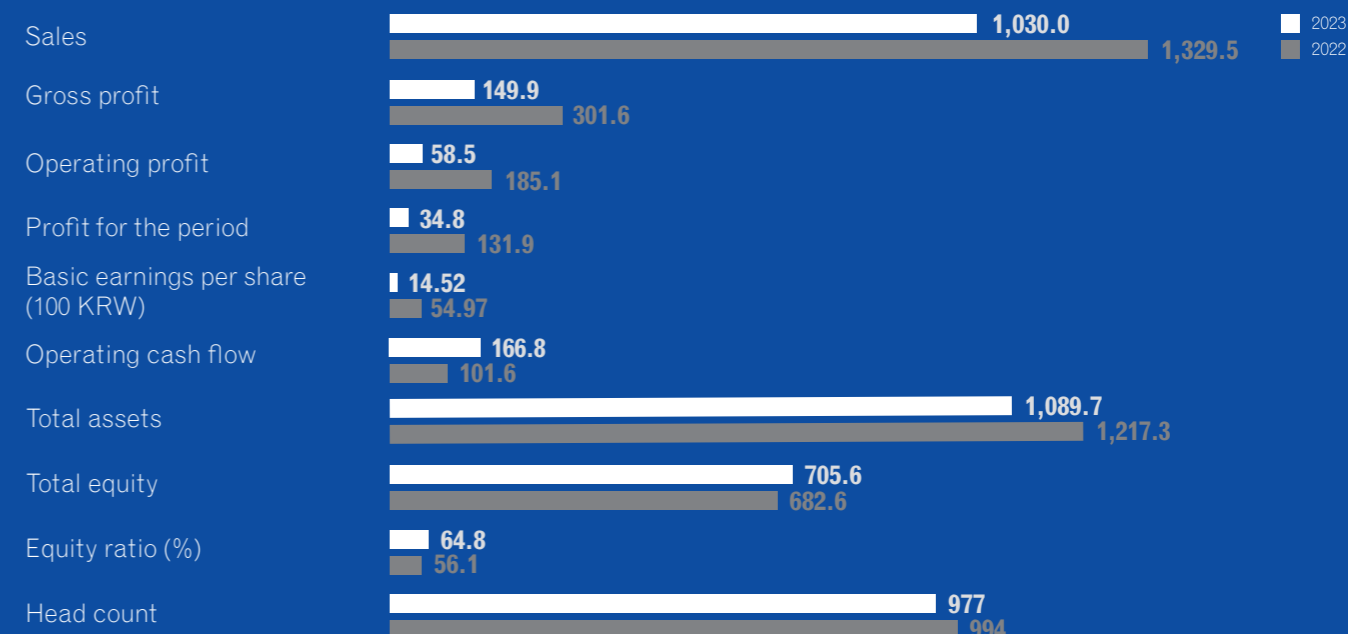


ANNUAL REPORT 2023

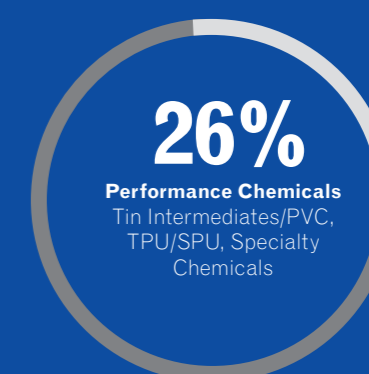
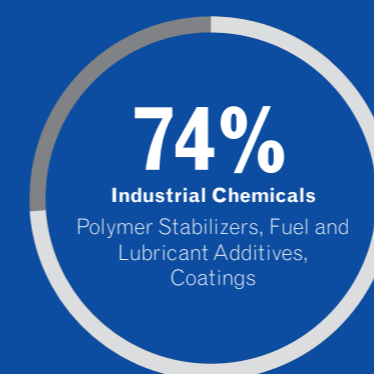
It's all about **the chemistry®**

2023 over- view

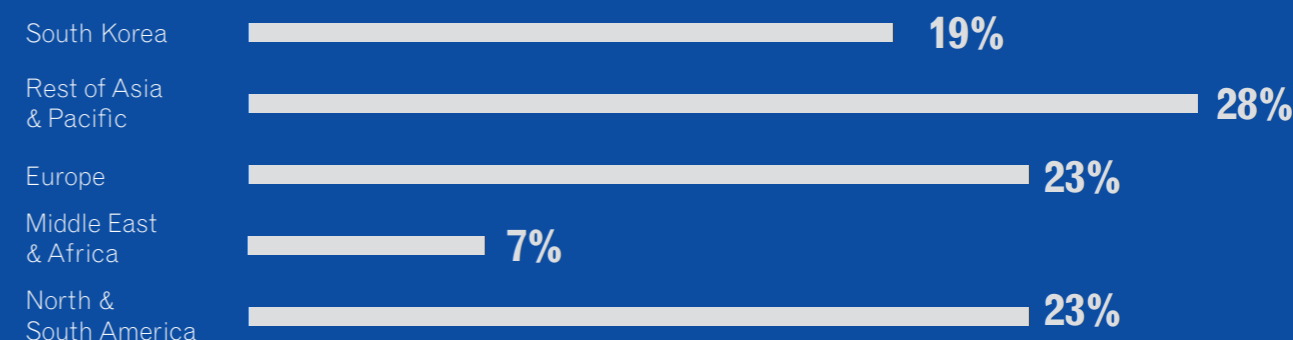
KEY FINANCIAL DATA 2023 (in Billion KRW)



SALES BY REPORTING SEGMENT



SALES BY REGION



SONGWON INDUSTRIAL GROUP OVERVIEW

35

Nationalities

112

Total female employees
worldwide

64.8

Equity ratio (%)

89

New talents added
to the global team

58.5

Billion KRW
Operating profit

34.8

Billion KRW
Profit for the year

246

Employees working
20+ years

1,452

KRW Basis earnings
per share

700.6

Direct energy
consumption
(TJ)

1,089.7

Billion KRW
Total assets

977

Total head count

149.9

Billion KRW
Gross profit

0.07

(%) Total case
accident rate (TCAR)

705.6

Billion KRW
Total equity

8

Manufacturing
plants



Letter to shareholders

In 2023, SONGWON achieved sales of 1,029,975 Million KRW (FY2022: 1,329,509 Million KRW) and reported a gross profit margin of 14.6%, -8.1%-points lower than the gross profit margin in the full year 2022 (FY2022: 22.7%). The Group's net profit for FY2023 amounted to 34,847 Million KRW.

EXEMPLARY RESILIENCE

Dear Shareholders,

Looking back over the year, the demanding global landscape not only highlighted SONGWON's strength as a leading industry player but also our capacity to navigate the current hurdles, reliably serve our customers and drive our sustainability efforts. Although 2023 was challenging and once again called for uncompromising responsiveness and adaptability, SONGWON has demonstrated exemplary resilience.

In 2023, SONGWON generated 1,029,975 Million KRW in sales.

Throughout 2023, significant shifts in macroeconomic and geopolitical dynamics, alongside increasing competitive pressure and volatile market demand behavior, have tested our operational efficiency. At the beginning of the year, the high demand-driven market situation we observed during 2022 weakened substantially and economic recovery in China was slower than expected. Furthermore, although supply chain conditions have stabilized since the pandemic, political tensions impacting logistics resulted in higher costs and brought an additional level of complexity.

Despite the unpredictable environment and substantial challenges, SONGWON's businesses showed resilience and performed as expected throughout the year, supported by our skilled global team and the valuable synergy across the organization.

Low industry demand impacted some of SONGWON's businesses more than others, particularly in market regions marked by fierce price competition. By exercising financial prudence, making key investments as well as implementing appropriate strategic actions across SONGWON's business units, we safeguarded our market share.

With over 58 successful years in the industry, SONGWON is accustomed to challenges. Over time, we have mastered the skills needed to stay competitive and react promptly to market fluctuations.

SONGWON has been in the industry for 58 years and is accustomed to challenges. Over time, we have mastered the skills needed to stay competitive and react promptly to fluctuations in demand. The fundamental pillars of our business are steadfast and strong. During the year, we focused on driving our strategy, seeking the most favorable competitive opportunities to enhance SONGWON's market share.

The fundamental pillars of our business are steadfast and strong.

In 2023, we remained dedicated to advancing our technology leadership and to expanding our pipeline with new product developments. This year, we registered 12 new products and 26 products are currently in the scale-up phase. Additionally, we broadened our comprehensive expertise and service strength, to deliver enhanced value to our stakeholders.

This year, we registered 12 new products and 26 products are currently in the scale-up phase.

We have always endeavored to stay close to our customers, especially in times of uncertainty. This has been a key contributor to our success. Furthermore, through collaborative relationships, we can understand and address evolving customer needs and achieve mutual success. Consequently, each of our businesses communicated more regularly and proactively fostered stronger relationships with our customers and partners across the value chain.

Recognizing the advantage of collaboration, we continued to boost our partnerships with distributors and logistics service providers. The insights they provide regarding business trends, regulatory changes and regional demand forecasts have become increasingly invaluable to us. Additionally, we also engaged with industry peers and our teams participated in key trade shows, conferences and industry associations.

This enabled us to stay up-to-date on developments in the market, making it possible for us to adapt as

necessary, implement improvements and swiftly respond to customers' needs. This served to strengthen SONGWON's reputation as a reliable partner and also advance our goal of being the preferred supplier in the industries we serve.

We are proud of the reputation we have built for consistently delivering high-quality products, service and support.

At SONGWON, we are proud of the reputation we have built for consistently delivering high-quality products, service and support. In today's markets, changes are happening at an accelerated pace. Customers demand increased flexibility, more advanced solutions and more comprehensive services. Therefore, ensuring ongoing improvement, streamlining our processes and maintaining the quality of products and services at the levels our customers have come to expect from SONGWON is crucial to our success.

We successfully implemented our new ERP system Dynamics 365 at all SONGWON's global locations.

We successfully implemented our new ERP system Dynamics 365 at all SONGWON's global locations. This enabled the QA team to now put together all relevant quality data and processes for fully integrated company-wide quality management with enhanced controls, processes and continuous quality trend monitoring.

Our competitive edge is secured through operational excellence. Therefore, SONGWON's operational framework emphasizes customer-centricity, efficiency, growth and most importantly, maintains transparency. In response to the dynamic regulatory environment, we keep a close eye on developments and are committed to responding accordingly to ensure that SONGWON remains compliant and fulfills its obligations. For us, maintaining a strong, accountable organization goes hand in hand with meeting stakeholder needs and achieving SONGWON's long-term goals.

In relation to sustainability, SONGWON can report another successful year of progress towards our sustainability goals. We are honored and very proud to be EcoVadis Gold rated and placed among the top 5% of sustainable companies assessed by EcoVadis worldwide.

Our EcoVadis rating reflects our strong commitment to sustainability.

Sustainability is not just an aspect of our business strategy; it is a strategic driver that sits at the center of everything we do. It shapes our approach to conducting business, recognizing that our responsibilities extend to a wide range of stakeholders. To honor these commitments, we strive to achieve a good balance between environmental stewardship, social progress, ethical business practices and economic success. This approach ensures that while we pursue our business objectives, we also contribute positively to society and the planet, reflecting our core belief that sustainable practices are essential for long-term success.

Aligned with the 17 United Nations Sustainable Development Goals, SONGWON's sustainability strategy outlines our commitment to acting on the sustainability challenges affecting our industry and our business, prioritizing where we can make the biggest difference. This year, we increased the number of selected key performance indicators (KPIs) in the report from 7 to the current 61 and the scope of data this year included 50 KPIs collected globally and 11 collected at the Korean sites. These were externally assured by the British Standards Institution (BSI) in accordance with ISAE 3000.

In our ongoing pursuit of sustainable practices and dedication to the principles of Environmental, Social, and Governance (ESG), we introduced a robust ESG framework.

This year, in our ongoing pursuit of sustainable practices and dedication to the principles of Environmental, Social, and Governance (ESG), we introduced a robust ESG framework. SONGWON's 3 key ESG policies (available on our website) underpin our proactive approach towards

integrating sustainability into all facets of our operations. Furthermore, SONGWON is on course to meet the Korean government's goal of an 11.4% reduction of CO2 emissions in the chemical industry by 2030. In addition to this, we have also set our own goal of achieving net zero by 2050 and subsequently established a dedicated Sustainability Team and a Net-Zero Roadmap.

We have also set our own goal of achieving net zero by 2050 and subsequently established a dedicated Sustainability Team and a Net-Zero Roadmap.

In the past 12 months, we have faced many challenges but we have continued to make solid progress. Our industry experience, broad portfolio, commitment to customers and dedicated employees have ensured that SONGWON has stayed competitive and well-positioned to meet the ever-increasing market demands, particularly for greater sustainability.

Going forward, we will closely monitor global developments, focus on achieving higher efficiencies, further advance our strategy and sustainability efforts and adapt to changes. By doing so, we are confident that SONGWON can continue to create lasting value for all of its stakeholders and support a circular economy.

On behalf of the Board of Directors, the Executive Committee and SONGWON's team worldwide, we thank you, our shareholders for your valuable trust, sustained confidence and continued support. ■



Jongho Park
Group CEO

BOARD OF DIRECTORS

SONGWON Industrial Group



Dongbek Park
1944 - Korean
Chairman of the Board



Jongho Park
1973 - Korean
Executive Board Member



Hans-Peter Wüest
1961 - Swiss
Executive Board Member



Choung-Sik Kim
1957 - Korean
Executive Board Member

EXECUTIVE COMMITTEE

SONGWON Industrial Group



Jongho Park
Chief Executive Officer



Hans-Peter Wüest
Chief Financial Officer



Hans Werhonig
Leader Group Commercial



Byungsoo Boo
Leader Operations

SHARE PRICE DEVELOPMENT

Similar end to a challenging year

On December 31st, SONGWON ended the year 2023 with a market cap of 393 Billion KRW (stock price level of 16,360 KRW). Compared to the market cap level achieved at the year-end 2022 (stock price level of 17,200 KRW), this marked a loss of 4.9%. In contrast, during FY2023, the Korea Composite Stock Price Index (KOSPI)¹ increased its index level at the year-end by 19.3% to 2,655 from its level of 2,226 on the first trading day in 2023.

Driven by significant events, the prevailing global economic volatility and deep uncertainty across the financial markets, already evident in 2022, persisted throughout FY2023. For example, the collapse² of several U.S. small-to-mid-sized banks and high interest rates maintained by the U.S. Federal Reserve³ as it continued its tightening monetary policy during the year. Additionally, the ongoing Russia-Ukraine war and conflicts in various other regions further contributed to the prevailing sense of unease in 2023.

SONGWON's share price started the year strongly, gaining 9.7% in January. In the 2nd week in March, it climbed to reach the price of 20,300 KRW per share, accounting for 487 Billion KRW in terms of market cap. However, as the diminished demand across the industry continued to impact SONGWON's performance, the share price fell to trade at 16,960 KRW on May 10th. During 1HY 2023, SONGWON's market cap increased by 17.7% while KOSPI gained by 14.7%.

In mid-June 2023, SONGWON's share price bounced back, rising from 16,550 KRW on June 1st to a high of 21,200 KRW by June 16th. In the final 6 months of the year, SONGWON's share price traded within a similar range as in 2HY 2022, fluctuating between 16,000 KRW and 21,000 KRW in 2HY 2023.

In the final quarter of 2023, the lowest stock price was 15,940 KRW (October 10th) and the highest price per share stood at 20,450 KRW (December 20th). During 2HY 2023, SONGWON's market cap decreased by 19.1% while KOSPI decreased its index level by 3.5% during the period.

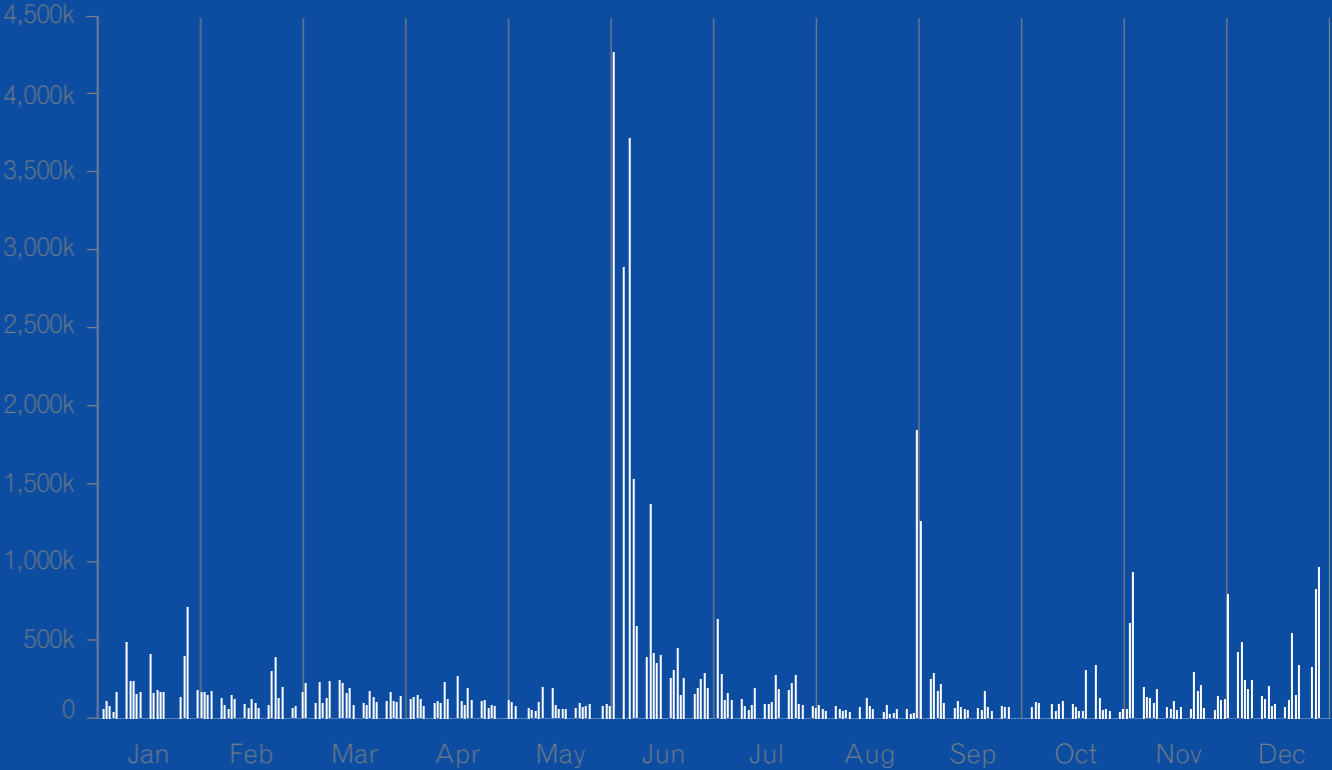
Sources:
1 www.bloomberg.com
2 www.reuters.com/
3 www.federalreserve.gov/

Despite the challenging, highly uncertain environment and the headwinds facing the industry, SONGWON remained focused on prudent cost management, disciplined capital allocation and adopted appropriate measures to ensure its operations and businesses could effectively adapt to the dynamic market conditions. Confident in the resilience of its business model and committed to delivering on its financial priorities, SONGWON is well-placed to materialize opportunities and continue to deliver solid performance for both its customers and investors. ■

SONGWON share price 2023



SONGWON share volume 2023



Ticker:	KOSE: A004430	Share price (31.12.2023):	16,360 KRW
Stock exchange:	Korea	52-week high:	21,700 KRW
Listed since:	1977	52-week low:	15,200 KRW
Shares outstanding:	24 million	Free float:	64.36%
Market capitalization: (Million KRW)	392,640	Dividend per share (2023): (100% of nominal share value)	500 KRW

2023 Highlights

R&D

12 new products were registered
47 new products have been developed
26 products are in scale-up
79 % scale-up success ratio achieved
53 patents are currently held by SONGWON

COLLABORATION

Expanded SONGWON's global network with 2 new distributors
Extended partnership with 2 distributors
Added 11 new suppliers to SONGWON's supply chain

CORPORATE

Introduced a robust ESG framework
ERP system Dynamics 365 implemented at all SONGWON's global locations

PRODUCTION

Increased efficiency with more plant automation
Added new equipment to support recycling
Installed new technology to reduce CO2 emissions

SUSTAINABILITY

Established a dedicated Sustainability Team & a Net-Zero Roadmap
61 KPIs assured by the British Standards Institution (BSI) based on ISAE 3000
Increased percentage of hazardous waste recycled in 2023 by 25.11%
Increased waste water recycling by 31.6%

TABLE OF CONTENTS

	Key Financial Data 2023	02
	Group Overview	04
	Letter to Shareholders	06
	SONGWON's Leadership	10
	Share Price Development	12
	Highlights 2023	14
01	ABOUT SONGWON	
	Company Profile	20
	Group Structure	22
	Global Locations	24
	Product Groups & Brands	26
	Value Creation	29
	SONGWON focuses on	30
02	BUSINESS REPORT	
	Market, Risks & Opportunities	34
	Sales & Division Updates	37
	Customer Service (CS)	40
	Procurement	42
	Supply Chain	44
	Research & Development (R&D)	46
	TAD & Technical Service	48
	Manufacturing	50
	Quality Assurance (QA)	53
	Regulatory Affairs	55
	Our People	57
03	SUSTAINABILITY REPORT	
	Sustainability Statement	64
	About the Sustainability Report 2023	65
	Approach to ESG & Value Creation	69
	Environment, Society, Governance	74
	Appendix	98
	GRI Content Index	102
	Independent Assurance Report	106
04	CORPORATE GOVERNANCE	
	Corporate Governance	114
05	FINANCIAL STATEMENTS	
	Table of contents	123
	Introduction to the consolidated financial statements	124
	Independent auditor's report	125
	Consolidated statements of financial position	128
	Consolidated statements of comprehensive income	130
	Consolidated statements of changes in equity	132
	Consolidated statements of cash flows	134
	Memberships	218
	About this report	219
	Forward-looking statements	220
	Contacts	221



01

ABOUT SONGWON

Company Profile	20
Group Structure	22
Global Locations	24
Product Groups & Brands	26
Value Creation	29
SONGWON focuses on	30

COMPANY PROFILE

SONGWON is a global leader in the development, manufacture and supply of specialty chemicals and the 2nd largest producer of polymer stabilizers in the world. Founded in 1965 and headquartered in Ulsan, South Korea, SONGWON has group companies operating all over the world and provides the globally beneficial advantage of readily accessible local operations that offer valuable local insight. SONGWON's diverse team of dedicated and experienced professionals works with customers and other industry experts to develop and deliver customized, application-specific chemical products for a wide variety of sectors and industries.

SONGWON continues to successfully strengthen its global foothold, particularly in emerging markets through its proprietary technologies and sound economics. With its wholly-owned subsidiaries and 1 joint venture, the organization is well-positioned to continue its steady course of international expansion.

Information on SONGWON's 58-year history can be found on the company website:
www.songwon.com/company/history

We
stand
for

ENTREPRENEURSHIP

Each of us truly lives SONGWON's entrepreneurial spirit, focusing on facts and figures. We stick to what we promise and transform innovative ideas to create additional benefit for our stakeholders.

COLLABORATION

We see ourselves as an extended team that is always within reach for our stakeholders to support, providing expertise and creating value added solutions.

EXCELLENCE

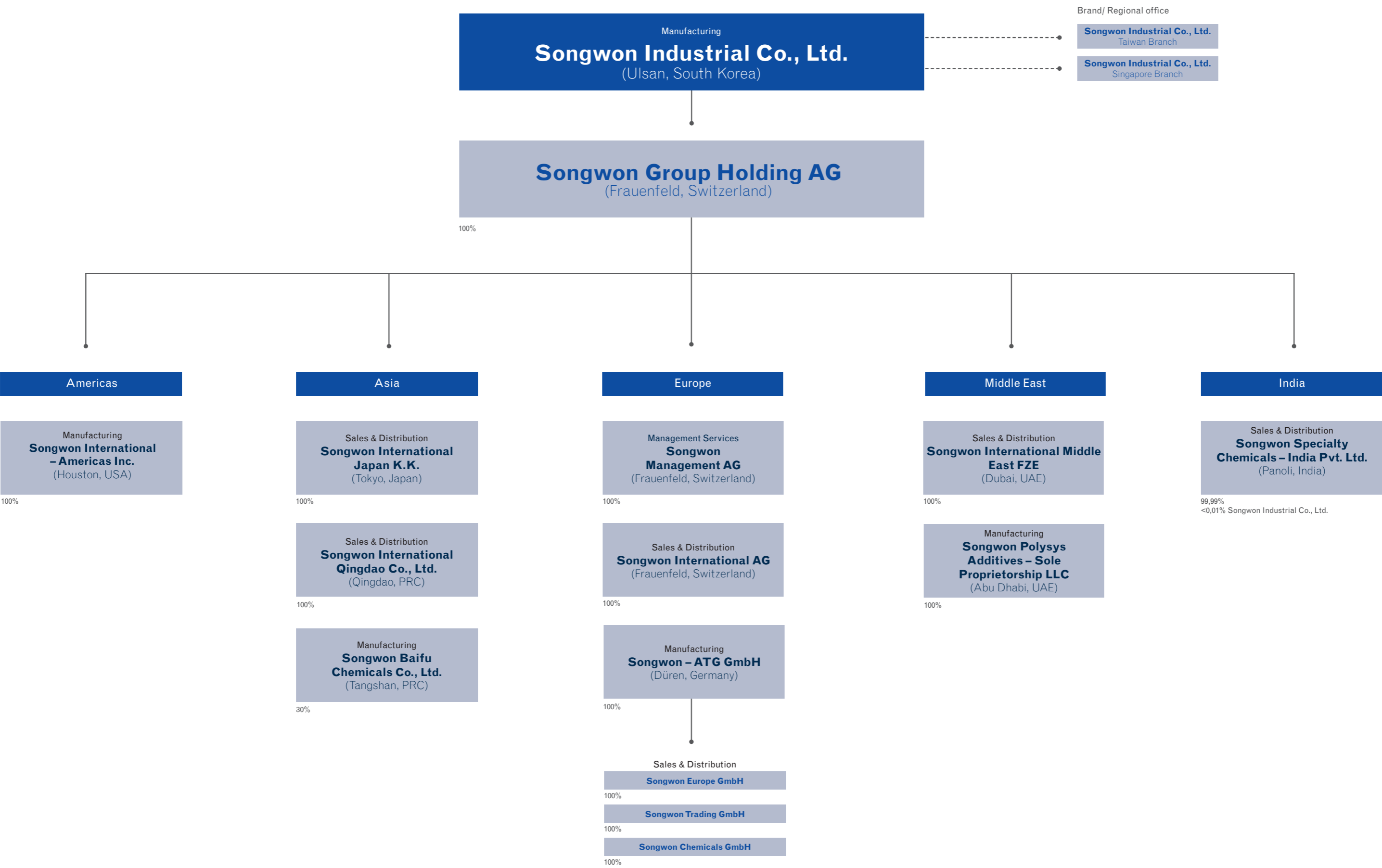
We understand the needs of the markets, seeking areas of improvement and applying our experience to generate sustainable value to our stakeholders.

VALUE IN PEOPLE

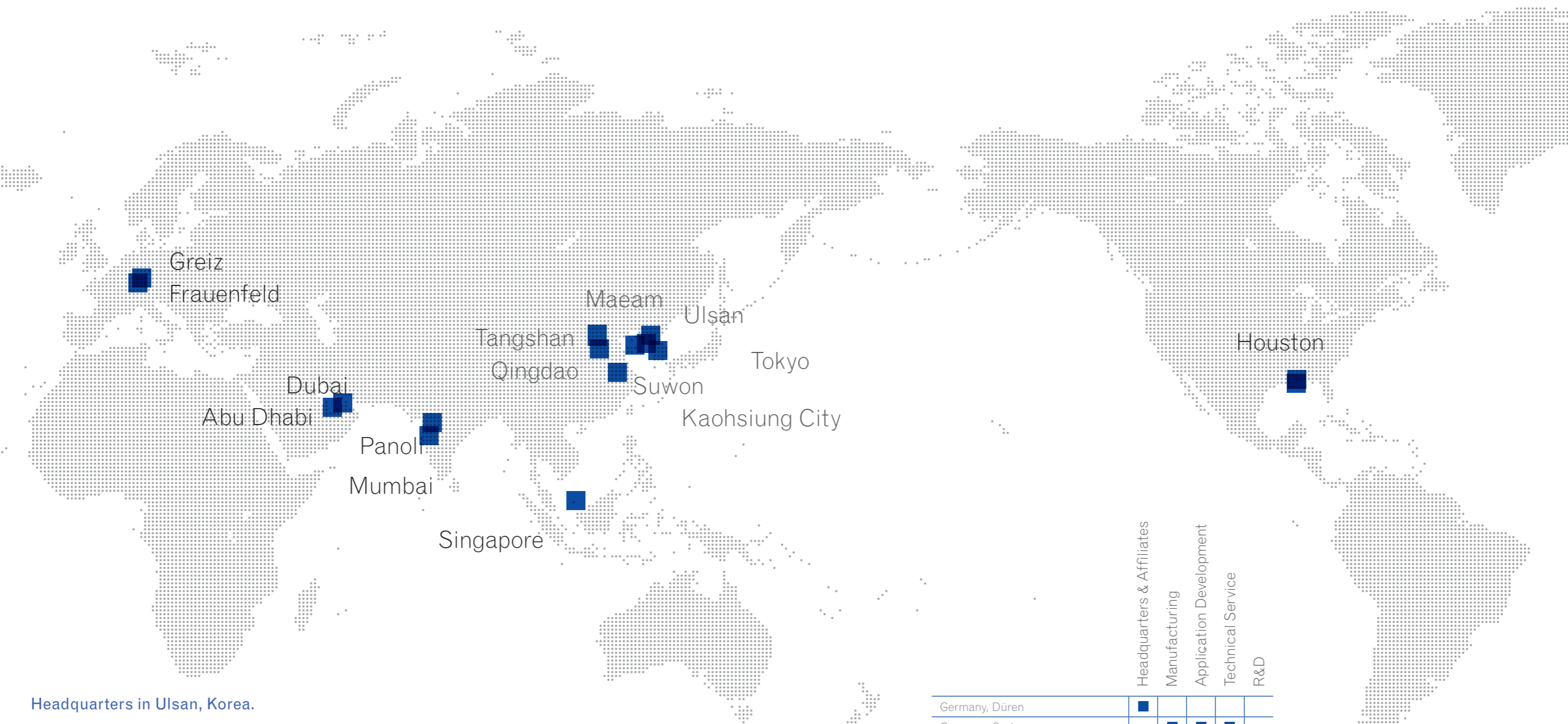
We are a committed team driven and dedicated to advancing our customers' interests. Our people, products and processes bear the hallmark of SONGWON's reliability, trust and confidence in the future.

GROUP STRUCTURE

as of December 31st, 2023



GLOBAL LOCATIONS



Headquarters in Ulsan, Korea.

14 Group companies, 1 joint venture and 2 representative offices, located in 10 different countries on 3 continents.

8 manufacturing facilities (incl. joint venture), 3 of which are located in Korea and the others in Germany, USA, India, UAE and China

A worldwide network of sales offices, distributors, customer service and logistic hubs and warehouses.

	Headquarters & Affiliates	Manufacturing	Application Development	Technical Service	R&D
Germany, Düren	■				
Germany, Greiz		■	■	■	
India, Mumbai				■	
India, Panoli	■	■			
Japan, Tokyo	■			■	
PR China, Qingdao	■			■	
PR China, Tangshan	■	■			
Republic of Singapore, Singapore	■				
South Korea, Maeam		■	■	■	■
South Korea, Suwon		■		■	
South Korea, Ulsan	■	■		■	
Switzerland, Frauenfeld	■			■	
Taiwan, Kaohsiung City	■				
UAE, Abu Dhabi	■	■			
UAE, Dubai	■			■	
USA, Houston	■	■		■	

PRODUCT GROUPS

Customized, high-performance solutions

As a specialty chemicals leader, SONGWON offers a broad portfolio of high-performance, market-oriented products to the industry. SONGWON's products are the result of 58 years of industry experience, the latest technologies and customer collaboration combined with SONGWON's long tradition of innovation. Each is designed to add value and fulfill even the most demanding application criteria while providing our diverse customer base with a competitive advantage.

Knowing that the requirements and conditions of each of our markets are ever-changing, we regularly engage with our customers throughout the world in order to develop solutions that not only match their needs but exceed their expectations. One of the key elements in the management's global strategy is making sure that SONGWON is technologically up-to-date and well-equipped to provide customers with the most suitable solutions for their unique application areas.

SONGWON's products have been organized into 6 main groups:

- Polymer Stabilizers
- Fuel and Lubricant Additives
- Coatings
- TPU/SPU
- Tin Intermediates/PVC
- Specialty Chemicals

POLYMER STABILIZERS – protect during manufacture & use

SONGWON offers a comprehensive range of processing, heat and light stabilizers, in a variety of blends and physical forms, facilitate handling and application use and protect polymers from heat and light degradation. These include antioxidants, hindered amine light stabilizers, UV absorbers and One Pack Systems. During processing, they ensure that plastic

end products retain their mechanical and physical properties while in use and also prolong their lifespan.

FUEL AND LUBRICANT ADDITIVES – prolong product life cycles & improve performance

SONGWON has an extensive portfolio of aminic, phenolic, phosphite and thioester antioxidants especially for lubricants used in automotive and industrial applications as well as for fuels (incl. biofuels). Antioxidants retard oil oxidation by reacting with and stabilizing free radicals or decomposing hydroperoxides which extends the oil's life and enhances both its efficiency and performance.

COATINGS – ensure long protection & durability

From liquid forms to powder to synergistic mixtures for the most demanding uses and applications, SONGWON's Performance Additives protect against thermal and light degradation. SONGWON also offers antioxidants (primary, secondary and thioesters), hindered amine light stabilizers, UV absorbers and synergistic blends of our products to ensure maximized performance across various sectors such as automotive, industrial etc.

TPU/SPU – offer customization & good physical properties

SONGWON provides customized polyurethane products to various industries such as coating resins for cable and synthetic leather for clothing/shoes, adhesives and ink binders for flexible packaging, protection films for mobile phones. TPU in particular offers good physical abrasion resistance and can be used to blend other resins (e.g., PVC etc.) to improve their properties.

TIN INTERMEDIATES/PVC – provide flexibility & quality

SONGWON's high-quality Tin Intermediates and Catalysts are especially developed for use in esterification processes and glass coatings. Our PVC stabilizer range now includes the new Calcium Organic stabilizer family and each one can be adapted to specific customer requirements. In addition to several products for PVC applications (e.g., pipes, cables, films, flooring, automotive interior parts etc.), SONGWON also has a broad range of plasticizers.

SPECIALTY CHEMICALS – deliver innovation & improve performance

By identifying opportunities for creating new electronics, functional monomers and flame retardants in cooperation with customers, SONGWON can meet the constant innovation that these markets demand.

SONGWON's electronic chemical products are designed mainly for KrF, ArF and EUV* photoresists used in the production of semiconductors.

Functional Monomers add extra benefits to polymers which significantly improve physico-chemical properties and performance.

*krypton fluoride, argon fluoride and extreme ultraviolet

SONGWON OFFERS ONE OF THE INDUSTRY'S BROADEST PORTFOLIOS FOR A WIDE RANGE OF APPLICATIONS.

	Adhesives & Sealants		Electrical & Electronics
	Agriculture		Fuel & Lubricants
	Automotive		Packaging
	Building & Construction		Textiles & Fibers
	Coatings		Wire & Cables
	Durable & Consumer Goods		...

OUR BRANDS

SONGCAT™

Organo-Tin Intermediates

SONGXTEND®

Stabilizer Solutions

SONGSTAR™

Polyester Diols

SONGCURE®

Photoinitiators

SONGSORB®

Light Stabilizers

SONGNOX®

Stabilizers & OPS Blends

SONGSTOMER™

TPU Grades

SONGSTAB™

PVC Stabilizers

SONGFLAME®

Flame Retardants





© Registered trademarks of Songwon Industrial Co., Ltd. ™Trademarks of Songwon Industrial Co., Ltd.

All of SONGWON's trademarks and product line brand names used in conjunction with SONGWON's business operations are registered (®) with the U.S. Patent and Trademark Office and registered or subject to pending trademark applications (™) with the registries of many foreign countries and/or are protected by common law.

Accordingly, SONGWON intends to keep its filings current and seek protection for new trademarks or product names on a country-by-country basis consistent with its business needs. All other trademarks, service marks, logos and trade names referenced in any of SONGWON's material are the property of their respective owners.

VALUE CREATION





Our inputs

<p>People</p>  <p>977 employees 35 nationalities 100% commitment</p>	<p>Manufacturing</p>  <p>8 world-class facilities Fully back integrated Leading-edge technologies</p>	<p>Innovation</p>  <p>Technology Innovation Center Dedicated application labs 47 products under development 58 years of industry experience</p>	<p>Financial</p>  <p>Total assets 1,089.7 Billion K</p>
--	---	---	---

Our business

360° high-performance solutions	Fully compliant & regulatory support
2 main reporting segments	Reliable on-time supply
Comprehensive customer support	Strong global distributor network
9 Technical Service Centers	Culture of innovation & responsibility
Sustainable supply chain	Customers in 60+ countries

Our 2023 outputs

<p>People</p>  <p>89 new talents joined the global team Company-wide synergy strengthened Corporate Values and Leadership Principles maintained worldwide</p>	<p>Manufacturing</p>  <p>LCAs (Life Cycle Assessments) Regular safety trainings & health inspections</p>	<p>Innovation</p>  <p>12 new products registered 47 new products developed</p>	<p>Financial</p>  <p>Total revenues 1,030 Billion KRW Profit for the period 34,847 Million KRW</p>
---	--	--	--

SONGWON FOCUSES ON:



Meeting our customers' current & future needs

Listening closely to and understanding our customers' concerns and needs is our key to reliably providing them with new products and solutions for high-end applications that enhance processing efficiencies and offer them solid ROI.



Expanding & developing our diverse portfolio

Although we already have one of the broadest and most comprehensive product portfolios on the market, we constantly seek to expand our 360° offering by developing the most sustainable, high-performance, top-quality solutions for new markets and applications.



Providing best-in-class & personalized customer support

We take good care of customers and cover all service areas – from customer service to logistics and from technical service to regulatory support, while also placing great importance on compliance issues and using regulatory development to drive our innovation efforts.



Creating value & remaining competitive

By creating sustainable value and achieving economic advantages through proprietary technology, economies of scale and backward integration, we help our customers overcome challenges and gain a competitive edge while successfully retaining our own.



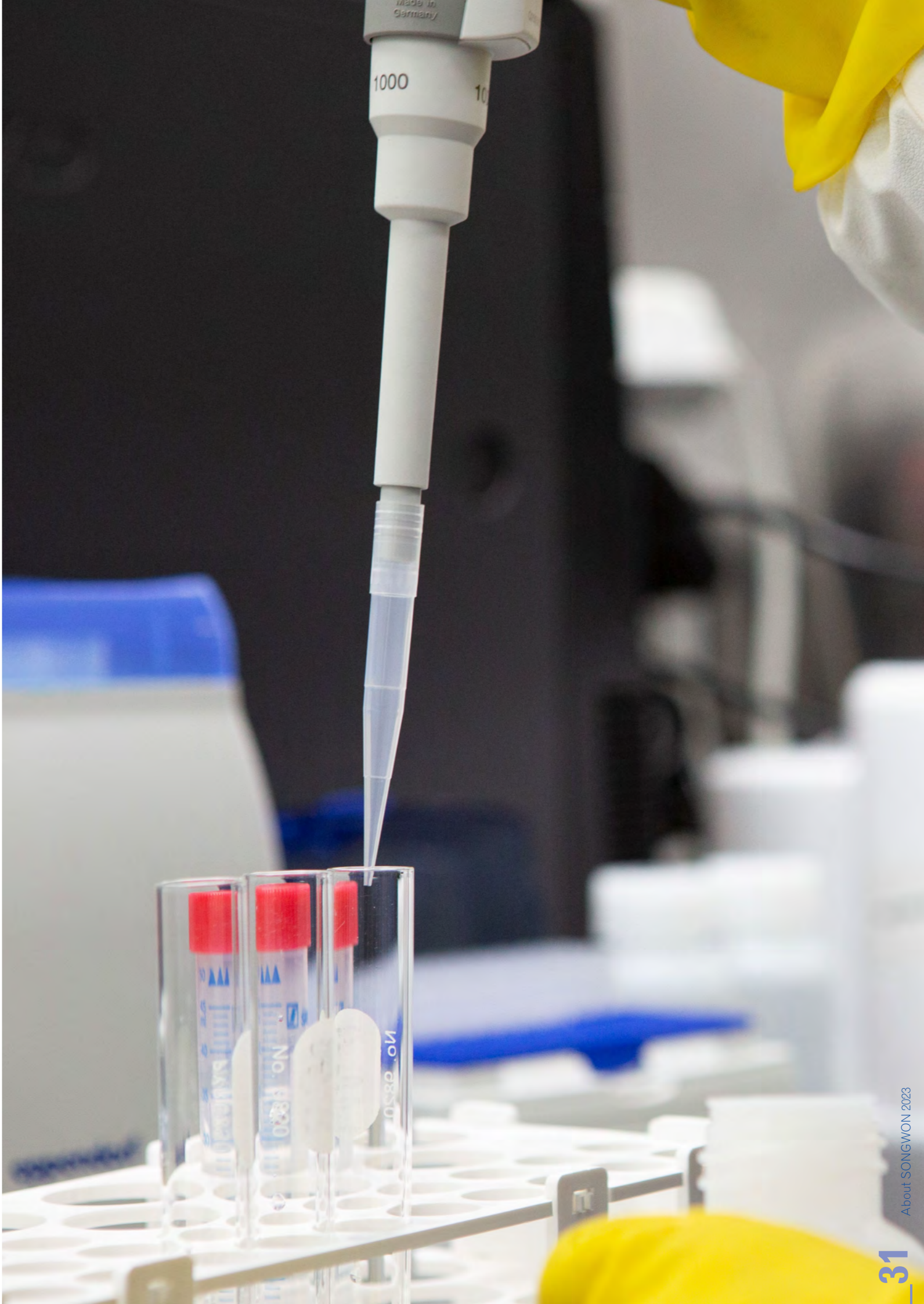
Offering global coverage with local operations

As an industry leader, making sure we are close to our customers is essential to our success. We have state-of-the-art manufacturing facilities in all major regions across the globe and strong local operations. This is how we minimize the risks to our organization, whether from economic volatility, negative currency developments or geopolitical conflicts and how we ensure that we can capitalize on any growth opportunities.



