction sites and top 20 suppliers by annual transaction amount with 10 or more transactions per year
- Materials Team: Packaging suppliers with annual transaction amounts of KRW 300 million or more

#### Supplier Transaction Status (Apr 2024 - Mar 2025)

Type	ltem	Status	Ratio
All	Number of suppliers	1,733	-
suppliers	Purchase amount	KRW 1.11T	-
Key	Count	103	6%
suppliers	Amount	KRW 760B	68%

#### | Shared Growth Win-Win Fund Support Program (As of Mar. 20205)

Supported Benefits	Loan interest rate reduction of up to 2.06%				
	Total KRW 6 billion				
Fund Amount	TAK	Woori Bank IBK Ba		ınk	KB Bank
Amount	KRW 3 billion KRW 1 billion each				
	-	Fotal KRW 4.	16 billio	n	
Loan Performance	Woori Bank	IBK Ba	nk	KB Bank	
	KRW 1.7 billio (2 companies		KRW 1.9 billion (3 companies) KRW		560 million ompany)

#### **Green Procurement**

TAK is expanding the purchase of recycled raw materials and packaging materials to minimize environmental impact across the entire supply chain and realize sustainable management. In addition to the existing recycled chips and recycled plywood already in use, we are continuously identifying applicable items and progressively expanding the scope of eco-friendly procurement.

#### | Green Procurement Performance (Apr 2024 - Mar 2025)

Type	Item	Amount	Ratio
Raw materials	Recycled chip	KRW 5.7B	5.7%
(Polymer)	Bio (PE, PTT)	KRW 1.1B	1.1%
Packaging	Recycled plywood	KRW 0.5B	10%

Purchase Ratio(Raw Materials): Purchase Amount per Green Procurement Item ÷ Total Purchase Amount for Polymer Materials
 Purchase Ratio(Packaging): Purchase Amount for Recycled Plywood ÷ Total Purchase Amount for Plywood among Packaging Materials

#### **Conflict Minerals**

TAK has established and operates a 'Responsible Mineral Policy' to ensure sustainable and ethical resource procurement that considers human rights protection and environmental conservation.

This policy aims to avoid the use of conflict minerals (tin, tantalum, tungsten, gold) that may be mined in conflict and high-risk areas and cause human rights violations and environmental destruction, and to use only responsible minerals mined in a socially responsible manner.

Based on the OECD's 'Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas', TAK conducts supply chain risk mitigation activities, including the preemptive identification and risk assessment within the mineral supply chain.

In particular, prior to import, we verify the origin of the relevant minerals in advance, and make sure our internal approval procedures through our Security Trade Control Office are strictly followed. When necessary, we request our suppliers to submit the CMRT3) and CRT4) forms provided by the RMI2), thereby enhancing transparency and traceability in the mineral procurement process.

We also regularly monitor responsible mineral procurement of our suppliers and report the outcome to the Sustainability Committee. Furthermore, by implementing a response system aligned with global standards, we publicly disclose our related activities and performance externally through our Sustainability Report.

- \*\* TAK does not use conflict minerals in the process of procurement, production, or distribution of its products.
- 2) RMI: Responsible Minerals Initiative
- 3) CMRT: Conflict Minerals Reporting
- 4) CRT: Cobalt Reporting Template

## **Product Quality and Safety**

#### **Quality Management**

To realize 'Toray of Quality', TAK has established and is continuously enhancing a systematic management system for product quality and safety. Particularly in the infrastructure innovation domain, we have set 'Safety, Environment, and Quality' as a top priority and are conducting activities to ensure product quality and safety.

Furthermore, to establish stakeholder-centered quality management, we are optimizing our quality management system across all stages—from setting quality objectives to design, production, and sales. This enables us to obtain and sustain global quality management certifications such as ISO 9001Note1) and IATF 169492). In April 2024, we obtained AS91203) certification, the aerospace industry quality management system established by the International Aerospace Quality Group (IAQG), by improving our product safety and risk management systems and reflecting relevant regulations and customer requirements.

#### Long-term Roadmap for Quality Management System

# Phase 1 (2022-2023) Reform the existing quality system • Establish management/institutional foundations for reforming the quality assurance system Phase 2 (2024-2025) Build an integrated quality operation system • Build infrastructure to strengthen quality compliance and create a quality culture Phase 3 (2026-) Advance quality management • Realize advanced quality management through big data management and analysis

To strengthen quality compliance, we have established and operate the Laboratory Automation System (LAS), a system designed to prevent falsification of quality data. This system is designed to automatically link quality data measured in the laboratory to the issuance of product certificates, thereby preemptively blocking the possibility of arbitrary modification or falsification of data, ensuring data integrity and transparency.

We plan to gradually expand the application of the LAS system by 2026 and is concurrently conducting user training to ensure the system's effective and lawful operation. With this system, we aim to achieve 'zero' possibility of quality fraud and minimize quality risks across the entire organization.

Centered around the Quality Assurance Division, we are also working to empower our quality personnel and cultivate experts. We conduct customized training programs for quality personnel at each level, and plan to steadily increase the number of personnel holding internal auditor qualifications. We are also promoting the training of experts in big data-based statistical techniques to strengthen expertise in quality data analysis.

#### | Quality Capability Enhancement Program

Course	Target
QMS Internal Auditor Course	Section managers, QA
Inspection Practice and 5S Activities Course	Inspectors
Quality Improvement Course	Foremen, QA
Quality Strategy Development and Leadership Course	Section managers

1) ISO 9001 : International standards for Quality Management System 2) IATF 16949 : International standards for quality management for the Automotive Industry

3) AS9120 : International standards for Quality Management System for Aerospace Component Distribution and Storage

#### **Product Safety**

We convene 'Product Safety Committee' meetings every July to strengthen our product safety management system by sharing information on: product safety reviews, preventive activities and performance, compliance with relevant regulations and improvement plans.

Our Product Safety Office continuously monitors the product safety operations status of each business division and implements immediate corrective actions for identified issues. We also proactively inspect the product safety systems of domestic and international subsidiaries to preemptively identify potential risks, and through integrated corrective actions at the corporate level, we ensure global-standard product safety.

Additionally, to prevent product safety incidents and cultivate specialized personnel, we regularly conduct annual company-wide product safety training.

#### | Content of Product Safety Training

✓ Understanding of product safety	✓ Product safety audits procedure
✓ Environmental substance regulations	✓ Product safety accident response procedure
✓ Product safety accident cases	✓ Product Liability Act

#### | Product Safety System Management Model

Proactive	-	Follow-up
<ul> <li>MSDS (Raw/sub-materials, products)</li> <li>Product safety audits</li> <li>Changes in domestic/foreign laws and regulations</li> <li>Regular training (PL, product safety)</li> </ul>		<ul> <li>Company-wide crisis management</li> <li>Response to product safety accidents</li> <li>PL insurance for all products</li> </ul>
Legal & Regulatory Compliance (I	ndus	trial Safety Act, EU REACH, etc.)

## Corporate Social Responsibility

#### **Korea Toray Science Foundation**

"We change the world with the power of science."

Toray Group is committed to developing technologies and materials that will benefit the world, based on its corporate philosophy of "contributing to society by creating new values." In line with this, TAK is also engaged in a wide range of science and technology promotion activities for a better tomorrow, taking responsibility for the development of science and technology and human resources in Korea.

Established in 2018, the Korea Toray Science Foundation is a public interest corporation founded by the Toray Korea Group to contribute to the advancement of science and technology in Korea. Each year, it awards the Science and Technology Prize to scientists with outstanding research achievements in the fundamental and applied fields of chemistry and materials who have significantly contributed to technological development, and the Fellowship to emerging scientists challenging new research projects with differentiated ideas.

It also provides scholarship support to help science and engineering university students pursue their studies with vision and grow into the next generation of talent in the scientific field.

#### | Korea Toray Science Foundation Awards and Fellowship

-	-	•
Type Segment		Support
Science Foundation Awards	Scientists and engineers in basic and applied chemistry and materials who have produced world-class research, significant discoveries, and technological advances in Korea	KRW 100M & plaque
Fellowship	Scientists and engineers working in the fields of chemistry and materials at universities and research institutes in Korea	Up to KRW 50M/year per project (up to 3 years)

We contribute to the development of Korea's chemical field by promoting science, culture, and academic advancement through supporting academic research and conferences.

We have also established the Toray Polymer Awards and the Toray Chemical Engineering Awards in cooperation with the Polymer Society of Korea and the Korean Society of Chemical Engineers to support the activities of outstanding researchers.

#### | Awards/Support by Korea Toray Science Foundation

Korea Toray Science Foundation Awards	14 recipients
TAK Fellowship	30 recipients
Scholarship for Science and Engineering Students	195 recipients
Science, Culture, and Academic Promotion Projects	47 projects

#### $\label{lem:condition} I \ 2024 \ Korea \ Toray \ Science \ Foundation \ Awards \ Ceremony$



#### **Educational Cooperation Activities**

We are also engaged in various educational cooperation activities to disseminate our corporate values and foster talent in related fields.

In 2024, students from Gyeongbok Business High School, university students from the Secondary Battery Industry Technical Workforce Development Project Team, the SETO Forum Youth Academy, the Korea-Japan High School Teacher Exchange Program (hosted by the Korea-Japan Future Partnership Foundation), and Keio University undergraduates visited the Korea Toray R&D Center. These visits allowed them to have a better understanding of the materials industry pursued by TAK and opportunities to indirectly experience its corporate culture.

#### | SETO Forum, Youth Academy



2nd Korea-Japan High School Teacher Exchange Program



## Corporate Social Responsibility

#### Exchange with 5th Artillery Brigade

TAK and the 5th Artillery Brigade have maintained continuous exchanges for over 10 years since establishing their sisterhood relationship in 2012.

To enhance the welfare and morale of soldiers dedicated to national security, we annually provide development funds and foster mutual understanding and broaden our perspectives through active exchange activities such as inviting exemplary officer couples and organizing military camp experiences for employees' children.

#### Delivery of Development Fund for Enhancing Soldier Welfare



Invitation for Exemplary Officer Couples from Sister Military Units



#### **Contributing to Communities**

As the social and environmental influence of companies continues to grow, TAK is also actively fulfilling its social responsibilities. Beyond participating in national disaster relief efforts, such as donating funds for flood recovery and supporting displaced residents, we regularly conduct environmental cleanup activities to foster a healthy aquatic ecosystem in the local community.

Our employees participate in the 'One Company, One River' campaign conducted by Gumi City on a regular basis, collecting litter from rivers in Gumi.

In October 2024, we held our second 'Ploking'note' campaign to practice sustainable social responsibility. In the Gumi area, over 1,300 employees participated in this campaign, and in cooperation with Gumi City, they intensively cleaned streets by walking 30 courses in environmentally vulnerable areas while picking up litter.

In Seoul, in cooperation with the Gangseo-gu Office, we conducted street maintenance and environmental cleanup activities, primarily around the Korea Toray R&D Center and in the surrounding subway station area.

#### I'One Company, One River' Campaign



To support the recovery from the wildfire damage that occurred in the Yeongnam region, we also made a donation of 100 million won to aid the restoration of daily life for the victims and the swift recovery of the affected areas.

TAK is actively participating in Gumi City's support projects for underprivileged people to help neighbors in need within the local community. Since 2014, we have consistently contributed to the community, including donating 10 million won annually through the Hope Sharing Campaign. We will continue to fulfill our role as a corporate citizen that coexists with the local community.

Note) Ploking: Ploking is a combination of the Swedish word 'plocka up (to pick up)' and 'walking', which refers to walking while picking up litter.

#### I Company-wide Ploking Day





## Corporate Social Responsibility

#### Support for Socially Disadvantaged Classes

Every year, we practice voluntary donations from our employees to help our neighbors in need and conduct various sharing activities for vulnerable groups such as living-alone elders and underfed children.

We continue to be involved in providing hygiene products for people with disabilities, donating blood to treat pediatric cancer patients, and creating Braille teaching aids for blind children.

In December 2024, we donated 200 blood donation certificates to the Korea Childhood Leukemia Foundation. These certificates were collected from employees who voluntarily participated in TAK's 'Love Blood Donation' campaign and will be used to support the treatment of pediatric cancer patients battling intractable blood diseases.

We have continued our blood donation campaigns and donation of blood donation certificates since 2018, donating a total of 1,300 certificates by 2024.

#### | Blood Donation Campaign



We donated special Christmas gifts to vulnerable children in the local community, including child breadwinners, grandparent or single-parent families, low-income families, and children with disabilities. The 'Sending Santa with Love' event, jointly conducted by Gumi YMCA and TAK, began in 2004 and has now reached its 21st iteration. In 2024, we delivered Christmas gifts and messages of hope to 62 vulnerable children.

In September 2024, we created and donated educational 'Change Cards' designed to enhance the memory skills of visually impaired children. This activity involved volunteers coloring in outlines drawn by visually impaired children to complete the artwork. By bringing together people with and without disabilities in this collaborative process, it contributed to improving societal perceptions of people with disabilities.

We also conducted a project where we produce an a cappella version of our safety campaign song together with visually impaired individuals.

#### | Sending Santa with Love



This project was conducted to comply with our safety guidelines while providing workplace vitality, sharing the message of "coexistence between people with and without disabilities" with our employees and practicing the social value of respect for diversity.

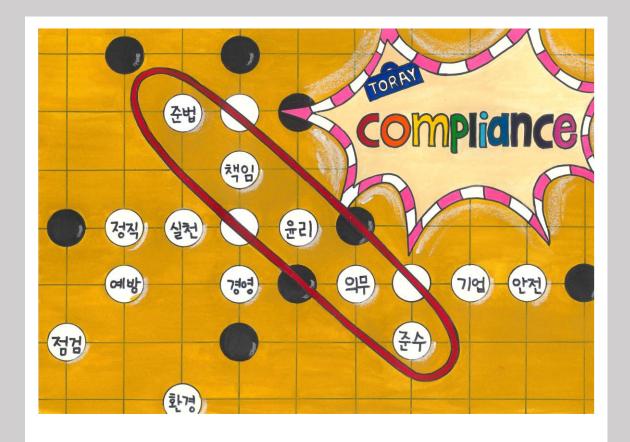
#### | Safety Campaign Song with Visually Impaired Neighbors



### | Production of Braille Textbooks for Visually Impaired Children



## GOVERNANCE



#### TAK's Condition

Created by Hwang In-chan

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- Compliance, Anti-corruption and Bribery 36

## Corporate Governance

#### Operation of the Board

The operation of TAK's Board of Directors is designed based on transparency, independence, and accountability. The Board of Directors meeting of Toray Advanced Materials Korea is held on a quarterly basis according to Article 5 of the Board of Directors Regulations, and extraordinary meetings are held from time to time as needed.

Our Board of Directors consists of 12 directors and one non-executive director appointed by the General Meeting of Shareholders and has a fair decision-making system in place for business activities. In 2024 (27th term), the board held 12 meetings to discuss major business activities.

#### I Board Structure

Title	Persons	Position	Area of specialty
Inside Director	12	Chairman CEO, Head of Division	Business administration
Non- executive Director	1	Head of Corporate Strategic Planning Office (in Japan)	Business administration

- Ordinary (quarterly): Approval of major transactions and report on management status
- Extraordinary (as needed): Resolutions based on the Articles of Association and the board's regulations

Resolutions of the board are made by a majority of the votes of all directors present and voting in accordance with the Articles of Association.

To enhance swift and efficient decision-making and expertise, we have established six specialized committees within the Board of Directors: the Management Committee, the Corporate Ethics and Compliance Committee, the Product Safety Committee, the Investment Deliberation Committee, the Security Trade Control Committee, and the Sustainability Committee. These committees perform deliberation and oversight functions specific to their respective areas.

In particular, the Management Committee meets as often as necessary according to the Articles of Association and the Board's Operating Regulations, and enhances transparency in the decision-making process by listening to the opinions of relevant employees in order to understand the agenda accurately.

Through its board-centered corporate governance structure, TAK strives to create sustainable future value, strengthen stakeholder trust, and practice responsible corporate operations aligned with global standards.

#### Operation of Committees under the Board of Directors (2024, 27th Term)

Name of Committee	Role	Meetings in 2024
Management Committee	Deliberate and vote on key matters delegated by the Board of Directors	4
Corporate Ethics and Compliance Committee	Report and make decisions on activities related to laws, regulations, and social contributions	2
Product Safety Committee	Report on activities related to product safety and environmental regulations	1
Investment Deliberation Committee	Review and make decisions on new and complementary investments	3
Security Trade Control Committee	Report on export controls and management of strategic goods and make decisions	1
Sustainability Committee	Share previous year's ESG performance and make decisions on company-wide ESG strategies and goals	1

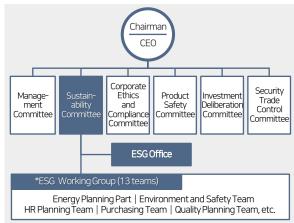
#### **Sustainability Committee**

The Board of Directors deliberates and supervises the company's overall management activities, including strategic direction and major policies. Key sustainability-related matters, such as environmental, human rights, and ethical management issues, are systematically managed through the 'Sustainability Management Committee.'