Building our diverse team of professionals

SONGWON's success lies in the hands of a strong, talented group of committed, highly competent experts. We make a point of ensuring that each member of our global team at every level knows that they are SONGWON's true assets and that we aim to provide them with the best and safest working conditions. Continually adding new key talents each year not only strengthens our organization but also improves our already solid EH&S performance.





02

BUSINESS REPORT

Market, Risks & Opportunities	34
Sales & Division Updates	37
Customer Service (CS)	40
Procurement	42
Supply Chain	44
Research & Development (R&D)	46
TAD & Technical Service	48
Manufacturing	50
Quality Assurance (QA)	53
Regulatory Affairs	55
Our People	57

MARKET, RISKS & OPPORTUNITIES

The global landscape

As a global leader, SONGWON aims to achieve strong and sustainable growth to create value for all our shareholders. However, due to the nature of our business activities and the global environment in which we operate, we face a range of risks and uncertainties. Many aspects are outside the scope of our control, including factors like weak demand and intense competition in our markets, persistent volatility in key industries like automotive and construction as well as the political and socio-economic conditions across different regions. Therefore, the robust management of risks and opportunities is fundamental to SONGWON's continued success.

The persistent unpredictability in the global market, characterized by escalating energy and feedstock costs, diminished profit margins and heightened pricing pressure has greatly impacted the chemical industry. In addition, increasingly more stringent regulations, particularly in the specialty chemicals industry, have resulted in a multitude of additional regulatory requirements in the manufacturing, testing and marketing of many products.

Consequently, in this highly complex and changeable business environment, it is crucial for us to identify potential risks early to counteract possible detrimental impacts and mitigate any serious damage to our business. Risks related to economic and in particular, geopolitical instability have the potential to inhibit growth and subsequently affect demand. Although, we cannot prevent this, we must endeavor to ensure that SONGWON is always well-placed to maintain its leading industry position and prevent the disruption of risk to our operations. To achieve this aim, we focus on fortifying our risk management approach, reinforcing our organizational agility and maintaining resilience by remaining flexible and adaptable to changing market conditions.

According to the Organization for Economic Cooperation and Development (OECD), growth in the global economy is expected to remain weak, due to the continued aftereffects of the global pandemic, geopolitical conflicts and increases in the cost of living. Though the monetary policies implemented globally are having an effect, business and consumer confidence have fallen and the rebound in China has slowed. Inflation could remain persistent and further disruptions to the energy and food markets are still possible. The OECD predicts 2.7% global GDP growth, with 2.6% projected headline inflation across G20

advanced economies in 2024. Despite the slow recovery of the Chinese economy, a disproportionate share of global growth in 2024 is expected to continue to come from Asia.

Headline inflation has continued to come down, mainly due to reduced food and energy prices in early 2023. However, core inflation (which excludes the most volatile components of energy and food) has not slowed significantly due to cost pressures and high margins in some sectors. It is projected at 2.8% across G20 advanced economies in 2024, well above central banks' targets. The OECD warns of the key risk of inflation

Chemical industry 2023 challenges:

This year, the chemical industry was subjected to:

- geopolitical risks and economic instability.
- weak demand, overstocking in the value chain.
- intense competition and price correction.
- increasing ESG and sustainability requirements.
- stringent, ever-changing regulatory requirements.
- pressure on recycling and net zero in 2050 targets.
- supply chain and logistics disruption.

not falling as quickly as expected, which could see interest rates remaining higher for longer. The monetary policies put into place have somewhat eased the fear of recession, but some uncertainty about the speed and strength of monetary policy transmission and persistently high inflation remains. Despite the reduction in inflation, interest and mortgage rates have increased, resulting in high borrowing rates that are challenging for businesses and consumers and could lead to continued weak demand.

With the global economy facing additional challenges, including the rapid advancement of technology, protectionism and the effects of climate change, the outlook for the coming year remains uncertain and the risks are significant.

Chemical industry 2023 challenges

The lingering aftereffects of the COVID-19 pandemic as well as the Russia-Ukraine and Middle East conflicts continue to impact global business and intensify the competitive environment. Supply chain and logistics remain affected, making it essential for industry players to seek alternative solutions and implement effective measures to optimize and secure reliable supply chains and delivery to customers.

The chemical industry faces increasing pressure from strengthened ESG and sustainability requirements. As the 3rd largest industry subsector in terms of direct CO2 emissions, the chemical industry has a significant role to play in reaching net zero commitments. Critical to this effort are material efficiency measures such as plastic recycling and reducing single-use plastics. Digitalization remains a key focus for many companies in the chemical industry, particularly in combination with sustainability efforts.

The increasing spectrum of ever more stringent regulatory requirements also poses a significant risk factor for the chemical industry. Chemical companies are not only facing additional requirements for substance registrations and approvals, including classification, labeling, packaging and testing but also continually changing regulations in different countries, such as EU-REACH, K-REACH and Turkey REACH, among many others.

In the coming years, to create an advantage in such a tight, highly competitive environment and maintain one's market position will mean ensuring the best strategic choices are made. For many of the industry's established players, the next few years will be crucial to securing their share of the market. To stay ahead, organizations will have to set clear priorities and become even more focused with their actions. Most importantly, identifying and developing new approaches to how they operate and innovate will be even more essential to success.

Industry trends in 2023

Macroeconomic:

Shrinking demand, overstocked warehouses and rising energy costs were significant challenges for chemical companies in 2023. Due to the rise in inflation and the cost of living, consumers have been forced to cut back on spending. This has led to major inventory overstocks throughout the industry, prompting companies to cut operating rates and improve efficiencies to offset the output reduction.

Environmental:

For the chemical industry, regulatory and sustainability pressure increased again in 2023, making it even more essential for industry players to increase their focus on sustainability targets and ESG goals. Restrictions and bans on single-use plastic continue to be adopted worldwide and recycling rates in the EU are rising. The circular economy also remained at the top of the agenda in 2023 as a major trend. Transparency and traceability are also significant industry trends that are becoming essential differentiators for chemical companies as well as clear stakeholder communication.

Technology:

While digital investments dropped slightly in 2023, due to the slower economy and higher interest rates, this drop is expected to be short-lived. Industry players recognize the pivotal role of technology in aligning market and regulatory conditions with the sustained high quality and performance of products and services. Digital tools are required for demand forecasting, raw material tracing, real-time order tracking and automation of production facilities. The intersection of sustainability and technology continues to feature prominently, e.g., with advances in mechanical recycling and waterborne solutions for coatings.

How SONGWON is responding to these trends.

Macroeconomic:

SONGWON continues to build on its multi-source strategy to secure materials from multiple suppliers and to seek suppliers close to SONGWON's plants to achieve business continuity, avoid disruptions and reduce transport impacts. We also continue to communicate regularly with external stakeholders to better predict market changes, trends, or fluctuations in demand as early as possible. The company is strengthening its risk management by developing robust strategies, with a particular focus on sustainability and regulatory issues. Organizational agility is key to taking swift and decisive actions in response to market changes. These measures are the core pillars of the company strategy to enable us to proactively respond resiliently and agilely to potential challenges in an uncertain environment. For example, in 2023, in response to market dynamics, primarily driven by soaring energy prices that resulted in a notable drop in demand, we endeavored to significantly lower stock levels throughout the value chain.

SALES & DIVISION UPDATES

Environmental:

While sustainability is already an integral part of SONGWON's daily business practices, we continue to focus on making it a key driver of our strategic direction and organizational development. SONGWON also continually monitors upcoming regulatory changes to be prepared for changes and develop replacements for products that may be subject to stricter regulations. We confirm our support for the circular economy, for instance, in the advances made in mechanical recycling. We continue to develop close relationships with stakeholders, to ensure a broad understanding of requirements and a healthy feedback culture. Furthermore, we continue optimizing SONGWON's manufacturing processes, with progressive targets (e.g., for waste management)and impact monitoring.

Technology:

The interface of sustainability and technology is a particular focus for SONGWON, as we must align sustainability, regulatory and ESG requirements with our internal portfolio strategy and company financial targets. For instance, to comply with the upcoming regulatory changes, SONGWON must constantly review its products and production processes, to ensure that changes and replacements are available well in advance of compliance deadlines. The development of sustainable products as an alternative to fossil-fuel-based products is another priority.

SONGWON responded to the ongoing turbulent economic and political global landscape in 2023 with a solid foundation of clear strategic targets to support operational improvements and competitiveness. The groundwork laid in 2022 and previous years has been critical in these efforts. The cumulative effects of past implementation and ongoing efforts underscored SONGWON's commitment to continued improvement and proactive management of market dynamics, risks and opportunities.

We can respond quickly to changing market conditions due to our flat and agile organizational structure, which enables swift and effective internal and external communication of data and information. SONGWON is committed to open and transparent communication with stakeholders, which includes not only the dissemination of information but also the active solicitation of feedback and input from our partners.

SONGWON employs a streamlined approach with efficient processes for market feedback and trend analysis. The close, collaborative relationships with

third parties foster a keen understanding of the industry landscape and enable the identification of emerging opportunities that align with the company's strategic objectives. Our approach also enables us to respond quickly to critical issues that impact both internal operations and the interests of its stakeholders. For example, in 2023, after the robust performance in 2021 and 2022, SONGWON experienced a transition period, due to market dynamics, primarily driven by soaring energy prices that resulted in a notable drop in demand. In response, we endeavored to significantly lower stock levels throughout the value chain.

Looking ahead, we are facing increasingly volatile markets and shifting demand, making it imperative that we ensure continuity of supply, manage the complex sustainability and ESG regulations and support our customers aiming for net zero in 2050. To identify and minimize key risks and capitalize on arising opportunities, we rely on our strong strategic focus, our experience in the chemical industry, our insight and understanding of requirements, clear prioritization and responsible communication with all stakeholders and customers.

This is what our stakeholders expect from us and this is how we ensure that SONGWON continues to deliver solid results that meet our shareholders' expectations. ■

Sources:
www.worldbank.org
www.cefic.org
www.deloitte.com
www.oecd.org
www.iea.org
www.reuters.com
www.maersk.com
www.theeconomist.com
www.carnegieendowment.org

Sales strategy

Customer-focused & effective

Over the years, combining our broad portfolio and services with our customer-focused approach has been pivotal to SONGWON's leadership position and growth in the industry. Nurturing solid, long-lasting relationships with customers based on transparency, respect and trust and most importantly reliably supplying them with high-quality products is fundamental to SONGWON's success. Most importantly, we never forget that our customers always have a choice with whom they do business, which drives us to focus on where they find the greatest value.

A key principle at SONGWON, transparency is a common thread that runs throughout all levels of our organization. Through transparency, we establish an open dialogue with all of our partners (customers, distributors etc.) and this helps us to grow long-term, constructive relationships with them and earn their confidence in SONGWON.

Success in sales means more than just selling products or promoting our services. It requires a thorough understanding of customers' needs and the ability to match these to a specific solution that adds value. We operate in highly competitive markets with multiple suppliers pursuing the same customers and so in 2023, we continued to optimize SONGWON's sales channels, making additional improvements to our service and sales network as well as partnering with strategically placed distributors.

SONGWON expanded its partnership with 2 distributors and added 2 new distributor to the global sales network.

With years of industry expertise and a highly tailored approach, the Sales team gains valuable, insight into the current challenges our customers face so that we can align our offering with the demands of the market. Establishing, clear channels of communication between our sales teams and both internal and external stakeholders improves our responsiveness and adaptability to change. It also ensures that SONGWON can remain agile, competitive and in a position to swiftly respond to market trends.

SONGWON's sales organization is strategically placed worldwide and our global team speaks the language of

our diverse customer base. In this way, we ensure that both our local and international customers receive the best sales support possible. As key contributors to differentiating our place in the market, our locally based sales experts are ideally situated to identify trends in the respective regions quickly and pass on important information to the rest of the business. In times of such uncertainty, this has proven to be more valuable than ever and enabled us to continue to meet market expectations and proactively address customer concerns.

In 2023 our Divisions:

- further extended and leveraged existing customer relationships.
- promoted products together from the different businesses into the same applications.
- reviewed and improved our direct and indirect presence to maximize market impact.
- provided valuable information from successful leads to develop new businesses.
- shared best practices with other functions & benefit from collective expertise.

Our sales organization's activities are guided by the best global and local practices and we make a point of consistently benchmarking SONGWON's approach against key industry players. While assisting customers to remain competitive with the best cost performance, we build on our strengths and challenge the status quo by proactively addressing any concerns customers may have, aiming to exceed not just meet their expectations.

Divisions update

In 2023, SONGWON faced a market landscape that mirrored our expectations with challenges that tested our resilience and adaptability. Despite anticipating many of the hurdles ahead, our Divisions found themselves navigating through a landscape marked by volatility, uncertainty and complexity. In 2023, the global business environment was characterized by a myriad of factors, including the slowdown of the world economy, geopolitical tensions, erratic customer behavior and further exacerbated by a slower-than-expected economic recovery in China. Intense price competition and unpredictable customer order patterns also compounded the complexity have made it less easy to predict market demand or business trends.

As the year progressed, additional challenges emerged, notably the conflict in the Middle East, which disrupted logistics operations and led to rapid price escalations, adding yet another layer of complexity to an already challenging landscape. Throughout the year, these conditions necessitated prompt action and a readiness to adjust our strategies flexibly to adequately respond to the constantly changing dynamics of the market. In this context, our capacity to stay resolute amid challenges and consistently readjust our methods to tackle new obstacles became crucial.

In 2023, SONGWON's Divisions faced:

- ongoing weak demand.
- unpredictable customer order patterns and extended lead times.
- oversupply in the markets and fiercer competition.
- industry-wide price pressures intensified by China's low-price strategy.
- macroeconomic factors impacting sales to certain countries.
- logistics issues leading to a sharp rise in freight shipping costs.
- increasing regulatory compliance complexity and costs.
- higher raw material costs and steep.

Despite the substantial challenges, both of SONGWON's Divisions delivered results in line with expectations. This result underscores the collective dedication of our global teams in actively addressing numerous challenges and in the renowned quality of SONGWON's diverse range of high-performance products. It also further validates the effectiveness of SONGWON's strategic approach and confirms the resilience of our business model. Most of all, this year's performance demonstrates the Divisions' customer commitment as well as their effective responsiveness to the many changes in this volatile environment which has received solid recognition from our customers.

Polymer Stabilizers (PS)

In 2023, against the backdrop of macroeconomic headwinds and geopolitical restrictions, PS faced a new challenge of depressed demand and oversupply, resulting in a shift from a seller's to a buyer's market with a significant drop in prices impacting margin levels.

Additionally, competition intensified as traditional market competitors resolved delivery issues, and new Chinese and Indian players entered the global market.

Throughout the year, to mitigate the poor market situation, the PS team went the "extra mile" to fill the volume gaps with new customers or products. Furthermore, the team was able to positively build on SONGWON's strong reputation in the industry for ensuring security of supply and stable product quality particularly during the pandemic as well as offering local warehousing, highly-skilled customer service and attractive pricing when compared with our traditional market competitors. In addition, by proactively fostering strong customer intimacy, the team successfully attracted several new customers, previously closely aligned with other suppliers and SONGWON has become a new major supplier to some of the industry's biggest players.

In 2023, our Divisions:

- focused on customer-centricity and increasing customer confidence.
- improved SONGWON's responsiveness to sudden changes.
- increased collaboration with customers to gain more insight into their needs.
- expanded SONGWON's reach by further optimizing our global distribution network and strengthening distributor partnerships.
- enhanced our ability to adapt and take advantage of opportunities.
- ensured that SONGWON remained agile, competitive and updated on its markets.
- provided valuable information from successful leads to develop the businesses.
- proactively sought to expand the scope of SONGWON's customer base.
- took advantage of rising opportunities and secured new business.
- reviewed and optimized processes to achieve greater efficiency.

Fuel and Lubricant Additives (FLA)

This year, SONGWON's FLA also encountered a landscape marked by the various challenges facing the industry. Macroeconomic factors such as China's slow recovery, geopolitical restrictions, and increasing cost of living have had a direct impact on confidence

been the case for other members of the supply chain. Additionally, the business noted a significant increase in regulatory evaluations of certain products. Request for Quotations (RFQs) bids and the spot market became more competitive due to the long market conditions and logistics challenges.

FLA's year-end volume is closely aligned with expectations, demonstrating the team's effective planning and execution. While revenue remained consistent with expectations, it was proportionally lower than anticipated due to the incorporation of lower actual costs into the pricing formula mechanism. However, there was a notable upswing in demand observed towards the end of the year, indicating positive momentum for future growth opportunities.

Coatings

This year, Coatings faced challenges primarily stemming from market dynamics, notably an oversupply relative to demand, which combined with declining raw material costs, contributed to price erosion. In addition, the significant drop in demand compared to 2022 was worsened by China's implementation of extremely low pricing as a tactic to address its overcapacities.

In response to the challenges faced in 2023, the Coatings team demonstrated its commitment to the industry by delivering exceptional customer service and conducting thorough demand planning to adapt to evolving market conditions. Necessary price reductions were implemented to a certain extent, ensuring competitiveness while maintaining value for customers. Additionally, proactive efforts were made to drive sales of SONGWON's new triazines, resulting in positive feedback from customers and indicating promising opportunities for growth in the future. Furthermore, the team focused on seeking business opportunities outside SONGWON's existing customer base to expand SONGWON's market reach.

TPU/SPU

For BUTPU/SPU, the challenging landscape marked by economic recession continued to impact customers' operations and competition remained fierce in Korea due to ongoing stagnant demand. Despite these challenges, the business managed to maintain its position in the market on the back of its strategic focus on niche and customized products. Fostering strong relationships with customers and providing advanced solution and stable quality compared to other competitors also supported the BU to protect SONGWON's market share. In 2023, BU TPU/SPU also successfully obtained product approvals from customers, strengthened distributorships in Asia

and actively sought opportunities to capture sales in overseas markets to strengthen the business and extend SONGWON's reach. Throughout the year, TPU suffered from lower demand in Korea. However, SPU noted stable demand not only Korea but also SEA. Over the 12 months, the team's strategic approach demonstrated the BU's commitment to successfully maintaining a strong foothold amid the difficult environment without losing ground to competitors.

Tin Intermediates/PVC

Despite the headwinds in 2023, BU TIN/PVC has demonstrated resilience, maintained its global footprint and continued development, particularly in the PVC sector. Following the strong performance, driven by product shortages and logistical challenges in 2022, this year was impacted by customers' destocking activities, resulting in downward pressure on prices. Additionally, the implementation of China's low-price strategy to offset its oversupply issues further compounded market challenges. Nevertheless, amidst these obstacles, we have managed to expand our reach and successfully penetrate new markets.

By prioritizing the delivery of top-tier products and services and maintaining close relationships with our customers, we have effectively defended our market share amidst intense competition. Tin Intermediates recorded increased turnover on the back of a favorable product mix and the stable price of tin. Despite weak demand and intense competition in the PVC sector during the final quarter, there were signs of a slight improvement, particularly with signs of slow recovery in Korea and strong development in EMEA.

Specialty Chemicals (SC)

BU SC saw the raw materials sector face significant challenges in 2023 as growth noticeably slowed due to various global economic factors. A decline in semiconductor investment and demand, exacerbated by high interest rate policies and significant inventory levels among major manufacturers, presented challenges in attaining actual sales and expanding our operations.

Throughout the year, SC focused on stabilizing the photoresist monomers production process and outlining objectives for advancing process technology. Substantial strides were made in 2023 in process enhancement, quality management and production optimization on the technical front, underlining SONGWON's commitment to innovation and operational excellence. As customers' trust in photoresist monomers continues to grow, reflected by the increasing number of requests received this year, SC is steadily solidifying SONGWON'S reputation as a trusted local leading company in the market. ■

CUSTOMER SERVICE

Putting the customer first

At SONGWON, we never forget that our customers always have a choice. In addition to offering them a broad range of high-quality products, we know that their satisfaction greatly relies on SONGWON's dedicated customer service. Hence, providing customers with the best support possible and doing everything we can to fulfill their needs is a cornerstone of SONGWON's business strategy and furthers our aim to be their partner of choice.

We view every interaction with customers as a chance to surpass expectations and highlight the importance SONGWON places on their ongoing success. Each CS team member is dedicated to being accessible and delivering responsive, professional customer service aligned with SONGWON's values. The team's deep commitment extends beyond the point of sale; SONGWON's CS professionals aim to address any issues during the purchasing process but also throughout the entire duration of the customer's business relationship with us.

After a turbulent 2022, the overall post-pandemic situation (e.g. affecting supply chains, etc.) began to normalize but 2023 still brought challenges. Customers' mid and long-term demand, along with their purchasing behavior, remained unpredictable throughout the year, adding to the complexity of the business landscape. In response, our CS experts continued to direct their efforts toward process improvements and enhanced efficiency in order to shorten reaction times to customer requests and sales orders. In addition, internal trainings related to CS process, IT security, etc. took place. These gave the CS team the chance to advance their skills as well as assess and analyze the effectiveness of established processes.

A central CS aim is the ongoing optimization of our service offering including streamlining processes and activities as well as identifying the areas of greatest value. For example, this year CS contributed to global process alignment in preparation for the Microsoft Dynamics 365 launch. The system will improve operational efficiency and facilitate the delivery of enhanced customer experience.

Amid all the geopolitical and economic uncertainty in 2023, the CS team's proactive service and key support were highly appreciated by customers. In addition to assisting them to effectively plan, the team also helps customers to identify the most optimal solutions for

In 2023, the CS team successfully implemented numerous internal initiatives, including:

- Standard Operating Procedures (SOPs) were globally harmonized to ensure consistently high service quality for our customers across all the entities.
- customer invoice certificates were implemented adding an authentication layer to the invoicing process and strengthening our joint efforts against cybercrime.
- sales order invoices distributed via email were automated expediting delivery, ensuring swift access to essential documents and enhancing customer satisfaction.

their business by closely listening to their needs. Furthermore, the collaborative teamwork culture across the organization empowers the CS team to provide comprehensive guidance and e.g. ensures that lead times align with customers' expectations.

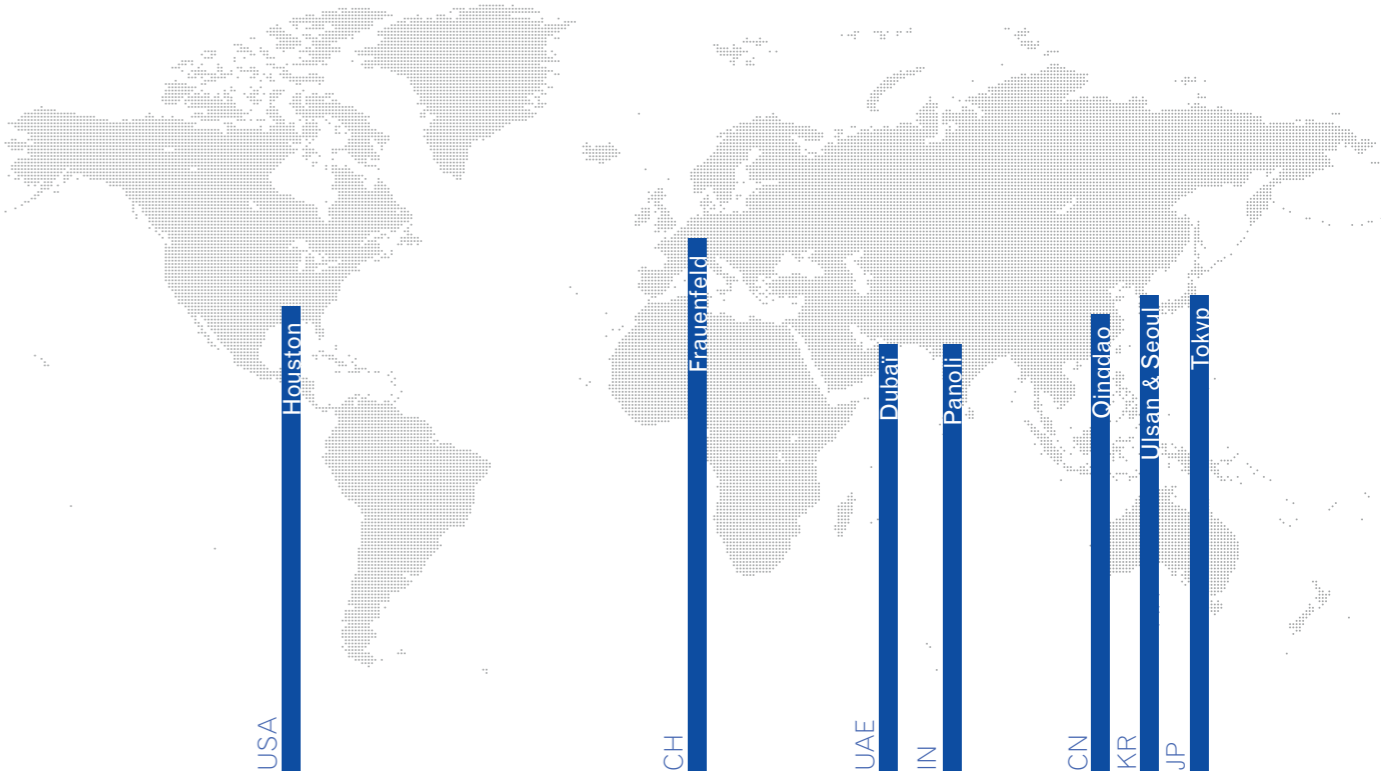
Anticipating customers' challenges and acting in advance to resolve them both quickly and effectively are important elements of good customer service. Furthermore, it makes sure that we stay ahead of the "curve" of industry developments. To support this, SONGWON's management has always fostered good communication throughout the organization and the company's structure facilitates the flow of information. This makes it very easy for the CS team to take advantage of positive synergies between departments which ultimately benefits SONGWON's customers.

With these strong channels of communication in place, the CS team is promptly notified of any delays or unforeseen issues and can provide customers with ample time to consider how they would like to proceed or whether they want to look for an alternative solution. To assess how it is performing and identify areas where both CS and SONGWON can improve, the CS team also makes a point of collecting feedback regularly from both its internal and external stakeholders. By sharing the valuable information it acquires with SONGWON's management and other relevant departments, CS valuably contributes to defining the necessary steps that should be implemented or which processes optimized.

SONGWON provides high-quality service to customers in more than 60 countries from 8 CS centers located across the globe. Having the ability to provide our services from multiple global centers enables us to meet local needs swiftly and effectively. It also makes it possible for us to flexibly shift our support and services to alternative locations if required and ensures that we can promptly navigate any disruptions that might occur.

In the coming year, CS will further improve and harmonize its processes to achieve even more efficiency wherever possible and continue providing the best service it can to SONGWON's customers. Most importantly, by operating in a way that fosters trust and mutual respect, CS will continue to strive to ensure SONGWON remains the partner of choice. ■

To effectively meet local needs, SONGWON applies global and regional best practices from its Customer Service Centers in:



PROCUREMENT

Responsibly sourcing & adding value

A strategic partner to our business, the Global Procurement team holds an essential role in supporting the Group's strategy and goals. Apart from responsibly sourcing raw materials and securing a continual supply for SONGWON's 8 manufacturing plants, Procurement works to mitigate supply risks and ensures that our supply chain is resilient and reliable.

Throughout 2023, Procurement continued to face ongoing challenges from 2022 caused by inflationary pressure and political instability as well as global supply/price volatility. With years of experience and a deep understanding of the value chain and supply markets, SONGWON's Global Procurement team is well-accustomed to managing uncertainty and navigating challenges. Fully aligned with SONGWON's global strategy, the team continued to focus on ensuring that all purchasing criteria needed for the business were met and importantly that the company fulfilled its corporate responsibilities.

In 2023, Procurement faced challenges such as:

- hyperinflation in certain markets.
- high material costs & rising interest rates.
- geopolitical instability & uncertainty e.g., Middle East conflicts, Suez Canal disruption, trade tensions.
- market slowdown & suppliers reducing operations.
- climate change e.g., dropping water levels on major shipping routes.
- increase sustainability emphasis e.g., a demand for more transparency & traceability.
- new laws & standards implemented in various regions.
- digital transformation e.g., streamlining processes, increasing automation & improving data analytics.
- more product documentation requirements.

With SONGWON's effective set of measures and solid contingency plan, we are well-prepared for unexpected challenges. Accordingly, by closely collaborating with our businesses and partners, the team gains beneficial insight and balances the quality of supply and price with effective risk management to achieve the best value. Again, this year, Procurement held regular meetings with the business leaders and product managers to share key information on the raw material market and inbound supply issues such as shutdowns, etc. This enabled the product managers to adjust their approach to fit the current situation.

SONGWON's management has always made sure that all procurement practices not only reflect the organization's vision, values and aims but also that our procurement experts receive the clearest guidance and support so that they can continue to deliver the best value. In 2023, increasing Procurement's competence was fully supported by the management and highly-skilled talent was added to the team.

The ongoing learning and skill-building approach within our Global Procurement organization allows our experts to apply essential out-of-the-box thinking, offer alternative solutions and provide valuable foresight as well as practical knowledge to everything they do for the organization.

For example, in 2023, Procurement team members took part in external trainings related to greenhouse gas (GHG) emissions to equip them to follow up on the current inbound supply chain objectives of the GHG Protocol Scope 3 standard*. In collaboration with the Global EHS Team, Procurement also prepared an informative seminar for suppliers on the Scope 3 standard, SONGWON's progress as well as a questionnaire to acquire the relevant CO2 footprint data.

Furthermore, Procurement persisted with its efforts in 2023 towards making our supply chain stronger and more efficient while fostering sustainability at every stage. The team also focused on further diversifying SONGWON's supplier base and advanced its strategy of securing alternative and multiple sources in different regions as close to our manufacturing facilities as possible to e.g. reduce emissions. Having such a solid supplier network allows SONGWON to benefit from additional business opportunities arising from unexpected events in the market and to side-step any disruptions.

* <https://ghgprotocol.org/corporate-value-chain-scope-3-standard>

In 2023, Procurement also prioritized identifying ways to reduce costs, negotiating better prices or terms with suppliers, consolidating purchases or contracts and switching to more economical or sustainable alternatives.

Procurement enhanced its multi-source approach by further expanding SONGWON's strong network of responsible partners and suppliers. The team also makes a point of clearly and regularly communicating SONGWON's expectations to all stakeholders. In 2023, the team continued to diligently monitor and evaluate the "On Time Delivery" performance of suppliers on a monthly basis. Additionally, 11 new suppliers, dedicated to consistently delivering on time and meeting SONGWON's specified standards, were incorporated into our global supplier network.

In 2023, Procurement added 11 new suppliers to SONGWON's global network of sustainably responsible suppliers.

Ensuring that integrity remains a primary focus in all our business transactions, Procurement conducted its ongoing evaluations and assessments of suppliers throughout the year. The team regularly checks our suppliers' performance by evaluating aspects such as flexibility, reliability, quality and most importantly, key sustainability factors such as the supplier's carbon footprint.

This year again, the team carried out supplier site audits of SONGWON's key and strategic suppliers and conducted RFIs (Request for Information) from many non-key and non-strategic suppliers. To align the process for selecting new suppliers with SONGWON's sustainability strategy, human rights issues and SONGWON's Code of Conduct were added to RFI in 2023 to comply with international frameworks. This approach enables us to reduce any potential risks, influence change and explore opportunities together with our suppliers for improving quality, delivery and EHS. By making a significant contribution to SONGWON's overall performance, sustainability and strategic development, Procurement continues to create value for the entire Group, as well as enhance our ability to deliver sustainable, profitable growth. ■

SUPPLY CHAIN

Committed to supply continuity

As a leading, global supplier of specialty chemicals, maintaining a robust and reliable supply chain is crucial to SONGWON's success and to meeting the ever-changing needs of the markets we serve. Each year, as the world's markets and global standards become more and more complex, customers need to be assured of an uninterrupted supply of high-quality products delivered on time, regardless of any fluctuations in demand or external challenges.

This year, we saw logistic market indicators recover to pre-pandemic levels and remain stable during the year due to the overall reduced market demand and subsequent improved supply conditions. However, although general conditions are normalizing, ongoing geopolitical uncertainty, the globally dynamic business environment and events such as the tensions in the Middle East or adverse weather conditions always carry the potential to put sudden and unexpected pressures on supply chains and significantly impact costs. Therefore, maintaining a resilient, agile and reliable supply chain to support SONGWON's business is essential.

Whereas throughout 2022, the emphasis was on securing vessel and container availability, Supply Chain's priorities shifted in 2023 to enhancing logistics efficiency and optimizing costs. In addition, the Supply Chain team focused on leveraging global processes, standards and capabilities in 2023 and aligned them with SONGWON's strategy. To also ensure that all the entity's supply chain organizations were aligned, SONGWON's management strengthened the team by integrating the Global Demand Planning function into the Global Supply Chain organization. This brought more efficiency and overall transparency in terms of sales forecasts and expected demand forecasts.

The positions of two Supply Chain experts were switched in 2023 to enable the cross-pollination of skills and knowledge. One team member put their extensive experience in outbound logistics into production planning and the other team member's background in SOIP and production planning brought a fresh perspective to outbound logistics leading to a more comprehensive and effective overall approach to supply chain management in 2023.

This year, our Supply Chain experts participated in the FTA (Free Trade Agreement) trainings organized every quarter by the Korea International Trade Association

(KITA). Here, they received the most recent updates on e.g. export duty policy changes for the various countries. This information benefited Sales who could adjust their pricing strategy accordingly.

The Supply Chain team also took part in production planning and SOP (Standard Operating Procedures) trainings organized by the Korean Productivity Center¹ that provided valuable insight into the tools and processes used by other manufacturing companies. The local entity's Supply Chain teams were also given regular trainings based on globalized SOPs.

Although the team managed the supply chain challenges and continued to greatly support our operations, SONGWON still depended on suppliers for raw materials and on logistics companies to deliver them. Throughout the year, Supply Chain remained in close contact with suppliers and customers to maintain a clear view of our extended supply chain. This ensured that SONGWON was well-positioned to navigate any unexpected situations more effectively.

In 2023, Supply Chain also continued to provide Sales with weekly logistic reports (shipping and tracking reports) to ensure that they had the latest information on inventory levels and forecasts, overstock management, materials in transit and expected delivery dates. This greatly assisted Sales with decision-making and order scheduling by providing them with a balanced outlook and ensuring material availability per customer request while minimizing inventory fluctuation and material replenishment. It also enabled Sales to keep customers updated.

Direct and fast communication between the various functions and also with customers has always been essential for the Supply Chain team to manage any risks to our promise of reliable supply. In line with this, SONGWON adhered to its strategy to secure contracts and establish multiple supply sources across different geographies in 2023. This year, the ongoing alignment of processes between the Global Supply Chain and P&D team also supported more efficient collaboration and information exchange.

Source:
1.The Korea Productivity Center(KPC), established in 1957 has been at the forefront of promoting the concept of 'management' to companies and is recognized as the first consulting organization and the top industrial educational institution in Korea.

During 2023, the team continued preparing for the final implementation of Microsoft Dynamics 365 in addition to other regional Supply Chain Organization projects. Once in place, the system will play a key role in stabilizing our entire supply chain by providing real-time visibility, advanced analytics and seamless integration across all aspects of our operations. ■

In 2023:

- Enhanced forecast accuracy contributed to stabilizing the end-to-end supply chain and kept regional inventory volumes at target levels.
- In the final implementation stage of Microsoft Dynamics 365, all processes were reviewed and new controls and workflows implemented to align the global entities.
- Improved end-to-end transparency on inventory, material in transit and expected delivery times supported Sales decision-making and order scheduling.
- Process improvement initiatives continued to be implemented within Supply Chain to further achieve global harmonization of regional processes and automation.
- Regional supply chains worked closely with logistics partners and provided weekly shipping and tracking reports to the sales teams to keep customers updated.

RESEARCH & DEVELOPMENT

Value-focused development

Since our foundation, our strong R&D capabilities have played a pivotal role in establishing SONGWON as the preferred partner for customers across the diverse range of industries we serve. Nevertheless, in today's dynamic, very competitive environment, we recognize that merely producing high-quality products is not enough to maintain our leadership position.

As customers' requirements grow more complex and specific, it is imperative for us to not only understand their needs but to respond to them by constantly adapting SONGWON's offering. Most importantly, with a focus on creating value, we must also align our portfolio with both current and future market demands.

R&D contributes to enhancing SONGWON's competitiveness and paves the way for future growth by:

- investing in modern, advanced technologies.
- improving processes & leveraging synergies.
- developing high-performance products that add value.
- securing the quality our customers require.
- ensuring we respond swiftly to customer requests.

Having a strong R&D core within the company is vital for staying ahead of current trends and spotting emerging ones on the horizon. SONGWON's management understands that focused innovation is required to maintain competitiveness and stay a step ahead in the industry. Accordingly, R&D investment is a high priority for SONGWON's leadership. They ensure that R&D always has the resources as well as the conditions it needs to continue providing key innovation and technology as well as valuable strategic support across the organization.

In 2023, to well-position R&D to meet the increasing number of challenges and enable the team to deliver better market competitiveness, various processes

were optimized and new ones implemented. Also, R&D's structure was further improved to standardize the research process and ensure more agility. The Task Force Team, established last year, continued to help strengthen project collaboration and strategic alignment within the organization during 2023 and succeeded in increasing both transparency and efficiency. This has proved immeasurably valuable for new business development.

All of SONGWON's researchers are fully aligned with the businesses and with their in-depth understanding of the strategic focus areas, they worked flexibly across the business during the year based on project priorities. This close collaboration with each business function enables R&D researchers to gain clear, valuable insight into the market situation as well as the complex, highly specific technical requirements of SONGWON's broad customer base and the wide spectrum of industries we serve.

SONGWON's strength is rooted in the unwavering commitment, expertise and solution-driven approach of its R&D experts. Leveraging cutting-edge technologies, R&D develops new products in response to business-wide requests and provides comprehensive analysis development and regulatory affairs support.

In 2023, R&D helped to strengthen the business by:

- supporting SONGWON to manage customer requests with agility.
- contributing to SONGWON's future growth through process improvements.
- developing and commercializing new SONGWON products and solutions.

R&D creates new products in response to business-wide requests, leveraging cutting-edge technologies and offering expertise in both analysis development and regulatory affairs support. Effectively responding to evolving customer needs with agility is paramount for the company's success. Therefore, our R&D experts strive to expand their capabilities each year and strengthen their support across the business.

In 2023, the R&D team successfully brought 12 products from lab process development to production. This year, 12 new products were also registered (4 more than in 2022) and 26 products are currently in the scale-up phase. Due to the rapid changes in customers' situations this year, R&D faced many challenges in the scaling-up phase (success ratio 79%). However, the process is stabilizing gradually.

R&D highlights:

- 12 new products were registered
- 47 new products have been developed
- 26 products are in scale-up
- 79% scale-up success ratio achieved
- 53 patents are currently held by SONGWON

During the year, R&D supported the stable production of functional monomers as well as PR (photoresist) monomers and also concentrated on developing high-value special monomers. The team also actively engaged in the development of PHS (poly(4-hydroxystyrene)) polymers. In 2023, in spite of the challenges posed by the global economic downturn, several products developed by R&D are undergoing customer evaluations and positioned for market entry opportunities. SONGWON is confident that the technology and expertise that R&D has acquired over the years in the electronic materials field will yield positive outcomes in 2024 and beyond.

SONGWON has always recognized the advantages of ongoing learning, understanding the significant value of sharing knowledge and leveraging expertise, especially within the realm of R&D. Promoting synergy throughout the organization, fostering a positive learning attitude and supporting continuous competence development are fundamental to improving our R&D resources and broadening our researchers' expertise. Furthermore, R&D's processes are designed to increase technology know-how and encourage constant questioning so that our researchers do not just rely on already available external information but are motivated to go beyond it.

As sustainability is a top priority at SONGWON, R&D focuses on:

- reducing any adverse environmental impacts.
- identifying ways to lower emissions & enhance process yields.
- minimizing raw material usage.
- supporting recycling & prolonging product lifespans.