This committee convenes regularly once a year, linking ESG elements to the company's growth drivers by establishing ESG strategies, reviewing the implementation status of key ESG projects, and approving mid-to-long-term goals.

We also run the company-wide ESG Office, serving as the control tower for sustainable management, and an interdepartmental consultative body (ESG Working Group) to enhance our ESG management system. This strengthens the substance of our ESG strategies and improves our execution capabilities.

#### | Structure of Sustainability Committee



## Risk Management

#### Risk Management

TAK has established and operates a crisis management system to ensure business continuity and protect stakeholders. We define crises as risks that negatively impact business operations or threaten safety, and seek to secure management stability through preemptive prevention and early response, and minimize damage and strive for rapid normalization when crises occur.

To this end, we have built a risk management system based on our internal crisis management regulations while strengthening proactive and consistent crisis response capabilities through operating committees tailored to crisis types, standardizing response processes, and providing education and training.

The committees which will respond to crises consist of five major committees: the Corporate Ethics and Compliance Committee, the Security Trade Control Committee, the Serious Accident Prevention Committee, the Safety and Environment Committee, and the Product Safety Committee. Each committee identifies risks in its respective field and prioritizes response actions. Each committee implements risk reduction activities applying the PDCA (Plan-Do-Check-Act) cycle1), reviewing and improving activity outcomes at least once annually.

Upon a crisis occurrence, TAK establishes a local control center for immediate on-site response or forms a company-wide control center under the CEO's leadership as needed and manages the situation, shares information, reports to relevant authorities, and communicates.

We prioritize protecting lives and transparent information disclosure above all else, responding with the goals of preventing damage spread and achieving early recovery. The head of the company-wide control center rapidly analyzes and reports the accident's progression, cause, and damage,

and collaborates with the CEO and relevant committees to establish and execute countermeasures to prevent recurrence.

#### | 1) PDCA Cycle



#### | Risk Management Response System by Crisis Type

,				
Crisis Type	Response			
<ul> <li>Natural disasters</li> <li>Explosions, fires, environmental incidents</li> <li>Threats, terrorism, wars</li> </ul>	Serious Accident Prevention Committee Safety and Environment Committee			
<ul> <li>Legal violations and unfortunate events</li> <li>Cyberterrorism, online damage</li> <li>External organization denunciation</li> <li>Information leakage</li> <li>International conflicts</li> <li>Other business threats</li> </ul>	Corporate Ethics and Compliance Committee Security Trade Control Committee			
Serious product safety issues	Product Safety Committee			

#### Information Security

TAK runs a systematic security management framework to protect core technologies and trade secrets in accordance with its 'Information Security Basic Policy.' We have established Security Management Procedures and IT Service Security Management Standards, and are strengthening security infrastructure by, for example, restricting access to sites not relevant to business.

Furthermore, we conduct 'Cyber Crisis Response Mock Drills' and continuously monitors for abnormal signs to respond to cyber threats.

We also annually have our employees sign the Confidentiality Pledge and receive information security training and communicate key security issues in a timely manner to strengthen the awareness of security and security capabilities across the organization.

2) Cyber Crisis Response Mock Drills: Conducting social engineering hacking email sending drills and security vulnerability detection response drills

#### | Toray Group's Information Security Basic Policy

- Ensure that important information assets of Toray Group and its business partners are protected according to the level of their risk and importance.
- 2 Do not collect, transfer, or use information assets in violation of laws or business ethics in any country.
- Only authorized persons use information assets within the scope of their business purpose and in an authorized environment.
- Personal information of employees, business partners, and Toray Group must be appropriately protected from being used for purposes other than pre-defined.
- Ensure the availability of critical information assets to fulfill social responsibilities.
- Clarify priorities through information collection and risk analysis, and continuously maintain and improve information security.

# Compliance, Anti-corruption and Bribery

### Corporate Ethics / Compliance

TAK has established and disseminates the "Ethics and Compliance Code of Conduct" to realize its basic philosophy of "serving customers, employees, shareholders, and society, based on its corporate philosophy, values, and management principles." In addition to laws and regulations, the Code of Conduct includes social norms required for business activities, emphasizing that all employees adhere to it and use it as a quide when performing their duties.

We also communicate the CEO's compliance message online every year, emphasizing that compliance activities benefit both individuals and the company, thereby promoting enhanced ethical and compliance awareness among employees.

All employees of TAK are engaged in Mission BEAR activities under the slogan "Have the Integrity to Do the Right Thing in the Right Way," grounded in a firm ethical consciousness. As part of this initiative, each Toray Group company identifies compliance and risk factors through surveys and establishes and implements response plans.

#### I Mission BEAR Code of Conduct



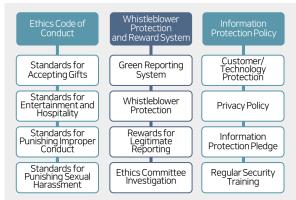
Quarterly, we share progress and plans through the 'Mission BEAR Promotion Committee', and disseminate implementation status and best practices through 'Mission BEAR Letter', a company newsletter (webzine).

To respond to tightening anti-corruption regulations in the business environment and fulfill ethical responsibilities, we have the "Anti-Bribery Policy" in place. This policy provides specific guidelines for employees to practice corruption prevention.

We have also established a "Green Reporting System" on the company website, enabling anyone to report ethical violations anonymously or by name, thereby promoting the company-wide dissemination of an ethics and compliance culture.

Furthermore, we annually have all our employees sign a Fair Trade Act Compliance Pledge and conduct online training to enhance understanding of this law to minimize the risk of legal violations.

### | Ethics and Compliance Framework



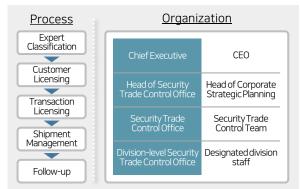
### **Security Trade Control**

As sanctions on corporate activities intensify across the world due to global security issues, we systematically manage our trade activities in accordance with the Foreign Trade Act and the Toray Group's Security Trade Control Principles, thereby contributing to national security.

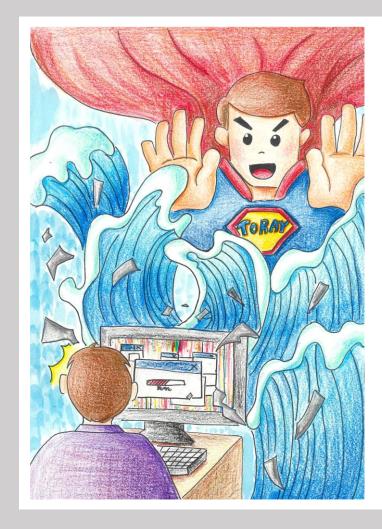
We strictly adhere to the licensing procedures outlined in our internal Security Trade Control Procedures, while implementing thorough and systematic control of strategic goods transactions through the establishment of a Security Trade Control System.

As a result of these efforts, we have consecutively earned the highest AAA rating for Compliance Program (CP) from the Ministry of Trade, Industry and Energy in 2014, 2019, and 2024, and have also received commendations from the Minister of Trade, Industry and Energy four times for our contributions to establishing a national voluntary compliance system for strategic goods. TAK will continue to foster a healthy and responsible export ecosystem through strict adherence to the Foreign Trade Act.

### | Process and Organization for Strategic Goods Control



# APPENDIX



Let's Protect Toray's Advanced Technology!