To reinforce this, SONGWON actively pursues mutually beneficial collaboration opportunities within the industry. Having access to the latest global knowledge and resources enables us to enhance the expertise of our R&D team and achieve our strategic ambitions. In line with this, R&D increased its collaboration with local and global technology partners in 2023, exchanging the latest information and best practices to facilitate more impactful research and accelerate the development of innovative, value-adding products.

As sustainability is a top priority for SONGWON, especially concerning the environmental aspects of specialty chemicals, R&D focuses on the reduction of any adverse environmental impacts. The team identifies ways to lower emissions, enhance process yields, minimize raw material usage, support recycling and prolong the lifespan of end products. Committed to responsible growth, SONGWON makes sure that R&D's technology methods and processes are tailored specifically to produce more efficient and sustainable products, delivering value to both customers and society.

Going forward, as demand increases for materials that are not only faster and more advanced but also sustainable and of higher quality, R&D will focus its efforts on ensuring that it is adequately prepared to meet the ever-changing needs of SONGWON's customer base. Furthermore, it will also make sure that SONGWON is strategically well-positioned to meet and successfully navigate the challenges of the 4th industrial revolution. ■

TAD & TECHNICAL SERVICE

Comprehensive support & application expertise

To fulfill their specific performance needs while complying with today's increasingly strict safety standards and industry regulations, customers are looking to their suppliers for more than just innovative products. Now more than ever, they expect comprehensive application assistance and advanced technical service support.

A key contributor to securing SONGWON's competitive advantage is our customer-centric, side-by-side approach and deep understanding of the needs and challenges of our customer base. Merging this understanding with innovative strength, our extensive technical expertise and decades of experience make it possible for us to incorporate customers' product development ideas into tangible business outcomes. The premium service SONGWON provides customers as well as our reputation for solid technical competence and high-quality product development is central to our ongoing success.

Another key factor is the continued investment in training and resources of our Global Testing and Application Development (TAD) and Technical Service (TS) teams. Based in SONGWON's Technical Innovation Center in Ulsan, South Korea, our experts have years of industry knowledge and work closely together to identify market trends and demands. This in-depth market awareness allows us to take advantage of business opportunities that arise while offering our customers the support they expect from an industry-leading company.

After several years of travel restrictions due to the COVID-19 pandemic, our TS experts were able to resume their routine customer visits in 2023 and re-engage personally with them onsite. The strong collaboration between the TAD and TS teams also facilitated our successful participation at various key meetings, such as the Polyolefin Conference and the TPO Conference in the U.S. Apart from gaining insight into the latest industry trends and market direction, these events gave us a valuable opportunity for showcasing SONGWON's new, innovative products and present our latest advances in mechanical recycling. For example, how recycled polymers can be enhanced by using standard SONGNOX® B-blends.

During the meetings with customers, both at industry events and onsite, the TS and TAD teams

noted a significant increase in questions related to sustainability. As customers deal with increasing regulations and industry requirements, SONGWON received more questionnaires from customers in 2023 requesting LCA (life cycle assessment) data for our products. In response and to expand the team's understanding of sustainability-related issues, SONGWON's management ensured that adequate comprehensive training was provided for our experts throughout the year.

In 2023, SONGWON continued its involvement with the Polyolefins Circular Economy Platform (PCEP), participating in the industry's collective efforts to enhance the recyclability of polyolefin packaging and boost the use of recycled post-consumer polyolefin content in products.

Global Testing & Application Development (TAD)

The TAD team leverages its extensive development expertise to match SONGWON's technical application know-how to customers' requirements. TAD plays an important role in gaining approvals for SONGWON's products as well as for specific applications. By having its base in the Technology Innovation Center, it benefits greatly from the close and direct collaboration with TS and R&D.

In 2023, TAD:

- improved response times and quality of customer support requests.
- increased our regular support of internal & external stakeholders.
- focused on hands-on training as part of our safety culture.
- upgraded the machine park with the newest technology.
- enhanced application development, skills & experience.
- increased lab capacity & efficiency.
- generated technical data to swiftly solve customer issues.

The synergy between the TAD team and the TS team within the Technical Innovation Center means that customer demands and requirements can directly influence and direct SONGWON's product and application development and approval processes. It also enables us to respond quickly to market demands, e.g. the recent shift to developing more sustainable products to meet regulatory changes.

In 2023, TAD underwent organizational changes as we train people for future roles in the company. The focus on hands-on training as part of our safety culture was central to the smooth transfer into the new organization. To increase lab capacity and improve customer service, new cutting-edge equipment was also installed. This year, TAD also made significant progress towards more sustainability by working hand-in-hand with TS on customer-specific projects. Additionally, they generated data for broader topics such as SONGWON's mechanical recycling approach such as how our standard SONGNOX® B-blends, can enhance recycled polymers. The TAD team also prepared technical presentations to promote SONGWON products at industry events.

Technical Service (TS)

Much more than just offering technical customer support, TS contributes significantly to generating new business opportunities for SONGWON. Working closely with customers, they assess their specific needs, support them in making product and process improvements and also to optimize their applications' performance. Drawing on their extensive experience and

industry knowledge, TS also makes sure that customers select the most suitable SONGWON products for their respective applications and that they gain the most value from them after purchase.

Holding a unique position in business development, our TS experts as key facilitators between our customers, Sales and other departments such as TAD, R&D, Manufacturing and Business Management. With their valuable knowledge of customer developments and market trends, they are strategically positioned to recognize potential new markets, suggest product improvements and drive project efficiency.

Finally able to travel again freely, TS concentrated on strengthening customer relationships in 2023. In a business environment full of challenges and a slowdown in the markets, having direct personal contact with customers and progressing with their current projects is a vital aspect of creating new business opportunities. The TS team also remained in close contact with distributors and conducted its regular reviews to keep them focused on projects and approval implementation. This proved valuable in helping us to manage SONGWON's downstream customers during the year.

Serving customers remains the TS team's primary focus. This year, improvements were made to the technical recommendation process and the definition of KPIs to measure customer acceptance of technical recommendations. TS' technical webinar series proved incredibly popular with customers and will be extended in the future, as well as our industry support on sustainability and recycling topics. ■

CLOSE-TO-THE-CUSTOMER EXPERTISE

Our goal is to always be close to customers providing the best level of technical support whenever they need it and wherever they are in the world. SONGWON has 9 strategically placed support centers across the globe.

- **China** | Qingdao
- **Japan** | Tokyo
- **Switzerland** | Frauenfeld
- **Germany** | Greiz
- **Korea** | Ulsan
- **UAE** | Dubai
- **India** | Panoli
- **Korea** | Suwon
- **USA** | Houston

MANUFACTURING

Committed to high-quality & reliable supply

Since our establishment in 1965, SONGWON's core operational principles have revolved around innovative manufacturing to supply our customers with premium products while maintaining compliance and adhering to global operating standards. Our decades of production expertise, proprietary technology and backward integration have been instrumental in the growth of our organization and provided a solid basis for future progress.

However, the global economic situation and the dip in customer demand did influence the utilization rates of some of SONGWON's sites during the year but overall, the facilities ran smoothly without any issues. During the year, we also noted increased price sensitivity and competitiveness in the market, but despite the persisting uncertainty SONGWON was able to maintain its supply reliability by aligning our capacities to demand.

SONGWON's Maeam plant in Korea is the world's largest fully back-integrated site dedicated to antioxidants.

SONGWON doesn't stand still. Year after year, we build on our position as an industry leader, with technology upgrades in our plants, improved automation and more sustainable production processes. Our agile working methods help us to improve safety and most importantly, minimize the use of natural resources while increasing sustainability in our plants and, ultimately, in our products.

SONGWON has 8 manufacturing facilities strategically located around the globe. Using innovative technology, we provide reliable and high-quality products to our customers wherever they are in the world and they know that they can count on our products to achieve consistent, precise and stable manufacturing processes.

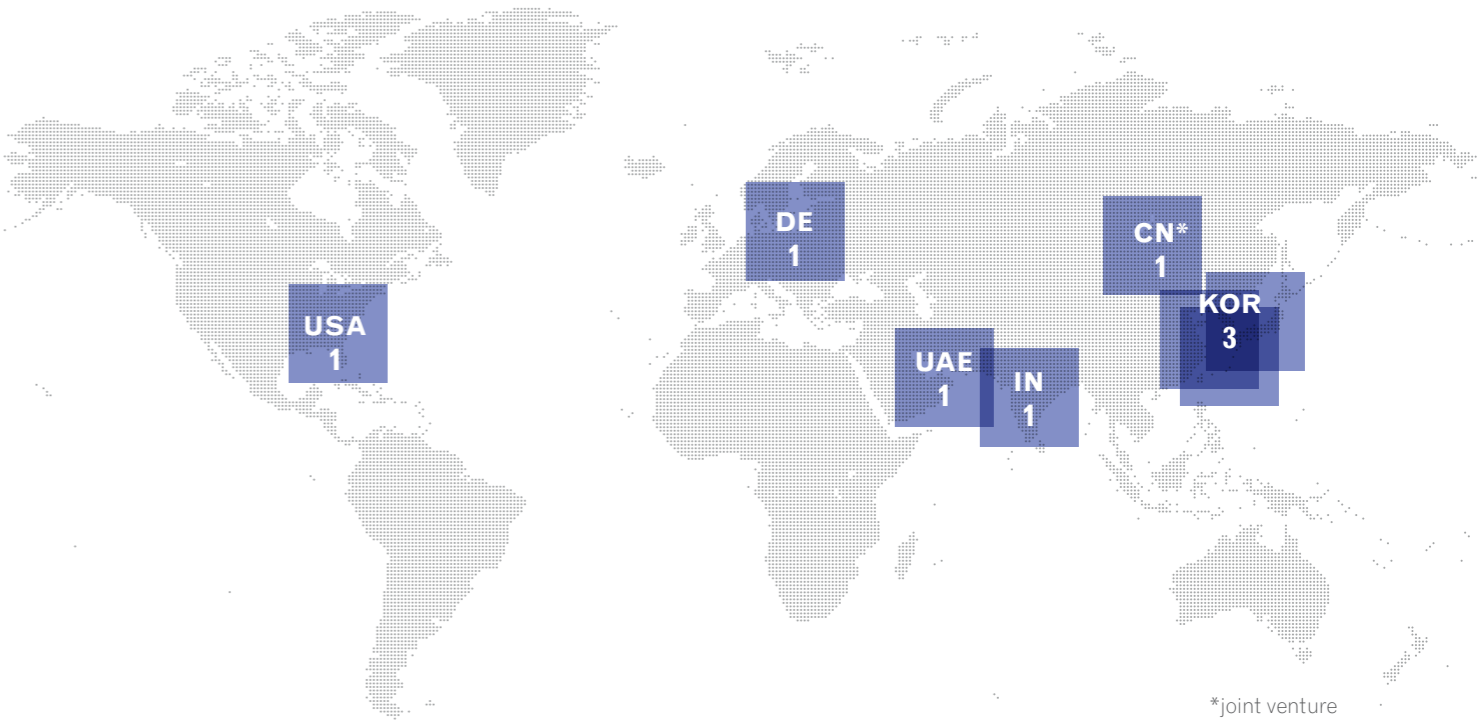
The global economic conditions in 2023 resulted in a general slowdown in the market. SONGWON, like other players in the chemical industry, saw a decline in customer demand and energy costs caused challenges in some regions. Additional challenges in 2023 were the strengthening of environmental and safety-related regulations in the countries in which SONGWON operates and the lack of skilled workers for our production facilities.

In comparison to 2022, the stabilization of the raw material supply positively impacted manufacturing.

SONGWON's manufacturing strategy focuses on:

- being a reliable partner and supplier for our customers.
- providing customers with premium quality products.
- ensuring agility and swift responsiveness to changes in demand.
- enabling customers to benefit from our extensive manufacturing skills.
- optimizing asset usage to benefit from economies of scale.
- increasing sustainability in our production processes and products.
- maintaining healthy and safe manufacturing facilities.
- implementing automated systems to achieve more efficiency.

Global locations



SONGWON's ongoing investment in innovation is a cornerstone for remaining competitive in our markets and ensures that we can align our manufacturing capabilities to the needs of our customers. For example, our effective preventative maintenance program enabled us to respond quickly to spikes in demand and quickly scale up production when needed. We also invested in production expansion projects, such as in our facility in India and the new ERP system, Microsoft Dynamics 365.

The increasingly stringent regulatory requirements in all regions and markets are creating significant challenges for the industry. The global regulatory framework of health and safety regulation, chemical control and environmental laws make efficient and sustainable manufacturing an essential part of SONGWON's economic and ecological strategy going forward. In response to these regulations, we have undertaken a wide range of efficiency improvements and made changes to limit our environmental impact and reduce our use of natural resources.

Once again in 2023, SONGWON invested in more sustainable operations, such as the new DAP operation in Korea, which led to an increased incinerator operation rate using waste oil and a reduction in steam costs. This year, we also prioritized reducing carbon emissions through improved waste recycling

and participated in government-supported projects, such as the installation of LED lights, high-efficiency pumps a Mechanical Vapor Re-compressor and a low NOx burner.

In our plant in India, we were able to reduce water usage and cost with a more efficient steam condensate recovery airDryer installation and waste heat recovery. We also used Agro-waste briquettes for steam production, rather than natural gas. This positively resulted in us covering 63% of our energy usage with renewable energy sources. The use of solar power also reduced our greenhouse gas emissions in 2023 as did the increase in efficiency due to the maintenance of our oil heater and steam boiler.

Alongside sustainability, safety is paramount at SONGWON and we work to ensure a safe working environment at all of our production facilities. We have introduced an Environmental Health and Safety (EHS) system in multiple locations, which includes:

- Accident reporting management
- Safety inspection schedules checks
- Self-audit plan and result
- Management of employee health
- Real-time check of work permits

QUALITY ASSURANCE

In 2023, we strengthened both internal and external training programs and activities to foster a safety-centric culture. Furthermore, we enhanced our fire safety systems by installing fire detector systems and alarms. We also expanded our infrastructure by adding extra hoists to the manual dumping station, among other initiatives.

The manufacturing team's extensive industry experience and dedication to stringent environmental, health and safety standards ensure that SONGWON consistently delivers high-quality products to our customers on time and to their satisfaction. The team worked closely with sales, business management and CS to react quickly to the changing requirements of customers and manage the challenges the company faced. One example of the excellent internal cooperation within our organization was the successful

* Process & Engineering

trial of a newly developed peroxide blend for one of the world's largest petrochemical manufacturers. The Korean P&E* team worked closely with the operations team on this project, demonstrating SONGWON's manufacturing strength and excellence.

In the future, we aim to further streamline and optimize processes by enhancing automation, addressing challenges posed by the shortage of skilled workers and refining the new Microsoft Dynamics 365 ERP system. To ensure that SONGWON remains fully compliant with environmental and safety regulations, we plan to implement various methods, including exploring options to reduce carbon emissions through adjustments to our steam systems and adopting highly efficient equipment to minimize our carbon footprint. ■

MANUFACTURING ACTIVITIES IN 2023

Installed

- Microsoft Dynamics 365 ERP system
- Increased automation
- More energy-efficient equipment
- Optimized operation processes for greater efficiency
- EHS System for improved health and safety

Improved

- Working processes & equipment maintenance
- Safety, due to improved health & safety training/activities

Reduced

- Greenhouse gases through renewable energy sources
- Raw material costs due to recycling & reuse of solvent

Increased

- Plant operation efficiency, due to low operation rates
- Efficiency through packaging automation

Conducted

- Numerous tests of new raw materials
- Various safety training programs & activities
- Environmental Integration Act permits completed
- Trial of newly developed peroxide blend for a key global petrochemicals manufacturer

Committed to consistently high standards

We take pride in the reputation we have established over the years for delivering consistently high quality. For us, Quality Assurance (QA) is not just limited to ensuring that SONGWON obtains the required certifications or controlling product quality before shipping. It is about having effective systems in place, intensive attention to detail and continually aligning process improvements with sustainable best practices. Most importantly, it is about ensuring compliance and supporting our customers' QA efforts in all aspects of their business.

At SONGWON, QA is supervised at the highest level of the organization and embedded into our structure and at the forefront of everything we do. SONGWON's Management makes it clear that maintaining the highest quality is not just a task for our QA experts but a priority for every member of SONGWON's global team. Accordingly, SONGWON's Quality Policy is aligned with the business strategy. It underlines how we respond to the requirements for quality service and safe products and most importantly, our commitment to our stakeholders.

Skilled in the latest methodologies, as well as best practices, our QA experts collaborate closely with SONGWON's operations, sites, business units and our customers to ensure QA needs are met and optimal outcomes achieved. For example, the dedicated QA team member for the Sub Business Unit Electronics supports smoother operations and efficiently provides electronics customers with the quality data they need.

By engaging in all aspects of our supply chain, QA proactively guarantees that SONGWON's products meet the stringent specifications demanded. This enables quick turnarounds and/or faster time-to-market possible for our products. Again this year, QA supported the launch of SONGSORB® CS 405 and SONGSORB® CS 945.

QA ensures that all internal stakeholders, including SONGWON's major sites, are kept up-to-date through regular meetings. QA Management Review meetings are also organized in all SONGWON's entities. Demonstrating SONGWON's proactive commitment to continuous improvement, critical items are identified in these meetings and swiftly addressed. Collaborating with all relevant departments, QA assists in identifying

the most appropriate corrective actions through accurate root cause analysis and in accordance with best practices.

Working with a global Quality Management System (QMS), SONGWON ensures that all core processes are strategically designed to significantly streamline processes, optimize resource utilization and ultimately enhance the effectiveness of SONGWON's operations worldwide. Additionally, by closely cooperating with the regional QA organizations, QA ensures that everyone is always working as "One Team" with the same agreed processes and quality goals.

Having an agile QMS system, keeping it simple and removing the complexity whenever possible is a key driver to more efficiency. To deliver consistent quality, SONGWON's QMS is continuously adapted to new requirements created by the business or operations. In 2023, the QA team continued its QMS software rollout to the other sites and entities. Now, the state-of-the-art document handling system has been successfully implemented in the India and Abu Dhabi sites. The team also further optimized SONGWON's product life cycle processes implemented in the online QMS process flow system to ensure better controls and greater transparency for all the stakeholders involved.

In 2023, the team focused on preparing all the relevant quality data and processes for fully integrated quality management encompassing enhanced controls, processes and continuous monitoring of quality trends. QA processes within SONGWON's ERP system Dynamics 365 were also defined and standardized, paving the way for the company-wide rollout.

SONGWON's commitment to QA extends to our business partners. By performing supplier audits, we confirm that quality requirements are understood and can be delivered to the agreed quality levels SONGWON has set. Once again, QA worked closely with the business units to improve suppliers' quality levels and achieve more efficient operations. Started in 2022, this project continued throughout 2023 and the team succeeded in harmonizing and aligning quality data with key suppliers.

Building collaborative supplier relationships and supporting them to improve is vital to ensuring our rigorous QA requirements are met. At SONGWON, we require suppliers to practice legal compliance and promote social responsibility toward such issues as the environment, human rights and occupational safety.

We also fully support customer audits. They allow QA to share quality perspectives with customers and gain a better understanding of their expectations.

QA's main aim is to achieve our quality targets, reduce customer complaints and lead for continuous improvements. In 2023, manufacturing saw a significant decrease of 25% in customer complaints compared to the previous year. The result highlights the success of QA's continuous improvement activities and the effective corrective actions implemented in operations over the past few years. Throughout 2023, issues related to the supply chain, logistics and trading led to an 8.6% increase in customer complaints. To respond, actions have already been executed and QA is looking at further initiatives to help reduce complaints.

SONGWON first obtained ISO certification in 1995. Since then, rigorous operating procedures and comprehensive and well-documented quality control measures have been established. ISO certification not only highlights SONGWON's uncompromising focus on quality but also underlines our constant efforts to improve operations so that we can consistently meet the ever-changing needs of our customers. ISO sets out the criteria for a quality management system (QMS) based on several quality management principles which include: strong customer focus, processes and continuous improvement. QA organizes regular ISO trainings or refresher courses at the different sites for our manufacturing employees.

SONGWON has the following ISO certifications:

- Quality Management System: ISO 9001:2015
- Environmental Management System: ISO 14001:2015
- Occupational Health & Safety Management System: ISO 45001

QA supported and effectively completed preparations for the implementation of ISO 45001:2018 (Occupational Health and Safety) at SONGWON's Suwon site. Certification is planned for 2024. Our sites in Ulsan and Maeam were already ISO 45001:2018 certified in 2020. Such certifications highlight that customers' requirements for quality and sustainability are a key priority for us.

For us, QA is not a static process but an evolving one. In today's dynamic landscape, changes are occurring more rapidly and customers are expecting greater flexibility and higher quality product and service levels. Now, more than ever, QA's full support of the organization is essential to SONGWON's success and their efforts to keep the quality of products and services at expected levels are crucial. ■

In 2023, SONGWON achieved a 25% decrease in customer complaints related to manufacturing compared to 2022.

Our commitment to compliance

In global organizations, compliance with diverse international and local laws, regulations, policies and enforcement authorities are crucial. For this reason, Regulatory Affairs (RA) holds a vital role in SONGWON's operations and in those of our business partners, customers shareholders. Strong adherence to product quality and compliance is not only good business practice, but it also demonstrates our commitment to being a responsible and sustainable organization.

Navigating complex regulatory landscapes, our RA team ensures that all SONGWON activities and products are aligned with global and regional standards, laws regulations. Compliance is deeply embedded into the core processes of SONGWON's product compliance and product stewardship efforts. For all of SONGWON's new products, our RA experts are involved from the start, accompanying new product development from R&D's stage and gate process, through budgeting and strategic planning to the Stock Keeping Unit (SKU) setup.

In 2023, in response to the increasing challenges of global compliance, RA transitioned from taking a very reactive approach to a much more proactive and effective one. The team also underwent significant organizational changes which included the expansion of expertise increasing the number of team members. The change of the reporting line from R&D to the recently created function, TechRAS (Technology, Regulatory Affairs and Sustainability) has brought the team closer to the business departments and consultants, resulting in a valuable improvement in bilateral communication. This connection was also further strengthened by the restructuring of the team. Having newly redefined roles and priorities has led to a stronger sense of ownership from all RA team members. In 2023, the team also expanded its skills and knowledge by participating in key conferences on global chemical regulations and attending external training sessions on topics such as toxicology. Such key trainings, particularly for new team members ensure that the team is equipped with the most up-to-date best practices and knowledge e.g. on the management of chemical substances.

This year, in addition to strengthening and restructuring the team, we also made structural changes to RA's working processes and methods. A shared document management platform was set up for the team and

internal stakeholders and RA's internal regulatory documents were better structured and organized. RA also developed a platform to handle the increased number of customer questionnaires, which are now allocated to the respective teams, tracked until completion and then delivered back to the responsible business unit. Another important goal for the RA team in 2023 was the development and ongoing maintenance of a comprehensive database of all SONGWON's products, including their composition and regulatory status, to enable regulatory activities such as monitoring, SDS, classification, volume tracking, etc.

As our global industry's regulatory environment becomes increasingly complex and more demanding each year, ensuring compliance is also becoming ever more challenging. Again in 2023, the RA team saw customers' demand for regulatory support noticeably increase, particularly, in terms of the number and extent of the requests received as well as the range of topics and countries that needed to be covered.

Current and future Regulatory Affairs challenges:

- regulatory bodies in regions such as the EU and Korea are becoming increasingly stringent and demand from countries in the process of developing chemical regulations is increasing.
- regulations such as REACH and K-REACH require extensive knowledge of product composition, continuous monitoring as well as prompt internal and external communication of changes.
- shipped volumes in various countries and regions must be precisely tracked and reported to ensure compliance with registered tonnage bands is maintained.
- ECHA¹ and NIER² are reviewing many dossiers for compliance, with numerous new studies requested on our substances, requiring substantial time and resources.
- several approaching deadlines for REACH registrations (Korea, Turkey, UK) demand additional time and resources for preparation.
- stricter sustainability regulations are causing customers to become increasingly more demanding with extensive questionnaires on the regulatory status of our products.

1. European Chemicals Agency 2. National Institute of Environmental Research, South Korea

OUR PEOPLE

Our proactive approach is essential to keeping SONGWON up-to-date and a step ahead of upcoming regulatory changes. Alongside the traditionally active regions such as the EU and Korea, an increasing number of countries are developing their own chemical regulations. Keeping on top of these changes and having an impact on decision-making requires frequent meetings with consultants and active participation in CEFIC sector groups, in EU REACH and in consortia trade associations. Our perpetual commitment to increasing advocacy and regularly engaging with internal and external stakeholders has a positive impact on the business activities of SONGWON.

The RA team's active regulatory monitoring of SONGWON's substances means that we are constantly assessing the impact on our portfolio and can communicate this to internal stakeholders. For example, with better information about upcoming changes, SONGWON's businesses are involved in decision-making and can make more strategic business decisions. In 2023, we were able to support each of the business units to assess the impact of regulatory threats on the commercial future of a product and increasing EU REACH tonnage bands at a very early stage.

In 2023, the RA team prepared for the KKDIK registration deadline and also for several EU REACH new registrations and dossier updates. Our experts oversaw the assessment of regulatory needs or compliance checks for several substances in the EU and Korea. We also strengthened our position in the EU by upgrading several tonnage bands for key products and completed the registration of raw materials to reduce SONGWON's reliance on suppliers for coverage in the EU.

SONGWON customers need to be fully informed about our products to ensure that they meet their sustainability, health and safety goals. They must also adhere to local, national global compliance regulations. At SONGWON, we take our responsibility to provide this information seriously and offer customers expert assistance in managing regulatory compliance, registration and certification of chemical substances. The RA team's advocacy work helps us to anticipate future changes that may affect our customers and consultants and proactively engage them so that they have time to make the necessary adjustments and actions.

In order to keep them informed, RA provides regular updates on the substance registration process. Going beyond the standard industry practice of providing customers with the specification (CoA), a technical data sheet (TDS) and a safety data sheet (SDS). SONGWON also fulfills EU-REACH requirements by creating an eSDS for each hazardous substance that is manufactured or imported in quantities > 10 t/a. In 2023, RA created 150 new SDS and updated 115 as well as 7 new eSDS. This year, SONGWON also introduced an additional Product Registration Sheet (PRS). The new one-page document contains information on the REACH regulation status of our products and similar regulations. In 2023, 100 new PRS were created for customers.

At SONGWON, compliance is prioritized and RA ensures that it remains at the center of our operations. As the importance of sustainability and product stewardship grows, we remain steadfast in our commitment to continue improving compliance management and sustainability for SONGWON and for our global stakeholders and customers. ■

2023 Regulatory Affairs highlights:

EU-REACH:

- 6 new registrations submitted
- 13 registrations updated (tonnage band changed, use updates, internal risk assessment performed)
- 10 notifications to the EU Poison Centre

K-REACH:

- 2 registration updates as Lead Registrant to cover consumer use
- 7 new registrations completed
- 17 new substance notifications
- 7 R&D exemptions
- 73 product SDS submitted to K-OSHA
- 17 substances for KKDIK³ registration in the preparation phase

3. Turkish REACH

A committed global team

SONGWON is shaped by an united team of 977 talented and highly skilled individuals. Their unwavering dedication forms the cornerstone of SONGWON's leading position in the industry and is instrumental in securing long-term customer loyalty. Setting the highest standards for themselves, our employees work diligently and always do their very best for the organization, our valued customers and the industry as a whole.

Mirroring the international scope of SONGWON's customer base, our global team members represent 35 different nationalities. Leveraging their varied backgrounds and perspectives, they work seamlessly across the business and borders. In today's challenging business environment, their united commitment extends beyond just positively contributing to SONGWON's business achievements to actively supporting our customers' continued success.

SONGWON's global team represents 35 different nationalities.

Behind SONGWON's distinctive and collaborative working environment, is a valuable blend of seasoned employees with many years of experience and ambitious newcomers. Nevertheless, whether they recently joined the organization or have been with us for a long time, each one is dedicated to playing their part. Apart from executing their daily responsibilities, our employees consistently strive to improve and encourage both themselves and their colleagues to go that "extra mile". Their entrepreneurial team spirit and sense of pride combined with SONGWON's vast experience, global reach, personalized approach and local knowledge have made our organization what it is today and help us to sustain our competitive edge in the industry.

To make sure that both individuals and teams have the resources they need to deliver positive business outcomes and achieve further success, SONGWON's management fosters a dynamic, engaging and proactive culture characterized by open communication and flat hierarchies. In addition to offering a secure working

environment and safeguarding the well-being of our people, the management engages in regular dialogue and listens to employees' views and ideas. Furthermore, to gain insight into and keep updated on our people's concerns, meetings between the business/department leaders and their teams take place regularly. Town Hall Meetings are also organized when needed and surveys are carried out.

Engaging with employees in such a way provides SONGWON's leadership with valuable, constructive feedback as well as contributing to continuous improvement and supporting motivation within the organization. Particularly in times of heightened uncertainty, we recognize the importance and value of effective internal and external communication. Consequently, SONGWON's management, HR and the team leaders regularly inform employees about our current priorities, financial results, EH&S issues, etc. Encouraging and supporting information exchange throughout the organization and harnessing internal synergies has always been strongly encouraged and actively supported at SONGWON.

To better understand the challenges confronting SONGWON's customers in 2023, our teams remained in close contact with them, offered targeted support where it was needed and continued to build key relationships. Furthermore, the insights gained were shared between the relevant functions providing us with a valuable advantage. Our great sense of responsibility towards each other and our stakeholders demonstrates our commitment to really living our Corporate Values every day.

Just like the dynamic environment in which we operate, SONGWON is always adapting and evolving. SONGWON's DNA is based on a "One Company, One Culture" principle and we have ensured that our set of values accurately reflects our current organizational identity and our business objectives. HR continued to conduct workshops across the organization in 2023 to further anchor our Corporate Values and leadership principles into our daily activities. These sessions included explanations and examples on how to incorporate SONGWON's values and principles into our tasks but also emphasized the importance of following our guidelines and supporting one another to successfully deliver on our business priorities. Our employee newsletter which features a summary of the organization's activities and highlights achievements also contributes to maintaining the sense of pride at SONGWON.

For us, being a successful organization is more than just our performance and achievements. It means acting responsibly, ethically and abiding by the law. Therefore, we make sure that every employee understands their responsibility to comply with SONGWON's company values and the ethical principles provided in our Code of Conduct, as well as with external laws, rules and regulations. Our Code contains clearly defined, essential information on the organization's values, ethical principles, compliance with laws, rules and regulations, as well as important guidelines and procedures for our daily operations*.

At SONGWON, our Corporate Values, Code of Conduct and Whistleblower Policy collectively underscore our strong commitment to prioritizing crucial matters like equality, diversity, human rights and sustainability. HR organizes refresher sessions on an annual basis to keep our values, policies and Code at the forefront of our people's minds. During onboarding, new employees are also provided with a copy of the Code and trained so that they have a comprehensive understanding of SONGWON's values, rules and expectations right from right from the very start.

SONGWON is dedicated to cultivating a working environment that encourages people of all backgrounds and beliefs to work well together in the pursuit of common goals. Above all, we recognize that an inclusive culture celebrating diversity, upholding human rights, providing equal opportunities and opposing discrimination fosters a stronger bond between managers and employees. It also serves to build trust within the company. We want our employees to be engaged and take pride in being part of a global organization that maintains the highest standards of integrity and protects its people, assets and reputation.

We are proud of the talented team of people SONGWON has. Empowering them to realize their maximum potential has always been a priority for us. In line with this, HR provides employees with the chance to continuously learn, share knowledge with each other and use their experience to make valuable contributions to the company. In 2023, in addition to the Corporate Values workshops, HR organized trainings on ethics standards (e.g., discrimination and sexual harassment), cyber security, health and safety as well as goal setting and English courses, etc. Also, when managers set development goals for certain employees during their yearly performance reviews, HR supported them to find suitable external education opportunities.

HR Highlights in 2023:

- further instilled SONGWON's Corporate Values & Leadership Principles across the organization.
- strengthened alignment with the corporate culture anchored to SONGWON's DNA.
- hired a new key global leader to drive SONGWON's Coatings strategy.
- optimized the organizational structure in collaboration with all key leaders.
- continued harmonizing HR standards and optimizing procedures across the Group.
- held team events at the different locations to reinforce the "One Team" spirit.
- arranged overseas exchange opportunities between Korea and the U.S..
- offered internal trainings e.g., ethics, health & safety, goal setting (SMART), cybersecurity.
- added further content for employees to the e-Learning Management System (LMS).
- organized further education and external learning opportunities for certain employees.

In addition to this, our people have access to SONGWON's e-learning platform and can access HR's educational content from wherever they are at any time. The information is downloadable so that it can be read offline and employees can also take assessment tests and obtain certifications. SONGWON's businesses continued to offer knowledge-building training sessions and webinars throughout the year to ensure that the SONGWON team, particularly newcomers, remained fully up-to-date with our latest products and the most current market information.

Through comprehensive on-the-job training, our people gain hands-on experience, an opportunity to advance their skills and the chance to acquire the knowledge they need to perform their best. SONGWON's employee exchange program was developed to allow employees to work alongside another SONGWON team in a different country and culture. Apart from providing

insight into other work environments, these exchanges support cultural understanding and allow employees to strengthen their language and international business skills. Making it possible for an employee to familiarize themselves with different ways of doing things and building stronger ties with other global team colleagues also benefits the local colleagues when the employee returns to their SONGWON base location with their new knowledge. Over the years, this approach to strengthening the communication between locations and promoting the sharing of best practices has proven valuable to SONGWON on many levels. Most importantly, it helps us to establish a global mindset and build on our diversified culture.

Together with SONGWON's management, HR supports and encourages the entrepreneurial spirit and collaborative culture at SONGWON. By creating the environment and conditions for our people to take pride in what they do and to contribute to fulfilling SONGWON's strategic targets is also a driver of our success. The foundation of our HR philosophy lies in recognizing the vital role each individual plays within the organization and the diverse ways in which they contribute to everything that SONGWON does. HR's goal is to make sure that whatever their function, our employees are engaged, driven by measurable results and feel valued.

Fully aware that personal development is an integral part of employee satisfaction; our performance management system (PMS) is an important contributor to this. With this system in place, we endeavor to provide the support our people need to realize SONGWON's strategy, targets and growth ambitions. We motivate and develop the highly talented individuals in our global team by aligning their tasks with SONGWON's organizational goals and assessing their performance against a clear set of leadership expectations, targets and measures. Our PMS process provides both context and purpose for each employee's area of work and helps them recognize the scope of their contribution to the global team and to SONGWON. The primary objective of SONGWON's PMS is that the results and discussions facilitate a fair and accurate two-way feedback process between managers which is motivating for both.

In addition to investing in and developing the skilled employees we already have within SONGWON, we continue to hire new talents. We always seek the best person for the job and provide a workplace where employees are guided towards shared goals and inspired to improve by being assigned meaningful tasks aligned with their respective roles. This strategy as well as

our traineeship programs strengthen SONGWON's attractiveness as an employer and contribute to counteracting the global shortage of skilled workers. For HR, finding the "best" person for the job at hand means more than attracting people with the right qualifications and experience. It involves finding people who share SONGWON's Corporate Values, add to our diversity and contribute to our multicultural environment. As a leading global organization, operating in such a dynamic, international landscape requires open-minded, collaborative thinkers who are versatile and can adapt to changes as well as manage challenges.

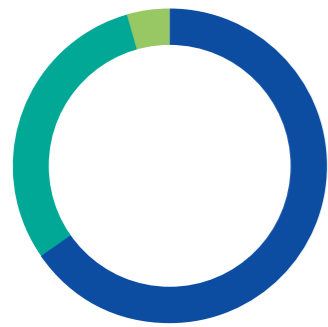
At SONGWON, we:

- provide** an environment for sharing & collaborating.
- support** creativity & entrepreneurial team spirit.
- enable** people to thrive & take responsibility.
- value** diversity & unique perspectives.
- encourage** further development & learning.
- acknowledge** dedication & achievements.
- empower** performance.

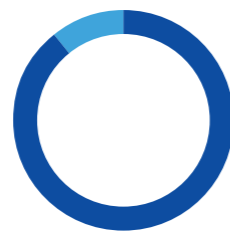
At SONGWON, we know the value of leveraging a local manager's inherent understanding of the culture of both employees and customers. HR's first aim is to fill a position with the best person for the job but wherever possible, we try to hire from within SONGWON. Internal recruitment is prioritized for mid-to lower-level positions and we follow a similar approach when selecting candidates for senior management positions. In 2023, the global team was strengthened with the recruitment of an external expert for the role of Business Unit Leader Coatings.

Throughout 2023, our regional and global HR teams played an essential role again in helping to secure business continuity for the organization, effectively supporting employees and enabling them to continue making positive contributions to SONGWON's success. To further enhance its support of SONGWON's strategy going forward, HR will continue improving efficiency by implementing leaner, more optimized processes across the entire Group. ■

* In 2023, there were no incidents to report, such as corruption that breached SONGWON's Code of Conduct and no significant fines (of either monetary or non-monetary value) for non-compliance with laws and regulations.



977
Employees



645
Asia

Women (70)
Men (575)



285
EMEA

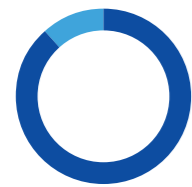
Women (30)
Men (255)



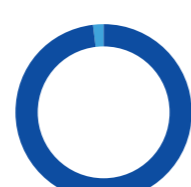
47
Americas

Women (12)
Men (35)

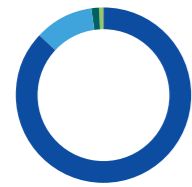
In 2023, 21 employees took parental leave and 15 employees returned to work.



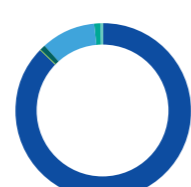
Women (112)
Men (865)



Permanent (968)
Temporary (9)



Men, salaried (857)
Women, salaried (111)
Men, hourly (8)
Women, hourly (1)



Men, full-time (856)
Men, part-time (1)
Men, temporary (8)
Women, full-time (104)
Women, part-time (7)
Women, temporary (1)

BOD & Executive Committee



30-50 years old (1)
over 50 years old (3)



Executive Committee
Men (4)
Women (0)

BOD
Men (4)
Women (0)

Employees by gender

	Left	Hired
Total	97	80
Men	84	69
Women	13	11

Employees by age

	Left	Hired
Total	97	80
> 50 years	22	3
From 30 to 50 years	52	34
< 30 years	23	43

SONGWON'S GLOBAL TEAM



35 different nationalities work at SONGWON



03

SUSTAINABILITY REPORT

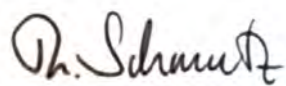
Sustainability Statement	64
About the Sustainability Report 2023	65
Approach to ESG & Value Creation	69
Environment, Society, Sustainability Governance	74
Appendix	98
GRI Content Index	102
Independent Assurance Report	106

SUSTAINABILITY STATEMENT

For SONGWON, sustainability goes far beyond mere environmental concerns. It is embedded in the way we think about and approach every aspect of our business, from operational efficiency to product development and employee engagement to ethical leadership and partnership. Embracing the principles of corporate responsibility, we have remained committed to transparently reporting on our actions and their impacts on an annual basis since our first report in 2008.

Transparency is at the heart of our relationships with stakeholders, providing a vital level of accountability. In 2023, we expanded SONGWON's reporting scope to encompass our global operations, aligning this year's report with 13 United Nations Sustainable Development Goals — 5 more than in 2022. In addition, our sustainability team has developed a comprehensive carbon reduction roadmap for SONGWON in alignment with the Korean government's Nationally Determined Contribution, which targets an 11.4% reduction in emissions within the chemical industry by 2030. Additionally, we have set our own ambitious long-term goal of achieving Net-Zero emissions by 2050.

As an industry leader, SONGWON has consistently showcased its agility and resilience in confronting numerous challenges, including unforeseen ones, by steadfastly upholding our sustainable values. While acknowledging that there will always be more work to be done, with our roadmap in hand, we are well-positioned to continue exploring innovative approaches to enhance the sustainability of SONGWON's operations. Our 2023 Sustainability Report is a testament to the progress we have made so far, to SONGWON's ability to drive change as well as to our ongoing commitment to building a more sustainable future for future generations.

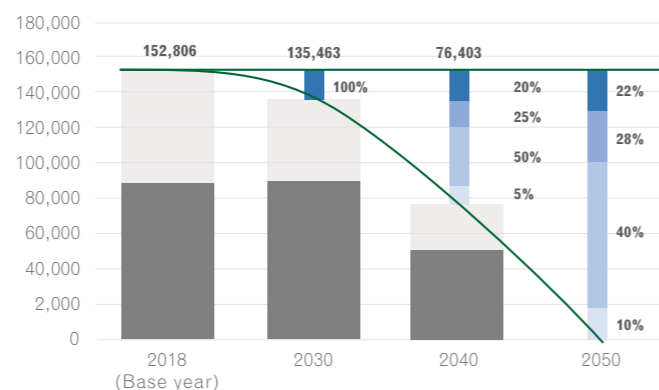


Thomas Schmutz

Leader Global Technology,
Regulatory Affairs & Sustainability

Net Zero Roadmap

in tCO₂-eq



Process efficiency

- Low-carbon and zero-carbon fuel conversion
- Removal of process gas
- Replacement with high efficiency facilities

Future innovative technology

- Gray: CO₂ emissions occur
- Green: renewable
- Blue: carbon capture, utilization and storage (CCUS)

Renewable energy

- Self-generation
- Power Purchase Agreements (PPAs)
- Renewable Energy Certifications (RECs)

Offset

- External reduction/absorption project
- Development and joint promotion

Scope 1 – direct

Scope 2 – indirect

With its sustainability commitment, SONGWON aims to successfully achieve its Net Zero target by 2050 while observing potential changes in governmental plans and strategic adjustments.

ABOUT OUR SUSTAINABILITY REPORT

Since SONGWON's foundation in 1965, we have learned to constantly prepare for the future with all the many changes and challenges it brings. So, as SONGWON's business continues to expand around the world, our sustainability priorities also evolve and drive our efforts to meet the expectations of our stakeholders and create value for future generations.

At SONGWON, sustainable success is synonymous with our dedication to economic, environmental and social responsibility across the entire value chain. Our Sustainability Report for 2023 provides stakeholders with a comprehensive, clear overview of SONGWON's key activities and achievements and demonstrates our unwavering commitment to sustainability objectives and transparency. Herein, we outline our environmental, social, and governance (ESG) goals, progress and performance throughout our global operations for the fiscal year 2023 (ending December 31st, 2023), unless otherwise indicated. The content of this report has been put together after taking into consideration our stakeholder's feedback and recommendations in relation to the previous year's reported topics and their importance.

This year's report, published on March 15, 2024, is designed to meet the information requirements of SONGWON's stakeholders, comply with pertinent regulations and also align with criteria set by sustainability rating and benchmarking organizations. It focuses on the concepts and key performance indicators (KPIs) that reflect SONGWON's material sustainability issues. SONGWON has reported in accordance with the GRI Standards for the period January 1st, 2023 through December 31st, 2023, which is in line with the Group's financial reporting.

Additional disclosures in 2023

SONGWON has broadened the scope of its disclosures to achieve the United Nations' Sustainable Development Goals (SDGs) and to support similar initiatives. In 2023, the KPIs were also expanded from the existing 7 to the current 61, and the scope of data this year included 50 KPIs collected globally and 11 collected at the Korean sites. This corresponds to an increase in target UN SDGs from 8 to 13.

External assurance

Transparent and verified reporting is important to SONGWON. Therefore, the selected KPIs in 2023 have been externally assured by the BSI (British Standards Institution). The limited assurance engagement was carried out in accordance with the auditing principles of the International Standard on Assurance Engagements (ISAE) 3000. (see the BSI Independent Assurance Opinion Statement on page 106).

Enhanced reporting

SONGWON has initiated a project aimed at enhancing its reporting across environmental, social and governance aspects in preparation for the anticipated disclosure requirements as per IFRS Sustainability standards, which are expected to be adopted by KSSB (Korea Sustainability Standards Board) and likely to be mandatory for SONGWON starting from 2027. Also, in consideration of the evaluation criteria outlined by KCGS (Korea Institute of Corporate Governance and Sustainability) in accordance with Korean law as well as the higher standards required by EcoVadis to achieve each grade. We view this effort as a chance to progress further as a socially responsible organization.

Material topics

At SONGWON, we conduct a formal materiality assessment each year to ensure that we prioritize issues that have the most potential to impact our business and most importantly those that matter most to our stakeholders, which include customers, employees, investors and communities.

To identify material topics, SONGWON leverages the previous year's GRI report and adheres to the guidelines set forth by the Global Reporting Initiative GRI Standards. We identify and assess actual and potential impacts by engaging directly with internal and external stakeholders and experts who possess a

profound understanding of our company's context. This process enables us to prioritize what is most crucial for our reporting. At SONGWON, we assess each element of sustainability based on its relevance to our business and its economic, environmental and social impacts which encompass factors such as human rights and business relationships. Our strategic priorities are then based on this assessment.

The determination of material topics is a continual process, aimed at achieving long-term relevance. The topics covered in this report are chosen for their potential impact on SONGWON's stakeholders and

our ability to create enduring value. The primary responsibility for selecting topics rests with the Sustainability Management Team, as outlined in the Sustainability Governance Structure. Accordingly, the team actively engages with customers, partners and the supply chain as well as with SONGWON's shareholders and other stakeholders. The feedback received on the previous year's report not only validates the direction pursued but also underscores the need for a more thorough exploration of existing topics, such as issues focused on customer experience or the supply chain.

Materiality Assessment

Topcis	Impacts	Type	Charac- teristic	Level*
GHG emission management	Contribute towards meeting the NDC goals and the Paris Agreement by reducing GHG emissions on entire value chain	E&S	Positive	●●○
	Increased GHG emission and worsening of climate change if Net Zero strategy is not implemented and managed appropriately	E&S	Negative	●●○
	If carbon emissions are not managed appropriately, sales revenue may decrease due to lack of customer confidence and capital raising may not be made easy due to negative impressions from stakeholders (ex. deal reduction, contract withdrawal)	Financial	Risk	●●●
Investment of green product and technology	Promote green consumption and contribute towards green society by expanding investment in eco-friendly technology and products	E&S	Risk	●●●
	Increase in the cost of R&D to meet the demand for green products	Financial	Positive	●●●
Minimization of environmental impact across product lifecycle	Reduced carbon footprint across product life cycle by conducting life cycle assessment (LCA) on Songwon's products and monitoring the results	E&S	Positive	●●●
	Increase in sales revenue and capital inflow due to the expansion of market share of Songwon's LCA- implemented products	Financial	Opportunity	●●○
Occupational health and safety risk management	If the culture of safety is not appropriately addressed then the burden of public healthcare system and the community accident rate may increase	E&S	Negative	●○○
	Decrease in sales revenue and net profit, caused by lower labor productivity and production volume	Financial	Risk	●●○

* ●●● High ●●○ Medium ●○○ Low

Sustainability Strategy

Sustainability is a strategic driver at SONGWON. We understand that to maintain and strengthen our leadership position in our core businesses, operating with a sustainable business model is essential. Consequently, our strategic objective is to create added value through efficient operations management, fostering innovation and adopting responsible business practices that meet the evolving demands and sustainability standards of our markets and stakeholders.

This influences the company's strategic trajectory and requires significant investments, particularly in financial and human resources. Sustainability is a group-wide challenge involving SONGWON's entire global team in all our entities and it is actively shaping the company's culture. We carefully consider all dimensions of sustainability: environmental, social and economic. Our sustainability priorities are determined through our materiality assessment process and focus on the most significant topics.

Our efforts are guided by the United Nations Sustainable Development Goals (SDGs) that further the global sustainability agenda. Our commitment to SONGWON's Code of Conduct, internationally recognized sustainability principles as well as stakeholder expectations, as reflected in our strategy, corporate policies and integrated management system, highlight our dedication to sustainability and uncovering new business opportunities.

Improving energy efficiency, reducing emissions and transitioning to renewable energy sources are pivotal long-term measures and consequently represent the primary objectives of SONGWON's sustainability strategy. As we monitor, manage and report on a wide variety of issues, the key to our approach is focusing our resources on material sustainability risks and opportunities that are associated with each material factor. Understanding our key priorities allows us to set our time, resources and investment to the best use.

To achieve our goals, we systematically look to find new and innovative ways to be more sustainable in our operations and through the products and services we offer to our customers. An innovation mindset is ingrained in our corporate culture and business success. Across SONGWON's operations, we use cutting-edge technologies to support reductions in energy use, improve water management and most importantly manage our emissions.

In 2023, SONGWON was selected as an excellence partner after an ESG customer evaluation.

Sustainability encompasses a wide spectrum of initiatives and efforts are underway across the organization to enhance the company's sustainability performance continuously, aligning with our purpose. At the core of these endeavors are responsible business practices, serving as the foundation for all sustainability efforts.

To enhance our company's resilience, SONGWON's strategic approach is comprehensive. The primary objective is to generate added value by skillfully managing operations, fostering innovation and aligning business practices with the evolving demands and sustainability standards of our markets and stakeholders.

ENVIRONMENT, SOCIETY AND GOVERNANCE (ESG) APPROACH

Goals	Measures
CO2-Emissions*: reduction of 11.4% by 2030 (Base year: 2018)	Verification by Korean Government Independent Limited Assurance by BSI (British Standards Institution) 3 rd Party verification by KSA (Korean Standard Association)
Energy consumption: Energy-efficiency, renewables	Renewables: renewables used based on palm oil, photovoltaics, agro-waste (implemented locally), recovery of raw materials from wastewater and waste oil Energy-efficiency: on-site operational optimization measures, Independent Limited Assurance by BSI (British Standards Institution)
Product footprint	LCA for all main products available; completed inventory composition for the top 50% of product sales volume
Health and Safety	Reached goal in 2023: Total Case Accident Rate of 0.07% Independent Limited Assurance by BSI (British Standards Institution)
Customer satisfaction	Sustainability Service Center
Innovation	Product innovations. Sustainable products
Circular economy	Developed design for mechanical recycling of raw materials The packaging recycled for PVC stabilizers
Waste reduction	Share of recycling waste increases annually Recycled PE for packaging (up to 50%). RIGK-Certificate Recovery of raw materials from wastewater and waste CO2 emissions
Governance Structure	Sustainability Governance Structure in place

*To meet the Korean government's NDC(Nationally Determined Contribution), the CO2 emissions (Scope 1 and Scope 2) shall be reduced by 11.4% from the 2018 absolute value by 2030 at the Korean manufacturing sites.

At SONGWON, we take a comprehensive and proactive approach to ESG. Aiming to generate lasting value for all our stakeholders while delivering consistent returns, we have implemented a sustainable business model that addresses the long-term objectives of environmental, social and governance (ESG) principles.

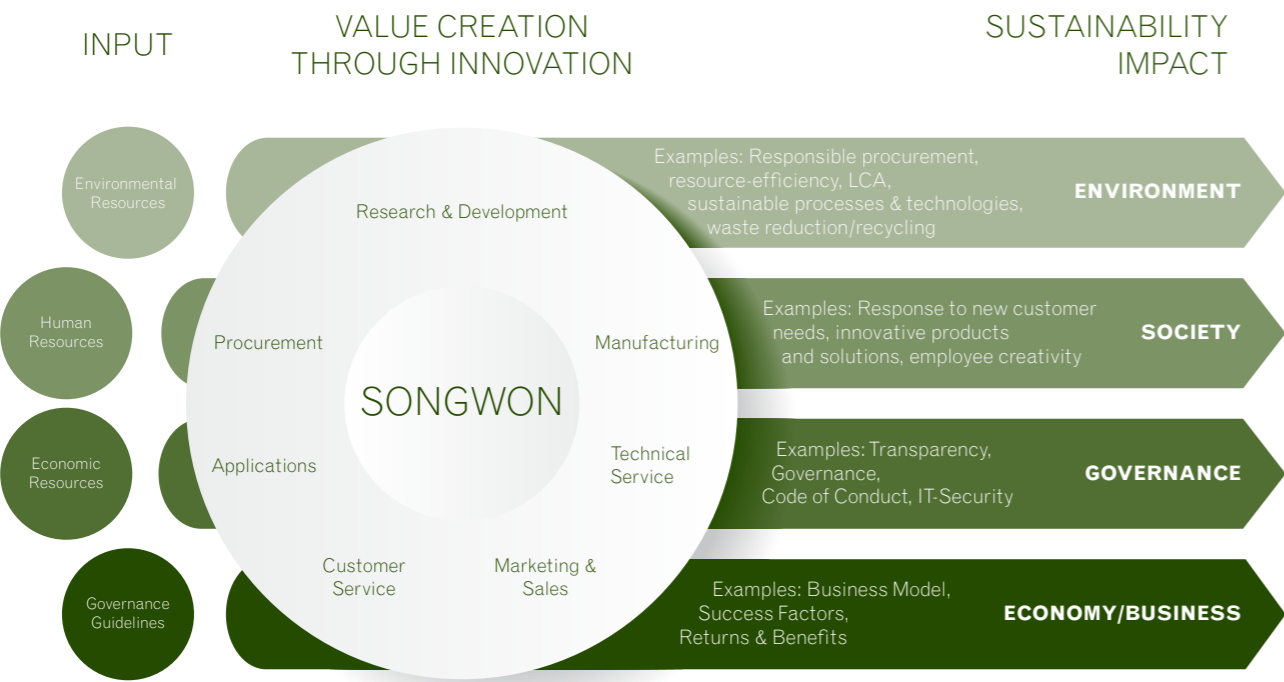
Value Creation

SONGWON's business model actively embodies a commitment to ongoing sustainability, social responsibility and ecological responsibility, while creating value through innovation.



Value Creation through Innovation

Committing to ongoing sustainability, social and ecological responsibility – while creating value through innovation – reflects SONGWON’s business model.



At SONGWON, we carefully assess the ESG impacts of all of our business activities, ensuring their alignment with sustainable development and the UN's SDGs.

Products

SONGWON is a global leader in the development, manufacture and supply of specialty chemicals and the 2nd largest manufacturer of polymer stabilizers in the world. Keeping the importance of sustainability at the forefront of everything we do at SONGWON, we work with customers and other industry experts to develop and deliver customized, application-specific chemical products for a wide variety of sectors and industries.

Sustainable product development

Consistently maintaining a focus on the safety and quality of our products, we are dedicated to ongoing innovation, striving to provide customers with the most sustainable solutions while maintaining uncompromised standards. Through the application of life cycle thinking to our existing product range,

we actively guide our portfolios towards enhanced sustainability outcomes. Our commitment extends across the entire life cycle, encompassing sourcing, transportation, manufacturing, customer usage and end-of-life considerations.

Within SONGWON's Technology Innovation Center, product development is intricately tied to sustainability objectives. Our team of product development experts is dedicated to expanding our portfolio while simultaneously striving to reduce environmental impact and conserve resources through innovative and proactive solutions. This collaborative approach not only fosters a cleaner economy but also ensures alignment with our customers' sustainability goals and drives mutual progress toward a more sustainable future.

During its 58 years in the industry, SONGWON has developed a wide-ranging portfolio of performance-enhancing products that make end materials more durable and plastics easier to recycle. Furthermore, additives make it possible for products to maintain their initial properties and they also can contribute to ensuring a 2nd product life for plastics. By actively assisting customers in selecting products for their applications that fulfill their sustainability requirements, SONGWON contributes to the circular economy.

SONGNOX® 1076 (phenolic antioxidant)	SONGNOX® 1680 (phosphite)	SONGNOX® 9228 (antioxidant for color improvement, stabilization of Cr-type high-density polyethylene)
SONGNOX® 1010 (phenolic antioxidant)	SONGNOX® L670 (liquid primary antioxidant for lubricants)	SONGSORB® 1164 (UV absorber for plastics)
SONGSORB® CS WB product range (solvent-free coatings additives)		SONGSORB® CS 460 SONGSORB® CS 171 (for highly durable coatings - new high performing triazine and a liquid benzotriazole)
SONGSTAB® CZ product range (lead-free PVC additives)	SONGSTAB® COS product range (tin- and zinc-free PVC additives)	SONGSORB® CS B5439 SONGSORB® CS B5452 (coatings on a water-based solution, new blends)
HI-THANE™ A-7332 HI-THANE™ A-6200 (solvent-free polyurethane adhesive)		Photoresist Monomers (raw material of photoresist in semiconductor manufacturing process)
		Photoresist Polymers (photoresist chemicals in the semiconductor manufacturing process)

Technical Service

SONGWON's 9 support centers are strategically placed across the globe and offer customers the highest level of expert technical support. In our industry today, it is not enough just to make sustainable products. SONGWON's Technical Service team focuses its expertise on helping our customers implement sustainable solutions and provide them with ongoing product support to ensure high performance is maintained.

SONGWON's Technical Service Team:

- proactively monitors customer requests.
- provides LCAs for SONGWON's core products.
- designs and further develops solutions for mechanical recycling.
- promotes education in the area of mechanical recycling.
- supports product innovations, e. g., with bio-based content.
- contributes to extending SONGWON's range of sustainable products & solutions.
- monitors activities related to plastic waste as a renewable resource to support the circular economy.

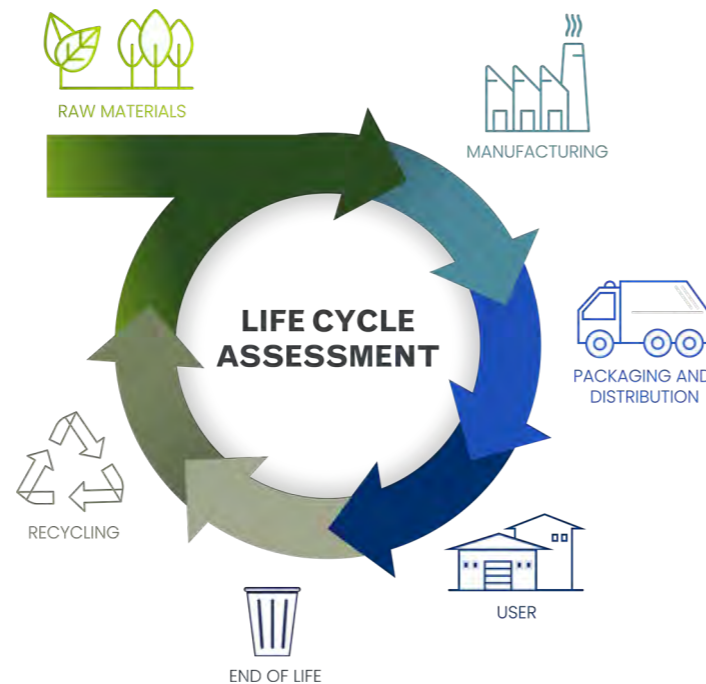
Life Cycle Assessments (LCAs)

Utilizing our global standing as a provider of specialty chemicals, we customize our offerings to meet our customers' diverse needs while maintaining stringent quality and performance benchmarks. However, we are also mindful of our products and processes' potential impacts on our customers, end-consumers and the environment. Hence, in recognition of our responsibility towards the circular economy, SONGWON conducts Life Cycle Assessments (LCA) to assess the sustainability performance of our core products across their entire life cycle, starting from the development phase to their end-of-use, evaluated based on the ISO 14040 and ISO 14044 standards.

In 2023, data for Life Cycle Assessments (LCA) of SONGWON's key products was collected using a well-established methodology, covering aspects such as materials, energy usage and emissions to:

- quantify the global warming potential per product and identify optimization possibilities.
- find opportunities for low-impact raw materials, extending the durability of end products, or utilizing renewable energy for production and operations.

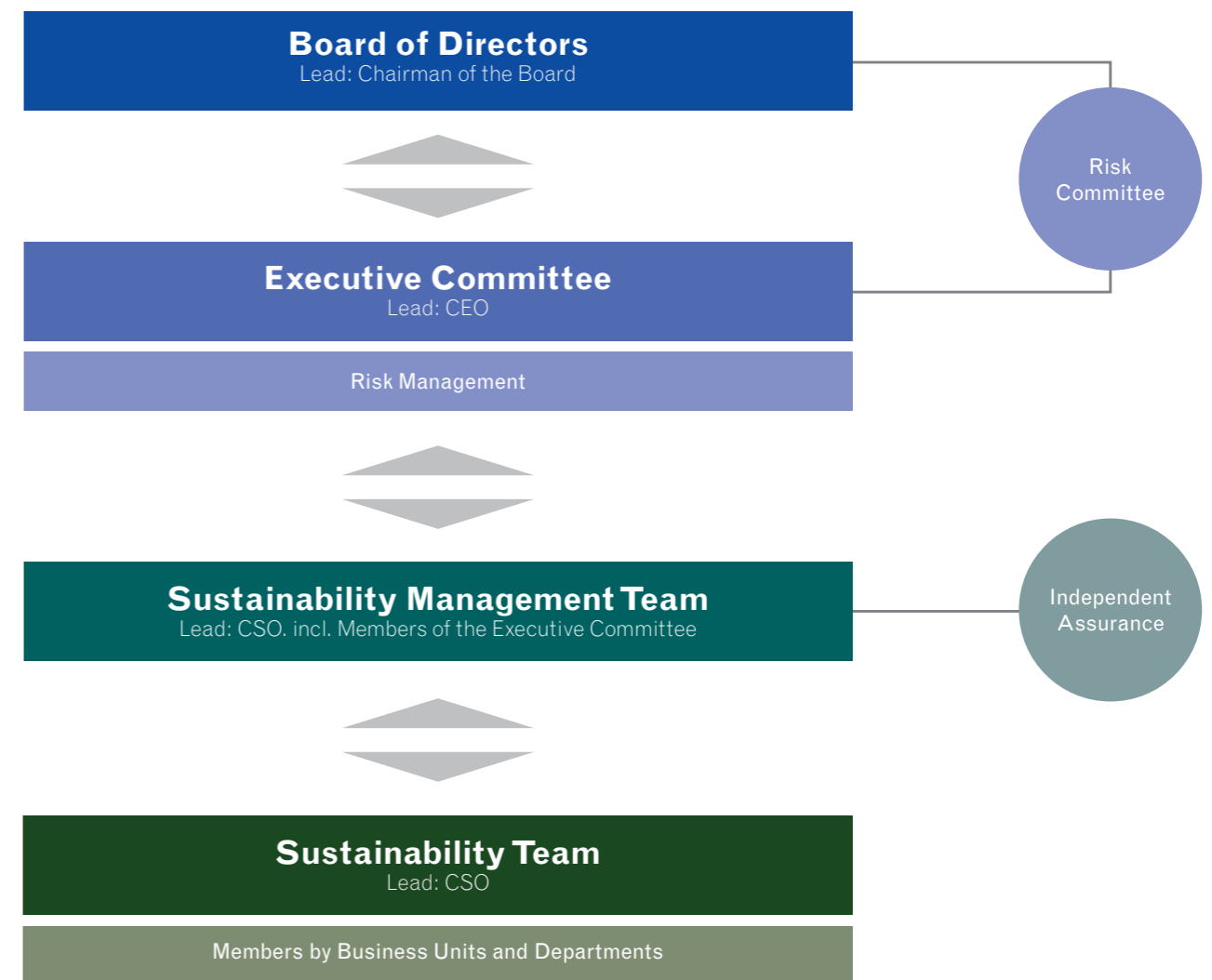
During product development, SONGWON also considers the entire lifecycle of plastics.



Sustainability Governance structure

SONGWON has a clear Sustainability Governance Structure. The highest governance body regarding Sustainability issues is the Board of Directors. The Executive Committee (ECM) is responsible for decision-making and ECM members play a key role in managing the impacts on the economy, environment and society.

Some are also active members of the Sustainability Management Team which is led by SONGWON's Chief Sustainability Officer (CSO). Through the Sustainability Team, leaders from all the Business Units and departments are brought together and actively engage in managing various issues.



Under this sustainability governance structure, SONGWON works to continually raise the sustainability benefits of its product portfolio, lower its greenhouse gas emissions (GHG), reduce waste and preserve natural resources, while creating a safe, diverse, inclusive and engaging workplace.

It achieves these goals through its defined key performance indicators (KPIs) and monitoring as well as reporting across all levels of the organization, in full compliance with international standards and adhering to strict internal policies. SONGWON's commitment to sustainability governance is reflected in the external ratings and positive assessments it receives from leading rating agencies such as EcoVadis.

SUSTAINABILITY GOVERNANCE

Recognizing the vital importance of Sustainability Governance, SONGWON has implemented various measures to strengthen its operations. In addition to a well-defined Sustainability Governance structure, these include adopting a comprehensive sustainability strategy, obtaining independent limited assurance of key performance indicators and instituting a robust risk management approach. These initiatives are aimed at enhancing the company's resilience against the dynamic challenges of the market and the far-reaching effects of climate change.

SONGWON's Board of Directors oversees the strategic direction of the Group and ensures that sound governance procedures are in place. The Board is closely involved in the management of the economic, environmental and social impacts (sustainability strategy approval, implementation, investments, reporting) since it also supervises decisions made by the ECM.

SONGWON's ECM plays a central role in shaping the Group's strategic direction, sustainability initiatives, policies, governance, implementation and reporting. They are also responsible for identifying and managing risks and opportunities. Additionally, always ensuring adherence to high standards of company-wide governance practices, the ECM oversees the organization's daily business activities.

- The members of the highest governance body, proposed to the Shareholders for election, are nominated based on the following criteria: impartiality, freedom from external influence or conflicts of interest, performance history, ethical behavior, leadership and expertise. These criteria contribute to fostering a diverse and well-rounded Board.
- The highest governance body delegates responsibility for managing the company's impacts to key members of SONGWON's ECM, which includes the Group CEO, Group CFO, Leader Operations and Leader Group Commercial.
- The Board's responsibility includes reviewing and approving reported information, which encompasses the organization's material topics. This evaluation is conducted based on a proposal put forth by the Sustainability Management Team and subsequently approved by the ECM.

- In the event of a conflict of interest, the concerned governing body member will refrain from voting on matters related to the conflict, ensuring the highest standards of corporate governance are maintained.
- SONGWON's management consistently promotes effective communication across the organization, facilitated by the company's streamlined structure that facilitates the smooth flow of information. All potential critical concerns, whether internal or external, can be raised with the ECM and are addressed during their regular meetings.

Sustainability, specifically focusing on the environmental, health and safety aspects of the chemical business, will continue to remain a top priority. As governments continue to implement and adjust regulations, such as emissions reduction goals and reporting standards, these developments bring new challenges that the highest governance bodies must continually address. In response, close collaboration with internal and external experts is a key measure to enhance the collective knowledge, skills and experience of the highest governance body on sustainable development.

Stakeholders

SONGWON's key stakeholders include our customers, shareholders, employees, suppliers and partners. Other relevant stakeholder groups include the local communities where SONGWON operates, creditors, regulatory bodies, trade associations, decision-makers and opinion leaders. SONGWON selects stakeholders based on their relevance to our corporate strategy and sector, considering the extent of their impact on the organization and in relation to how SONGWON's activities impact them.

At SONGWON, prioritizing accountability and transparency is fundamental to establishing trust with our stakeholders and we use their input and perspectives to guide us. By regularly engaging in transparent and collaborative dialogue with them, we can better understand their challenges while building strong long-term relationships. Furthermore, their feedback helps us to identify areas of improvement and also to match what we do to their requirements.



The involvement of our stakeholders is paramount to SONGWON's success. To effectively implement our sustainability strategy in a significant way, we rely on contributions from all our stakeholders. To achieve this, we employ a varied array of tailored communication channels for each stakeholder group. This approach enables us to promptly address their concerns and meet their expectations.

In 2023, to strengthen communication with stakeholders and respond appropriately, KPIs related to health and safety as well as technical advice were added to the KPIs for management.

Stakeholder Groups	Topics	Channels
Employees	Health & safety, human rights, career development, work conditions, job security	Daily interaction, meetings, intranet, employee newsletter, training, performance reviews
Customers	Requests, new requirements, products, developments, strategy	Personal contact, website, newsletter, events, surveys, handbooks, email/calls
Suppliers	Due diligence, targets, products, developments, declaration	Direct contact, online, meetings, surveys, assessments, training, calls
Shareholders/Investors	Strategy, performance, ESG	Financial reporting, meetings, annual reports, website, calls
Industry Associations	Industry developments/issues, regulations, standards, legislation, partnerships	Memberships, conferences, meetings, projects

Stakeholder communication is fostered through contact and regular exchange. Stakeholder engagement activities are predominantly initiated at the top level (Board/ECM, BU leaders, site management) to identify current, potential impacts and to determine respective prevention measures or common solutions. For the process of following up, all levels are integrated. SONGWON ensures that stakeholders have access to clear, accessible information through appropriate communication channels, e.g. product declarations.

SONGWON systematically records and integrates stakeholder feedback, that has been gathered through methods such as online questionnaires and requests for low-emission products, into decision-making processes, including product Life Cycle Assessments (LCAs). In all its business and communication activities, SONGWON actively promotes its values of respect, which encompass human rights and the cultivating of positive business relationships.

Risk Management

At SONGWON, we understand that to achieve our long-term vision in the face of a rapidly shifting business landscape and to earn stakeholders' trust and confidence by meeting their expectations, we must address risks with proactive and decisive actions.

The significant events of the last two years – such as the pandemic, supply chain disruptions and heightened geopolitical tensions have highlighted the importance of evaluating and anticipating the spectrum of risks and systematically incorporating them into the company's top management strategies. This is essential not only for mitigating or minimizing SONGWON's exposure to risks but to ensuring that we are always well-positioned to capitalize on any valuable emerging opportunities. SONGWON's Board of Directors is actively engaged in identifying and assessing risks and opportunities as well as developing and establishing appropriate strategies for managing them.

In particular, evaluating the exposure to climate-related risks and opportunities across a specified timeframe is paramount for fostering the shift towards a low-carbon economy as outlined in both the Paris Agreement and the Sustainable Development Goals (SDGs) set by the United Nations. To address this risk, we continually strive to reduce SONGWON's carbon footprint and also by developing more sustainable products to support the circular economy.

In 2023, SONGWON's management conducted a materiality assessment on climate change risks. The outcomes have been incorporated into KPIs and are being effectively managed by the Leader Sustainability.

Furthermore, the impact of potential risks related to regulatory changes (e.g., product registrations, substance bans), market uncertainties (e.g., volatile demand, rising costs) and maintaining SONGWON's reputation (e.g., governance, operations) emphasize the need for our ongoing vigilance. In addition to formulating our strategy, establishing a robust and meticulously developed risk management framework lays a vital cornerstone for our future endeavors. By systematically identifying, assessing and mitigating risks, we can safeguard our operations and resiliently position SONGWON for sustainable growth in our ever-changing business environment.

Ethics

Acting responsibly, ethically and in a law-abiding way to uphold a culture of mutual responsibility is fundamental to how we do business. At SONGWON, we are dedicated to fostering a responsible culture and having policies that empower our people to conduct themselves in alignment with our values.

Our dedication to “always doing the right thing,” is the guiding principle that directs us to act responsibly and with integrity. At SONGWON, we prioritize human welfare, seek new opportunities and strive for excellence and collaborative success with our stakeholders. We aim to continually reinforce ethical behavior, enhance our processes, policies and compliance tools as well as enable our people to make sound decisions. We want our people to be proud of working in a global organization with high standards of integrity, committed to safeguarding its staff, assets and reputation.

In line with the company's core values and professional, customer-focused approach, our **Code of Conduct** sets out business principles and how every member of SONGWON's global team should apply them.

The Code undergoes regular updates, addressing the following areas:

- Corporate values
- Equal opportunities
- Health and safety
- Environment
- Fair trading
- Money laundering
- Trade control regulations
- Insider trading
- Bribery and corruption
- Gifts and favors
- Expenses and claims
- Intellectual property rights
- Use of company property
- Alcohol, controlled substances and weapons
- Code breaches
- Communication

As part of the commitment to a culture of good corporate practice, SONGWON also has a whistleblower policy that allows individuals to report concerns regarding improper activities or breaches of our Code and protects them from retaliation.

Compliance

In 2023, no inquiries, reports, or complaints were received. There were also no cases of human rights violations, bribery, discrimination, or other violations of personal rights. During the reporting period, there were also no lawsuits or fines resulting from anti-competitive practices, in relation to products and services or due to non-compliance with environmental laws and regulations.

Compliance

Ethics and integrity	No cases
Discrimination and harassment	No cases
Human rights	No cases
Bribery and corruption	No cases
Anti-competitive practice	No cases
Environmental laws/regulations	No cases

IT-Security and -infrastructure

Ensuring the highest level of IT security and the ongoing development of our IT infrastructure are top priorities at SONGWON. Only by protecting our systems, networks and programs against digital attacks can we maintain a high level of cybersecurity which is essential for business but also for our stakeholders.

The IT policy is the framework for IT services and knowledge-based articles serve as guidance. Measures to increase end users' awareness regarding IT security are in place (e.g., simulated phishing attacks). SONGWON calls on the support of dedicated IT experts for infrastructure services, tests, or the simulation of attacks (e.g., external penetration tests). IT security is managed via both Global IT (Group level) and local IT (entity level).

For Ethics and IT security Key Performance Indicators, see Appendix pg. 78

ENVIRONMENT

Ethics

GRI Disclosures	Categories	Unit		2018	2019	2020	2021	2022	2023
205-2	Total employees trained on ethics ^{1,2}	Number	First reporting from 2019		680	1,085	1,023	994	977
		%			63	100	100	100	100
	Total ECM members ⁴ trained on ethics	Number	First reporting from 2019		5	5	4	4	4
		%			100	100	100	100	100
205-1	Percentage of fully owned sites for which an internal audit/risk assessment on ethics issues ³	Number	First reporting from 2020			3	4	4	7
		%				43	57	57	100
205-3	Cases reported through whistleblowing channel ⁵	Substantiated cases ⁶	Number	0	0	0	0	0	0
		Unsubstantiated cases ⁶	Number	0	0	0	0	0	0
	Total confirmed incidents of corruption		Number	0	0	0	0	0	0
206-1	Total number of legal actions pending or completed during the reporting period regarding anti-competitive behavior and violations of anti-trust and monopoly legislation		Number	0	0	0	0	0	0

* Data boundaries: All SONGWON's business operations. (7 manufacturing sites & offices)

¹ SONGWON plans ethics training for SONGWON's all employees.

² Ethics training has included anti-corruption content.

³ The internal audit/risk assessment on ethics issues was conducted for a total of 7 manufacturing facilities.(Ulsan, Maeam, Suwon, Panoli, Greiz , Houston, Abu Dhabi)

⁴ The ECM (Executive Committee) manages all aspects of SONGWON's business, create policies and make a key decisions concerning the organization's strategy, investments and people.

⁵ Whistleblowing channel in SONGWON
Korean sites : Whistleblowing Grievance Committee (see Committee counselor contact information)
Global sites : Whistleblowing Officers (see Section 7 of the Whistleblowing policy)

⁶ Zero cases reported through whistleblowing channel so there are no cases reported through the whistleblowing channel.

IT-security

GRI Disclosures	Categories		Unit	2018	2019	2020	2021	2022	2023
418-1	Total substantiated complaints received concerning breaches of customer privacy	Complaints received from outside parties and substantiated by the organization	Number	0	0	0	0	0	0
		Complaints from regulatory bodies	Number	0	0	0	0	0	0
	Total identified leaks, thefts, or losses of customer data		Number	0	0	0	0	0	0

* Data boundaries: All business operations of SONGWON. (7 manufacturing sites & offices)

At SONGWON, we firmly believe that minimizing the environmental impact of our business activities is not only a moral imperative but also a key driver of our future success as a leading organization. We acknowledge that our operations and supply chains as well as SONGWON's products and services, impact the natural environment in various ways. As expectations relating to manufacturers' responsibility increase throughout the value chain, we uphold SONGWON's dedication to environmental protection.

Our goal is to safeguard the environment by responsibly managing natural resources, including renewables and raw materials, through sustainable procurement and production practices. This involves reducing energy and water consumption as well as minimizing emissions, waste and effluents. We have implemented an operational management system to achieve SONGWON's emissions reduction goal, improve energy efficiency, increase recycling rates and reduce waste and wastewater. With proactive coordination and strategic planning, we are dedicated to making significant strides toward a more sustainable and climate-resilient future.

Since 2008, we have transparently reported SONGWON's sustainability performance, with a focus on specific countries and indicators. Recently as part of our evolving strategy and ongoing commitment to improvement, we adjusted our reporting measures and scope to better align with our goals and commitments.

Scope of environmental data to be extended	The reporting scope includes all manufacturing sites in SONGWON entities. First reporting from 2023 includes 8 manufacturing sites.
	The environmental data collection has been extended to all manufacturing site of SONGWON entities from 2023.
Independent Limited Assurance	In accordance with ISAE 3000, BSI has conducted limited assurance on 15 disclosures related to Environment.
	The assurance statement is set out on page 106.
Restatement	At the end of August on an annual basis, the Korean Government verifies and corrects the by SONGWON disclosed emissions data (Korea) in the Annual Report. The adjustments relate to the previous year's data. The (minor) adjustments according to the Korean government are included in the tables.
	The corresponding tables are marked.

Energy

At SONGWON, we are dedicated to sustainable energy consumption. We prioritize evaluating the environmental, social and economic impacts of our energy use and implement effective measures to reduce energy waste, enhance efficiency and transition to renewable sources whenever feasible. With a strong emphasis on optimizing resource utilization, we strive to mitigate environmental consequences associated with SONGWON's energy consumption. The production volume was aligned with the dynamic environment in 2023.

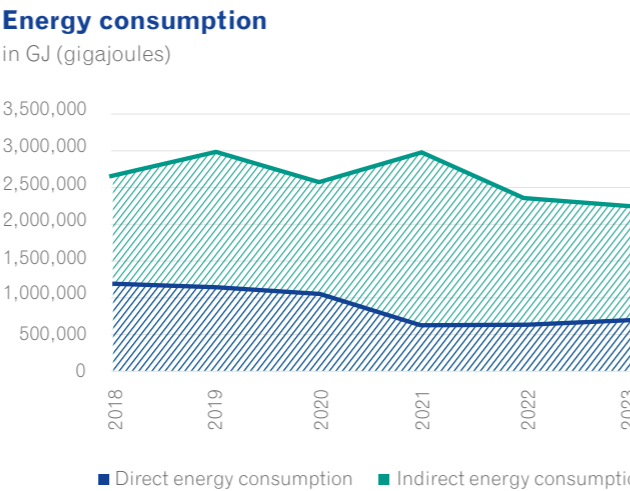
In 2023:

- Total energy consumption for infrastructure & chemical processes: 2,954.68 TJ.
- Direct energy (Scope 1) consumption: 700.64 TJ.
- Indirect energy (Scope 2) consumption: 2,254.03 TJ
- Energy intensity: 11.8 GJ/tProduct
- Total energy consumption for Korea: 2,619.25 TJ (10.37% decrease compared to 2022)

In 2023, SONGWON's energy collection scope increased from 4 manufacturing plants to 8.

Greenhouse Gas Protocol (GHG Protocol) corporate standard – Scope 1 and Scope 2

- Scope 1 – emissions are direct GHG emissions that occur from sources that are owned or controlled by SONGWON, including emissions from the combustion of fuels for electricity, incineration, heat, or steam and emissions from physical or chemical processing.
- Scope 2 – emissions are indirect GHG emissions from the generation of purchased electricity and steam consumed by SONGWON.



GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023	
302-1	Total energy consumption ¹	Direct Energy	GJ	1,191,882	1,142,496	1,049,102	633,750	626,355	700,643
		Indirect Energy	GJ	2,658,662	3,005,230	2,608,411	3,005,609	2,350,374	2,254,034
		Total	GJ	3,850,544	4,147,726	3,657,513	3,639,359	2,976,729	2,954,678

¹ This calculation is based on FRAMEWORK ACT ON LOW CARBON, GREEN GROWTH. This data is subject to change following verification by the Korean Government. (Verification result can be confirmed yearly in May)

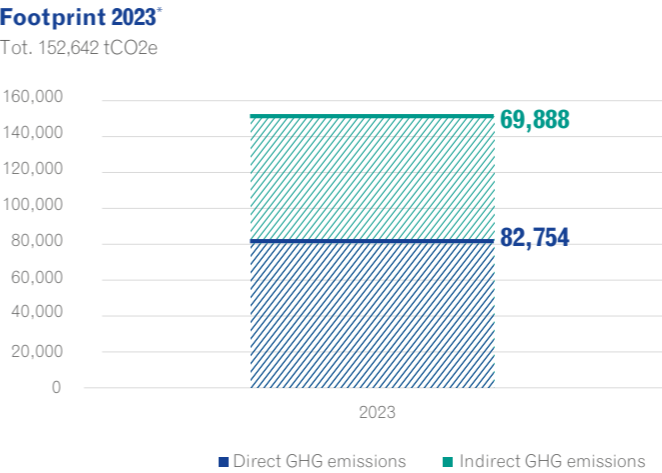
Emissions

This year, SONGWON established a carbon reduction roadmap aligned with the Korean government's National Determined Contribution (NDC) as the first step in our strategic plan. As part of this roadmap, we aim to reduce SONGWON's emissions by 11.4% by 2030, in line with the chemical industry sector's target of 11.4% reduction from 2018 levels. To achieve this, we plan to implement further efficiency measures, including investing in and upgrading our facilities. Going forward, SONGWON is committed to further reducing greenhouse gas (GHG) emissions by 50% by 2040 by adopting green and blue hydrogen, leveraging future innovative technologies, expanding renewable energy sources and securing offset emissions rights. Our long-term vision is to continue expanding our efforts in this area and striving to achieve net-zero emissions by 2050.

Adhering to internationally recognized standards, SONGWON has diligently monitored emissions data and consistently reported GHG and other air emissions annually since 2008. The disclosed CO2 equivalent data (CO2e) includes both direct emissions and indirect emissions (Scope 2 incl. all 8 facilities) originating from SONGWON's global manufacturing sites. The total in 2023 was 152,642 tCO2e.

In 2023 SONGWON:

- recorded total emissions² (Scope 1 & Scope 2) of 152,642 tCO2e.
- decreased total emissions in Korea³ by 5.71% to 132,317.82 tCO2e (2022: 140,337 tCO2e).
- reports a carbon intensity of 2.2 tCO2-eq/TOE.