Created by Lee Ye-rim

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# **ESG Fact Book**

### **Environmental**

Inde	ex	Unit	2022	2023	2024
Water Resource Managem	Water Resource Management				
Total water withdrawal		ton	5,011,934	5,050,785	5,401,573
Water withdrawal Ir	dustrial water	ton	4,721,130	4,694,432	5,050,358
S	ervice water	ton	290,804	356,353	351,215
Water recycled (graywat	er facility)	ton	631,871	623,439	706,797
Water reduction (Challer	ge50+)	ton	139,249	210,323	270,388
Waste water discharged		ton	2,473,376	2,150,682	2,192,172
Water consumption		ton	2,538,558	2,900,103	3,209,401
Water pollutants dischar	ged BOD	ton	31.71	7.53	18.71
	TOC	ton	133.21	15.95	72.03
	T-N	ton	46.05	10.61	32.81
	T-P	ton	1.67	1.39	4.10
Pollution Prevention & Cher	micals Management				
Air pollutants emissions	Dust	ton	5.49	7.61	7.57
	NOx	ton	112.24	108.22	99.37
	SOx	ton	6.85	5.97	1.62
	VOCs	ton	47.33	55.56	62.74
Chemicals Management	PRTR	kg	2,052.01	1,554.32	1,665.62
	Ozone-depleting substances (CFC-eq)	ton	2.22	2.34	1.98
Environmental incidents		cases	0	0	0
Legal violations	cases	0	0	0	

<sup>1)</sup> Differences in the sums may occur due to rounding down by site.

	ndex	Unit	2022	2023	2024
<u> </u>	iluex	Offic	2022	2023	2024
Energy		T.	40.074	40.570	40.400
Total energy usage		TJ	12,971	12,578	12,138
Energy usage	Fuel	TJ	2,993.095	2,802.488	2,615.872
	Electricity	TJ	7,875.259	7,628.313	7,246.692
	Steam	TJ	2,108.328	2,153.684	2,280.945
Percentage of electric	city consumed	%	61	61	60
Renewable energy		TJ	31	27	23
GHG Emissions					
GHG emissions (Scop	e1+Scope2)	tCO <sub>2</sub> -eo	725,681	707,496	686,758
Direct GHG emissions	(Scope 1)	tCO <sub>2</sub> -eo	161,488	152,139	144,266
Indirect GHG emission	Indirect GHG emissions (Scope 2)			555,363	542,497
GHG emissions intens	GHG emissions intensity tCO <sub>2</sub> -eq/KF			0.327	0.335
GHG reduction (Challe	enge50+)	tCO <sub>2</sub> -eo	28,340	41,499	41,901
Waste Management					
Total waste generate	d	ton	36,923	27,253	24,483
Waste recycled		ton	29,957	19,295	18,143
Waste recycling rate		%	81.1	70.8	74.1
Waste disposal	Incineration	ton	2,230	2,539	2,333
	Landfill	ton	2,498	2,118	1,991
Waste disposal rate	Waste disposal rate		12.8	17.1	17.7
Waste generated	General waste	ton	28,448	18,071	16,470
	Designated was	ste ton	6,018	5,651	6,051
	Construction wa	aste ton	2,457	3,531	1,961

<sup>1)</sup> Electricity consumed: (Electricity/total energy use) x 100

According to the information from the Env-Info System, the Yugu Plant is a plant exempt from registration in the Env-Info System and so the data for the plant reflects its performance of 2022 to 2024 based on our internal management data (exemption criteria: GHG emissions of less than 3,000 tCO2-eq and energy consumption of less than 55 TJ).

<sup>3)</sup> Water consumption: Total water withdrawal - wastewater discharge

<sup>2)</sup> Renewable energy: Includes biomass gas + solar power generation at Toray R&D Center

<sup>3)</sup> GHG emissions intensity: GHG emissions / revenue (separate basis)

# **ESG Fact Book**



	Index		Unit	2022	2023	2024
Occupational Safety	and Hea	lth, Health Improvemen	t	·		
Number of accide	nts	Employees	persons	3	2	1
		Partners	persons	3	2	4
Industrial accident (accident + diseas	rate e)	Employees	%	0.09	0.09	0.25
Diversity and Equal (	Opportun	ity				
Employees	Total nu	ımber of employees	persons	2,422	2,460	2,353
	Males		persons	2,258	2,294	2,192
	Female	S	persons	164	166	161
	Percent	age of females	%	6.8	6.7	6.8
	By age	Under 30 years old	persons	190	253	210
		30~50 years old	persons	1,345	1,359	1,294
		Over 50 years old	persons	887	848	849
Managerial staff	Numbe	r of managerial staff	persons	166	162	153
	Males		persons	164	161	152
	Female	S	persons	2	1	1
	Percent	age of females	%	1.2	0.6	0.7
	By age	Under 30 years old	persons	0	0	0
		30~50 years old	persons	67	79	67
		Over 50 years old	persons	99	83	86
Non fixed-term employees	Numbe employ	r of non fixed-term ees	persons	2,394	2,406	2,318
(permanent)	Males		persons	2,237	2,245	2,158
	Female	s	persons	157	161	160
	Percent	age of females	%	6.6	6.7	6.9
	Percent employ	age of non fixed-term ees	%	98.8	97.8	98.5

	Index	Unit	2022	2023	2024
Fixed-term	Number of non fixed-term employees	persons	28	54	35
employees (contract-based)	Males	persons	21	49	34
	Females	persons	7	5	1
	Percentage of females	%	25.0	9.3	2.9
	Percentage of fixed-term employees	%	1.2	2.2	1.5
New hires	Total new hires	persons	186	181	59
	Males	persons	175	171	52
	Females	persons	11	10	7
	Percentage of females	%	5.9	5.5	11.9
Employee	Total employee turnover	persons	144	140	154
turnover	Turnover rate	%	5.9	5.7	6.5
	Number of voluntary departures	persons	100	85	86
	Voluntary departure rate	%	69.4	60.7	55.8
	Number of involuntary departures	persons	44	55	68
	Retirements at mandatory age	persons	23	39	42
	Layoffs	persons	0	0	0
	Other reasons	persons	21	16	26
Employees with	Number of employees with disabilities	persons	52	54	53
disabilities	Employees with disabilities	%	3.11	3.19	3.34
Employed	Number of employed veterans	persons	36	34	33
veterans	Employed based on national merit	%	1.5	1.4	1.4
Average wage of	female employees to male employees	%	72.9	74.6	74.4

4) Average wage of female employees to male employees: Excluding wages of employees who joined, left, or went abroad during the period.

**ENVIRONMENTAL** 

40

Number of accidents: Calculated the number of accidents with at least one day of leave based on internal control. Industrial accident rate: Based on data from the Korea Occupational Safety and Health Agency, (Number of accidents (accident cases + illness cases) / number of workers covered by Industrial Accident Compensation Insurance) x 100
 Employees with disabilities: The number of employees with disabilities is based on the actual number of disabled people, and the percentage of employees with disabilities is based on the number reported to the Korea Employment Agency for Persons with Disabilities

# **ESG Fact Book**



	Index		Unit	2022	2023	2024
Corporate S	ocial Responsibility					
Annual do	nation		KRW Million	1,920	2,232	1,577
Donation o	over revenue*separate basis		%	0.1	0.1	0.1
Work-life Ba	lance					
Parental	Total parental leave takers	Males	persons	10	12	10
leave		Females	persons	9	6	10
	Employees returning from	Males	persons	8	11	10
	parental leave	Females	persons	4	8	8
	Employees who have	Males	persons	7	11	9
	worked at least 12 months after returning	Females	persons	4	8	7
	Percentage of employees returning from parental leave	Males	%	89	92	100
		Females	%	100	100	100
	Percentage of employees who have worked at least	Males	%	88	100	90
	12 months after returning	Females	%	100	100	88
Stakeholder	Engagement					
Laborunio	on membership ratio		%	97	98	98
Laborunio	on members		persons	1,389	1,409	1,366
Labor-ma	nagement meetings held		times	4	3	4
Applicatio	n of collective agreement		-	Applied	Applied	Applied
Talent Acqui	isition and Development					
Employee	Training hours per empl	oyee	hours	56	54	58
training	Training cost per emplo	yee	KRW	1,028,076	831,166	762,598
	Total training hours		hours	134,730	125,764	136,354
Employee	Language education		hours	34,024	27,544	21,158
upskilling	Job training		hours	29,655	31,646	18,088
Human rights training for sustainability			hours	3.480	4,688	4,518

Index	Unit	2022	2023	2024
Product Quality and Safety				
ISO-9001 renewal	-	Renewed	Renewed	Renewed
Product safety reviews	cases	30	45	49

### Governance

	Index			2023	2024	
Corporate Governar	Corporate Governance					
Board	Board organization	persons	12	13	13	
composition	Resolution on director remuneration limit	cases	1	1	1	
Board operation	Meetings held	times	9	11	12	
	Concurrent positions	persons	8	7	7	
	Submitted and passed items	cases	26	27	34	
	Average directorship	years	5.0	5.0	1.5	
	Average attendance rate	%	92	93	81	
Risk Management						
Employees who c	ompleted data protection training	persons	1,675	1,724	1,672	
Cyber threat resp	onse drills	cases	2	2	2	
Compliance, Anti-co	Compliance, Anti-corruption and Bribery					
Legal advice requ	cases	51	49	42		
Fair trade training	cases	1	1	1		
Strategic goods c	ontrol Violations of Foreign Trade Act	cases	0	0	0	