For additional Key Performance Indicators see Appendix pg. 98

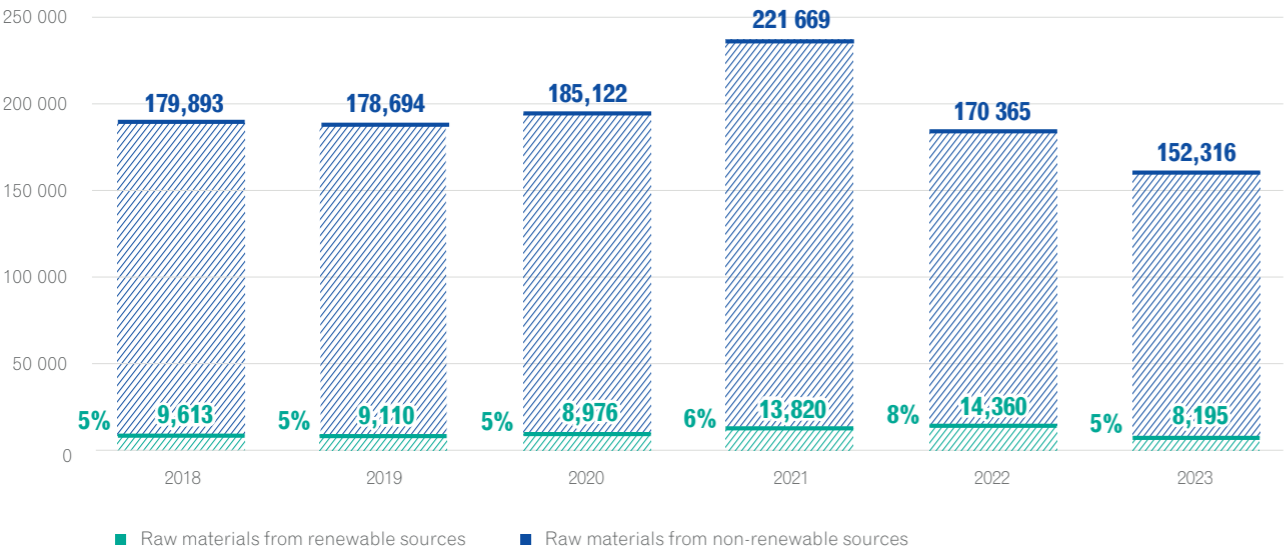
² In 2023, SONGWON extended its scope to global and reports on its 8 manufacturing facilities.
³ Korean plants: Ulsan, Maeam & Suwon as well as the offices in Seoul & Busan
*This calculation is based on FRAMEWORK ACT ON LOW CARBON, GREEN GROWTH, The Korean Law in case of Korea. **This data is subject to change following verification by the Korean Government. (Verification result can be confirmed yearly in May)** In case of Global sites (India, UAE, Germany, USA, China), calculation method is based on the IPCC guideline (Scope 1) & electricity factor (Scope 2) of each nation & steam factor (Scope 2) of each steam supplier.

Raw Materials

At the heart of our product portfolio strategy lies a dedicated commitment to transitioning to renewable resources. We actively seek out opportunities to integrate raw materials sourced from renewable sources into our operations.

Central to our strategy is the imperative shift towards renewable resources. We are committed to actively seeking opportunities to incorporate raw materials sourced from renewable sources into our operations. While the majority of our required raw materials still originate from non-renewable sources, we are making good progress. In 2023, 8,195MT of renewable raw materials were used and we sought to increase to more renewables to improve the sustainability of our operations.

Used Raw Materials
(in mt)



GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023	
301-1	Total amount of Raw material	Renewable ⁶	MT	9,613	9,110	8,976	13,820	14,360	8,195
		Non-Renewable ⁷	MT	179,893	178,694	185,122	221,669	170,365	152,316
		Total	MT	189,506	187,804	194,098	235,489	184,725	160,512

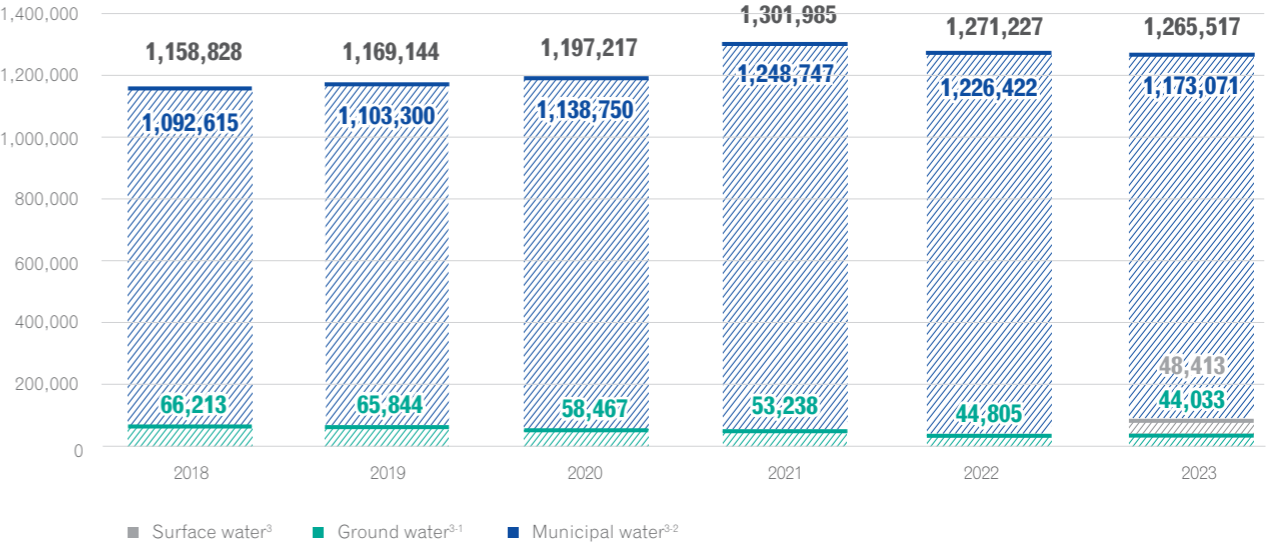
⁶ The raw material from renewable sources : Cetyl Alcohol, Epoxy, Glycerine 99.5%, H-LA, H-OLE, H-ST(25 KG), N-OCT(OH), N-Octanol(Sasol), Oleylalcohol, S-100, ST(OH)-1.
⁷ The raw material from non-renewable sources : Total raw materials except for renewable sources.

Water

Water is essential for our production processes and our water management strategy involves maximizing water efficiency across our operations and minimizing pollutants into water sources. At all of SONGWON's facilities, we are executing targeted, site-specific action plans to reduce our consumption, minimize and improve the quality of discharged water as well as implement pollutant-preventative measures all aimed at conserving this precious resource.

According to on-site measurements, SONGWON's total water consumption decreased again compared to the previous year. All water discharged from SONGWON's manufacturing facilities undergoes internal treatment before being directed to central water treatment plants in local municipalities. At these facilities, organic content is further reduced before the treated water is released into the sea or directed to a regional water treatment facility, such as in Panoli, India. Water withdrawal and water discharge have both decreased compared to 2022. Total water consumption in 2023 was 1,265,517 MT.

Water consumption
(in t)



For additional Key Performance Indicators see Appendix pg. 99

³ Surface water data collection from 2023 (Data boundaries : Only applicable for Greiz plant).
^{3,1} In case of Ground water (Data boundaries: Only applicable for Suwon plant)
^{3,2} In case of Municipal water (Data boundaries: Ulsan, Maeam, Panoli, Abu Dhabi, Houston, Baifu plants).
The leased building status of the Houston plant hinders the monitoring of water withdrawal usage because SONGWON solely pays utility bills to the building owner, making the direct measurement of water usage unattainable.

Waste

Manufacturing processes inevitably lead to the generation of byproducts. At SONGWON, we always endeavor to reuse byproducts as inputs elsewhere whenever feasible and thereby reduce carbon emissions by minimizing waste wherever possible. Our ultimate objective is to establish a circular economy in which products are repeatedly used, resulting in zero waste generation. If there are no reasonable means of recycling it. Unavoidable waste is properly treated and disposed of in full compliance with all regulations.

This year, the data boundary changed to include all of SONGWON's manufacturing sites⁵.In 2023, the hazardous waste generated by SONGWON amounted to 52,642 tons. Compared to 2022, the percentage of hazardous waste that was recycled in 2023 increased by 2.46%.

GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023*	
306-3 306-4 306-5	Total amount of hazardous waste	Recycling	Tons	384	499	4,074	11,119	12,903	13,220
		Landfill	Tons	1,646	5,097	6,434	3,641	3,074	26,240
		External Incineration	Tons	18,831	15,223	15,595	520	660	613
		Internal Incineration	Tons	6,229	6,310	6,006	17,287	14,919	12,569
		Total	Tons	27,090	27,129	32,109	32,568	31,556	52,642
306-3 306-4 306-5	Total amount of non-hazar-dous waste	Recycling	Tons	1,556	1,597	1,809	1,687	1,070	1,614
		Landfill	Tons	2,879	605	275	418	255	90,169
		External Incineration	Tons	646	694	601	603	1,430	741
		Internal Incineration	Tons	5	2	0	28	0	0
		Total	Tons	5,086	2,898	2,685	2,736	2,755	92,524

⁵ **2023 data boundaries:** SONGWON's 7 manufacturing sites (Ulsan, Maeam, Suwon, Panoli, Houston, Greiz Abu Dhabi) & 1 manufacturing JV (SW Baifu). Up to 2022, the data was only included from SONGWON's 3 Korean plants: Ulsan, Maeam and Suwon. For comparison, in 2022 in Korea, the total amount of hazardous waste was 31,556 tons and the total amount of non-hazardous waste was: 2,755 tons. * The waste tally until 2022 was limited to Korean manufacturing sites, but the scope of the tally was expanded to 8 global manufacturing sites from 2023.

TOC

With the change in the Water Environment Conserva-tion Act in Korea, the benchmark for assessing organic matter in water pollutants shifted from COD (Chemical Oxygen Demand) to TOC (Total Organic Carbon). As of 2022, SONGWON's disclosures and regulatory com-pliance concerning water pollution in Korea now rely on TOC measurements, with the TOC index integrated into our control system. We ensure that SONGWON complies with TOC limits and regulations as mandated by the amended law.

In 2023, SONGWON's TOC average was 19 ppm (2022: 27 ppm).

Significant spills

SONGWON has not had any spills (oil, fuel, waste, and chemicals) to record or report since 2008. The company also has none to record or required to report in 2022.

SONGWON had no spills in 2023.

Biodiversity

We recognize that our business operations present both opportunities and risks for biodiversity. This encompasses not only our global production but also extends to the raw materials we procure and the utilization of our products. Therefore, we make a point of prioritizing the preservation of biodiversity in managing SONGWON's sites. Additionally, the organization does not own, lease, or manage any property within or near protected areas or regions of high biodiversity.

SONGWON's activities, products and services and no significant impact on biodiversity, to the best of our knowledge.

Products: Use and End-of-Life

GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023
-	Product Use ⁹	Coatings	%	First reporting from 2020	1.7	2.8	2.7	2.4
		Fuel and Lubricant Additives	%		16.4	18.0	23.5	24.6
		Polymer Stabilizers	%		63.5	63.8	56.4	56.5
		Specialty Chemicals	%		0.1	0.2	0.4	0.3
		Tin Intermediates / PVC	%		8.5	8.3	8.4	7.7
		TPU / SPU	%		9.9	6.9	8.7	8.5
		Total	%		100.0	100.0	100.0	100.0
		6 months	%	2.9	2.9	2.9	2.9	2.9
-	Product End-of-Life ¹⁰	8 months	%	0.4	0.4	0.4	0.4	0.4
		9 months	%	0.4	0.4	0.4	0.4	0.4
		12 months	%	17.8	17.8	17.8	17.8	17.8
		24 months	%	39.7	39.7	39.7	39.7	39.7
		36 months	%	30.2	30.2	30.2	30.2	30.2
		18 months	%	3.3	3.3	3.3	3.3	3.3
		60 months	%	5.4	5.4	5.4	5.4	5.4
		Total	%	100.0	100.0	100.0	100.0	100.0

⁹ Consumer consumption rate of product
¹⁰ Product shelf life

Sustainable sourcing

SONGWON's procurement strategy incorporates criteria including health, quality, safety, social factors and environmental protection. Our procurement organization is dedicated to ensuring the long-term reliability of our supply chain, supporting the production of our products while also securing competitive advantages for our operating businesses. We prioritize sustainability in our procurement practices, seeking suppliers who align with our commitment to environmental and social responsibility. This approach not only strengthens our supply chain resilience but also contributes to helping us meet our corporate responsibility.

All of SONGWON's policies and procurement procedures are designed to address risks, including those related to human rights and other upstream social and environmental impacts. Additionally, we have dedicated significant resources to strengthening SONGWON's human rights compliance systems to create a safe and healthy organizational culture for our employees and those supporting our supply chains.

SONGWON evaluates suppliers' sustainability performance based on key factors such as labor laws, EH&S, human rights and business ethics. In 2022, we conducted an in-depth analysis of SONGWON's supply chain with the support of external advisors to evaluate the risk and potential exposure to forced labor. In 2023, we continued to work with suppliers previously analyzed and we will be continuing to update our supplier reviews in 2024.

To promote sustainable sourcing, we became members of the Responsible Mineral Initiative (RMI) to curb our purchase of conflict minerals and ask our supply chain to cooperate with SONGWON's Code of Conduct and Purchasing Policy.

We not only select suppliers based on economic indicators but also based on sustainability performance (e.g., shorter transport distances for lower emissions), competitiveness or geographic area (e.g., close proximity to plants, reduced delivery time, same time zone, quick response) as well as important aspects such as EH&S, human rights and business ethics.

We are actively managing CO2 emissions within our supply chain. When needed, we offer training and support to enable our partners to participate in CO2 reduction efforts. Additionally, we provide incentives for maintaining a collaborative relationship with SONGWON by incorporating their emission reduction performance into our supply chain evaluations. Our future goal is to meet customer demands by accounting for Scope 3 emissions and contributing to carbon reduction initiatives. By setting environmentally-friendly corporate objectives and fostering a circular economy, we enable customers to participate in eco-friendliness by purchasing SONGWON products.

SONGWON is collecting and reusing tote bags (the packaging material for liquid PVC stabilizers) and will continue to use PE packaging with 50% reused plastic to contribute to a circular economy. In addition, through collaboration with partner companies, we plan to increase the reuse rate by securing technology to extract raw materials from wastewater as well as waste oil of products that are being treated as waste and we will continue to recycle process sludge and used catalysts.

Exclusion of Conflict Materials:

In 2023, SONGWON conducted CSR audits of major suppliers and adhered strictly to regulations prohibiting the trading or processing of conflict minerals. This ensures our compliance with the laws of various countries, excluding minerals like tantalum, tungsten, tin, and gold sourced from conflict zones.

Additionally, we avoid any products potentially linked to child labor in our value chain. The Procurement team evaluates the performance of each supplier based on whether they have ISO 14001 or not. Furthermore, Procurement also evaluates suppliers annually and if they get a poor score they are excluded from next year's contract.

Sustainable Sourcing Key Examples

GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023
308-1	Targeted suppliers with ISO14001 registered	Number	First reporting from 2020		36	71	68	31
		%	First reporting from 2020		72	84.5	83	86

Sustainability Highlights 2023

- Established a carbon reduction roadmap in response to the EU's carbon tax & supply chain due diligence law.
- Established a sustainability team to drive SONGWON's sustainability strategy.
- Promoted sustainable sourcing and became a member of the Responsible Mineral Initiative (RMI).
- Used PE bags containing 50% recycled plastic as packaging materials.
- Collected and reused tote bags (liquid PVC stabilizer packaging).
- Minimized waste oil by converting it into steam through di-alkylphenol (DAP) plant expansion.
- Maximized use of steam produced by agro-waste-fired steam boiler
- Introduced drying technology for recycling used catalysts (isobutylene (IBL) waste).
- Installed two new spent solvent storage tanks to facilitate solvent reuse-recycling.
- Replaced the heat boiler with a low NOx burner, reducing LNG consumption & NOx emissions.
- Installed refrigerated air-dryer to achieve greater energy efficiency.
- Introduced an EHS system for KPI tracking (e.g. accident management, safety inspections, employee health monitoring & self-audits, etc.)
- Recycled waste by extracting raw materials from process sludge generated in the product manufacturing process.
- Recycled water through Zero Liquid Discharge and recovered 80% of steam condensate (total water savings: 12,174 KL)
- Lowered CO2 emissions by 923 mt through solar power generation.
- Carried out carbon emissions reduction activities using the LCAs.
- Executed CO2 emissions management in relation to our supply chain
- Provided training to supply chain partners, enabling them to participate in reducing CO2 emissions through due diligence.
- Conducted quarterly joint safety patrols to improve plant environment & safety.

SOCIETY

Customer Focus

Our customers are fundamental stakeholders and vital to our value proposition. For us, it is essential to cultivate strong, trusting relationships with them, prioritizing their needs across our product offerings, quality assurance, reliability and our commitment to environmental, health, safety, and social responsibility.

We foster a culture at SONGWON, where our employees embrace high personal responsibility and prioritize customer needs. As a steadfast development partner for our customers, we believe in the power of collaboration to deliver the best solutions. Our goal is to always be “one step ahead” of our customers and thus anticipate their potential product, service, or information needs.

SONGWON's customer-focused approach in today's challenging environment involves integrating every facet of the value chain, making swift decisions, maintaining a high level of agility and adopting solution-oriented approaches. We continually strive to position the company ahead in the industry by emphasizing high quality and supply reliability as well as continuously enhancing our cost position, and driving innovation in both products and processes.

Our Services to our Customers

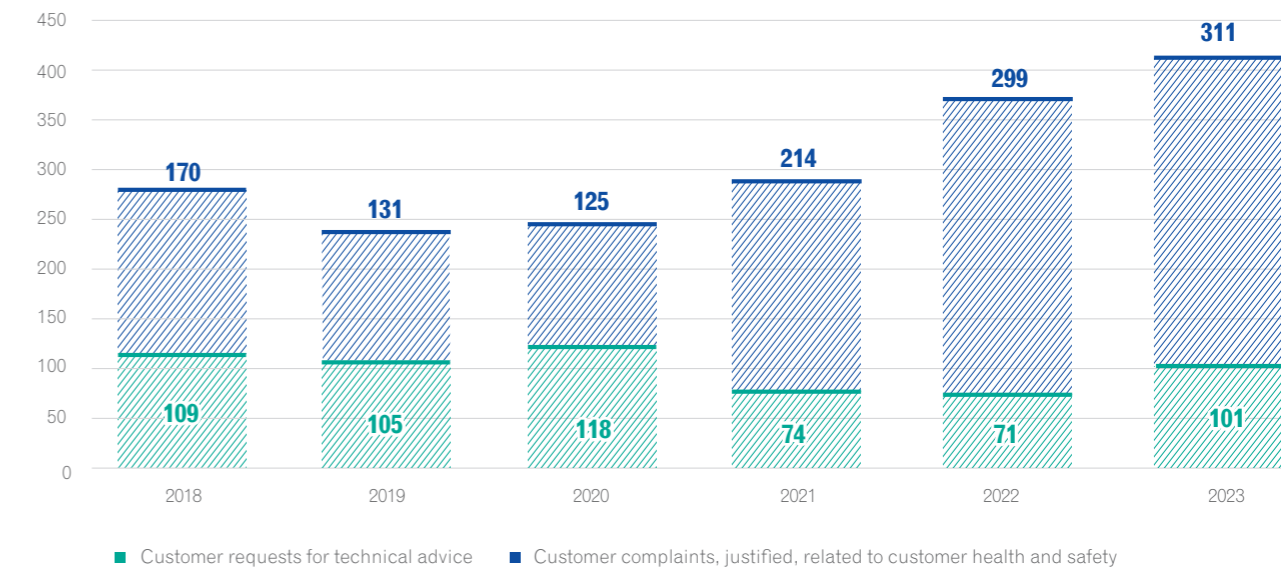
By adopting a holistic approach for our customers, we cover all stages of the value chain, from procurement and manufacturing to sales, service, and even after-sales processes such as recycling solutions. The objective is to address emerging customer needs, regulatory changes and demands for product and service information and labeling, including aspects like life cycle assessment (LCA) as well as sustainable products and packaging. To ensure both customer satisfaction and their health and safety, SONGWON introduces significant product and process innovations that also yield positive environmental impacts such as:

- declaring the sourcing and components of all SONGWON products, excluding conflict materials and child labor.
- procuring renewable materials where possible.
- manufacturing products in a safe environment.
- ensuring prompt and reliable supply (regardless of disrupted supply chains or the geopolitical situation).
- using recycled PE for packaging (up to 50%) incl. Climate Protection Certificate from RIGK.
- providing LCAs for all of SONGON's core products.
- continuing to build an optimized pipeline of products, services and solutions.
- offering guidance, trainings and videos for the efficient and safe handling of products or solutions.
- managing (online) requests regarding product use, technologies, materials, and/or regulations received from supply chain stakeholders.
- offering trainings on our mechanical recycling approach to give plastics a 2nd life.
- monitoring of regulatory and product (labeling) requirements.
- establishing a Sustainability Team.

Again in 2023, SONGWON had zero instances of non-compliance related to marketing communications or product and service information and labeling. Furthermore, to better understand customers' needs and perceptions, the Technical Service team carried out a strategic review in the past which included a voice of customer survey. As a result, the team was able to improve its response times to requests and a dedicated email address (techservice@songwon.com) was created to channel all technical customer inquiries.

Customer Health & Safety

(in EA)



SONGWON Key Performance Indicators 2023

Customer Health & Safety

GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023
-	Customer complaints, justified, related to customer health and safety	Number	109	105	118	74	71	101
416-1	Customer requests for technical advice	Number	170	131	125	214	299	311
416-2	Incidents of non-compliance with regulation and/or voluntary codes concerning the health and safety impacts of products and services	Number	0	0	0	0	0	0
	Incidents of non-compliance with regulations resulting in a fine or penalty	Number	0	0	0	0	0	0

* Data boundaries: All business operations of SONGWON. (7 manufacturing sites & offices)

Health and Safety

TCAR⁶ 2023: 0.07%

Health and safety is, and always will be, our top priority. To be a truly sustainable organization able to create value for stakeholders, we need environmental stewardship, as well as a healthy, safe and injury-free working environment.

Over the past decade, we have made great improvements in EH&S by increasing the awareness of its importance across the company. In each of our manufacturing facilities, we have well-established EH&S safety policies, clear procedures and performance standards in place that encompass far more than the minimum required to comply with laws and regulations. chemical elements, products, processes, or technologies. Our employees actively engage in identifying and managing risks, as well as in finding ways to improve EH&S.

In order to fulfill our responsibility, we aim to monitor and continually optimize the safety standards of our facilities, while striving to achieve accident-free operations. We sincerely believe that all accidents are preventable and that by applying safe working practices, we can safeguard against hazards or remove them. Protecting our stakeholders, our facilities and the environment, as well as strongly advocating the sustainable use of natural resources and raising environmental awareness are integral aspects of SONGWON's mission as a responsible, leader in the industry.

GRI Disclosures	Categories		Unit	2018	2019	2020	2021	2022	2023
403-9	Number & Rate of Recordable Accidents (TCAR) ⁸	Based on 200'000 Working hours	Number	6	2	5	5	0	1
			Number/h	0.42	0.14	0.36	0.32	0.00	0.07
		Based on 1'000'000 Working hours	Number	6	2	5	5	0	1
			Number/h	2.12	0.71	1.82	1.61	0.00	0.35
	Number & Rate of Injuries (TCIR, TRIR) ⁹	Based on 200'000 Working hours	Number	10	4	9	19	4	6
			Number/h	0.71	0.28	0.66	1.23	0.27	0.43
		Based on 1'000'000 Working hours	Number	10	4	9	19	4	6
			Number/h	3.54	1.42	3.28	6.13	1.34	2.13
	Lost day & Lost day rate (LDR, LTIR) dur to accidents and incidents ¹⁰	Based on 200'000 Working hours	Number	157	32	116	126	8	72
			Number/h	11.11	2.27	8.46	8.13	0.53	5.11
		Based on 1'000'000 Working hours	Number	157	32	116	126	8	72
			Number/h	55.56	11.33	42.28	40.66	2.67	25.54
	Number & Rate of Fatalities ¹¹	Based on 200'000 Working hours	Number	0	0	0	0	0	0
			Number/h	0.0	0.0	0.0	0.0	0.00	0.00

⁶ TCAR(Total Case Accident Rate) = Number of recordable accidents * (200,000 or 1,000,000) / total working hours (includes all workers in SONGWON's 7 manufacturing sites: Ulsan, Maeam, Suwon, Panoli, Greiz, Houston, Abu Dhabi)

⁸ Rate of recordable accidents(TCAR)
TCAR(Total Case Accident Rate) = Number of recordable accidents * (200,000 or 1,000,000) / total working hours (includes all workers in SONGWON's 7 manufacturing sites : Ulsan, Maeam, Suwon, Panoli, Greiz, Houston, Ab.D plant)

⁹ Rate of Injuries(TCIR, TRIR)
TCIR(Total Case Incident Rate), TRIR(Total Recordable Incident Rate) = Number of injuries(incidents) * (200,000 or 1,000,000) / total working hours (includes all workers in SONGWON's 7 manufacturing sites : Ulsan, Maeam, Suwon, Panoli, Greiz, Houston, Ab.D plant)
* TRIR means equal to TCIR.

¹⁰ Lost Day Rate(LDR, LTIR)
LDR(Lost Day Rate), LTIR(Lost-Time Injury Rate) = Number of lost days * (200,000 or 1,000,000) / total working hours (includes all workers in SONGWON's 7 manufacturing sites : Ulsan, Maeam, Suwon, Panoli, Greiz, Houston, Ab.D plant)
* LTIR means equal to LDR.

¹¹ Rate of Fatalities = Number of fatalities * 200,000/total working hours (includes all workers in SONGWON's 7 manufacturing sites : Ulsan, Maeam, Suwon, Panoli, Greiz, Houston, Ab.D plant)

Our People

We recognize the necessity to do the right things for people – our employees, customers and communities – as well as the environment. We value our employees' opinions and recognize they are vital to our success. Every day, it is the members of our global team who initiate, build and nurture the long-term relationships with our stakeholders that are essential to our sustainable growth.

SONGWON always strives to ensure that each of its products and services consistently meets the highest standards. Achieving this objective relies on the dedication of our workforce. Every member of our team of talented individuals contributes significantly to SONGWON's success and sustainable growth. Therefore, we need to offer them a safe, inclusive and inspiring work environment.

SONGWON Employee⁷ Demographics

- 87.7% are men
- 10.7% are women
- 66.1% from Asia
- 29.1% from Europe/Middle East/ India
- 4.8% from North & South America

⁷ permanent employees

Diversity & Inclusion

At SONGWON, diversity is a feature of corporate culture. The 977 employees represent 35 nationalities. The operational efficiency of our global company is upheld by SONGWON's culture of mutual respect and responsibility towards all stakeholders. The policies and processes we have established promote diversity, uphold human rights, provide equal opportunities and advocate against discrimination. SONGWON's Corporate Values, Code of Conduct and Whistleblower Policy serve to underline the importance we place on these core principles within our corporate culture.

SONGWON places a strong emphasis on ethical conduct within its workforce. In 2023, to ensure adherence to company standards, all employees (incl. management) were given comprehensive ethics training based on SONGWON's Code of Conduct. Additionally, our Whistleblower Policy provides employees with a way to report any violations confidentially. All new employees receive compliance and Code of Conduct training when they start which ends with a final exam on the Learning Management System (LMS). Furthermore, we conduct annual refresher exams to reinforce ethical standards and keep the principles at the forefront of our employees' minds. To ensure transparency and accountability, we have an established monitoring process in place designed to detect and, if necessary, address any instances of non-compliance swiftly and effectively.

2023 Ethical Compliance Overview

In 2023, SONGWON reported zero instances of discrimination, bribery, corruption, whistleblowing, child labor, forced labor, or breaches of the Code of Conduct. SONGWON adheres to governmental regulations concerning working conditions and respects employees' rights to freedom of association and collective bargaining*.

During the reporting period, there were zero instances of legal actions pending or completed regarding anti-competitive behavior and violations of anti-trust and monopoly legislation.

* Percentage of total employees covered by collective bargaining agreements in 2023 was 4%.

Social Responsibility

As an industry leader, our sense of responsibility goes beyond minimizing our environmental footprint. We look beyond our organization to see where we can make a positive contribution to humanity and support the vulnerable and less privileged in our communities. At SONGWON, corporate social responsibility is an ongoing effort and an obligation that we take very seriously. Our sense of responsibility is as great as our capacity to act. Addressing some of the wider issues that affect us as global citizens, we support a variety of socio-economic, educational and health initiatives and programs.

SONGWON's local communities encompass a range of interacting groups, including partners, suppliers, neighbors, employees, schools, and universities. These groups collectively contribute to the local dynamic. Diverse factors such as goals, resources, needs, risks, and social values like safety and security influence the identity and unity of each community.

Prioritizing Human Rights

The international community, represented by organizations such as the UN and OECD, advocates for expanded corporate responsibility to include not only the protection of individual human rights but also those within supply chains. Organizations are urged to implement systems and policies that proactively prevent human rights violations.

SONGWON has publicly pledged to adhere to its Code of Conduct, prioritizing the protection of the dignity and values of all stakeholders. Additionally, the company has strengthened its human rights protection system to maintain a safe and inclusive organizational culture, ensuring freedom from discrimination for its employees.

SONGWON supports international standards, including the Universal Declaration of Human Rights, the Human Rights and Labor Principles of the UN Global Compact (UNGC), the UN Guiding Principles on Business and Human Rights (UNGPs) and the International Labor Organization (ILO). Furthermore, we ensure that we remain fully compliant with the laws of the countries in which we operate.

Offering our support to help humanity, in general, has always been reflected in our company's core values and those of our employees. For this reason, it is clear to everyone working at SONGWON that all of us have a responsibility to be active members of the communities in which we live and work. Although this responsibility is a social one, we also see it as a business imperative. For this reason, we are continually looking out for ways to offer SONGWON's support and give back.

In 2023:

- Quantitative target on labor and human rights issues: 0 cases
- TCAR: 0.07%; injury rate: 0.43%, (see Health & Safety pg. 90)
- SONGWON managed labor & human rights issues by its KPIs
- Cases of non-compliance = zero
- Supplier due diligence, (Sustainable sourcing pg. 86-87)
- Exclusion of child labor & conflict materials (see Sustainable sourcing pg. 86 & Code of Conduct)

As a leader, our sense of responsibility goes beyond minimizing our environmental footprint. We look outside our organization to see where we can make a positive contribution to humanity and support the vulnerable and less privileged in our communities.

GRI Disclosures	Categories		Unit	2018	2019	2020	2021	2022	2023
403-4 407-1	Management and employee joint councils or meetings to discuss labor and human rights issues ¹		Number	4	4	4	4	4	4
401-3	Employees that were entitled to parental leave, by gender	Female	Number	60	58	64	61	60	59
		Male	Number	54	63	68	75	77	77
		Total		114	121	132	136	137	136
	Employees that took parental leave, by gender	Female	Number	4	7	10	11	17	18
		Male	Number	0	0	3	1	2	3
		Total		4	7	13	12	19	21
	Employees that returned to work in the reporting period after parental leave ended	Female	Number	3	1	11	10	11	12
		Male	Number	0	0	3	1	2	3
		Total		3	1	14	11	13	15
	Employees that returned to work after parental leave and ended that were still employed 12 months after their return to work	Female	Number	2	1	6	7	10	13
		Male	Number	0	0	0	1	1	2
		Total		2	1	6	8	11	15
	Return to work rate ² of employees that took parental leave	Female	%	75	14	110*	91	65	67
		Male	%	0	0	100	100	100	100
	Retention rate ³ of employees that took parental leave, by gender	Female	%	67	100	55	64	100	118
		Male	%	0	0	0	33	100	100
404-1	Training hours per employee ⁴	Female	Hours	47	28	20	30	36	38
		Male	Hours	31	24	19	30	47	54

* This percentage may surpass 100% as it accounts for both individuals taking parental leave and those returning to work within the reporting period.

¹ The work council holds regular labor-management meetings every 3 months.

² Return to work rate= (no. of employees that returned to work after parental leave / no. of employees that took parental leave) *100

³ Retention rate= (no. of employees that were still employed 12 months after parental leave / no. of employees who returned to work in the previous year) *100

⁴ The Labor & Human Rights Training contains the contents about prevention of gender discrimination and the promotion of disability awareness program.

GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023
407-1 408-1 409-1	Cases of child/forced labor ⁵	Number	0	0	0	0	0	0
	Percentage of women employed in relation to the whole organization	%	11	12	12	12	12	11
405-1	Age group in BOD and top executive positions	Number	0	0	2	3	2	1
		Number	0	0	8	7	6	5
	Percentage of women employed in top executive positions (excluding board of directors)	%	0	14	17	25	0	0
-	Ratio of the annual total compensation for the highest paid individual, to the median annual total compensation for all employees ⁶	%	First reporting from 2022				168	156
-	Number of hours worked ⁷	Hours	First reporting from 2022				2,991,337	2,818,595
202-1	Direct employees ¹²⁻¹ covered by a living wage benchmarking analysis ¹²	%	First reporting from 2022				100	100
	Direct employees paid below living wage ¹²	%	First reporting from 2022				0	0
	All employees paid below living wage, including direct employees, individual contractors and dispatched workers ^{12, 13}	%	First reporting from 2022				0	0
	Average wage gap for direct employees paid below living wage against a living wage benchmark ¹²	%	First reporting from 2022				0	0

⁵ this data has been researched including all suppliers and we have only contracted with the suppliers that comply with the child labor prohibition.

⁶ Applicable only employees except executives & Directors. (Data boundaries : Only applicable for SWDM-KR_Ulsan, Maeam, Suwon plant, Seoul, Busan offices)

⁷ Number of hours worked is based on all boundaries of worksite of 7 manufacturing sites(Ulsan, Maeam, Suwon, Panoli, Greiz, Houston, Ab.D plant) including direct employees of SONGWON and resident subcontractor employees as well.

¹² In case of living wage (Data boundaries : Only applicable for SWDM-KR_Ulsan, Maeam, Suwon plant, Seoul, Busan offices)

¹²⁻¹ Direct employees include full-time employees and laboratory interns directly employed by SONGWON.

¹³ When SONGWON makes contract with a subcontractor, letter of agreement includes compliance matters related to compliance with local related laws relevant to living wage, labor standard, industrial health&safety etc., thereby ensuring that the subconductor complies with the relevant laws. And in case of dispatched workers, there is no dispatched workers in Korea.)

UN Sustainable Development Goals (SDGs)

SONGWON is dedicated to the Sustainable Development Goals (SDGs) and Agenda 2030. By offering sustainable solutions that drive innovation across various industries, the chemical sector can play a crucial role in advancing sustainability. Our industry's capacity to deliver solutions directly aligns with numerous SDGs, making it pivotal in global sustainability efforts.

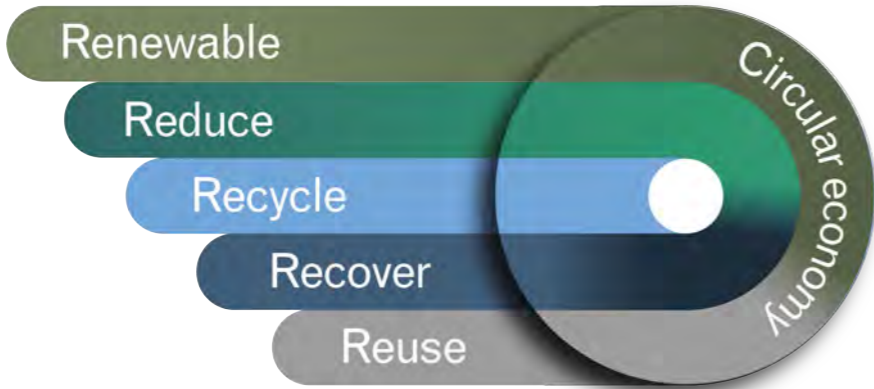
As a member of the UN Global Compact (UNGC), SONGWON is working to achieve 17 Sustainability Development Goals (SDGs) to fulfill its corporate social responsibility.



Circularity

For us, the circular economy entails maximizing the use of resources effectively across the entire value chain as we manage a significant volume of materials each year in our production processes. Through continuous learning a steadfast commitment to improvement and strategic investment, our objective is to enhance the efficiency of our operations and increase the utilization of purchased raw materials and energy while reducing emissions and minimizing waste.

Embracing its responsibility towards the environment and society, SONGWON has implemented comprehensive 5R measures to support and continuously enhance the circular economy. Employees are not only encouraged but empowered to exceed minimum standards in their efforts to protect the environment.



RENEWABLE:

e.g. using raw materials from renewable sources

REDUCE:

e.g. emissions reduction through solar PV (photovoltaic) panels

RECYCLE:

e.g. bags made with 50% recycled PE

RECOVER:

e.g. recovering (e.g., tin) from wastewater for reuse or sale

REUSE:

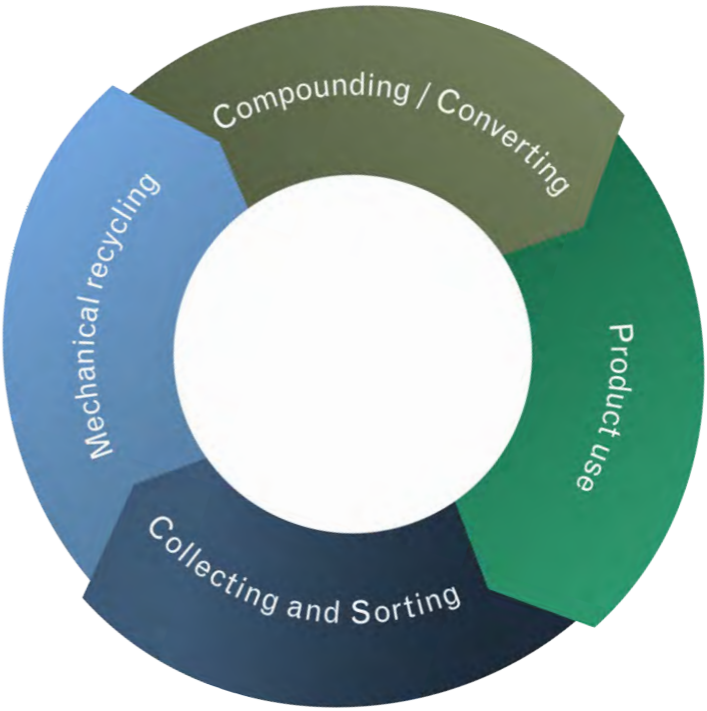
e.g. giving plastics and recycled resins a 2nd life

Today's plastics industry players are seeking solutions that can meet the ever-evolving requirements for sustainability. SONGWON is responding to these needs by directing its innovation efforts towards improving the sustainability of plastics as well as supporting customers by applying its additive expertise and using specialty chemistry as a powerful enabler for transforming and reusing materials to create new solutions that close loops.

SONGWON is a member of PCEP (Polyofelin Circular Economy Platform), a European joint industry initiative, founded by two plastics industry associations (EuPC and PlasticsEurope) in order to advance the circular economy.

SONGWON's design for circularity

If plastics are not properly stabilized with additives, their mechanical properties are substantially reduced. SONGWON has created a "design-for-circularity" approach that improves the quality and durability of polyolefins, enabling the further use of products or recycling without significantly losing initial properties.



SONGWON's contribution to mechanical recycling

Mechanical recycling is facilitated if the stabilizers are added upstream by the polymer producer. Through the process of re-stabilization achieved by adding SONGNOX® binary blends consisting of primary and secondary antioxidants, recycled resins become suitable for a 2nd service life.

APPENDIX – KEY PERFORMANCE INDICATORS 2023

Emissions

GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022 ⁴	2023	
305-7	Air Emissions	Nitrogen Oxides (NOx)	Kg	32,775	33,546	40,094	39,467	18,435	29,217
		Sulfur Oxides (SOx)	Kg	53	31	25	33	27	31

⁴ In case of NOx data, the calculation method until 2021 was confirmed as inaccurate. Since 2022, the accurate calculation method has been being applied.

GRI Disclosures		Categories	Unit	2018	2019	2020	2021	2022	2023
305-1 305-2	GHG emissions ¹	Scope 1: Direct	tCO2-eq	82,638	78,733	87,215	93,358	84,837	82,754
		SWDM-KR ¹⁻¹	tCO2-eq	82,638	78,733	86,596	92,201	83,694	80,768
		SWDM-IN ¹⁻²	tCO2-eq	First reporting from 2020		619	1,157	1,143	981
		SWDM-AE, DE, US ¹⁻³	tCO2-eq	First reporting from 2023					0
		SW Baifu ¹⁻⁴	tCO2-eq	First reporting from 2023					1,005
		Scope 2: Indirect ¹⁻¹	tCO2-eq	69,842	71,991	71,447	77,437	64,236	69,888
		SWDM-KR ¹⁻²	tCO2-eq	69,842	71,991	64,862	69,707	56,643	51,550
		SWDM-IN ¹⁻³	tCO2-eq	First reporting from 2020		6,585	7,730	7,593	10,611
		SWDM-AE, DE, US ¹⁻⁴	tCO2-eq	First reporting from 2023					1,568
		SW Baifu ¹⁻⁵	tCO2-eq	First reporting from 2023					6,159
Total			tCO2-eq	152,480	150,724	158,662	170,796	149,073	152,641

¹ This calculation is based on FRAMEWORK ACT ON LOW CARBON, GREEN GROWTH, The Korean Law in case of SWDM-KR. This data will be able to change after data verification by Korean Government. (Verification result can be confirmed on May yearly.) In case of Global sites(SWDM-IN, AE, DE US, SW Baifu), calculation method is based on IPCC guideline(Scope 1) & electricity factor(Scope 2) of each nation & Steam factor(Scope 2) of each steam supplier.