Donation over revenue: (The company's total financial/goods donations ÷ revenue) x 100
 Percentage of employees returning from parental leave: Percentage of employees who returned over those who are to return within the period

Percentage of employees who have worked at least 12 months after returning: Percentage of employees who are still employed within the period over those who returned the previous year
 Training hours per employee: (Total number of employees ÷ the company's total training hours) x 100
 Average directorship: Calculated based on the June 25 shareholder meeting

# **ESG-related Certifications**

Category	Certificate	Certified by	Validity	Applicable sites/products
	ISO-9001	Korean Standards Association	2023.11.24~2026.11.23	All sites in Korea
Quality Management	ISO-16949	Korean Standards Association	2025.02.10~2028.02.09	Gumi Plant 1 (IT) Gunsan Plant (Resin)
	AS-9120	International Aerospace Quality Group (IAQG)	2024.04.10~2027.04.09	Seoul Office (Composite PP Sales)
Environmental Management	ISO-14001	Korean Standards Association	2023.11.24~2026.11.23	All sites in Korea (except Ulsan Plant)
	ISO-45001	Korean Standards Association	2024.12.24~2027.12.23	All sites in Korea (except Gunsan Plant and Ulsan Plant)
Safety and Health	NAVI Certificate (Healthy Workplace)	Gumi City	2022.12.01~2025.11.30	All sites in Gumi
	Healthy Workplace Certification	Korea Occupational Safety and Health Agency, Ministry of Employment and Labor	2023.10.11~2026.10.10	All sites in Korea
	Family-Friendly Excellent Company	Ministry of Gender Equality and Family	2024.12.01~2027.11.30	All sites in Korea
	ISCC Plus	Control Union (ISCC)	2024.12~2025.11	Gumi Plants 1 and 3
Sustainability	GRS (Global Recycled Standard)	Control Union (Textile Exchange)	2025.01.12~2026.01.11	Seoul Office, Gumi 1, 3 and Anseong Plants (polymerized, raw cotton, yarn, spunbond, sheet)
	EcoVadis - Bronze	EcoVadis	2025.06.16~2026.06.16	All sites in Korea
	GREEN-US	Korea Management Certification	2024.12.01~2025.11.30	Gumi Plant 4 (IT water-based release film)

# **Association Memberships**

Korea Chemical Fibers
Association

Korea Display Industry
Association

Korea Chamber of Commerce and Industry

Korea AEO Association

Korean Institute of Chemical Engineers

Korea Desalination Plant Association Gumi Chamber of Commerce and Industry

Korea Customs Logistics Association

Polymer Society of Korea

Korea Carbon and Nano Industry Association

Gunsan Chamber of Commerce and Industry

Korea International Trade Association

Membrane Society of Korea

Korea Industrial Technology Association

Korea Productivity Center

Korea-Japan Economic Association

Korean Society for Composite Materials

Korean Society for Quality Management

Korea Management Association Consultants

SETO Forum

Korea Federation of Textile Industries Korea Industrial Safety
Association

Green Company

Japan External Trade Organization

\* The above list is based on key institutions TAK has joined for each industry.

**SOCIAL** 

# TAK's Ethics & Compliance Code of Conduct



### I. Compliance for Safety and Environment

### 1. Establish a Safe Working Environment

- To maintain safe facilities, work environments, and procedures, and to protect the safety and health of oneself and colleagues, we must comply with relevant laws and regulations as well as internal company rules, and continuously pursue proactive safety activities with the goal of zero accidents.
- To ensure our mental health, managers and employees must communicate closely and strive to foster a bright and healthy workplace culture.

#### 2. Global Environmental Conservation

- Recognizing that preserving the global environment in an improved state is our duty, we must comply with environmental, disaster prevention, and chemical substance laws and regulations, as well as relevant internal company rules.
- We must strive to minimize the burden our corporate activities and products and services place on the global environment while working to conserve biodiversity and promote sustainable use.

### II. Compliance for Quality

#### 1. Provide Products That Are Safe and Meet Customer Needs

We must comply with safety-related laws and regulations and ensure safety
in accordance with the spirit of those laws to continuously provide highquality products that are safe and meet customer needs. We must also
accurately identify customer needs and design, manufacture, and provide
products accordingly. If any issues arise, we must respond promptly.

### 2. Appropriate Quality Data Management

**ENVIRONMENTAL** 

 To consistently fulfill commitments to customers, quality data must be acquired, stored, and verified as promised, and necessary data must be accurately communicated to customers. We will never tolerate any falsification or manipulation of quality data at the company level.

# TAK's Ethics & Compliance Code of Conduct

### III. Compliance for Human Rights

### 1. Respect for Employees' Dignity and Individuality

- The dignity of all employees must be respected; unjust harassment or discrimination is prohibited.
- The privacy of each employee must be respected, and when handling personal information, careful and meticulous attention must be paid, and efforts must be made to manage it appropriately.

#### 2. Prohibition of Harassment and Discrimination

 We will never tolerate any form of harassment or discrimination, including sexual harassment, harassment related to pregnancy or childbirth, or workplace harassment.

### 3. Respect for the Human Rights of All Stakeholders

 We must respect international human rights norms and act in accordance with the 'Toray Group Human Rights Policy' to prevent any involvement in human rights violations.

### IV. Compliance for Fair Corporate Activities

### 1. Fair Competition

- In activities such as purchasing, sales, development, and production, we must not engage
  in any collaborative acts through unfair competitive means like cartels, unfair treatment of
  customers, suppliers, or business partners, or any other acts violating antitrust laws in each
  country.
- All forms of bribery, including giving or receiving bribes to or from domestic or foreign
  public officials and business partners, as well as other corrupt practices, are prohibited.
  When making political contributions or donations, we must strictly adhere to laws,
  regulations, and internal company rules.
- The quality, performance, price, etc., of products or services must be appropriately labeled, and any labeling that could mislead business partners or users is prohibited.

### 2. Proper Transactions and Asset Management

- All transactions, including deliveries, sales, and expense payments, must be conducted appropriately in accordance with laws and accounting rules.
- Company assets, such as inventory and fixed assets, must be properly managed, used, and preserved for business purposes.

### 3. Proper Import/Export Management and Security Trade Control

 When purchasing, importing, and exporting products, services, equipment, materials, and samples, or providing technology to foreign countries, we must comply with relevant local laws and regulations in accordance with our internal rules and implement proper import/export management and security trade control to avoid violating UN or U.S. sanctions among others.

#### 4. Compliance with Other Laws and Regulations

- We must recognize that violating laws and regulations damages our credibility and comply with all applicable laws and regulations. For example, strict compliance with the following laws and regulations is strongly required:
- Prohibition of insider trading Blocking relationships with antisocial forces Prohibition of conflicts of interest

### V, Compliance for Intellectual Property Rights

### 1. Respect for Others' Intellectual Property Rights

 We must not only avoid intentionally infringing on others' intellectual property rights but also exercise sufficient caution to prevent infringement due to negligence, such as insufficient research.

### VI. Compliance for Information

### 1. Information Management

- Confidential information, whether ours or others', obtained through business activities
  must not be used for other purposes, disclosed, or shown to third parties, both during and
  after employment.
- When handling personal information in the course of business, it must be handled carefully and appropriately in accordance with our Privacy Policy.

### 2. Appropriate Information Disclosure

**ENVIRONMENTAL** 

 We must strictly adhere to statutory disclosure requirements and promote information disclosure in accordance with disclosure principles to ensure fair, timely, and appropriate information disclosure.

# Responsible Minerals Sourcing Policy

### 1. Purpose

Toray Advanced Materials Korea has established the 'Responsible Minerals Sourcing Policy' to procure minerals in a sustainable and ethical manner and to establish responsible sourcing practices throughout the supply chain. This policy prohibits the use of conflict minerals, which have served as a funding source for conflict and high-risk regions, and minerals whose extraction raises human rights and environmental issues. It expresses our commitment to using only responsible minerals extracted in a manner that respects human rights and protects the environment, and aims to present the principles and management measures to realize this commitment.

#### 2. Definition of Terms

'Conflict minerals' refers to tin, tantalum, tungsten, and gold (3TG), which are minerals produced in conflict regions (such as 10 African countries) or high-risk areas that cause negative impacts on human rights and the environment.

'Responsible minerals' refers to minerals mined in a manner that eliminates illegal activities, such as human rights violations and environmental destruction, that may occur during mining, and fulfills social responsibilities.