¹⁻¹ Electricity factor of each nation (Unit : kg-GHG/kWh)

Korea : 0.4594

India : 0.7132

Germany : 0.37764

US(Texas) : 0.38896

UAE : 0.401

China : 0.5572

¹⁻² SWDM-KR : Ulsan, Maeam, Suwon Plant / Seoul, Busan Office

¹⁻³ SWDM-IN : Panoli Plant

¹⁻⁴ SWDM-AE, DE, US : Ab.D, Greiz, Houston OPS Plant

¹⁻⁵ SW Baifu : Joint venture Baifu Plant (SW Baifu GHG emissions is calculated to not considered about JV share ratio of SONGWON.)

Water

GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023	
303-5	Total water consumption	Surface water ³	MT	0	0	0	0	0	48,413
		Ground water ³⁻¹	MT	66,213	65,844	58,467	53,238	44,805	44,033
		Rainwater	MT	0	0	0	0	0	0
		Municipal water ³⁻²	MT	1,092,615	1,103,300	1,138,750	1,248,747	1,226,422	1,173,071
		Total	MT	1,158,828	1,169,144	1,197,217	1,301,985	1,271,227	1,265,517

³ Surface water data collection from 2023 (Data boundaries : Only applicable for Greiz plant).

³⁻¹ In case of Ground water (Data boundaries: Only applicable for Suwon plant)

³⁻² In case of Municipal water (Data boundaries: Ulsan, Maeam, Panoli, Abu Dhabi, Houston, Baifu plants).

The leased building status of the Houston plant hinders the monitoring of water withdrawal usage because SONGWON solely pays utility bills to the building owner, making the direct measurement of water usage unattainable.

GRI Disclosures	Categories	Unit	2018	2019	2020	2021	2022	2023	
303-3	Total amount of water withdrawal & discharge	Water withdrawal	MT	1,158,828	1,169,144	1,197,217	1,301,985	1,271,227	1,265,517
303-4		Water discharge	MT	700,529	716,202	694,885	734,060	727,257	712,702

SDGs	Metrics and Disclosure	Report
Climate Action	Energy consumption within the organization	Sustainability, Environment
	GHG emissions (Scope1 & Scope2) within the organization	
	Carbon intensity	
	Energy intensity	
	Air emissions	
	New suppliers that were screened using environmental criteria	
• Clean water and sanitation • Life below water • Life on land	Water consumption	
	Water withdrawal	
	Water discharge	
	Management of water discharge-related impacts	
	Product End-of-Life	
	New suppliers that were screened using environmental criteria	
	Significant spills	
Responsible consumption and production	Waste management	
	Materials use management	
	Waste management	
	Product use	
	Product End-of-Life	
	Customer requests for technical advice	
Industry, Innovation and Infrastructure	New suppliers that were screened using environmental criteria	
	Product Use	Sustainability, Society, Governance structure
	Product End-of-Life	
	Customer requests for technical advice	
	New suppliers that were screened using environmental criteria	
Sustainable cities and communities	Products life cycle assessment (LCA) and improvement (GHG-reduction etc.)	
	Customer complaints, justified, related to customer health and safety	
	Customer requests for technical advice	
	Incidents of non-compliance concerning the health and safety impacts of products and services	
	Total substantiated complaints received concerning breaches of customer privacy	
Good health and well-being	Total identified leaks, thefts, or losses of customer data	
	Incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services	
	Work-related injuries	
	Number of hours worked	

SDGs	Metrics and Disclosure	Report
Decent Work and Economic Growth	Management and employee joint councils or meetings to discuss labor and human rights issues	Sustainability, Society, Governance structure
	Employees that were entitled to parental leave, by gender	
	Parental leave	
	Diversity of governance bodies and employees	
	Work-related injuries	
	Ratio of the annual total compensation for the highest paid individual, to the median annual total compensation for all employees	
	Management and employee joint councils or meetings to discuss labor and human rights issues	
Reduced inequalities	Parental leave	
	Training hours per employee	
	Cases of child/forced labor	
	Communication and training about anti-corruption policies and procedures	
	Operations assessed for risks related to corruption	
	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	
	New suppliers that were screened using environmental criteria	
Gender equality	Ratio of the annual total compensation for the highest paid individual, to the median annual total compensation for all employees	
	Parental leave	
	Diversity of governance bodies and employees	
Quality education	Communication and training about anti-corruption policies and procedures	
No poverty	Direct employees covered by a living wage benchmarking analysis	
	Direct employees paid below living wage	
	All employees paid below living wage, including direct employees, individual contractors and dispatched workers	
	Average wage gap for direct employees paid below living wage against a living wage benchmark	
Partnerships for the Goals	Partnerships, Memberships	Labels, Standards, Certifications, Partnerships, Memberships
	Sustainability Standards, Ratings	

GRI CONTENT INDEX

	For the Content Index – Essentials Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting in accordance with the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders.
Statement of use	January 1 st , 2023 to December 31 st , 2023. SONGWON has reported in accordance with the GRI Standards for the period from January to December.
Applicable GRI sector standard(s)	No specific sector standard applied
GRI 1 used	GRI 1: Foundation 2021
GRI Content Index	The GRI Content Index includes the General Disclosures (GRI 2), the Material Topics (GRI 3), and Reasons for Omissions for disclosures and requirements that the organization cannot comply with.
Reporting Principles	SONGWON confirms the application of the Reporting Principles: Accuracy, Balance, Clarity, Comparability, Completeness, Sustainability context, Timeliness, Verifiability.
Content Index Service	Reporting year 2023: Content Index Service Essential Reporting year 2022: Content Index Service Essential Reporting year 2021: Content Index Service

GRI 2 GENERAL DISCLOSURES 2021

GRI Disclosures	Disclosure	Page	Comments, Omissions
2-1	Organizational details	23-29	
2-2	Entities included in the organization's sustainability reporting	23- 65	
2-3	Reporting period, frequency and contact point	65, 219-22	
2-4	Restatements of information	79	
2-5	External assurance	107-111	
2-6	Activities, value chain and other business relationships	20-59, 67-77	
2-7	Employees	57-61, 91-93	
2-8	Workers who are not employees	94	s. Health and Safety
2-9	Governance structure and composition	74-76, 113-119	
2-10	Nomination and selection of the highest governance body	74, 115-116	

GRI 2 GENERAL DISCLOSURES 2021

GRI Disclosures	Disclosure	Page	Comments, Omissions
2-11	Chair of the highest governance body	74, 115-116	Chairman, s. Governance Structure company website.
2-12	Role of the highest governance body in overseeing the management of impacts	74, 115-116	
2-13	Delegation of responsibility for managing impacts	74, 115-116	
2-14	Role of the highest governance body in sustainability reporting	74, 116	
2-15	Conflicts of interest	118	In 2023, there were no cases of conflicts resulting from cross-memberships, cross-shareholding, or control by related parties
2-16	Communication of critical concerns	117	In 2023, no critical concerns about the organization's potential and actual negative impacts on stakeholders, business conduct, or business relations have been communicated to the highest governance body.
2-17	Collective knowledge of the highest governance body	74	
2-18	Evaluation of the performance of the highest governance body	116	As the Governance Structure has been adapted/changed in 2022, neither a dependent nor an independent evaluation of the highest governance body has been carried out.
2-19	Remuneration policies	116	<i>Confidentiality constraints: this information is confidential and subject to legal prohibition such as data protection and privacy laws.</i>
2-20	Process to determine remuneration	116	<i>Confidentiality constraint, s. above.</i>
2-21	Annual total compensation ratio		<i>Confidentiality constraints: this information is confidential and subject to legal prohibition such as data protection and privacy laws.</i>
2-22	Statement on Sustainable Development Strategy	9, 64, 67	
2-23	Policy commitments	9, 117-119	Code of Conduct. Policies: Health and Safety. Environment.
2-24	Embedding policy commitments	9, 52, 58, 77-78, 117	Also in order to obtain the ISO certification, the policies are embedded in the structures and processes, are communicated companywide, to our partners and comprise trainings (e. g. Health and Safety)
2-25	Processes to remediate negative impacts	77	

GRI 2GENERAL DISCLOSURES 2021

GRI Disclosures	Disclosure	Page	Comments, Omissions
2-26	Mechanisms for seeking advice and raising concerns	58, 77-78	In 2022: No critical concerns about the organization's potential and actual negative impacts on stakeholders were raised through grievance mechanisms and other processes.
2-27	Compliance with laws and regulations	55-56, 77	In 2023: No cases of non-compliance .
2-28	Membership associations	206	
2-29	Approach to stakeholder engagement	67, 75	
2-30	Collective bargaining agreements	91	

GRI 3MATERIAL TOPICS 2021

GRI Disclosures	Disclosure	Page	Comments, Omissions
3-1	Process to determine material topics	65-67	The double materiality assessment is conducted in the following order: 1) identification of industry-specific ESG issues, 2) identification of environmental and social impacts of each issue, and 3) assessment of impacts, leading to the final selection of material issues.
3-2	List of material topics	66	4 material topics were derived from materiality assessment results.
3-3	Management of material topics	By topic, throughout 67-69, 80-94	For each material topic, the following information is explained throughout: <ul style="list-style-type: none">• relevant impacts (economy, human rights, business)• strategic goals, qualitative and/or quantitative targets, policies• actions taken to achieve targets• tracking of action effectiveness,• engagement with / information of stakeholders

GRI Disclosures	Disclosure	Page	Comments, Omissions
GHG emission management			
GRI 3: Material Topics 2021			
3-3	Management of material topic	65-66	
GRI 302: Energy 2016			
302-1	Energy consumption within the organization	80	
GRI 305: Emissions 2016			
305-1	Direct (Scope 1) GHG emissions	80, 81, 98	
305-2	Energy indirect (Scope 2) GHG emissions	80, 81, 98	
305-4	GHG emissions intensity	81	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	81	
Investment of green product and technology			
GRI 3: Material Topics 2021			
3-3	Management of material topic	65-66	
GRI 301: Materials 2016			
301-1	Materials used by weight or volume	82	
Minimization of environmental impact across product lifecycle			
GRI 3: Material Topics 2021			
3-3	Management of material topic	65-66	
GRI 308: Supplier Environmental Assessment 2016			
308-1	New suppliers that were screened using environmental criteria	87	
Occupational health and safety risk management			
GRI 3: Material Topics 2021			
3-3	Management of material topic	65-66	
GRI 403: Occupational Health and Safety 2018			
403-4	Worker participation, consultation, and communication on occupational health and safety	93	
403-9	Work-related injuries	90	
GRI 404: Training and Education 2016			
404-1	Average hours of training per year per employee	93	



INDEPENDENT ASSURANCE OPINION STATEMENT

To the Board of Songwon Industrial Co., Ltd.

83, Jangsaengpo-ro, Nam-gu 44781, Ulsan, Republic of Korea

Holds Statement No.: SRA 745794

The British Standards Institution (BSI) has conducted a limited assurance engagement on the sustainability information (described in the "Scope") in the specific sustainability performance information (Key Performance Indicators) for Songwon Industrial Group for the financial year 2023.

Scope

The scope of engagement agreed upon with Songwon includes the following:

The assurance covers the information of the following subject matters in the specific sustainability performance information for Songwon Industrial Group for the financial year 2023. The selected information is reported in accordance with GRI Standards and Organization-specific indicators. The details of subject matters and their boundaries within the scope is described in Appendix A.

Opinion Statement

We have conducted a limited assurance engagement on the sustainability information described in the "Scope" above Sustainability Information. The limited assurance is compared to the reasonable assurance, and provides a lower level of assurance than the reasonable assurance. As a result, the procedure for collecting evidence, such as the nature, scope and sampling of the procedure carried out by the assurer, is planned at a lower level than that of the reasonable assurance, and may not be aware of the important points that may be identified through the reasonable assurance. Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the accompanying Sustainability Information is not prepared, in all material respects and assurer has found no findings that would determine that the information and data contained were improperly described in accordance with the criteria used by Songwon in view of the importance of the information to be verified.

Methodology

Our assurance engagements were carried out in accordance with ISAE3000 (Revised). Our work was designed to gather evidence on which to base our conclusion. As part of its independent assurance, the assurer has used the methodology developed to collect relevant evidence to comply with the verification criteria and to reduce errors in the reporting, and has performed the following activities.

- a top level review of issues raised by external parties that could be relevant to organizations policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers and staffs on organization's approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
- document review of relevant systems, policies, and procedures where available

...making excellence a habit.™



- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- visit of the Ulsan HQ of Songwon to confirm the data collection processes, record management practices.

Responsibility

Songwon is responsible for the preparation and fair presentation of the sustainability information and report in accordance with the agreed criteria and is responsible for designing and implementing an internal control system related to the content of the report and maintaining it to ensure that there are no significant errors due to forgery or alteration or distortion.

British Standards Institution (BSI) is responsible for providing an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described. We have conducted review the information presented by Songwon according to expert judgment, and prepared assurance opinion based on the assurance procedure and conclusion performed. We assume that all information provided by Songwon is true, accurate, and complete. We shall not bear any responsibility to a third party other than Songwon regarding the work performed by the assurer and the conclusions presented in this opinion.

Independence, Quality Control and Competence

British Standards Institution (BSI) is a leading global standards and assessment body founded in 1901 and an independent professional institution that specializes in quality, health, safety, social and environmental management with over 120 years history in providing independent assurance services and complied with the other ethical requirements of BSI. BSI Group Korea implements a comprehensive system that meets the accreditation requirements of ISO 14065 (General principles and requirements for bodies validating and verifying environmental information) and ISO/IEC 17021 (Requirements for bodies providing audit and certification of management systems), which complies with the Code of Ethics requirements of ISQC1 (International Standard on Quality Control 1) and IESBA (Certified Public Accountant of International Ethics Standards Board for Accountants). No member of the assurance team has a business relationship with Songwon Industrial Group. The Assurer has conducted this verification independently, and there has been no conflict of interest. The Assurer applies Quality Control of BSI scheme and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements. All assurers who participated in the assurance have qualifications as an ISAE3000 assurer, have wide assurance experience and in-depth understanding of the BSI Group's assurance standard methodology.

Issue Date: 02.02.2024

For and on behalf of British Standards Institution (BSI):

Jungwoo Lee, Lead Assurrer of BSI Korea

SeongHwan Lim, Managing Director of BSI Korea

BSI Group Korea, Republic of Korea, 29, Insa-dong 5-gil, Jongno-gu, Seoul

...making excellence a habit.™



Appendix A: [Data of subject matters within the scope]

No	GRI	KPIs and disclosures	GRI details
1	202-1	Direct employees covered by a living wage benchmarking analysis, direct employees paid below living wage, All employees paid below living wage, including direct employees, individual contractors and dispatched workers, Average wage gap for direct employees paid below living wage against a living wage benchmark (Only Korean Entity)	Ratios of standard entry level wage by gender compared to local minimum wage
2	205-1	Percentage of sites for which an internal audit/risk assessment on ethics issues	Operations assessed for risks related to corruption
3	205-2	Total employees trained on ethics, Total ECM members trained on ethics	Communication and training about anti-corruption policies and procedures
4	205-3	Cases reported through whistleblowing channel, Total confirmed incidents of corruption	Confirmed incidents of corruption and actions taken
5	206-1	Total number of legal actions pending or completed during the reporting period regarding anti-competitive behavior and violations of anti-trust and monopoly legislation	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices
6	301-1	Renewable, Non-Renewable (Only Korean Entity)	Materials used by weight or volume
7	302-1	Direct Energy, Indirect Energy	Energy consumption within the organization
8	303-3	Water withdrawal	Water withdrawal
9	303-4	Water discharge	Water discharge
10	303-5	Ground water, Municipal water, Rainwater, Surface water	Water consumption
11	305-1	Scope 1: Direct GHG emissions	Direct (Scope 1) GHG emissions
12	305-2	Scope 2: Indirect GHG emissions	Energy indirect (Scope 2) GHG emissions
13	305-4	Carbon Intensity	GHG emissions intensity
14	305-7	Nitrogen Oxides (NOx), Sulfur Oxides (SOx) Emissions (Only Korean Entity)	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions

...making excellence a habit.™



15	306-3, 4, 5	Total amount of hazardous waste (Recycling, Landfill, External Incineration, Internal Incineration)	Waste diverted from disposal Waste directed to disposal
16	306-3, 4, 5	Total amount of non-hazardous waste (Recycling, Landfill, External Incineration, Internal Incineration)	Waste diverted from disposal Waste directed to disposal
17	308-1	Targeted suppliers with ISO14001 registered	New suppliers that were screened using environmental criteria
18	401-3	Employees that were entitled to parental leave by gender, Employees that took parental leave by gender, Employees that returned to work in the reporting period after parental leave ended, Employees that returned to work after parental leave and ended that were still employed 12 months after their return to work, Return to work rate of employees that took parental leave, Retention rate of employees that took parental leave by gender	Parental leave
19	403-4 407-1	Management and employee joint councils or meetings to discuss labor and human rights issues	Worker participation, consultation, and communication on occupational health and safety Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk
20	403-9	Number & Lost-Time Injuries Rate (LTIR) due to accidents and incidents, Number & Rate of recordable accidents (TCAR), Lost day & Lost day rate (LDR), Number & rate of injuries (TCIR, TRIR) due to accidents and incidents, Number & Rate of fatalities	Work-related injuries
21	404-1	Training hours per employee	Average hours of training per year per employee
22	405-1	Percentage of women employed in relation to the whole organization, Age group in BOD and top executive positions, Percentage of women employed in top executive positions (excluding board of directors)	Diversity of governance bodies and employees

...making excellence a habit.™



23	407-1 408-1 409-1	Cases of child/forced labor	Operations and suppliers at significant risk for incidents of child labor
24	416-1	Customer requests for technical advice	Assessment of the health and safety impacts of product and service categories
25	416-2	Incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services	Incidents of non-compliance concerning the health and safety impacts of products and services
26	418-1	Total substantiated complaints received concerning breaches of customer privacy, Total identified leaks, thefts, or losses of customer data	Substantiated complaints concerning breaches of customer privacy and losses of customer data
27	-	Average COD (Only Korean Entity)	-
28	-	Total volume of significant spills (Only Korean Entity)	-
29	-	Product Use	-
30	-	Product End-of-Life	-
31	-	Customer complaints, justified, related to customer health and safety	-
32	-	Number of hours worked	-
33	-	Ratio of the annual total compensation for the highest paid individual, to the median annual total compensation for all employees (Only Korean Entity)	-

...making excellence a habit.™



04

CORPORATE GOVERNANCE

Corporate Governance

114

CORPORATE GOVERNANCE

Committed to transparency & accountability

Sound and accountable corporate governance forms the basis for responsible management and is key to SONGWON's long-term business success. Since SONGWON's foundation, our commitment to transparency and accountability has always gone beyond just complying with statutory obligations.

Over the years, we have earned a solid reputation as a leading global player with strong ethical principles driven to deliver long-term value to our shareholders while conducting our business in full compliance with all relevant legal requirements. At SONGWON, we are proud to be one of the leading manufacturers, contributing not only to the industry but also to the communities where we operate.

For us as a company dedicated to responsible governance and guided by principles of integrity, we make it a priority to ensure transparency in communicating SONGWON's financial and business performance. This helps us earn and sustain the trust of SONGWON's employees, customers, shareholders, and all other stakeholders. By exercising responsible corporate governance in our daily operations worldwide, we make sure that SONGWON remains an accountable organization that is well-positioned to achieve our targets, address stakeholder needs and deliver long-term competitive returns for shareholders.

At the center of SONGWON's approach to corporate governance are our core values: entrepreneurship, collaboration, value in people and excellence. These elements lie at the heart of our business operations, shaping how we engage with stakeholders, generate value and strategize for the future. SONGWON's Management is driven by these values and applies them to daily decision-making as well as to setting long-term objectives and developing the strategic vision for the organization.

At SONGWON, corporate governance is not just a matter for our governing bodies. It is embedded throughout the organization and practiced by our committed employees. Our people measure their contribution to SONGWON's success not only through business achievements but also by their ability to create value for all of our stakeholders.

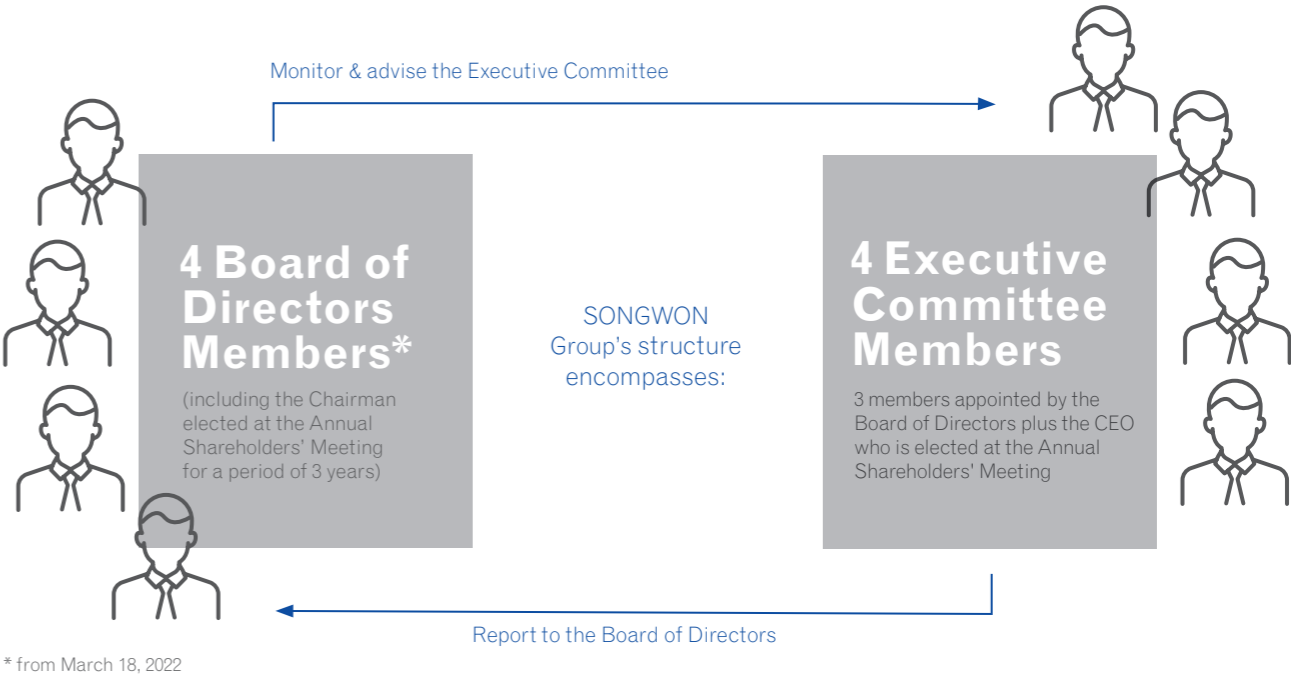
For each member of SONGWON's global team always behaving in line with responsible corporate governance is a top priority. SONGWON's leadership has established a clear framework for decision-making and accountability across the business as a guide for upholding the standards of behavior and integrity that we should expect from ourselves, each other and from our partners.

SONGWON's Code of Conduct incorporates guidelines, policies, and practices for conducting our daily business responsibly. Additionally, SONGWON's vision and mission statements as well as our core values underpin everything we do and guide the actions we take as individuals and as an organization.

Ensuring full compliance with all the relevant external standards and regulations is a top priority for SONGWON's leadership. Most importantly, the Management strives to minimize risks by upholding consistent standards and implementing responsible business practices throughout the entire organization. SONGWON Industrial Group already has sound existing policies and procedures in place for monitoring potential risks, together with the ICFR* process.

This ongoing process has already further strengthened the Group's ability to identify potential risks and supports continuous improvement at SONGWON. For example, to fulfill the requirements set out by ICFR, SONGWON has a whistleblower policy which is a part of the CFA (Controlling, Finance & Administration) manual. At SONGWON, this corporate policy is maintained by Global HR. All of SONGWON's policies e.g. ESG policies that serve to reinforce the principles of an 'open, fair and clean' corporate culture throughout the organization are continually implemented and updated on an ongoing basis by the Executive Committee and approved by the Board.

* Internal Control Over Financial Reporting



Annual Shareholders Meeting

Each year, all SONGWON shareholders are invited to attend the Annual Shareholders Meeting where important decisions are made on matters concerning SONGWON Industrial Co., Ltd. and the Group. Traditionally focusing on the annual report and financial accounts, the meeting also offers shareholders the opportunity to put forth any questions they may have relating to the meeting's agenda. According to the mechanisms for shareholders provided by Korean law, it is a requirement for company directors to organize a shareholders' meeting and to propose resolutions submitted by the shareholders.

This year, SONGWON's Annual General Meeting was held on March 17th, 2023 at SONGWON's Headquarters in Ulsan, Korea. During the meeting, the Annual Report for the financial year 2022 was adopted, as well as the proposal for the distribution of profits.

The Board of Directors & Executive Committee

SONGWON Industrial Group's structure comprises the Board of Directors and Executive Committee.

- The Board of Directors consists of 3 executive members and 1 non-executive member, which is equivalent to 3 internal directors and 1 outside director in line with Korean regulations.
- During the year, the members of the Board usually attend 4 face-to-face meetings but if not possible due to external circumstances, then meetings take place via video call. In 2023, 3 Board meetings were conducted virtually. In addition to these meetings, virtual ad hoc meetings are also organized when necessary.
- SONGWON's Executive Committee comprises 4 members, all of whom hold key managerial positions in the Group. The Committee normally meets in person once every quarter and also regularly holds tele- and video conferences, as well as communicating via email. This year, 2 face to face and 6 virtual meetings were held in 2023.

■ The Executive Committee manages all of SONGWON's daily business while maintaining and ensuring sound company-wide governance practices. In addition to developing and implementing policies, the Committee makes all the operational decisions based on the Group's overall strategy. This includes the allocation of resources, investments and HR issues except for specific decisions reserved under the Korean Company Act for the Board. The Executive Committee is also responsible for handling any instances related to matters arising from the Korean Company Act. If there are any instances during the year, the Committee prepares the required proposals for submission to the Board for final approval.

■ At SONGWON, the responsibilities of the Chairman of the Board and CEO are separated. All the responsibilities concerning business operations decisions are managed by the Executive Committee and the decision-making process related to SONGWON's strategy and investment is handled by the Board. This clear division of responsibilities reinforces the Group's corporate governance by ensuring greater transparency, controls and accountability. In line with continuous improvement, SONGWON's leadership seeks to implement the Board's activities with a clearly defined scope of responsibility which is distinctly different from the activities of the Executive Committee.

The Board of Directors at SONGWON is responsible for overseeing the strategic direction of the Group and ensuring the implementation of effective governance procedures. The Executive Committee is the governing body responsible for making decisions relating to economic, environmental and social impacts. These decisions are supervised by the Board. Additionally, the Executive Committee plays a crucial role in identifying and managing risks and opportunities.

As SONGWON's highest governance body, the Executive Committee also reviews the adequacy of the organization's internal controls to ensure the quality of the organization's sustainability reporting. The Audit Committee¹ and HR Committee, established by the Board support the Executive Committee to optimize the overseeing of these activities. SONGWON's Risk Committee comprises members of both the Board and the Executive Committee. (see pg. 73, Sustainability Governance Structure).

The directors (excl. the executive members) proposed to the shareholders for election are chosen based on the following criteria:

- performance history
- ethical behavior
- leadership & expertise
- attitude towards rules & regulations
- expertise in the area of responsibility
- independence & impartiality

These criteria contribute to ensuring diversity on the Board with individuals from various backgrounds who can offer different perspectives. In 2023, SONGWON's Board of Directors comprised individuals representing 2 different nationalities with knowledge from many industries. Each year, the Board of Directors evaluates the outcomes of the decisions and the actions it has taken to assess their effectiveness and value for SONGWON. As the highest governing bodies, the Board and Executive Committee are involved in all aspects and decisions related to Environmental, Social and Corporate Governance (ESG) at SONGWON in accordance with Sustainability Governance.

Chairman of the Board, Chief Executive Officer (CEO) & Executive Management

The Chairman of the Board is a non-Executive Director elected at SONGWON's Annual Shareholders' Meeting. The CEO is an Executive Director. As Chair of the Executive Committee, he exercises ongoing control of the Group. The CEO manages according to the Board of Directors' instructions, and in line with the division of responsibilities between the CEO and the Board of Directors as approved by the Board.

Remuneration

For SONGWON's highest governance body members, senior managers, and executives remuneration (incl. departure arrangements), is aligned with the company's performance overall and takes into consideration the social, economic and environmental results.

External auditors

Every 3rd year at the Annual Shareholders Meeting, auditors for SONGWON are elected for a period of 3 years. SONGWON's current auditors are Ernst & Young. Both the Board and the Executive Committee work closely with the external auditors to make sure that they are constantly up-to-date and well-informed about relevant issues concerning the accounts, reporting procedures and management of the Group's assets.

Corporate governance framework

SONGWON's Vision and Mission statements reflect our commitment to maintaining the highest levels of integrity and ethical standards throughout our global operations.

At SONGWON, we understand that building a healthy, high-performing and responsible organization is only possible when we encourage direct and respectful communication at all levels and foster a corporate culture of honesty, tolerance and integrity. We also know that corporate culture determines people's behavior within an organization. For this reason, continually making sure that we keep our employees up-to-date and well-informed is very important to us. Accordingly, SONGWON's leadership regularly shares information on the organization's operations, activities and strategic aims with employees.

Moreover, SONGWON's Board and upper management also make it a priority to regularly communicate the importance of responsible behavior and ensure that ethical business conduct is always at the forefront of our day-to-day activities. To support this, both SONGWON's Vision and Mission statements are clearly communicated to all employees and also released publicly to make them available to our stakeholders worldwide.

SONGWON has developed a complete set of policies relating to all of our business activities. Accessible to every employee, the policies outline our dedication to high ethical standards and compliance with the applicable laws in the areas and regions we operate. Hence, a great deal of effort goes into ensuring that SONGWON's Code of Conduct is constantly aligned with internationally agreed standards and updated regularly.

Our Code of Conduct is promoted via internal communication and trainings across the whole organization and is also downloadable from SONGWON's website. The Code explains how to apply the basic principles aligned with SONGWON's core values and our safe, responsible and ethical culture. It also offers practical advice on how to comply with laws and regulations, including how to interact with colleagues as well as SONGWON's customers and communities. Every employee is given a copy of SONGWON's Code of Conduct when they are hired and we also test our employees' knowledge each year to guarantee that the Code remains fresh in their minds.

Our Code of Conduct also governs the way we handle information, confidentiality and data security, the prevention of money laundering, bribery and corruption as well as issues related to keeping personal and business interests separate. With its strong monitoring process, SONGWON's Management makes sure that if the Code is breached in any way, it can be easily detected and dealt with quickly. In 2023, no breaches were reported (see: www.songwon.com/investors/corporate-governance/code-of-conduct).

SONGWON's leadership believes in fostering a collaborative approach to management where each individual, including senior management, is easily approachable, always open to engaging in dialogue and ready to advise as well as offer guidance. SONGWON's Management seeks to create an environment of openness and clarity where people are treated fairly and encouraged to contribute. Across the organization, questions and even discussions are both welcome and encouraged. Although no punishment culture exists at SONGWON, every employee is very aware of the zero-tolerance policy for any breach of standards or any improper, unethical behavior.

Consistent with our commitment to maintaining a culture of honesty and integrity, SONGWON's whistleblower policy and framework provide all SONGWON stakeholders with a method of reporting² (incl. anonymously) any actual or suspected misconduct within the organization. The policy also protects whistleblowers from any repercussions or breaches of their confidentiality. All concerns reported are treated with the utmost discretion and handled as swiftly as possible to ensure that issues are resolved quickly or any necessary changes within the organization are implemented appropriately.

¹ as per the IAA standard

² External 3rd party concerns can be reported directly to the Executive Committee.

In 2023, there were no whistleblower claims reported and also no incidents that breached SONGWON's principles (e.g. corruption, anti-trust, or discrimination). However, if there had been an incident, then the most appropriate form of communication and/or consultation method would have been applied immediately based on the nature of the issue at hand. SONGWON had no monetary or non-monetary fines for non-compliance with laws and regulations to report in 2023.

Internal control

A fundamental aspect of SONGWON's corporate culture is internal control. Each year, the organization seeks to continually strengthen and improve its Internal Control Over Financial Reporting (ICFR) for monitoring all of the Group's activities. By doing so, SONGWON makes sure that its rules of business engagement concerning external legislation and regulations, as well as its internal guidelines and control documentation, are diligently adhered to.

Another important aspect of internal control is identifying risks and then ensuring that they are managed effectively. Our main goal is to minimize SONGWON's exposure to risk as far as possible while making sure that we can capitalize on valuable opportunities at the same time. SONGWON is organized in such a way as to ensure it meets the requirements for effective internal control and its working methods are characterized by organizational transparency and a clear division of responsibilities. To be certain that it can achieve true and fair consolidated financial reporting, the Group also has the necessary financial and business reporting systems in place which is secured under the ICFR implemented.

Using well-established procedures, internal group reports are compiled each month and then presented in a document that also includes extensive analysis. A number of people from various company levels from different Group departments are involved in preparing the quarterly and annual financial reporting. After reviewing the summarized results, the management team, Executive Committee and the Board of Directors approve them.

If ever a conflict of interest should arise, the governing body member in question abstains from voting on the issues relating to the conflict of interest to make sure that the highest levels of corporate governance

are always upheld. SONGWON is not aware of any conflicts of interest in 2023, or of any which could have potentially occurred during the year.

At SONGWON, we are fully aware that any form of corruption can severely impact sustainable economic and social development and can have a detrimental effect on poorer communities. As SONGWON's business continues to expand, we know that it is highly likely for us to be more exposed to regions and environments where corruption is well-known to exist. For this reason, SONGWON is regularly updating its policies and processes and remains open and responsive to improvements that stakeholders and authorities may propose and consider as necessary. ■

SONGWON optimizes corporate governance by:



Optimizing communication to further strengthen the interaction between the Board, Executive Committee and the various function leaders.



Increasing the Board's knowledge and understanding of the relevant impacts of SONGWON's activities on a regular basis. For example, each business and function are invited to present and discuss its strategies and actions with the Board.



Concentrating its efforts on improving and strengthening the Internal Control Systems at all levels and at each of the Group's entities.



Reviewing its existing policies to be sure that they are always up-to-date and introducing new policies when required.



Participating actively in various associations and organizations to enhance its ability to monitor key issues (incl. ESG), identify possible risks and opportunities and ensure that SONGWON is always well-positioned to act accordingly at an early stage.



Improving and supporting engagement between employees at all levels and senior management by organizing, e.g. Town Hall meetings when needed. Each Executive Team member also holds regular dialogue sessions with their teams. Such meetings provide SONGWON's leadership with the opportunity to share information with employees on the Group's financial results, business activities and strategy as well as emphasize SONGWON's expectations concerning ethical business conduct, sustainability and EH&S, etc.



Assessing the quality of, e.g. Town Hall meetings, identifying improvement areas and following up on issues or concerns raised by employees.

05

FINANCIAL STATEMENTS

Table of contents	123
Introduction to the consolidated financial statements	124
Independent auditor's report	125
Consolidated statements of financial position	128
Consolidated statements of comprehensive income	130
Consolidated statements of changes in equity	132
Consolidated statements of cash flows	134

Table of contents

Introduction to the consolidated financial statements	124
Independent auditor's report	125
Consolidated statements of financial position	128
Consolidated statements of comprehensive income	130
Consolidated statements of changes in equity	132
Consolidated statements of cash flows	134
1. Corporate information	136
2. Summary of significant accounting policies	138
3. Material accounting judgments, estimates and assumptions	158
4. Segment information	160
5. Property, plant and equipment	162
6. Investment properties	166
7. Intangible assets	167
8. Investment accounted for using the equity method	169
9. Inventories	171
10. Trade and other receivables	172
11. Impairment testing of goodwill and intangibles with indefinite useful life	173
12. Other current assets	175
13. Other financial assets	176
14. Cash and cash equivalents	177
15. Issued capital and reserves	179
16. Bonds, interest-bearing loans and borrowings	180
17. Trade and other payables	182
18. Emission rights and emission liabilities	183
19. Other financial liabilities	184
20. Additional information on financial instruments	185
21. Pension liability	187
22. Other long-term employee-related liabilities	192
23. Commitments and contingencies	194
24. Assets pledged as collateral and guarantees	196
25. Operating profit and other income / expenses	197
26. Finance income / expense	199
27. Income tax expenses	201
28. Earnings per share	203
29. Cash flow statement	204
30. Related party disclosures	206
31. Financial risk management objectives and policies	208
32. Fair values	212
33. Impact of global economic situation on consolidated financial statements	215
34. Events after the reporting period	216
35. Exposure to pillar two income taxes	217

INTRODUCTION TO THE CONSOLIDATED FINANCIAL STATEMENTS

On the following pages (126–219), consolidated financial statements for the year 2023 are presented. The financial statements disclosed are prepared according to International Financial Reporting Standards as adopted by the Republic of Korea (“KIFRS”) and represent the statements submitted for approval to the Annual General Shareholders’ Meeting on March 15, 2024, in Ulsan, Korea.

While the management of the Group is responsible for the preparation and presentation of the financial statements, the Group’s independent auditor is responsible for expressing an opinion on these financial statements. The report on the consolidated financial statements – issued by our Group auditor, Ernst & Young Han Young – can be found on pages (127–129).

INDEPENDENT AUDITOR’S REPORT



Ernst & Young Han Young
2-4F, 6-8F, Taeyoung Building, 111, Yeouigongwon-ro,
Yeongdeungpo-gu, Seoul 07241 Korea

Tel: +82 2 3787 6600
Fax: +82 2 783 5890
ey.com/kr

Independent auditor’s report
(English Translation of a Report Originally Issued in Korean)

The Shareholders and Board of Directors
Songwon Industrial Co., Ltd.

Opinion

We have audited the consolidated financial statements of Songwon Industrial Co., Ltd. (the “Company”) and its subsidiaries (collectively referred to as the “Group”), which comprise the consolidated statements of financial position as of December 31, 2023 and 2022, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for each of the two years in the period ended December 31, 2023, and the notes to the financial statements, including material accounting policy information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2023 and 2022, and its consolidated financial performance and its consolidated cash flows for each of the two years in the period ended December 31, 2023 in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (“KIFRS”).

Basis for opinion

We conducted our audit in accordance with Korean Standards on Auditing (“KSA”). Our responsibilities under those standards are further described in the Auditor’s responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The Group consists of the Company, its 13 subsidiaries and a joint venture, and the volume of intragroup transactions, such as sales and purchases, are significant. Due to the significant impact of the aggregation of such sales and purchases and their related receivables and payables balances, and of the completeness and accuracy of the elimination of intragroup transactions on the consolidated financial statements, we have selected this area as key audit matters.

The main audit procedures we have performed in relation to these key audit matters are as follows:

- We performed an analytical procedure on the Group’s significant intragroup sales and purchases as well as related receivables and payables of the current and prior reporting periods.
- We confirmed the consistency of the major intragroup sales, purchases and related balances that are subject to elimination by comparing those to the input data used in the consolidation system.
- We reviewed whether all intragroup sales and purchases aggregated were eliminated during the consolidation process.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with KIFRS, and for such internal control as management determines is necessary to enable the preparation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with KSA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with KSA, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is *Yoon, Jung Won*.



February 23, 2024

This audit report is effective as of February 23, 2024, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's report date to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As of December 31, 2023 and 2022

		2023	2022
Assets		Million KRW	Million KRW
Non-current assets		520,514	536,604
Property, plant and equipment	4.2.2, 5, 23, 24	435,321	441,541
Right-of-use assets	4.2.2, 5.1	18,379	16,969
Investment properties	4.2.2, 6, 23, 24	3,448	3,456
Intangible assets	4.2.2, 7, 11, 23	14,789	11,427
Investments accounted for using the equity method	8	8,131	7,818
Other non-current assets	21	23,046	30,778
Other non-current financial assets	13, 30, 32	11,345	16,030
Deferred tax assets	27	6,055	8,585
Current assets		569,230	680,707
Inventories	9, 23	291,466	377,129
Trade and other receivables	10, 30, 32	150,975	177,174
Income tax receivables		2,189	2,047
Other current assets	12	13,606	12,920
Other current financial assets	13, 20, 32	12,410	6,677
Cash and cash equivalents	14, 32	98,584	104,760
Total assets		1,089,744	1,217,311
Equity and liabilities			
Equity		705,592	682,622
Non-controlling interests		—	—
Equity attributable to owners of the parent		705,592	682,622
Issued capital	15.1	12,000	12,000
Capital surplus	15.2	20,482	20,482
Reserves	15.3	30,303	29,103
Retained earnings	15.3	638,217	622,951
Other components of equity	15.4	4,590	-1,914
Non-current liabilities		76,459	130,667
Bonds, interest-bearing loans and borrowings	16, 23, 24, 31, 32	5,250	65,745
Pension liability	21	4,269	2,682
Other long-term employee-related liabilities	22	10,780	9,061
Non-current lease liabilities	5.1, 31, 32	16,087	14,564
Other non-current financial liabilities	19, 31, 32	2,579	1
Other non-current liabilities		434	453
Deferred tax liabilities	27	37,060	38,161
Current liabilities		307,693	404,022
Interest-bearing loans and borrowings	16, 23, 24, 31, 32	164,696	208,070
Trade and other payables	17, 30, 31, 32	119,245	139,275
Current lease liabilities	5.1, 31, 32	2,357	2,334
Other current financial liabilities	19, 20, 31, 32	1,640	554
Other current liabilities	18	5,149	5,440
Income tax payable		14,606	48,349
Total liabilities		384,152	534,689
Total equity and liabilities		1,089,744	1,217,311

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As of December 31, 2023 and 2022 (see note 2.3)

		2023	2022
Assets		Thousand USD	Thousand USD
Non-current assets		403,687	416,164
Property, plant and equipment		337,615	342,439
Right-of-use assets		14,254	13,160
Investment properties		2,674	2,680
Intangible assets		11,470	8,862
Investments accounted for using the equity method		6,306	6,063
Other non-current assets		17,873	23,870
Other non-current financial assets		8,799	12,432
Deferred tax assets		4,696	6,658
Current assets		441,469	527,925
Inventories		226,048	292,484
Trade and other receivables		117,089	137,408
Income tax receivables		1,698	1,588
Other current assets		10,552	10,020
Other current financial assets		9,625	5,178
Cash and cash equivalents		76,457	81,247
Total assets		845,156	944,089
Equity and liabilities			
Equity		547,226	529,410
Non-controlling interests		—	—
Equity attributable to owners of the parent		547,226	529,410
Issued capital		9,307	9,307
Capital surplus		15,885	15,885
Reserves		23,502	22,571
Retained earnings		494,971	483,131
Other components of equity		3,561	-1,484
Non-current liabilities		59,298	101,339
Bonds, interest-bearing loans and borrowings		4,072	50,989
Pension liability		3,311	2,080
Other long-term employee-related liabilities		8,360	7,027
Non-current lease liabilities		12,476	11,295
Other non-current financial liabilities		2,000	1
Other non-current liabilities		337	351
Deferred tax liabilities		28,742	29,596
Current liabilities		238,632	313,340
Interest-bearing loans and borrowings		127,731	161,370
Trade and other payables		92,481	108,015
Current lease liabilities		1,828	1,810
Other current financial liabilities		1,272	430
Other current liabilities		3,992	4,218
Income tax payable		11,328	37,497
Total liabilities		297,930	414,679
Total equity and liabilities		845,156	944,089

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

for the years ended December 31, 2023 and 2022

		2023	2022
	Notes	Million KRW	Million KRW
Sales	4.1, 4.2, 30	1,029,975	1,329,509
Cost of sales	25.5, 30	-880,026	-1,027,889
Gross profit		149,949	301,620
Selling and administration costs	25.2, 25.5, 30	-91,480	-116,504
Operating profit		58,469	185,116
Other income	25.3	4,111	3,833
Other expenses	25.4, 25.5	-5,170	-3,447
Share of result from investments accounted for using the equity method	8	847	2,020
Finance income	26.1, 26.3	42,792	63,807
Finance expenses	26.2, 26.3	-51,555	-70,229
Profit before tax		49,494	181,100
Income tax expenses	27	-14,647	-49,168
Profit for the period		34,847	131,932
Other comprehensive income, net of taxes			
Net other comprehensive income to be reclassified to profit or loss in subsequent periods		6,502	-242
Gain on valuation of interest rate swaps	15.4	—	25
Exchange differences on translation of foreign operations	15.4	6,502	-267
Net other comprehensive income not to be reclassified to profit or loss		-6,379	12,478
Gain / (loss) on valuation of financial assets at FVOCI	15.4	2	-89
Re-measurement (loss) / gain on defined benefit plans	15.4, 21	-6,381	12,567
Total other comprehensive income, net of taxes		123	12,236
Total comprehensive income		34,970	144,168
Profit for the period attributable to:			
Owners of the parent	28	34,847	131,932
Non-controlling interests		—	—
Profit for the period		34,847	131,932
Total comprehensive income attributable to:			
Owners of the parent		34,970	144,168
Non-controlling interests		—	—
Total comprehensive income		34,970	144,168
Earnings per share			
		KRW	KRW
Basic / diluted, profit for the period attributable to ordinary equity holders of the parent	28	1,452	5,497

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

for the years ended December 31, 2023 and 2022 (see note 2.3)

	2023	2022
	Thousand USD	Thousand USD
Sales	798,802	1,031,106
Cost of sales	-682,508	-797,184
Gross profit	116,294	233,922
Selling and administration costs	-70,948	-90,355
Operating profit	45,346	143,567
Other income	3,188	2,973
Other expenses	-4,010	-2,673
Share of result from investments accounted for using the equity method	657	1,567
Finance income	33,188	49,486
Finance expenses	-39,984	-54,467
Profit before tax	38,385	140,453
Income tax expenses	-11,359	-38,133
Profit for the period	27,026	102,320
Other comprehensive income, net of taxes		
Net other comprehensive income to be reclassified to profit or loss in subsequent periods	5,043	-188
Gain / (loss) on valuation of interest rate swaps	—	19
Exchange differences on translation of foreign operations	5,043	-207
Net other comprehensive income not to be reclassified to profit or loss	-4,946	9,677
Gain / (loss) on valuation of financial assets at FVOCI	2	-69
Re-measurement (loss) / gain on defined benefit plans	-4,948	9,746
Total other comprehensive income, net of taxes	97	9,489
Total comprehensive income	27,123	111,809
Profit for the period attributable to:		
Owners of the parent	27,026	102,320
Non-controlling interests	—	—
Profit for the period	27,026	102,320
Total comprehensive income attributable to:		
Owners of the parent	27,123	111,809
Non-controlling interests	—	—
Total comprehensive income	27,123	111,809
Earnings per share		
	USD	USD
Basic / diluted, profit for the period attributable to ordinary equity holders of the parent	1.13	4.26

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

for the years ended December 31, 2022 and 2023

	Attributable to owners of the parent								Non-controlling interests	Total equity
	Issued capital	Capital surplus	Reserves	Retained earnings	Other components of equity			Total		
					Cash flow hedge reserve	Fair value reserve of financial assets at FVOCI	Foreign currency translation reserve			
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
As of January 1, 2022	12,000	20,482	28,623	483,732	-25	-614	-944	543,254	—	543,254
Profit for the period	—	—	—	131,932	—	—	—	131,932	—	131,932
Other comprehensive income	—	—	—	12,567	25	-89	-267	12,236	—	12,236
Total comprehensive income	—	—	—	144,499	25	-89	-267	144,168	—	144,168
Dividends	—	—	—	-4,800	—	—	—	-4,800	—	-4,800
Appropriation to reserves	—	—	480	-480	—	—	—	—	—	—
As of December 31, 2022	12,000	20,482	29,103	622,951	—	-703	-1,211	682,622	—	682,622

As of January 1, 2023	12,000	20,482	29,103	622,951	—	-703	-1,211	682,622	—	682,622
Profit for the period	—	—	—	34,847	—	—	—	34,847	—	34,847
Other comprehensive income	—	—	—	-6,381	—	2	6,502	123	—	123
Total comprehensive income	—	—	—	28,466	—	2	6,502	34,970	—	34,970
Dividends	—	—	—	-12,000	—	—	—	-12,000	—	-12,000
Appropriation to reserves	—	—	1,200	-1,200	—	—	—	—	—	—
As of December 31, 2023	12,000	20,482	30,303	638,217	—	-701	5,291	705,592	—	705,592

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

for the years ended December 31, 2022 and 2023 (see note 2.3)

	Attributable to owners of the parent								Non-controlling interests	Total equity
	Issued capital	Capital surplus	Reserves	Retained earnings	Other components of equity			Total		
					Cash flow hedge reserve	Fair value reserve of financial assets at FVOCI	Foreign currency translation reserve			
	Thous. USD	Thous. USD	Thous. USD	Thous. USD	Thous. USD	Thous. USD	Thous. USD	Thous. USD	Thous. USD	
As of January 1, 2022	9,307	15,885	22,198	375,161	-19	-476	-732	421,324	—	421,324
Profit for the period	—	—	—	102,320	—	—	—	102,320	—	102,320
Other comprehensive income	—	—	—	9,746	19	-69	-207	9,489	—	9,489
Total comprehensive income	—	—	—	112,066	19	-69	-207	111,809	—	111,809
Dividends	—	—	—	-3,723	—	—	—	-3,723	—	-3,723
Appropriation to reserves	—	—	373	-373	—	—	—	—	—	—
As of December 31, 2022	9,307	15,885	22,571	483,131	—	-545	-939	529,410	—	529,410

As of January 1, 2023	9,307	15,885	22,571	483,131	—	-545	-939	529,410	—	529,410
Profit for the period	—	—	—	27,026	—	—	—	27,026	—	27,026
Other comprehensive income	—	—	—	-4,948	—	2	5,043	97	—	97
Total comprehensive income	—	—	—	22,078	—	2	5,043	27,123	—	27,123
Dividends	—	—	—	-9,307	—	—	—	-9,307	—	-9,307
Appropriation to reserves	—	—	931	-931	—	—	—	—	—	—
As of December 31, 2023	9,307	15,885	23,502	494,971	—	-543	4,104	547,226	—	547,226

CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended December 31, 2023 and 2022

		2023	2022
	Notes	Million KRW	Million KRW
Profit for the period		34,847	131,932
Total adjustments	29	74,182	102,471
Changes in operating assets and liabilities	29	102,211	-98,782
Interest received		1,353	524
Payments of income tax		-45,813	-34,590
Net cash flows provided by operating activities		166,780	101,555
Proceeds from sale of property, plant and equipment	5, 29	80	79
Purchases of property, plant and equipment	5	-38,392	-45,073
Purchases of intangible assets	7	-4,203	-3,114
Dividends received from investments using the equity method	8	578	581
Increase in other financial assets, net		-1,859	-6,064
Net cash flows used in investing activities		-43,796	-53,591
Proceeds from borrowings	16, 29	341,188	697,848
Repayments of borrowings	16, 29	-445,377	-719,157
Payment of lease liabilities	16, 29	-3,332	-3,419
Increase in other financial liabilities, net	16, 29	3,575	94
Interest paid		-8,997	-8,183
Dividends paid	15	-12,000	-4,800
Net cash flows used in financing activities		-124,943	-37,617
(Decrease) / increase in cash and cash equivalents		-1,959	10,347
Net foreign exchange differences		-4,217	-3,331
Cash and cash equivalents as of January 1	14	104,760	97,744
Cash and cash equivalents as of December 31	14	98,584	104,760

CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended December 31, 2023 and 2022 (see note 2.3)

	2023	2022
	Thousand USD	Thousand USD
Profit for the period	27,026	102,320
Total adjustments	57,532	79,472
Changes in operating assets and liabilities	79,270	-76,611
Interest received	1,049	406
Payments of income tax	-35,530	-26,826
Net cash flows provided by operating activities	129,347	78,761
Proceeds from sale of property, plant and equipment	62	61
Purchases of property, plant and equipment	-29,775	-34,957
Purchases of intangible assets	-3,260	-2,415
Dividends received from investments using the equity method	448	451
Increase in other financial assets, net	-1,442	-4,703
Net cash flows used in investing activities	-33,967	-41,563
Proceeds from borrowings	264,610	541,219
Repayments of borrowings	-345,414	-557,745
Payment of lease liabilities	-2,584	-2,652
Increase in other financial liabilities, net	2,773	73
Interest paid	-6,978	-6,346
Dividends paid	-9,307	-3,723
Net cash flows used in financing activities	-96,900	-29,174
(Decrease) / increase in cash and cash equivalents	-1,520	8,024
Net foreign exchange differences	-3,270	-2,583
Cash and cash equivalents as of January 1	81,247	75,806
Cash and cash equivalents as of December 31	76,457	81,247

1. CORPORATE INFORMATION

1.1. THE GROUP

SONGWON Industrial Group (the “Group”) consists of the parent company Songwon Industrial Co., Ltd. (the “Company”) and its consolidated subsidiaries as listed below. The Company was incorporated on December 15, 1965, under the law of the Republic of Korea to engage in the manufacture and commercial sale of polymer stabilizers, tin intermediates, PVC stabilizers and specialty chemicals, among others. The Company’s main manufacturing plants are located in Korea in Ulsan, Maeam and Suwon and in India in Ankleshwar. The address of the registered office (Songwon Industrial Co., Ltd.) can be found at the end of the annual report.

The Company has listed its common shares on the Korea Exchange since June 1977, pursuant to the Korean Securities and Exchange Act.

1.2. SCOPE OF CONSOLIDATION

1.2.1. CHANGE IN THE SCOPE OF CONSOLIDATION

As of December 31, 2023, the scope of consolidation for the consolidated financial statements encompasses 14 entities (2022: 14 entities). Additionally, one entity is classified as a joint venture (2022: one entity) and accounted for using the equity method.

During the twelve months of 2023, there were no changes in the legal structure of the Group or the scope of consolidation. During the twelve months of 2022, there were no changes in the legal structure of the Group or the scope of consolidation.

The consolidated financial statements include the financial statements of the Company and of the subsidiaries listed in the following table. The table also includes joint ventures which are accounted for using the equity method.

Consolidated entities	Location	Status	2023	Status	2022
			December 31		December 31
			Interest		Interest
Songwon Industrial Co., Ltd.	Korea	Parent		Parent	
Songwon International – Japan K.K.	Japan	Subsidiary	100%	Subsidiary	100%
Songwon Specialty Chemicals-India Pvt. Ltd.	India	Subsidiary	100%	Subsidiary	100%
Songwon International – Americas Inc.	USA	Subsidiary	100%	Subsidiary	100%
Songwon International AG	Switzerland	Subsidiary	100%	Subsidiary	100%
Songwon Group Holding AG	Switzerland	Subsidiary	100%	Subsidiary	100%
Songwon Management AG	Switzerland	Subsidiary	100%	Subsidiary	100%
Songwon ATG GmbH	Germany	Subsidiary	100%	Subsidiary	100%
Songwon Europe GmbH	Germany	Subsidiary	100%	Subsidiary	100%
Songwon Chemicals GmbH	Germany	Subsidiary	100%	Subsidiary	100%
Songwon Trading GmbH	Germany	Subsidiary	100%	Subsidiary	100%
Songwon International – Qingdao Co., Ltd.	China	Subsidiary	100%	Subsidiary	100%
Songwon International Middle East FZE	UAE	Subsidiary	100%	Subsidiary	100%
Songwon Polysys Additives – Sole Proprietorship LLC	UAE	Subsidiary	100%	Subsidiary	100%

Entity accounted for using the equity method (joint venture)

Songwon Baifu Chemicals (Tangshan) Co., Ltd.	China	Joint venture	30%	Joint venture	30%
--	-------	---------------	-----	---------------	-----

1.2.2. SUMMARIZED STATEMENTS OF FINANCIAL POSITION AND COMPREHENSIVE INCOME OF SUBSIDIARIES

The summarized statements of financial position and comprehensive income of subsidiaries are as follows:

	Total assets	Total liabilities	Total equity	Total revenue	Net income	Total comp. income
2023	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
as of December 31						
Songwon International – Japan K.K.	35,867	25,682	10,185	97,271	1,295	1,295
Songwon Specialty Chemicals-India Pvt. Ltd.	50,930	8,379	42,551	27,946	7,269	7,426
Songwon International – Americas Inc.	99,069	57,866	41,203	237,256	3,747	3,747
Songwon International AG	99,419	67,256	32,163	263,157	4,450	4,337
Songwon Group Holding AG	138,892	3,144	135,748	–	23,351	23,351
Songwon Management AG	24,520	16,650	7,870	–	1,899	255
Songwon-ATG GmbH	7,939	3,617	4,322	7,561	321	321
Songwon Europe GmbH	422	94	328	2,617	82	82
Songwon Chemicals GmbH	149	18	131	1,544	42	42
Songwon Trading GmbH	132	16	116	1,406	36	36
Songwon International – Qingdao Co., Ltd.	10,965	6,407	4,558	25,929	459	459
Songwon International – Middle East FZE	12,983	9,664	3,319	37,797	1,889	1,889
Songwon Polysys Additives – Sole Proprietorship LLC	38,549	15,623	22,926	31,385	1,370	1,370

2022						
as of December 31						
Songwon International – Japan K.K.	62,789	50,664	12,125	139,524	870	870
Songwon Specialty Chemicals-India Pvt. Ltd.	50,388	9,531	40,857	31,651	3,054	3,161
Songwon International – Americas Inc.	134,021	94,813	39,208	333,753	5,851	5,851
Songwon International AG	127,717	97,458	30,259	338,812	7,519	7,947
Songwon Group Holding AG	134,625	4,125	130,500	–	14,211	14,211
Songwon Management AG	23,284	15,103	8,181	–	2,010	5,053
Songwon-ATG GmbH	7,539	3,769	3,770	9,051	551	551
Songwon Europe GmbH	2,051	1,821	230	4,736	166	166
Songwon Chemicals GmbH	92	7	85	1,065	24	24
Songwon Trading GmbH	81	6	75	944	19	19
Songwon International – Qingdao Co., Ltd.	10,648	6,213	4,435	26,336	729	729
Songwon International – Middle East FZE	10,517	7,215	3,302	34,771	1,851	1,851
Songwon Polysys Additives – Sole Proprietorship LLC	34,787	11,442	23,345	43,369	1,956	1,956

2. SUMMARY OF MATERIAL ACCOUNTING POLICIES

2.1. BASIS OF PREPARATION

The Group prepares statutory financial statements in the Korean language in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("KIFRS") enacted by the *Act on External Audit of Stock Companies*.

The consolidated financial statements have been prepared on a historical cost basis, except for certain items, such as financial instruments, which are mentioned separately in the following accounting principles. The consolidated financial statements are presented in Korean won (KRW) and all values are rounded to the nearest million (000,000), except when otherwise indicated.

The Group maintains its official accounting records in Korean won. The accompanying consolidated financial statements have been translated into English from Korean financial statements. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, Korean version, which is used for regulatory reporting purposes, shall prevail.

2.2. BASIS OF CONSOLIDATION

The consolidated financial statements comprise the financial statements of the Group and its subsidiaries as of December 31, 2023. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure or rights to variable returns from its involvement with the investee
- The ability to use its power over the investee to affect its returns

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee
- Rights arising from other contractual arrangements
- The Group's voting rights and potential voting rights

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when it loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statements of comprehensive income from the date that the Group gains control until the date that it ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to align their accounting policies with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

2.3. CONVENIENCE TRANSLATION INTO UNITED STATES DOLLAR AMOUNTS

The parent company operates primarily in Korean won and its official accounting records are maintained in KRW. The USD amounts provided in the financial statements represent supplementary information solely for the convenience of the reader. All KRW amounts are expressed in USD at the rate of 1,289.40 KRW to 1 USD, the exchange rate in effect on December 31, 2023. Such a presentation is not in accordance with generally accepted accounting principles and should not be construed as a representation that the KRW amounts shown could be readily converted, realized or settled in USD at this or at any other rate.

2.4. BUSINESS COMBINATIONS AND GOODWILL

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at the acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as of the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests, and any previous interest held over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group reassesses whether it has correctly identified all of the assets acquired as well as all of the liabilities assumed, and reviews the procedures used to measure the amounts to be recognized at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregated consideration transferred, then the gain is recognized in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units (CGU) that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a CGU and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the CGU retained.

2.5. INTEREST IN JOINT ARRANGEMENTS

Joint ventures

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. The considerations made in determining joint control are similar to those necessary to determine control over subsidiaries.

The Group's investments in its joint ventures are accounted for using the equity method. Under the equity method, the investment in a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the joint venture since the acquisition date.

The statements of comprehensive income reflect the Group's share of the results of operations of the joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognized directly in the equity of a joint venture, the Group recognizes its share of any changes, when applicable, in the statements of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the joint venture are eliminated to the extent of the interest in the joint venture.

The aggregate of the Group's share of profit or loss in a joint venture is shown on the face of the statements of profit or loss outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the joint venture.

The financial statements of the joint venture are prepared for the same reporting period as the Group. When necessary, adjustments are made to align the accounting policies with those of the Group.

At each reporting date, the Group determines whether there is objective evidence that the investment in the joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the joint venture and its carrying value, and then recognizes the loss as "Share of profit of a joint venture" in the statements of comprehensive income.

Upon loss of material influence over the joint venture, the Group measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the joint venture – upon loss of material influence or joint control – and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

Joint operations

A joint operation is defined as an arrangement in which the parties with joint control have rights to the assets and obligations for the liabilities relating to that arrangement. In respect of its interest in a joint operation, a joint operator must recognize all of its assets, liabilities, revenues and expenses, including its relative share of jointly controlled assets, liabilities, revenue and expenses.

The considerations made in determining joint control are similar to those necessary to determine control over subsidiaries.

2.6. FOREIGN CURRENCY TRANSLATION

The consolidated financial statements are presented in KRW, which is the parent company's functional currency. Each entity in the Group determines its own functional currency, and items included in the financial statements of each entity are measured using that functional currency.

Transactions in foreign currencies are initially recorded by the companies at their respective functional currency rates prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rate of exchange ruling at the reporting date. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

The assets, including goodwill and liabilities of foreign subsidiaries, where the functional currency is other than the KRW, are translated using the exchange rate at the end of the reporting period, while the statements of comprehensive income are translated using the average exchange rates during the period. Differences arising from such translations are recognized within equity and reclassified to net income when the gain or loss on disposal of the foreign subsidiary is recognized.

In determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which the Group initially recognizes the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of advance consideration.

2.7. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are valued at cost less accumulated depreciation and accumulated impairment losses. If the recognition criteria are met, such costs include the cost of replacing part of the property, plant and equipment and borrowing costs for long-term construction projects. Other repair and maintenance costs are recognized in the statements of comprehensive income as incurred. If the costs of certain components of an item of property, plant and equipment are material in relation to the total cost of the item, they are accounted for and depreciated separately.

Depreciation expenses are calculated by using the straight-line method. The following useful lives are assumed:

Land	No depreciation
Buildings	18–60 years
Structures	10–40 years
Machinery	10–20 years
Other	1–39 years

Residual values and useful lives are reviewed annually and adjusted accordingly if expectations differ from previous estimates.

The gain or loss arising from the derecognition of a property, plant or equipment shall be determined as the difference between the net disposal proceeds and the carrying amount of the asset. It shall be recognized in the income statement when the asset is derecognized.

2.8. INTANGIBLE ASSETS

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is its fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses.

Intangible assets with useful finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life, or the expected consumption pattern of future economic benefits embodied in the asset, are accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in the income statement under cost of sales and selling and administration costs in the expense category that is consistent with the function of the intangible assets.

Intangible assets with indefinite useful lives (such as goodwill and memberships) are not amortized, but are tested for impairment annually either individually, or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the income statement when the asset is derecognized.

Intangible assets with finite useful lives are amortized using the straight-line method with the following useful lives:

Software	3–10 years
Industrial rights	10 years

2.9. INVESTMENT PROPERTY

The Group classifies the property to earn rentals or for capital appreciation, or both, as investment properties. As investment properties are accounted for using a cost model, the same accounting policies applied to property, plant and equipment are used for their accounting treatment, except for their classification and presentation.

2.10. LEASES

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

- Right-of-use assets*
The Group recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any re-measurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognized right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Right-of-use assets are subject to impairment (see note 5.1).
- Lease liabilities*
At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate (see note 31.3).

In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. The carrying amount of the right-of-use asset and lease liability is re-measured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

- Short-term leases and leases of low-value assets*
The Group applies the short-term lease recognition exemption to its short-term leases of tools and other equipment (i.e., those leases that have a lease term of twelve months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value (i.e., below 5,000 USD). Lease payments on short-term leases and leases of low-value assets are recognized as an expense on a straight-line basis over the lease term.
- Material judgment in determining the lease term of contracts with renewal options*
The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised. The Group has the option, under some of its leases to lease the assets for additional terms. The Group applies judgment in evaluating whether it is reasonably certain to exercise the option to renew. That is, it considers all relevant factors that create an economic incentive for it to exercise the renewal. After the commencement date, the Group reassesses the lease term if there is a material event or change in circumstances that is within its control and affects its ability to exercise (or not to exercise) the option to renew (e.g., a change in business strategy).

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which they are earned. In the financial year 2022, the Group has not entered into lease agreements as a lessor.

2.11. IMPAIRMENT OF NON-FINANCIAL ASSETS

The Group reviews non-financial assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If any indication exists, or when annual impairment testing for assets, such as membership is required, the Group estimates the asset's recoverable amount. Recoverability of assets is measured by the comparison of the carrying amount of the asset to the recoverable amount, which is the higher of the asset's value in use and its fair value less costs to sell. If assets do not generate cash inflows that are largely independent of those from other assets or groups of assets, the impairment test is not performed at an individual asset level; instead, it is performed at the level of the cash-generating unit (CGU) that the asset belongs to.

Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, recent market transactions are taken into account, if available. If no such transactions can be identified, an appropriate valuation model is used.

For assets excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such an indication exists, the Group estimates the asset or cash-generating unit's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited, so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such a reversal is recognized in the income statement.

The following criteria are also applied in assessing impairment of specific assets:

Goodwill

Goodwill is tested for impairment annually as of December 31, and whenever there are events or changes in circumstances (triggering events), which suggest that the carrying amount may not be recoverable. Goodwill is carried at cost less accumulated impairment losses.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to the (groups of) cash-generating unit(s) that is expected to benefit from the synergies of the business combination. If the carrying amount of the cash-generating unit(s), to which the goodwill is allocated, exceeds its recoverable amount, an impairment loss on goodwill is recognized. The recoverable amount is the higher of the cash-generating unit(s) fair value less costs to sell and its value in use.

Impairment losses relating to goodwill cannot be reversed in future periods.

Intangible assets with indefinite useful lives

Intangible assets with indefinite useful lives are tested for impairment annually as of December 31, either individually, or at the cash-generating unit level, as appropriate and when circumstances indicate that the carrying value may be impaired.

2.12. BORROWING COSTS

Borrowing costs directly attributable to the acquisition, construction or production of an asset, that requires a substantial period of time to get ready for its intended use or sale, are capitalized as part of the cost of the respective assets.

2.13. INVENTORIES

Inventory is valued at the lower of the acquisition or production cost and net realizable value, cost being generally determined on the basis of a weighted average. Production costs comprise direct material and labor and applicable manufacturing overheads, including depreciation charges based on normal operating capacity. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

2.14. CASH AND CASH EQUIVALENTS

Cash and cash equivalents in the statements of financial position comprise cash at banks, as well as on-hand and short-term deposits with a maturity of three months or less.

2.15. PROVISIONS

A provision is recognized when the Group has a present legal or constructive obligation as a result of a past event. It is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. If the effect is material, provisions are recognized at present value by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money.

Greenhouse gas emissions

The Group receives free emission rights as a result of emission trading schemes. The rights are received on an annual basis and, in return, the Group is required to remit rights equal to its actual emissions. The Group has adopted the net liability approach to the emission rights granted. Therefore, a provision is recognized only when actual emissions exceed the emission rights granted and still held. The emission costs are recognized as other operating costs. Where emission rights are purchased from other parties, they are recorded at cost, and treated as a reimbursement right, whereby they are matched to the emission liabilities and re-measured to fair value. The changes in fair value are recognized in the statement of profit or loss and other comprehensive income.

2.16. PENSIONS AND OTHER LONG-TERM EMPLOYMENT BENEFITS

Pensions

The Group operates three defined benefit pension plans: one in Korea, one in Switzerland and one in India. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method.

Re-measurements, comprising actuarial gains and losses, the effect of the asset ceiling, excluding net interest and the return on plan assets (excluding net interest), are recognized immediately in the statements of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Re-measurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognized in profit or loss on the earlier of the date:

- the plan amendment or curtailment
- that the Group recognizes restructuring-related costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The pension expenses are recognized in the income statement under cost of sales and selling and administration costs.

Other long-term employment benefits

The parent company also implements a bonus plan designed to present a prescribed quantity of gold and entitles compensated vacation to long-term service employees. Accounting policies of the bonus plan are mostly the same as the defined benefit plan, except that re-measurements are recognized immediately in profit or loss.

2.17. TAXES

Current income tax

Current income tax assets and liabilities for the current period are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted, or substantively enacted, at the reporting date in the countries where the Group operates and generates taxable income.

Deferred tax

Deferred tax is provided using the liability method on temporary differences at the reporting date between the tax basis of assets and liabilities, and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- where the deferred tax liability arises from the initial recognition of goodwill, or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit, nor taxable profit or loss;
- with respect to taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized, except:

- where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit, nor taxable profit or loss;
- with respect to deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future, and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are reassessed at each reporting date and recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transaction, either in other comprehensive income, or directly in equity.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

2.18. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Group's business is the manufacture and commercial sale of antioxidants, stabilizers and polyurethane. Revenue from contracts with customers is recognized when control of the goods or services is transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group has generally concluded that it is the principal in its revenue arrangements, except for the agency services below, because it typically controls the goods or services before transferring them to the customer.

Sales of goods

The Group has concluded that revenue from the sale of goods should be recognized at the point in time when control of the asset is transferred to the customer, generally on delivery of the goods.

Sale of services

The Group provides transportation services in combination with the sales of goods. The services can be provided by others and are not materially modified or customized. There are two performance obligations in a contract for bundled sales of goods and transportation services, because its promises to transfer goods and provide transportation services, are capable of being distinct and separately identifiable. The Group allocates the transaction price based on the relative stand-alone selling prices of goods and transportation services. The Group concluded that revenue for transportation services, will be recognized over time because the customer simultaneously receives and consumes the benefits provided by the Group.

Contract balances

1) *Contract assets*

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays a consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional.

2) *Trade receivables*

A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Refer to the accounting policies of financial assets in note 2.19.

3) *Contract liabilities*

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognized when the payment is made, or the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when the Group performs under the contract.

2.19. FINANCIAL INSTRUMENTS

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets

Financial assets are classified, at initial recognition, as subsequently measured at amortized cost, fair value through other comprehensive income (FVOCI), and fair value through profit or loss (FVTPL).

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them: With the exception of trade receivables that do not contain a material financing component, or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs.

In order for a financial asset to be classified and measured at amortized cost or FVOCI, it needs to give rise to cash flows that are, solely payments of principal and interest (SPPI), on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades), are recognized on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

1) Subsequent measurement

For purposes of subsequent measurement, financial assets are classified into four categories:

- Financial assets at amortized cost (debt instruments);
- Financial assets at FVOCI with recycling of cumulative gains and losses (debt instruments);
- Financial assets designated at FVOCI with no recycling of cumulative gains and losses upon derecognition (equity instruments);
- Financial assets at FVTPL.

2) Financial assets at amortized cost (debt instruments)

This category is the most relevant to the Group. The Group measures financial assets at amortized cost if both of the following conditions are met:

- the financial asset is held within a business model with the objective of holding financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortized cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

3) Financial assets at FVOCI (debt instruments)

The Group measures debt instruments at FVOCI if both of the following conditions are met:

- the financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For debt instruments at FVOCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognized in the statement of profit or loss and computed in the same manner as for financial assets measured at amortized cost. The remaining fair value changes are recognized in OCI. Upon derecognition, the cumulative fair value change recognized in OCI is recycled to profit or loss. The Group's debt instruments at FVOCI includes investments in quoted debt instruments included under other non-current financial assets.

4) Financial assets designated at FVOCI (equity instruments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at FVOCI when they meet the definition of equity under KIFRS 1032 and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled into profit or loss. Dividends are recognized as other income in the statement of profit or loss when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at FVOCI are not subject to impairment assessment.

The Group elected to classify irrevocably its non-listed equity investments under this category.

5) Financial assets at FVTPL

Financial assets at FVTPL include financial assets held for trading, financial assets designated upon initial recognition at FVTPL, or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at FVTPL, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortized cost or at FVOCI, as described above, debt instruments may be designated at FVTPL on initial recognition if doing so eliminates, or materially reduces, an accounting mismatch.

Financial assets at FVTPL are carried in the statement of financial position at fair value with net changes in fair value recognized in the statement of profit or loss.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at FVTPL. Embedded derivatives are measured at fair value with changes in fair value recognized in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that materially modifies the cash flows that would otherwise be required, or a reclassification of a financial asset out of the FVTPL category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at FVTPL.

6) Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e., removed from the Group's consolidated statement of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a pass-through arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

After the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognize the transferred asset to the extent of its continuing involvement. In that case, the Group also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

7) Impairment of financial assets

Further disclosures relating to the impairment of financial assets are also provided in the sections:

- material accounting judgments, estimates and assumptions
- debt instruments at FVOCI
- trade and other receivables

The Group recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at FVtPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognized in two stages. For credit exposures for which there has not been a material increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a material increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors regionally specific to the debtors and the economic environment.

For debt instruments at FVOCI, the Group applies the low credit risk simplification. At every reporting date, the Group evaluates whether the debt instrument is considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Group reassesses the internal credit rating of the debt instrument. In addition, the Group considers that there has been a material increase in credit risk when contractual payments are more than 30 days past due.

The Group considers a financial asset in default when contractual payments are 180 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Financial liabilities

1) Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at FVtPL, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include mainly trade and other payables, interest-bearing loans and borrowings as well as derivative liabilities.

2) Subsequent measurement

The measurement of financial liabilities depends on their classification, as described below:

3) Financial liabilities at FVtPL

Financial liabilities at FVtPL include financial liabilities held for trading and financial liabilities designated upon initial recognition as at FVtPL.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by KIFRS 1109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in the statement of profit or loss.

Financial liabilities designated upon initial recognition at FVtPL are designated at the initial date of recognition, and only if the criteria in KIFRS 1109 are satisfied.

4) Loans and borrowings

This is the category most relevant to the Group. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the statement of profit or loss.

This category generally applies to interest-bearing loans and borrowings. For more information, refer to note 16.

5) Derecognition

A financial liability is derecognized when the obligation under the liability is discharged, cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the statement of profit or loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

Derivative financial instruments and hedge accounting

1) Initial recognition and subsequent measurement

The Group uses derivative financial instruments, such as forward exchange contracts and interest rate swaps, to hedge its foreign currency risks, interest rate risks and commodity price risks. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

For the purpose of hedge accounting, hedges are classified as:

- fair value hedges when hedging the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment.
- cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability, or a highly probable forecast transaction or the foreign currency risk in an unrecognized firm commitment.
- hedges of a net investment in a foreign operation.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including analysis of the sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- there is an economic relationship, between the hedged item and the hedging instrument.
- the effect of credit risk does not dominate the value changes, that result from that economic relationship.
- the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group really uses to hedge that quantity of hedged item.

Hedges that meet all the qualifying criteria for hedge accounting are accounted for, as described below:

2) Fair value hedges

The change in the fair value of a hedging instrument is recognized in the statement of profit or loss as other expenses. The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognized in the statement of profit or loss as other expenses.

For fair value hedges relating to items carried at amortized cost, any adjustment to carrying value is amortized through profit or loss over the remaining term of the hedge using the EIR method. The EIR amortization may begin as soon as an adjustment exists and no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

If the hedged item is derecognized, the unamortized fair value is recognized immediately in profit or loss.

When an unrecognized firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognized as an asset or liability with a corresponding gain or loss recognized in profit or loss. The Group has forward exchange contracts as well as currency and interest rate swaps (CRS) in order to hedge the risk of foreign exchange rate fluctuation of assets and liabilities denominated in foreign currencies and floating interest rates on corporate bonds. The Group applies fair value hedge accounting for forward exchange contracts (note 20.1.1) and currency and interest rate swaps (note 20.1.2).

3) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized in OCI in the cash flow hedge reserve, while any ineffective portion is recognized immediately in the statement of profit or loss. The cash flow hedge reserve is adjusted to the lower of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The amounts accumulated in OCI are accounted for, depending on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the amount accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and will not be recognized in OCI for the period. This also applies where the hedged forecast transaction of a non-financial asset or non-financial liability subsequently becomes a firm commitment for which fair value hedge accounting is applied.

For any other cash flow hedges, the amount accumulated in OCI is reclassified to profit or loss as a reclassification adjustment in the same period or periods during which the hedged cash flows affect profit or loss.

If cash flow hedge accounting is discontinued, the amount that has been accumulated in OCI must remain in accumulated OCI if the hedged future cash flows are still expected to occur. Otherwise, the amount will be immediately reclassified to profit or loss as a reclassification adjustment. After discontinuation, once the hedged cash flow occurs, any amount remaining in accumulated OCI must be accounted for depending on the nature of the underlying transaction as described above.

The Group had interest rate swap agreements about some borrowings that had been terminated early. The Group applied cash flow hedge accounting for interest rate swap contracts.

4) Hedges of a net investment

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, are accounted for in a way similar to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized as OCI while any gains or losses relating to the ineffective portion are recognized in the statement of profit or loss. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is transferred to the statement of profit or loss.

Fair value measurement

The Group measures financial instruments such as derivatives at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- in the principal market for the asset or liability, or
- in the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is material to the fair value measurement as a whole:

- **Level 1** — Quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- **Level 2** — Valuation techniques for which the lowest level input that is material to the fair value measurement is directly or indirectly observable.
- **Level 3** — Valuation techniques for which the lowest level input that is material to the fair value measurement is unobservable.

For assets and liabilities that are recognized in the financial statements at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is material to the fair value measurement as a whole) at the end of each reporting period.

The Group determines the policies and procedures for both recurring fair value measurement, such as investment properties and unquoted AFS financial assets, and for non-recurring measurement, such as assets held for sale in discontinued operation.

External valuers are involved for material assets, such as AFS financial assets, and material liabilities. Selection criteria include market knowledge, reputation, independence and whether professional standards are maintained.

At each reporting date, the Group analyses the movements in the values of assets and liabilities that are required to be remeasured or re-assessed as per the Group's accounting policies. For this analysis, the Group verifies the major inputs applied in the latest valuation by agreeing the information in the valuation computation to contracts and other relevant documents.

The Group, in conjunction with the Group's external valuers, also compares the change in the fair value of each asset and liability with relevant external sources to determine whether the change is reasonable.

On an interim basis, the Group and the Group's external valuers present the valuation results to the Group's independent auditors. This includes a discussion of the major assumptions used in the valuations.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above.

2.20. GOVERNMENT GRANTS

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as income in equal amounts over the expected useful life of the related asset.

When the Group receives grants of non-monetary assets, the asset and the grant are recorded at nominal amounts and released to profit or loss over the expected useful life of the asset, based on the pattern of consumption of the benefits of the underlying asset by equal annual installments.

2.21. NEW AND AMENDED STANDARDS AND INTERPRETATIONS

The Group applied certain standards and amendments for the first time, which are effective for annual periods beginning on or after January 1, 2023 (unless otherwise stated). The Group has not adopted early any other standard, interpretation or amendment that has been issued but is not yet effective.

KIFRS 1117 *Insurance Contracts*

In May 2017, the IASB issued KIFRS 1117 *Insurance Contracts*, a comprehensive new accounting standard for insurance contracts covering recognition and measurement, presentation and disclosure. KIFRS 1117 replaces KIFRS 1104 *Insurance Contracts* that was issued in 2005. KIFRS 1117 applies to all types of insurance contracts (i.e., life, non-life, direct insurance and re-insurance), regardless of the type of entities that issue them, as well as to certain guarantees and financial instruments with discretionary participation features; a few scope exceptions will apply. The overall objective of KIFRS 1117 is to provide an accounting model for insurance contracts that is more useful and consistent for insurers. In contrast to the requirements in KIFRS 1104, which are largely based on grandfathering previous local accounting policies, KIFRS 1117 provides a comprehensive model for insurance contracts, covering all relevant accounting aspects. KIFRS 1117 is based on a general model, supplemented by:

- a specific adaptation for contracts with direct participation features (the variable fee approach)
- a simplified approach (the premium allocation approach) mainly for short-duration contracts

This new accounting standard had no impact on the consolidated financial statements of the Group as SONGWON Industrial Group is not involved in the insurance business.

Amendments to KIFRS 1008 *Definition of Accounting Estimates*

The amendments to KIFRS 1008 clarify the distinction between changes in accounting estimates, changes in accounting policies and the correction of errors. They also clarify how entities use measurement techniques and inputs to develop accounting estimates.

These amendments had no impact on the consolidated financial statements of the Group as there were no changes in accounting estimates and accounting policies on or after the beginning of the earliest period presented.

Amendments to KIFRS 1001 *Disclosure of Accounting Policies*

The amendments to KIFRS 1001 provide guidance and examples to help entities apply materiality judgments to accounting policy disclosures. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their "significant" accounting policies with a requirement to disclose their "material" accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures.

The amendments have had an impact on the Group's disclosures of accounting policies, but not on the measurement, recognition or presentation of any items in the Group's financial statements.

Amendments to KIFRS 1012 *Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction*

The amendments to KIFRS 1012 *Income Tax* narrow the scope of the initial recognition exception, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences such as leases and decommissioning liabilities.