### 3. Responsibilities and Roles

We establish a 'Responsible Minerals Sourcing Policy' and management procedures based on the 'OECD Due Diligence Guidance for Responsible Business Conduct', and conduct risk management and improvement activities targeting the supply chain. We also provide sustainable 'CSR Procurement Action Guidelines' to our partners and encourage their adherence.

### 4. Management Approach

To ensure responsible resource procurement considering human rights protection and conflict risks, building a responsible mineral supply chain has been made mandatory, based on the five-step process outlined in the 'OECD Due Diligence Guidance'. TAK manages its mineral sourcing to comply with this due diligence guidance as follows:

- Establish a responsible sourcing policy and clearly communicate it to the supply chain.
   Establish a system to manage risks associated with minerals mined in conflict or high-risk areas.
- 2) Identify and assess potential risks arising from mineral mining, trading, or export from conflict or high-risk areas.
- 3) Develop and implement strategies to address identified risks, monitor implementation outcomes, and continuously improve the management system.
- 4) Require third-party certification for smelters within the supply chain located in conflict or high-risk areas, and conduct third-party audits based on supplier risk when necessary.
- 5) Publicly report due diligence results and activities through the Sustainability Committee, and include relevant information in the Sustainability Report.

#### 5. TAK's Commitment

TAK continuously manages conflict minerals such as tin, tantalum, tungsten, and gold, as well as key responsible minerals such as cobalt; monitors its suppliers' responsible mineral sourcing practices and continuously strives to ensure that its suppliers' business partners also implement policies to avoid conflict minerals and expand the implementation of socially responsible mineral sourcing policies.

**SOCIAL** 

# **GRI Standards 2021**

GRI 1 : Foundation 2021	Description	Toray Advanced Materials Korea reports performance data for the period from January 2024 to December 2024, based on the amended GRI Standards 2021. Some performance data are for the period from April 2024 to March 2025 (17th term).
GRI 1 used GRI 1 : Foundation		GRI 1 : Foundation 2021
	Applicable GRI Sector Standards	Reporting is possible only after the standards for the chemicals sector TAK belongs to are released.

GRI Standards		Disclosure No. & Indicators	Page	Remarks
GRI 2: General Disclosures 2021	2-1	Organizational details	5	
	2-2	Entities included in the organization's sustainability reporting	6	
	2-3	Reporting period, frequency and contact point	52	
	2-4	Restatements of information	39~41	
	2-5	External assurance	51, 52	
	2-6	Activities, value chain and other business relationships	5, 28, 39~41	
	2-7	Employees	5, 40	
	2-8	Workers who are not employees	40	
	2-9	Governance structure and composition	35	
	2-10	Nomination and selection of the highest governance body	-	Confidential information
	2-11	Chair of the highest governance body	-	Confidential information
	2-12	Role of the highest governance body in overseeing the management of impacts	35	
	2-13	Delegation of responsibility for managing impacts	35	
	2-14	Role of the highest governance body in sustainability reporting	35	
	2-15	Conflicts of interest	-	Incomplete information
	2-16	Communication of critical concerns	35	
	2-17	Collective knowledge of the highest governance body	-	Incomplete information
	2-18	Evaluation of the performance of the highest governance body	-	Confidential information
	2-19	Remuneration policies	-	Confidential information
	2-20	Process to determine remuneration	-	Confidential information
	2-21	Annual total compensation ratio	-	Confidential information

GRI Standards		Disclosure No. & Indicators	Page	Remarks
	2-22	Statement on sustainable development strategy	8~12	
	2-23	Policy commitments	21, 24, 28, 36	
	2-24	Embedding policy commitments	21, 24, 28, 36	
	2-25	Processes to remediate negative impacts	35, 36	
	2-26	Mechanisms for seeking advice and raising concerns	35, 37	
	2-27	Compliance with laws and regulations	37	
	2-28	Membership associations	43	
	2-29	Approach to stakeholder engagement	26	
	2-30	Collective bargaining agreements	26	
GRI 3: Material	3-1	Process to determine material topics	50	
Topics 2021	3-2	List of material topics	50	
	3-3	Management of material topics	8~12	
GRI201: Economic	201-1	Direct economic value generated and distributed	-	Incomplete information
Performance	201-2	Financial implications and other risks and opportunities due to climate change	9	
	201-3	Defined benefit plan obligations and other retirement plans	-	Audit report
	201-4	Financial assistance received from government	-	Audit report
GRI 205: Anti-corruption	205-1	Operations assessed for risks related to corruption	-	Incomplete information
Anti corruption	205-2	Communication and training about anti-corruption policies and procedures	37	
	205-3	Confirmed incidents of corruption and actions taken	-	N/A
GRI 206: Anti-competitive behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices Legal action	-	N/A
* Not listed: GRI 2	02 GRI 2	03 GRI 204 GRI 207 (incomplete information)		

**OVERVIEW** 

# **GRI Standards 2021**

GRI Standards	Disclosure No. & Indicators	Page	Remarks
GRI 302: Energy	302-1 Energy consumption within the organization	39	
Lifergy	302-2 Energy consumption outside of the organization	-	Incomplete information
	302-3 Energy intensity	39	
	302-4 Reduction of energy consumption	15	
	302-5 Reductions in energy requirements of products and services	-	Incomplete information
GRI 303: Water and	303-1 Interactions with water as a shared resource	17	
Effluents	303-2 Management of water discharge-related impacts	17, 39	
	303-3 Water withdrawal	39	
	303-4 Water discharge	39	
	303-5 Water consumption	39	
GRI 305: GHG Emissions	305-1 Direct (Scope 1) GHG emissions	39	
GI IG ETTISSIOTIS	305-2 Energy indirect (Scope 2) GHG emissions	39	
	305-3 Other indirect (Scope 3) GHG emissions	-	Incomplete information
	305-4 GHG emissions intensity	39	
	305-5 Reduction of GHG emissions	16	
	305-6 Emissions of ozone-depleting substances (ODS)	39	
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	39	
GRI 306: Waste	306-1 Waste generation and significant waste-related impacts	19	
waste	306-2 Management of significant waste-related impacts	19	
	306-3 Waste generated	39	
	306-4 Waste diverted from disposal	39	
	306-5 Waste directed to disposal	39	
GRI 308: Supplier	308-1 New suppliers that were screened using environmental criteria	-	Incomplete information
Environmental Assessment	308-2 Negative environmental impacts in the supply chain and actions taken	-	Incomplete information
GRI 401: Employment	401-1 New employee hires and employee turnover	22, 40	
Employment	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	27, 40	
	401-3 Parental leave	27, 40	

GRI Standards		Disclosure No. & Indicators	Page	Remarks
GRI 402: Labor/Managemen t Relations	402-1	Minimum notice periods regarding operational changes	26	Notice pursuant to the collective agreement
GRI 403: Occupational	403-1	Occupational health and safety management system	24, 25, 42	
Health and Safety	403-2	Hazard identification, risk assessment, and incident investigation	24, 25, 42	
	403-3	Occupational health services	24, 25, 42	
	403-4	Worker participation, consultation, and communication on occupational health and safety	24, 25, 42	
	403-5	Worker training on occupational health and safety	24, 25, 42	
	403-6	Promotion of worker health	24, 25, 42	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	24, 25, 42	
	403-8	Workers covered by an occupational health and safety management system	24, 25, 42	
	403-9	Work-related injuries	25, 40, 42	
	403-10	Work-related ill health	25, 42	
GRI 404:	404-1	Average hours of training per year per employee	23, 41	
Training and Education	404-2	Programs for upgrading employee skills and transition assistance programs	23, 41	
	404-3	Percentage of employees receiving regular performance and career development reviews	23, 41	
GRI 405: Diversity and Equal	405-1	Diversity of governance bodies and employees	22, 40	
Opportunity	405-2	Ratio of basic salary and remuneration of women to men	40	
GRI 407: Freedom of Association and Collective Bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk Supplier	-	N/A
GRI 413: Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	-	N/A
	413-2	Operations with significant actual and potential negative impacts on local communities $$	-	N/A
GRI 414: Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	-	N/A
300lai /33033118110	414-2	Negative social impacts in the supply chain and actions taken	-	N/A
GRI 416: Customer Health	416-1	Assessment of the health and safety impacts of product and service categories $$	30, 31	
and Safety	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	30, 31	

Not listed: GRI 301, GRI 406, GRI 410 (incomplete information)
 CRI 304, GRI 409, GRI 410, GRI 411, GRI 415, GRI 417

GRI 304, GRI 408, GRI 409, GRI 411, GRI 415, GRI 417, GRI 418 (N/A)

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# SASB Standards

In 2011, the Sustainability Accounting Standards Board (SASB) developed standards for each industry to help businesses disclose their sustainability information that is financially significant and useful for decision making. Toray Advanced Materials Korea prepares sustainability reports according to the SASB standards (chemicals), and share them with its stakeholders.

Topic	SASB code	Accounting metric	Metrictype	Page		
Sustainability Disclo	Sustainability Disclosure Topics & Metrics					
	RT-CH-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	39		
GHG emissions	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		16		
Air quality	RT-CH-120a.1	Air emissions of the following pollutants: (1) NOX (excluding N2O) (2) SOX (3) Volatile organic compounds (VOCs) (4) Hazardous air pollutants (HAPs)	Quantitative	39		
Energy management	RT-CH-130a.1	<ul><li>(1) Total energy consumed</li><li>(2) Percentage grid electricity</li><li>(3) percentage renewable</li><li>(4) total self-generated energy</li></ul>	Quantitative	39		
	RT-CH-140a.1	(1) Total water withdrawn (2) Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	39		
Water Management	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	39		
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion/a nalysis	17		
Hazardous waste management	RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	Quantitative	39		
Community relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	Discussion/a nalysis	32		

Topic	SASB code	Accounting metric	Metric type	Page
Workforce	RT-CH-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	40
health and safety	RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Discussion/a nalysis	24, 25
Product design for use-phase efficiency	RT-CH-410a.1	Revenue from products designed for use phase resource efficiency	Quantitative	Unreported
Safety & environmental stewardship of chemicals	RT-CH-410b.1	(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 (2) Percentage of such products that have undergone a hazard assessment	) Quantitative	Unreported
CHETHICAIS	RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	: Discussion/a nalysis	18
Genetically modified organisms	RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Quantitative	N/A
Management of the legal and 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	Discussion/a nalysis	18
Operational safety, emergency preparedness	RT-CH-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Quantitative	Unreported
and response	RT-CH-540a.2	Number of transport incidents	Quantitative	N/A
Activity Metrics				
	RT-CH-000.A	Production by reportable segment	Quantitative	Unreported

# **Materiality Assessment**

To achieve sustainability management, Toray Advanced Materials Korea has identified material ESG issues and set 17 ESG key indexes. We also conducted a materiality assessment for operational departments based on 'financial materiality' and 'environmental and social materiality', and as a result, we selected 17 key ESG indexes as material issues, consistent with the previous year. Based on these material issues, we have established a total of 118 focus ESG metrics as sub-indexes, and through this report, we are transparently disclosing our major ESG performance.

### Materiality Assessment Process

### 01 Pool Material Issues

- Benchmark excellent ESG companies and industry peers as well as ESG-related global initiatives (UN-SDGs, GRI, SASB, etc.)
- Create a pool of material issues to promote ESG management

### 02 Identify Key Indexes

- Identify key indexes from material issues based on Toray Group's ESG Guidelines and our business status
- Identify sub-indexes for each key index

### 03 Select Kev ESG Indexes

- Analyze 'Financial Materiality' and 'Environmental and Social Materiality' 1) Financial Materiality
  - : Factors affecting a company's financial performance or sustainability
  - 2) Environmental and Social Materiality : The impact of corporate activities on the environment and society

### 04 Conduct Internal Expert Assurance

- Top management assurance
- Index review by working group
- Assurance by ÉSG management office

### Materiality Assessment for Key Indexes

Topic	KeyIndex	GRI Standards 2021	Financial Materiality Average	Environmental and Social Materiality Average	Priority	Report page
	(1) Energy Management	GRI 302: Energy	3.9	4.6	High	15
	(2) GHG Emissions	GRI 305 : GHG Emissions	3.8	4.8	High	16
Environmental	(3) Water Resource Management	GRI 303: Water and Effluents	3.7	4.3	Medium	17
	(4) Pollution Prevention & Chemicals Management	GRI 306 : Waste, GRI 403 : Occupational Health and Safety	3.8	4.6	High	18
	(5) Waste Management	GRI 306: Waste	3.7	4.7	Medium	19
	(6) Human Rights	GRI 401: Employment, GRI 404: Training and Education	3.2	4.4	Medium	21
	(7) Diversity and Equal Opportunity	GRI 405: Diversity and Equal Opportunity	3.2	4.3	Medium	22
	(8) Talent Acquisition and Development	GRI 401: Employment, GRI 404: Training and Education	4.3	3.9	Medium	23
	(9) Occupational Safety and Health, Health Improvement	GRI 403: Occupational Health and Safety	3.9	4.6	High	24, 25
Social	(10) Stakeholder Engagement	GRI 407: Freedom of Association and Collective Bargaining, GRI 413: Local Communities	3.8	4.1	Medium	26
	(11) Work-life Balance	GRI 401: Employment, GRI 403: Occupational Health and Safety	3.4	4.3	Medium	27
	(12) Supply Chain Management	GRI 308: Supplier Environmental Assessment, GRI 414: Supplier Social Assessment	4.0	4.1	Medium	28
	(13) Product Quality and Safety	GRI 416: Customer Health and Safety	4.4	4.6	High	30
	(14) Corporate Social Responsibility	GRI 413: Local Communities	3.0	4.2	Medium	31~33
Governance	(15) Corporate Governance	GRI 2-1~18: Governance	3.6	4.1	Medium	35
Corporate	(16) Risk Management	Non-GRI	4.4	4.3	High	36
Governance	(17) Compliance, Anti-corruption and Bribery	GRI 205: Anti-corruption, GRI 206: Anti-competitive behavior	4.3	4.6	High	37

# **GHG Verification Report**

To readers of Toray Advanced Materials Korea Sustainability Report

### Introduction

BSI Group Korea has verified TAK's greenhouse gas emissions for 2024 as follows.

### Scope

Direct GHG emissions (Scope 1) and indirect GHG emissions (Scope 2) of Korean operations in  $2024\,$ 

### **Verification Data**

The GHG emissions corresponding to direct emissions (Scope 1) and indirect emissions (Scope 2) for the year 2024 are as follows.

[Unit: tCO<sub>2</sub>-eq]

Site	Scope 1 emissions	Scope 2 emissions	Total emissions for 2024
Gumi Plant 1	37,514	336,898	374,413
Gumi Plant 2	52	4,806	4,858
Gumi Plant 3	74,151	105,649	179,800
Gumi Plant 4	14,055	38,570	52,625
Gumi Plant 5	0	12,464	12,464
Gunsan Plant	18,250	36,283	54,533
Ulsan Plant	0	1,427	1,427
R&D Center	239	1,248	1,488
Anseong Plant	0	4,467	4,467
Yugu Plant	1	671	673
Yeongnam Office	0	10	10
Total	144,262	542,493	686,758

X GHG emissions are rounded down to the nearest whole number.



### **GHG-related Standards and Guidelines Used for Verification**

At the request of TAK, verification was performed using the following standards and guidelines.

- Guidelines on Reporting and Verification of Greenhouse Gas Emissions under the Greenhouse Gas Emissions Trading Scheme
- Greenhouse Gas Emission Calculation Plan Reviewed and Approved by the Ministry of Environment
- ISO14064-1: 2018 and ISO 14064-3: 2019

### **Verification Opinion**

BSI Group Korea's verification opinion on the outcome of the verification conducted in accordance with the above greenhouse gas standards and quidelines is as follows.

- The assurance level for this verification is 'reasonable assurance', guaranteeing that risks are below a threshold throughout the verification process.
- No material issues were identified during the verification process regarding the calculation of greenhouse gas emissions, and no evidence was found indicating that related activity data and supporting documentation were not managed appropriately. However, due to the inherent limitations of verification, there is an unavoidable risk that material errors could exist without being detected.
- The 2024 GHG emissions were calculated in accordance with the verification criteria and were appropriately calculated and reported below the materiality assessment threshold. Accordingly, the BSI Group Korea verification team provides a verification opinion that is "Appropriate."

For and on behalf of BSI: Issue: 26/03/2025

**ENVIRONMENTAL** 

Managing Director Korea, SeongHwan Lim



# Independent Assurance Statement

### To readers of 2025 Toray Advanced Materials Korea Sustainability Report

#### Introduction

Korea Management Registrar (KMR) was engaged to conduct an independent assurance of 2025 Toray Advanced Materials Korea Sustainability Report for the year ending December 31, 2024. The preparation, information and internal control of the report are the sole responsibility of Toray Advanced Materials Korea's the management. KMR's responsibility is to comply with the agreed engagement and express an opinion to Toray Advanced Materials Korea's management

### Subject Matter

The reporting boundaries included the performance and activities of sustainability-related organizations as described in Toray Advanced Materials Korea's report:

- 2025 Toray Advanced Materials Korea Sustainability Report

#### Reference Standard

- GRI Standards 2021: 2023 (GRI)

#### Assurance criteria

KMR applied the quality management system in accordance with ISO 17029 and KMR EDV 01, and carried out the verification in accordance with the assurance criteria of AA1000AS v3 and KMR's proprietary SRV1000. Under AA1000AS v3, we assessed the adherence to the four principles presented in AA1000AP:2018—Inclusivity, Materiality, Responsiveness, and Impact—and evaluated the reliability and quality of the data and information using. Under SRV1000, we conducted a multidimensional review aimed at zero data errors, applying expert judgment to determine the materiality criteria.

- ISO 17029: 2019, ISO 14065: 2020, AA1000AS v3: 2020 (AccountAbility), AA1000AP: 2018 (AccountAbility), SRV1000: 2022 (KMR), KMR EDV 01: 2024 (KMR)
- Levels of assurance/materiality: AA1000AS v3 Type 2/moderate, limited/ not set

### Scope of assurance

The information subject to verification in the sustainability report is as follows...

- GRI Standards 2021 reporting principles
- Universal Standards
- Topic Specific Standards
  - GRI 205 : Anti-Corruption
  - GRI 206: Anti-Competitive Behavior
  - GRI 302 : Energy
  - GRI 303 : Water and Effluents
  - GRI 305 : Emissions
  - GRI 306: Waste
  - GRI 308: Supplier Environmental Assessment

- GRI 401 : Employment
- GRI 403: Occupational Health and Safety
- GRI 404: Training and Education
- GRI 405: Diversity and Equal Opportunity
- GRI 407: Freedom of Association and Collective Bargaining
- GRI 413: Local Communities
- GRI 416: Customer Health and Safety

#### KMR's Approach

Our Assurance Team undertook the following activities for the agreed scope of assurance using the standard outlined above:

- Conducting inquiries to understand the data management and control environment, processes, and information systems (the effectiveness of controls was not tested);
- Evaluating the appropriateness and consistency of the methodology for estimation (note that the underlying data was not tested and KMR has not made any estimates);
- Visiting the headquarters, determining visit sites based on the site's contribution to sustainability and the possibility of unexpected changes since the previous period and sampling data, and carrying out due diligence on a limited number of source records at the sites visited;
- Interviewing people in charge of preparing the report;

**ENVIRONMENTAL** 

- Considering whether the presentation and disclosures of sustainability information are accurate and clearly defined;
- Identifying errors through comparison and check against underlying information, recalculation, analyses, and backtracking; and
- Evaluating the reliability and balance of information based on independent external sources, public databases, and press releases.

#### Limitations and Recommendations

The absence of generally accepted reporting frameworks or well-established practices on which to draw to evaluate and measure non-financial information allows for different measures and measuring techniques, which can affect comparability between entities. Therefore, our assurance team relied on professional judgment. In a limited assurance engagement, the scope of the risk assessment procedures and the subsequent procedures performed in response to the assessed risks are limited than in a reasonable assurance engagement. Our assurance team conducted our work to a limited extent through inquiries, analysis, and limited sampling based on the assumption that the data and information provided by Toray Advanced Materials Korea are complete and sufficient. To overcome these limitations, we confirmed the quality and reliability of the information by referring to independent external sources and public databases, such as DART and the National GHGs Management System (NGMS).

# Independent Assurance Statement

### Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with Toray Advanced Materials Korea on the revision of the Report. We reviewed the Report's final version in order to make sure that our recommendations for improvement and revision have been reflected. We found that the report was prepared in accordance with the criteria presented by Toray Advanced Materials Korea, and nothing comes to our attention to suggest that the evidence obtained regarding its content is insufficient to provide a basis for our opinion. Our opinion on the principles is as follows:

#### Inclusivity

Toray Advanced Materials Korea has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

### Materiality

Toray Advanced Materials Korea has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

### Responsiveness

Toray Advanced Materials Korea prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of Toray Advanced Materials Korea's actions.

### Impact

Toray Advanced Materials Korea identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

### Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of sustainability performance data, including economic, environmental, and social performance data. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

### KMR's Competence, Independence, and Quality Control

Korea Management Registrar (KMR) is a verification body for the Republic of Korea Emissions Trading Scheme (K-ETS), accredited to ISO/IEC 17029:2019 (Conformity Assessment - General principles and requirements for validation and verification bodies), ISO 14067, the additional accreditation criteria ISO 14065, and ISO/IEC 17021:2015 (Requirements for bodies providing audit and certification of management systems). Additionally, KMR maintains a comprehensive quality control system that includes documented policies and procedures of the KMR EDV 01:2024 (ESG Disclosure Assurance System) based on ISO/IEC 17029 requirements and compliant with IAASB ISQM1:2022 (International Standard on Quality Management 1 by the International Auditing and Assurance Standards Board). Furthermore, KMR adheres to the ethical requirements of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior in accordance with the IESBA Code:2023 (International Code of Ethics for Professional Accountants). Our assurance team consists of sustainability experts. Other than providing an independent assurance, KMR has no other contract with Toray Advanced Materials Korea and did not provide any services to Toray Advanced Materials Korea that could compromise the independence of our work.

#### Limitations of Use

This assurance statement is made solely for the management of Toray Advanced Materials Korea for the purpose of enhancing an understanding of the organization's sustainability performance and activities. We assume no liability or responsibility for its use by third parties other than the management of Toray Advanced Materials Korea. As this assurance statement may be subject to revision after the assurance date below, we recommend verifying whether this is the latest version.

September, 2025







E. J Havay

# About this report

### Report Overview

Toray Advanced Materials Korea has published the 「2025 Sustainability Report」 in order to inform stakeholders of various management activities for sustainable growth and to transparently disclose the results of ESG management activities. We published our first Sustainability Report in 2022 and have since published a Sustainability Report every year. (4th edition in 2025)

### | Reporting Period and Scope

This report covers sustainability management activities and achievements from January 1 to December 31, 2024. Some indexes and metrics include data from different reporting periods due to reasons such as legal disclosures, regulatory agency reporting, or Toray (Japan) reporting cycles. Quantitative performance data includes the most recent three-year period (2022–2024) to enable year-over-year trend comparisons. The report also covers environmental, social, and governance performance across all of our operations, including ones in Seoul and Gumi.

### Items with different reporting periods

ltem	Index	Reporting period	Remarks
Water Resource Management	Water withdrawal, water reduction		Based on Toray report
Corporate Social Responsibility	Donation amount	2024.04.01 ~ 2025.03.31 (17th term)	Based on audit report
Governance	All indexes		Based on fiscal year

### | Reporting Principles

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021, and under the global initiatives (GRI, SASB, TCFD, UN-SDGs) and the K-ESG guidelines jointly proposed by relevant departments of the Ministry of Trade, Industry, and Energy for balanced and transparent disclosure. To ensure the reliability of the report's preparation process and the information presented, a third-party verification was conducted by an independent certification body, the Korea Management Certification.

### | Preparation of Report (Published in: September 2025)

- Team in Charge: ESG Office (Corporate Strategic Planning Team)
- Inquiries on this Report: <a href="https://www.torayamk.com">www.torayamk.com</a> [Contact Us]
- Working Group

Key Index	Department
Energy Management	Energy Planning part
GHG Emissions	Energy Planning part
Water Resource Management	Environment and Safety team
Pollution Prevention & Chemicals Management	Environment and Safety team
Waste Management	Environment and Safety team
Human Rights	HR Planning team
Diversity and Equal Opportunity	HR Planning team
Talent Acquisition and Development	Talent Development team
Occupational Safety and Health, Health Improvement	Environment and Safety team
Stakeholder Engagement	Labor Relation team
Work-life Balance	HR Planning team
Supply Chain Management	Purchase Planning
Product Quality and Safety	Quality Planning team
Corporate Social Responsibility	Communication team
Corporate Governance	Corporate Strategic Planning team
Risk Management	Corporate Strategic Planning team, Information Strategy team
Compliance, Anti-corruption and Bribery	Legal & Compliance team, Security Trade Control team, Purchase Planning team

<sup>\*</sup> The illustrations in this report are the winners of TAK's 'ESG Painting Contest with Your Child' held in 2025.



Toray Advanced Materials Korea Inc.