These amendments had no impact on the consolidated financial statements of the Group as there were no transactions leading to initial recognition exceptions that gave rise to equal taxable and deductible temporary differences within the scope of these amendments arising during the period.

2.22. STANDARDS ISSUED BUT NOT YET EFFECTIVE

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's consolidated financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Amendments to KIFRS 1116 *Lease Liability in a Sale and Leaseback*

The amendments to KIFRS 1116 specify the requirements that a seller-lessee uses in measuring the lease liability arising in a sale and leaseback transaction, to ensure the seller-lessee does not recognize any amount of the gain or loss that relates to the right of use it retains.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024, and must be applied retrospectively to sale and leaseback transactions entered into after the date of initial application of KIFRS 1116. Earlier application is permitted, and that fact must be disclosed.

The amendments are not expected to have a material impact on the Group's financial statements.

Amendments to KIFRS 1001 *Classification of Liabilities as Current or Non-current*

The amendments to paragraphs 69 to 76 of KIFRS 1001 specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- what is meant by a right to defer settlement.
- that a right to defer must exist at the end of the reporting period.
- that classification is unaffected by the likelihood that an entity will exercise its deferral right; and
- that only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification.

In addition, a requirement has been introduced to require disclosure when a liability arising from a loan agreement is classified as non-current and the entity's right to defer settlement is contingent on compliance with future covenants within twelve months.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024, and must be applied retrospectively. The Group is currently assessing the impact the amendments will have on current practice and whether existing loan agreements may require renegotiation.

Amendments to KIFRS 1007 and KIFRS 1107 *Supplier Finance Arrangements*

The amendments to KIFRS 1007 *Statement of Cash Flows* and KIFRS 1107 *Financial Instruments: Disclosures* clarify the characteristics of supplier finance arrangements and require additional disclosure of such arrangements. The disclosure requirements in the amendments are intended to assist users of financial statements in understanding the effects of supplier finance arrangements on an entity's liabilities, cash flows and exposure to liquidity risk.

The amendments will be effective for annual reporting periods beginning on or after January 1, 2024. Early adoption is permitted but will need to be disclosed.

The amendments are not expected to have a material impact on the Group's financial statements.

3. MATERIAL ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

The preparation of the Group's financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods. The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, which have a material risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below.

Notes	Description	Nature of estimation
5, 6, 7, 11	Impairment of non-financial assets / goodwill	Impairment exists when the carrying value of an asset or cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs to sell and its value in use. The determination of the recoverable amount of a cash-generating unit involves the use of estimates by management. The fair value less costs to sell calculation is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model. The cash flows are derived from the expectations for the next three to five years and do not include restructuring activities that the Group is not yet committed to or material future investments that will enhance the asset performance of the cash-generating unit being tested. The recoverable amount based on the value in use is most sensitive to the discount rate used for the discounted cash flow model (WACC), as well as the expected future cash-inflows and the growth rate used for extrapolation purposes. The recoverable amount based on the fair value less cost to sell is most sensitive to the market prices, premiums and the estimate of cost to sell. These estimates, including the methodologies used, can have a material impact on the fair value and ultimately, the amount of any goodwill impairment.
21, 22	Pension and other employment benefits	The cost of defined benefit pension plans and other similar long-term employee benefits, and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions, which may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions.
27.1, 27.2	Income tax / deferred tax assets	The Group applies material judgment in identifying uncertainties over income tax treatments. Since the Group operates in a complex multinational environment, it assesses on a yearly base whether these uncertainties have an impact on its consolidated financial statements. Deferred tax assets are recognized for all unused tax losses, to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Material management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.
32	Fair value of financial instruments	Where the fair value of financial assets and financial liabilities recorded in the statement of financial position cannot be derived from active markets, their fair value is determined using valuation techniques including the discounted cash flow model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing fair values. The judgments include consideration of inputs, such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

31.3	Leases – determination of lease term and incremental borrowing rate	<p>The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised. The Group applies judgment in evaluating whether it is reasonably certain whether or not to exercise the option to renew or terminate the lease. That is, it considers all relevant factors that create an economic incentive for it to exercise either the renewal or termination. After the commencement date, the Group reassesses the lease term if there is a material event or change in circumstances that is within its control and affects its ability to exercise or not to exercise the option to renew or to terminate (e.g., construction of material leasehold improvements or material customization to the leased asset).</p> <p>The Group cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.</p>
------	---	--

4. SEGMENT INFORMATION

The Group is organized into two main reporting segments “Industrial Chemicals” and “Performance Chemicals”. The segments are defined based on SONGWON's product portfolio and its respective product families.

- Industrial Chemicals**
Industrial Chemicals operating segment mainly includes the product lines “Polymer Stabilizers”, “Fuel and Lubricant Additives” and “Coatings”.
- Performance Chemicals**
Performance Chemicals operating segment mainly includes the product lines “Thermoplastic Polyurethanes / Solution Polyurethanes”, “Tin Intermediates / PVC Stabilizers and Plasticizers” and “Specialty Chemicals”.

The Chief Operating Decision Makers (CODM), at Songwon, leaders of respective divisions, monitor the sales and operating profits or losses of its operating segments separately for the purpose of making decisions about resource allocation and performance assessment. However, certain income and expense positions such as other income / expenses, finance income / expenses and income tax expenses are managed on a Group basis and therefore not allocated to operating segments. The Group does not disclose a measure of total assets and liabilities for each reportable segment as such amounts are not reported to the CODM.

There are no inter-company transactions between the two operating segments.

4.1. REPORTED KEY FIGURES

The following key figures are presented each month to the CODM. For the segment reporting, the same accounting policies and methods of computation as were followed in the most recent annual financial statement are used.

For the twelve months ended December 31						
Description	2023		2022		2023	
	Industrial Chemicals		Performance Chemicals		Total	
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Sales	765,743	983,239	264,232	346,270	1,029,975	1,329,509
Operating profit	56,536	179,470	1,933	5,646	58,469	185,116

4.2. GEOGRAPHIC INFORMATION

4.2.1. SALES

The sales information below is based on the location of the customer. Korea is disclosed separately due to the size of the Korean market whereas all other countries have been summarized into regions. Therefore, no other country's revenues are disclosed separately.

	2023	2022
	Million KRW	Million KRW
Korea	198,256	240,554
Rest of Asia	287,729	363,393
Europe	238,094	302,286
North and South America	235,432	334,558
Australia	2,285	4,817
Middle East and Africa	68,179	83,901
Total sales	1,029,975	1,329,509

As of December 31, 2023, one customer referring to the reporting segment “Industrial Chemicals” accounted for more than 10% of the Group's total sales with a total amount of revenues of 114,115 Million KRW. (As of December 31, 2022: no customer accounted for more than 10% of the Group's total sales.)

4.2.2. NON-CURRENT ASSETS

Non-current assets information presented below consists of property, plant and equipment, right-of-use assets, investment properties and intangible assets.

	2023	2022
	Million KRW	Million KRW
Korea	410,232	411,991
Rest of Asia	23,582	24,036
Europe	7,444	7,619
North and South America	12,409	10,388
Middle East and Africa	18,270	19,359
Total	471,937	473,393

5. PROPERTY, PLANT AND EQUIPMENT

	Land	Buildings	Structures	Machinery	Other	Construction in progress	Total
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Acquisition cost							
As of January 1, 2022	149,656	93,377	71,856	497,806	45,026	15,127	872,848
Additions	—	144	431	1,802	830	45,352	48,559
Disposals	—	-51	-421	-4,641	-745	—	-5,858
Reclassifications	—	9,293	1,052	37,692	-23,112	-24,925	—
Net exchange differences	—	575	—	-192	54	-56	381
As of December 31, 2022	149,656	103,338	72,918	532,467	22,053	35,498	915,930
As of January 1, 2023	149,656	103,338	72,918	532,467	22,053	35,498	915,930
Additions	—	242	163	2,111	587	27,057	30,160
Disposals	—	-3,612	-1,512	-56,397	-3,005	—	-64,526
Reclassifications	—	2,452	7,633	44,103	-95	-54,940	-847
Net exchange differences	—	545	—	1,255	151	—	1,951
As of December 31, 2023	149,656	102,965	79,202	523,539	19,691	7,615	882,668
Accumulated depreciation and impairment							
As of January 1, 2022	—	-30,675	-44,676	-335,178	-38,020	—	-448,547
Depreciation charge	—	-2,761	-3,253	-21,516	-1,681	—	-29,211
Disposals	—	14	308	3,337	689	—	4,348
Impairment	—	-27	—	-891	—	—	-918
Reclassifications	—	-1,535	-26	-20,100	21,661	—	—
Net exchange differences	—	-113	—	164	-112	—	-61
As of December 31, 2022	—	-35,096	-47,647	-374,184	-17,462	—	-474,389
As of January 1, 2023	—	-35,096	-47,647	-374,184	-17,462	—	-474,389
Depreciation charge	—	-3,613	-4,104	-23,254	-1,394	—	-32,365
Disposals	—	1,862	1,314	54,143	2,978	—	60,297
Reclassifications	—	—	—	-533	533	—	—
Net exchange differences	—	-109	—	-701	-80	—	-890
As of December 31, 2023	—	-36,956	-50,437	-344,529	-15,425	—	-447,347
Net book value							
As of December 31, 2023	149,656	66,009	28,765	179,010	4,266	7,615	435,321
As of December 31, 2022	149,656	68,242	25,271	158,283	4,591	35,498	441,541

During the year ending 2023, no impairment was recognized on property, plant and equipment.

During the year ending 2022, there were impairment losses of property, plant and equipment within Songwon Specialty Chemicals-India Pvt. Ltd of 918 Million KRW due to the scrapping of the pilot plant.

Non-cash acquisition of property, plant and equipment decreased during the year ending 2023 by 9,079 Million KRW (2022: increased by 3,486 Million KRW) and accounts payables relating to non-cash transactions amounted to 3,511 Million KRW as at the year ending 2023 (2022: 12,590 Million KRW).

In 2023, tenant improvements of 847 Million KRW within Songwon International – Americas Inc. were reclassified from “construction in progress” in “right-of-use assets buildings” (refer to note 5.1) including recognition of the respective lease liabilities.

Capitalized borrowing costs

Borrowing costs, which are directly attributable to the acquisition or production of a qualifying asset, are capitalized as part of the cost of that asset. As of December 31, 2023, the balance of capitalized borrowing costs within property, plant and equipment amounted to 731 Million KRW (2022: 267 Million KRW).

Contractual commitments and pledged assets

A pledged asset is an asset that is transferred to a lender for the purpose of securing debt. The lender of the debt maintains possession of the pledged asset but does not have ownership unless a default occurs (refer to note 24). For contractual commitments to purchase property, plant and equipment refer to note 23.3.

5.1. RIGHT-OF-USE ASSETS AND LEASES

Set out below are the carrying amounts of right-of-use assets recognized and the movements during the period:

Right-of-use assets:					
	Buildings	Structures	Machinery	Other	Total
Acquisition cost	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
As of January 1, 2022	20,704	2,178	1,235	1,077	25,194
Additions	84	80	–	110	274
Disposals	–	–	–	-126	-126
Modification of contract	5	578	–	213	796
Net exchange differences	859	1	-35	23	848
As of December 31, 2022	21,652	2,837	1,200	1,297	26,986
As of January 1, 2023	21,652	2,837	1,200	1,297	26,986
Additions	1,737	–	264	397	2,398
Disposals	-75	-2,819	–	-8	-2,902
Reclassifications	847	–	–	–	847
Modification of contract	-370	654	–	-57	227
Net exchange differences	843	1	37	59	940
As of December 31, 2023	24,634	673	1,501	1,688	28,496
Accumulated depreciation					
As of January 1, 2022	-4,530	-1,731	-364	-668	-7,293
Depreciation charge	-1,644	-610	-155	-305	-2,714
Disposals	–	–	–	126	126
Modification of contract	–	–	–	20	20
Net exchange differences	-141	-1	9	-23	-156
As of December 31, 2022	-6,315	-2,342	-510	-850	-10,017
As of January 1, 2023	-6,315	-2,342	-510	-850	-10,017
Depreciation charge	-1,703	-660	-157	-276	-2,796
Disposals	75	2,819	–	8	2,902
Modification of contract	–	–	–	76	76
Net exchange differences	-235	–	-9	-38	-282
As of December 31, 2023	-8,178	-183	-676	-1,080	-10,117
Net book value					
As of December 31, 2023	16,456	490	825	608	18,379
As of December 31, 2022	15,337	495	690	447	16,969

No impairment losses were recognized in 2023 on right-of-use assets (2022: none).

In 2023, tenant improvements of 847 Million KRW within Songwon International – Americas Inc. were reclassified from “construction in progress” in “right-of-use assets buildings” (refer to note 5) including recognition of the respective lease liabilities.

Further, the Group recognized rent expenses from short-term leases of 170 Million KRW (2022: 229 Million KRW), leases of low-value assets of 78 Million KRW (2022: 81 Million KRW) and variable lease payments of 54 Million KRW (2022: 41 Million KRW) in the consolidated statements of comprehensive income.

Set out below are the carrying amounts of lease liabilities and the movements during the year:

Description	2023	2022
	Million KRW	Million KRW
As of January 1	16,898	17,934
Additions	3,245	274
Modifications	303	816
Net exchange differences	665	689
Accretion of interest	665	604
Payments	-3,332	-3,419
As of December 31	18,444	16,898

The maturity analysis of lease liabilities is disclosed in note 31.3.

6. INVESTMENT PROPERTIES

	Land	Buildings	Total
	Million KRW	Million KRW	Million KRW
Acquisition cost			
As of January 1, 2022	3,280	504	3,784
Net exchange differences	-2	-6	-8
As of December 31, 2022	3,278	498	3,776
Net exchange differences	-1	-4	-5
As of December 31, 2023	3,277	494	3,771

Accumulated depreciation			
As of January 1, 2022	—	-317	-317
Depreciation charge	—	-10	-10
Net exchange differences	—	7	7
As of December 31, 2022	—	-320	-320
Depreciation charge	—	-7	-7
Net exchange differences	—	4	4
As of December 31, 2023	—	-323	-323

Net book value			
As of December 31, 2023	3,277	171	3,448
As of December 31, 2022	3,278	178	3,456

Investment properties are stated at cost less any accumulated depreciation and impairment losses, if any. The same useful lives have been applied to property, plant and equipment.

	2023	2022
	Million KRW	Million KRW
Description		
Rental income	16	15
Operational expenses	-39	-37

The Company owns an office building in Busan which is subleased. The fair value of the office building and land amounts to 8,184 Million KRW as of December 31, 2023 (2022: 8,607 Million KRW). In addition, Songwon International –Japan K.K. owns an object that is subleased. The fair value of the building and land is 24 Million KRW (2022: 19 Million KRW). The fair value of investment properties is calculated based on the valuation of an independent rating agency taking into consideration the location and category of the investment property being valued. It is classified as Level 3 based on the valuation technique of the fair value hierarchy.

During the current year, the Company did not dispose of any investment properties (2022: no disposed investment properties).

Disclosure of pledged assets can be found in note 24.

7. INTANGIBLE ASSETS

	Industrial rights	Software	Memberships	Goodwill	Construction in progress	Total
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Acquisition cost						
As of January 1, 2022	6,643	3,058	831	44,038	2,114	56,684
Additions	344	411	—	—	2,359	3,114
Disposals	-453	-11	—	—	-133	-597
Reclassifications	1,154	—	—	—	-1,154	—
Net exchange differences	—	100	—	-3,304	—	-3,204
As of December 31, 2022	7,688	3,558	831	40,734	3,186	55,997

As of January 1, 2023	7,688	3,558	831	40,734	3,186	55,997
Additions	27	92	—	—	4,084	4,203
Disposals	-5	-32	—	—	—	-37
Reclassifications	340	208	—	—	-548	—
Net exchange differences	—	35	—	6,168	—	6,203
As of December 31, 2023	8,050	3,861	831	46,902	6,722	66,366

Accumulated amortization and impairment						
As of January 1, 2022	-3,602	-2,673	—	-40,759	—	-47,034
Amortization charge	-632	-168	—	—	—	-800
Disposals	586	11	—	—	—	597
Impairment	-391	—	—	—	—	-391
Net exchange differences	—	-92	—	3,150	—	3,058
As of December 31, 2022	-4,039	-2,922	—	-37,609	—	-44,570

As of January 1, 2023	-4,039	-2,922	—	-37,609	—	-44,570
Amortization charge	-657	-265	—	—	—	-922
Disposals	4	33	—	—	—	37
Net exchange differences	—	-25	—	-6,097	—	-6,122
As of December 31, 2023	-4,692	-3,179	—	-43,706	—	-51,577

Net book value						
As of December 31, 2023	3,358	682	831	3,196	6,722	14,789
As of December 31, 2022	3,649	636	831	3,125	3,186	11,427

Intangible assets with a definite useful life are amortized over the useful life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. During the year ended 2023, no impairment loss on intangible assets was recognized by the Group (2022: 391 Million KRW).

The intangible assets with an indefinite useful life are tested for impairment on an annual basis. An impairment test was carried out for goodwill and memberships based on the recoverable amount of each asset. For further details of the impairment test, refer to note 11. The goodwill items consist of items acquired in a business combination. In the financial years 2023 and 2022, no business combination took place that led to a recognition of goodwill.

Capitalized borrowing costs

Borrowing costs, which are directly attributable to the acquisition or production of a qualifying asset, are capitalized as part of the cost of that asset. As of December 31, 2023, the balance of capitalized borrowing costs within intangible assets amounts to 193 Million KRW (2022: none).

7.1. DETAILS OF INDIVIDUAL MATERIAL INTANGIBLE ASSETS

Description	Remark	2023	2022	Remaining life
		December 31 Million KRW	December 31 Million KRW	
Industrial rights	REACH	2,876	3,073	5.7
Industrial rights	1330 Technology	238	357	2.0
Membership	New Seoul Country	778	778	Indefinite
Goodwill	Acquisition of Business SeQuent Scientific Limited	3,196	3,125	Indefinite
Construction-in-progress	D-365	6,378	2,781	n/a
Construction-in-progress	REACH	344	273	n/a
Construction-in-progress	IT LIMS system	—	132	n/a
Material intangible assets total		13,810	10,519	

8. INVESTMENT ACCOUNTED FOR USING THE EQUITY METHOD

The Group has a 30% interest in Songwon Baifu Chemicals (Tangshan) Co., Ltd., classified as a jointly controlled entity that primarily engages in the production of thioesters. Determination was driven by the contractually agreed sharing of control with regard to relevant activities, requiring unanimous consent of the control-sharing parties.

The summarized statements of financial position and summarized statements of comprehensive income of joint ventures (accounted for using the equity method) are as follows:

Statement of financial position	Cash and cash equivalents	Total current assets	Total non-current assets	Current financial liabilities	Total current liabilities	Non-current financial liabilities	Total non-current liabilities	Equity	Carrying amount
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	5,981	15,765	13,722	2,363	3,366	28	62	26,059	7,818
December 31, 2022	5,981	15,765	13,722	2,363	3,366	28	62	26,059	7,818
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	6,986	16,093	13,464	2,374	2,418	—	37	27,102	8,131
December 31, 2023	6,986	16,093	13,464	2,374	2,418	—	37	27,102	8,131

Statement of comprehensive income	Revenue	Depreciation & Amortization	Interest income	Interest expense	Profit before tax	Income tax expenses	Profit for the period	Other comp. income	Total comp. income
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	43,077	-176	4	-5	8,723	-1,990	6,733	-290	6,443
December 31, 2022	43,077	-176	4	-5	8,723	-1,990	6,733	-290	6,443
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	31,632	-180	61	-4	3,270	-447	2,823	147	2,970
December 31, 2023	31,632	-180	61	-4	3,270	-447	2,823	147	2,970

The investment in the joint venture is accounted for by using the equity method. The joint venture is continuing its operations as of December 31, 2023, and its reporting period is the same as that of the Group. In 2023, dividends of 578 Million KRW were received from Songwon Baifu Chemicals (Tangshan) Co., Ltd. (2022: 581 Million KRW).

Changes in the investments in joint ventures are summarized as follows:

	As of January 1	Dividends	Share of result from equity method revaluation	Exchange rate effects	As of December 31
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
2022					
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	6,466	-581	2,020	-87	7,818
Total	6,466	-581	2,020	-87	7,818

2023					
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	7,818	-578	847	44	8,131
Total	7,818	-578	847	44	8,131

9. INVENTORIES

	2023 December 31 Million KRW	2022 December 31 Million KRW
Description		
Raw materials and supplies	57,850	85,687
Work in progress	1,132	1,250
Finished and semi-finished goods	175,478	232,946
Goods in transit	54,594	54,131
Consignment stocks	2,412	3,115
Total inventories at the lower of cost and net realizable value	291,466	377,129

As of December 31, 2023, the inventory allowance balance amounted to 6,178 Million KRW for raw materials, work in progress, finished and semi-finished goods (2022: 4,853 Million KRW). The Group recognized inventory allowance expenses of 2,413 Million KRW in the financial year 2023 (2022: none) and reversed inventory allowances recognized in prior periods of 1,088 Million KRW (2022: reversal of inventory allowance of 276 Million KRW).

For the year ended 2023, the Group recognized impairment losses of 2,638 Million KRW within inventory (2022: 1,777 Million KRW).

10. TRADE AND OTHER RECEIVABLES

Description	2023	2022
	December 31 Million KRW	December 31 Million KRW
Trade and notes receivables	148,170	176,734
Allowances for trade and notes receivables	-1,375	-1,371
Trade and notes receivables (related parties) (note 30)	65	63
Other accounts receivables	3,948	1,670
Allowances for other accounts receivables	-13	-18
Accrued income	180	96
Total	150,975	177,174

Other accounts receivables include customs duty refunds, rental income receivables and others.

Changes in the allowance for doubtful accounts for trade and other receivables are as follows:

Million KRW	
January 1, 2022	-1,295
Charge for the period	-106
Unused amounts reversed	12
December 31, 2022	-1,389
January 1, 2023	-1,389
Charge for the period	-279
Unused amounts reversed	280
December 31, 2023	-1,388

The aging analysis of trade and other receivables is as follows:

	Total	Current	Days past due			
			≤ 90	91-120	121-180	> 180
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
December 31, 2023	152,363	139,998	11,759	–	–	606
December 31, 2022	178,563	166,012	11,689	51	261	550

Refer to note 31.2 on credit risk of trade receivables, which describes how the Group manages and measures credit quality of trade receivables that are neither past due, nor impaired.

As the right of recourse is granted to the transferee, the balance of trade receivables that are not derecognized at the end of the financial year amounts to 47,877 Million KRW (2022: 68,440 Million KRW). The total amount of deposits received was carried in the financial statements under interest-bearing loans and borrowings.

11. IMPAIRMENT TESTING OF GOODWILL AND INTANGIBLES WITH INDEFINITE USEFUL LIFE

11.1. IMPAIRMENT TESTING OF GOODWILL AND INTANGIBLE ASSETS WITH INDEFINITE USEFUL LIFE

Goodwill acquired through business combinations and memberships with an indefinite useful life have been allocated to the cash-generating units (CGUs) according to their business activities. Goodwill acquired in a business combination is allocated to each CGU expected to benefit from the synergies of the business combination.

The goodwill resulting from the business acquisition of SeQuent Scientific Limited was allocated to the individual CGU of Songwon Specialty Chemicals – India Pvt. Ltd., India (SWDM-IN).

Details of the allocation of goodwill and intangible assets with an indefinite useful life to the CGU are as follows:

Description	2023	2022
	December 31 Million KRW	December 31 Million KRW
Goodwill of Songwon Specialty Chemicals-India Pvt. Ltd., India (SWDM-IN)	3,196	3,125
Memberships with indefinite useful lives of the rest of the Group	831	831
Total tested goodwill and intangible assets with indefinite useful lives	4,027	3,956

The Group performed its annual impairment test in December 2023 and 2022. The recoverable amount of the CGU – to which goodwill and intangible assets with an indefinite useful life are allocated – has been determined based on its value in use, calculated using the discounted cash flow (DCF) model.

CGU of SWDM-IN

As of December 31, 2023, the recoverable amount of the CGU of Songwon Specialty Chemicals – India Pvt. Ltd., India amounts to 54,266 Million KRW or 3,487 Million INR (2022: 46,919 Million KRW or 3,082 Million INR) and exceeds the carrying amount of the respective CGU.

Memberships with indefinite useful lives of the rest of the Group

As of December 31, 2023, no impairment loss is recognized according to the impairment test on memberships with indefinite useful lives (2022: no impairment loss).

11.2. KEY ASSUMPTIONS USED IN CALCULATION OF VALUE IN USE

The calculation of the CGU value in use reflects the future free cash flows for the next five years for SWDM-IN discounted to the present value at the WACC and an estimated residual value. The projected free cash flows for SWDM-IN's CGU are estimated on the basis of the Business Plan 2024 – 2028, as approved by management, and mid-term assumptions. For the free cash flows extending beyond the detailed planning period, a terminal value was computed by capitalizing the normalized cash flows using a constant growth rate. The long-term growth rate was calculated in consideration of the long-term inflation expectations for relevant countries.

In addition, a market risk premium of 5.16% (2022: 6.00%) and a small cap premium of 3.05% (2022: 3.02%) were applied for the calculation of the WACC.

The key assumptions underlying the calculation are as follows:

Parameters for the determination of the recoverable amount of the CGU	Description
Average annual growth rate	Average annual growth is calculated on the basis of mid-term assumptions.
WACC	WACC, which is the weighted average of cost of equity and cost of debt, is calculated using the Capital Asset Pricing Model (CAPM). The application of pre-tax WACC and post-tax WACC yields the same value in use.
Long-term growth rate	Long-term growth rate is calculated based on the long-term inflation expectations for the relevant countries.

Parameters for the determination of the recoverable CGU amount of SWDM-IN	2023	2022
Average annual growth rate	10.07%	6.27%
Pre-tax WACC	15.56%	16.05%
Post-tax WACC	11.19%	11.80%
Long-term growth rate	2.71%	2.82%

The following changes in key assumptions in 2023 led to a situation where the value in use for the CGU SWDM-IN equals the carrying amount:

Parameters for the determination of the recoverable CGU amount	Sensitivity analysis SWDM-IN
Average annual growth rate	3.78%
Pre-tax WACC	20.94%
Post-tax WACC	14.72%
Long-term growth rate	0.00%

12. OTHER CURRENT ASSETS

Other current assets as of December 31, 2023 and 2022, consist of the following:

	2023 December 31 Million KRW	2022 December 31 Million KRW
Description		
Advance payments	701	1,030
Prepaid expenses	4,961	4,623
VAT refundables	7,944	7,267
Total	13,606	12,920

13. OTHER FINANCIAL ASSETS

Description	2023		2022	
	December 31		December 31	
	Non-current	Current	Non-current	Current
	Million KRW	Million KRW	Million KRW	Million KRW
Financial instruments at amortized cost (bank deposit)	539	2,400	529	1,826
Financial instruments at FVtPL	9,450	5,823	11,847	2,591
Derivative assets at FVtPL (note 20)	–	3,556	2,293	1,849
Guarantee and other deposits at amortized cost	1,323	631	1,328	411
Guarantee and other deposits at amortized cost (related parties) (note 30)	33	–	33	–
Total	11,345	12,410	16,030	6,677

As of December 31, 2023, financial instruments at amortized cost (bank deposit) include restricted cash of 5 Million KRW (2022: 7 Million KRW) as well as pledged bank deposits of 804 Million KRW (December 31, 2022: 481 Million KRW).

13.1. EQUITY INSTRUMENTS AT FVOCI

Details of equity instruments at FVOCI as of December 31, 2023 and 2022 are as follows:

Description	2023				2022			
	December 31				December 31			
	Number of shares	% to equity	Cost	Fair value	Number of shares	% to equity	Cost	Fair value
			Million KRW	Million KRW			Million KRW	Million KRW
Ulsan Broadcasting Corporation	180,000	3.00%	900	–	180,000	3.00%	900	–
Total			900	–			900	–

Investments in equity instruments that do not have a quoted market price in an active market are measured using an appropriate valuation technique.

14. CASH AND CASH EQUIVALENTS

Description	2023	2022
	December 31	December 31
	Million KRW	Million KRW
Cash on hand	103	59
Bank accounts	66,566	76,069
Time deposits (< 3 months)	31,915	28,632
Total	98,584	104,760

Cash at banks earns interest at floating rates based on daily bank deposit rates. Time deposits are made for various periods from one day to three months, depending on the Group's immediate cash requirements, and earn interest at the respective short-term deposit rates.

As of December 31, 2023, time deposits included restricted cash of 125 Million KRW (December 31, 2022: none).

15. ISSUED CAPITAL AND RESERVES

15.1. SHARE CAPITAL

In accordance with the Articles of Incorporation, the Company is authorized to issue 100,000,000 shares of common stock with a par value of 500 KRW per share. As of December 31, 2023 and 2022, the Company issued 24,000,000 shares of common stocks outstanding with a carrying value of 12,000 Million KRW.

15.2. CAPITAL SURPLUS

As of December 31, 2023 and 2022, the Group's capital surplus is composed of the following:

Description	2023	2022
	December 31	December 31
	Million KRW	Million KRW
Paid-in capital in excess of par value	20,065	20,065
Gain on disposal of treasury stock	4,296	4,296
Loss on change in non-controlling interest due to interest acquisition	-3,879	-3,879
Total	20,482	20,482

15.3. RESERVES

Description	2023	2022
	December 31	December 31
	Million KRW	Million KRW
Legal reserve	4,488	3,288
Asset revaluation surplus	25,815	25,815
Total	30,303	29,103

Legal reserves

In accordance with the Korean Commercial Code, an amount equal to at least 10% of cash dividends is required to be appropriated as a legal reserve until the reserve equals 50% of paid-in capital. The legal reserve may not be utilized for cash dividends, but may only be used to offset a deficit, if any, or be transferred to capital. Appropriation to the legal reserve from retained earnings, pursuant to the approval of the General Meeting of Shareholders on March 17, 2023, amounted to 1,200 Million KRW (2022: 480 Million KRW).

Asset revaluation reserve

The Group re-valued certain parts of its property, plant and equipment in accordance with the Korean Asset Revaluation Act on January 1, 1984, and January 1, 1999, resulting in a revaluation surplus of 2,884 Million KRW and 64,277 Million KRW, respectively. An asset revaluation surplus amounting to 62,343 Million KRW, net of related revaluation tax, was credited to capital surplus. As of December 31, 2023 and 2022, the asset revaluation surplus is 25,815 Million KRW. The asset revaluation surplus of 23,312 Million KRW and 13,216 Million KRW were utilized in the disposition of accumulated deficit pursuant to the approval of the stockholders on March 6, 2008, and March 7, 2009, respectively. The asset revaluation surplus may not be utilized for cash dividends, but may only be used to offset a deficit, if any, or be transferred to capital.

Dividends

Dividends approved by the shareholders are as follows:

Description	2023	2022
	December 31	December 31
	2022	2021
Subject to the year		
Dividends on ordinary shares in KRW	12,000,000,000	4,800,000,000
Number of shares	24,000,000	24,000,000
Dividends per share in KRW	500	200

15.4. ACCUMULATED OTHER COMPREHENSIVE INCOME

Accumulated other comprehensive income, net of tax, as of December 31, 2023 and 2022, is composed of the following:

Description	2023	2022
	December 31	December 31
	Million KRW	Million KRW
Re-measurement of defined benefit plans	-10,749	-4,368
OCI recognized within retained earnings	-10,749	-4,368
Fair value reserve of financial assets at FVOCI	-701	-703
Foreign currency translation reserve	5,291	-1,211
OCI recognized within other components of equity	4,590	-1,914

Details of other comprehensive income for the year ended December 31, 2023 and 2022, are as follows:

Description	2023	2022
	Million KRW	Million KRW
Pre-tax amounts		
Gains on valuation of interest rate swaps	-	33
Losses on valuation of financial assets FVOCI	-	-103
Exchange differences on translation of foreign operations	6,502	-267
Re-measurement (losses) / gains on defined benefit plans	-8,009	15,726
Pre-tax amounts total	-1,507	15,389
Tax effects on:		
Gains on valuation of interest rate swaps	-	-8
Losses on valuation of financial assets at FVOCI	2	14
Re-measurement (losses) / gains on defined benefit plans	1,628	-3,159
Tax effects total	1,630	-3,153
Net amounts		
Gains on valuation of interest rate swaps	-	25
Gains / (losses) on valuation of financial assets FVOCI	2	-89
Exchange differences on translation of foreign operations	6,502	-267
Re-measurement (losses) / gains on defined benefit plans	-6,381	12,567
Net amounts total	123	12,236

16. BONDS, INTEREST-BEARING LOANS AND BORROWINGS

Interest-bearing loans and borrowings as of December 31, 2023 and 2022, are as follows:

Description	2023	2022
	December 31 Million KRW	December 31 Million KRW
Corporate bonds	–	56,905
Long-term borrowings	5,250	8,840
Non-current interest-bearing loans and borrowings	5,250	65,745
Current portion of corporate bonds	57,529	–
Current portion of long-term borrowings	3,590	1,930
Short-term borrowings	103,577	206,140
Current interest-bearing loans and borrowings	164,696	208,070
Total	169,946	273,815

Details of corporate bonds that the Group entered in the form of a private placement bond and floating rate note (FRN) as of December 31, 2023 and 2022 are as follows:

Contractual party	Form	Contract amount	Carrying amount	Maturity dates	2023
					As of December 31 Interest rate
Hana Bank	Private placement bond	26,000 Million KRW	26,000	24.09.2021 – 24.09.2024	2.09% (fixed rate)
Woori Bank	Private placement bond (FRN)	24,500 Thousand USD	31,529	17.09.2021 – 13.09.2024	SOFR Compounding +0.8%
Total			57,529		

Contractual party	Form	Contract amount	Carrying amount	Maturity dates	2022
					As of December 31 Interest rate
Hana Bank	Private placement bond	26,000 Million KRW	26,000	24.09.2021 – 24.09.2024	2.09% (fixed rate)
Woori Bank	Private placement bond (FRN)	24,500 Thousand USD	30,905	17.09.2021 – 13.09.2024	3M Libor +0.8%
Total			56,905		

Details of long-term borrowings as of December 31, 2023 and 2022, are as follows:

Banks	Description	Maturity date	Annual interest rate (%)	2023	2022
				December 31 Million KRW	December 31 Million KRW
Busan Bank	General Loan	08.05.2024	4.99	590	1,770
Korea Development Bank	General Loan	24.08.2026	4.48	8,250	9,000
Subtotal				8,840	10,770
Less current portion				-3,590	-1,930
Non-current portion				5,250	8,840

Details of short-term borrowings as of December 31, 2023 and 2022, are as follows:

Banks	Description	Annual interest rate (%)	2023	2022
			December 31 Million KRW	December 31 Million KRW
Hana Bank	Trade loan	4.57~6.31	13,740	23,842
Woori Bank	General & trade loan	4.90~6.20	17,876	24,890
Korea Development Bank	General & trade loan	4.78~4.82	32,250	81,446
Busan Bank	General & trade loan	4.57~5.03	14,442	17,759
Kyongnam Bank	General& trade loan	4.91~6.35	20,269	28,203
NH Bank	General loan	5.12	5,000	20,000
KB Bank	General loan	4.80	–	10,000
Subtotal			103,577	206,140

17. TRADE AND OTHER PAYABLES

Description	2023	2022
	December 31	December 31
	Million KRW	Million KRW
Trade payables	74,675	78,386
Trade payables (related parties) (note 30)	1,062	1,361
Other accounts payables	18,186	28,744
Other accounts payables (related parties) (note 30)	7	7
Withholdings	1,966	1,835
Accrued expenses	23,334	28,904
Guarantee deposits	15	38
Total	119,245	139,275

Trade and other payables do not bear interest and usually become due within 30-60 days.

18. EMISSION RIGHTS AND EMISSION LIABILITIES

Details of the annual quantity of allocated emission allowances as of December 31, 2023, are as follows
(Unit: Korean Allowance Unit – KAU):

	2021	2022	2023	2024	2025	Total
Allocated emission allowance	138,875	138,875	138,875	137,574	137,574	691,773

Changes in emission rights and emission allowances during each planned period are as follows
(Units: KAU and Million KRW):

	2022(*)		2023		2024		2025	
	Quantity	Book value	Quantity	Book value	Quantity	Book value	Quantity	Book value
Beginning	3,171	348	3,063	27	–	–	–	–
Allocation	138,875	–	138,875	–	137,574	–	137,574	–
Allocation cancellation	–	–	–	–	–	–	–	–
Additional allocation	–	–	–	–	–	–	–	–
Purchase	–	–	–	–	–	–	–	–
Disposal	-1,531	-26	–	–	–	–	–	–
Delivery to government	-137,452	-295	–	–	–	–	–	–
Carryforward	-3,063	-27	–	–	–	–	–	–
Ending	–	–	141,938	27	137,574	–	137,574	–

(*) In the current period 2023, the details of emission rights approved by the government in 2022 are stated.

There are no emission rights provided as collateral as of December 31, 2023.

Changes in emission liabilities included in other current liabilities during the current and prior reporting period are as follows (in Million KRW):

	2023	2022
As of January 1	–	14
Increase	–	–
Decrease	–	-14
As of December 31	–	–

Allocated greenhouse gas emissions free of charge in 2023 were 138,875 KAU.

Estimated greenhouse gas emissions in 2023 132,285 KAU (2022: 141,118 KAU).

19. OTHER FINANCIAL LIABILITIES

Other financial liabilities as of December 31, 2023 and 2022, are as follows:

Description	2023 December 31		2022 December 31	
	Non-current Million KRW	Current Million KRW	Non-current Million KRW	Current Million KRW
Derivative liabilities (note 20)	–	89	–	–
Deposits	2,579	1,290	1	–
Accrued interest expenses	–	261	–	554
Total	2,579	1,640	1	554

20. ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS

20.1. DERIVATIVES FINANCIAL INSTRUMENTS

Description	2023 December 31		2022 December 31	
	Assets	Liabilities	Assets	Liabilities
	Million KRW		Million KRW	
Forward exchange contracts (current portion)	96	89	624	–
Currency and interest rate swaps (current portion)	3,460	–	1,225	–
Currency and interest rate swaps (non-current portion)	–	–	2,293	–
Total	3,556	89	4,142	–

20.1.1. FORWARD EXCHANGE CONTRACTS

Details of forward exchange contracts that the Group entered into with financial institutions in order to hedge the risk of foreign exchange rate fluctuation of assets denominated in foreign currencies as of December 31, 2023 and 2022 are as follows:

Contractual party	Position	Contract amount	Maturity dates	2023 As of December 31
				Contractual exchange rate (KRW)
Woori Bank	sell	EUR 15,000,000	31.01.2024 – 28.06.2024	1,456.10 ~ 1,457.10
Citibank Korea	sell	EUR 10,800,000	16.01.2024 – 28.06.2024	1,403.50 ~ 1,454.20

Contractual party	Position	Contract amount	Maturity dates	2022 As of December 31
				Contractual exchange rate (KRW)
Citibank Korea	sell	JPY 1,608,000,000	31.01.2023~30.06.2023	10.7500
Citibank Korea	sell	EUR 15,660,000	31.01.2023~30.06.2023	1,425.00~1,467.00
Woori Bank	sell	EUR 15,660,000	31.01.2023~30.06.2023	1,425.40~1,467.80

20.1.2. CURRENCY AND INTEREST RATE SWAPS

The Group is exposed to exchange rate and interest rate risks due to the corporate bond issuance in the form of a floating rate note (refer to note 16). To hedge these risks, the Group has entered into the following currency

and interest rate swaps (CRS) as of December 31, 2023 and 2022 are as follows:

2023

As of December 31

Contractual party	Target	Contract amount	Interest exchange condition	Contract date	Maturity date
Hongkong Woori Investment	Corporate bond (foreign currency FRN)	Receipt: 24,500 TUSD	SOFR Compounding +0.8%	17.09.2021	13.09.2024
		Payment: 28,643 MKRW	Fixed 1.96%		

2022

As of December 31

Contractual party	Target	Contract amount	Interest exchange condition	Contract date	Maturity date
Hongkong Woori Investment	Corporate bond (foreign currency FRN)	Receipt: 24,500 TUSD	3M Libor +0.8%	17.09.2021	13.09.2024
		Payment: 28,643 MKRW	Fixed 1.96%		

21. PENSION LIABILITY

Pension plan	2023 Million KRW	2022 Million KRW
Net defined benefit liability (incl. in pension liability)	4,269	2,682
Korean	—	—
Swiss	4,201	2,658
Indian	68	24
Net defined benefit asset (incl. in other non-current assets)	22,062	30,622
Korean	22,062	30,622

The Group has three defined benefit pension plans: one pension plan in Korea, one in Switzerland and one in India.

The following tables summarize the components of net benefit expense recognized in the consolidated statements of comprehensive income and the funded status and amounts recognized in the consolidated statement of financial position for the respective plans.

21.1. DEFINED BENEFIT OBLIGATION

Changes in the defined benefit obligation:

	Korean plan Million KRW	Swiss plan Million KRW	Indian plan Million KRW	Total Million KRW
Defined benefit obligation as of January 1, 2022	74,778	33,785	393	108,956
Pension cost charged to profit or loss				
Service costs	4,999	1,465	36	6,500
Interest costs	2,636	123	27	2,786
Sub-total included in profit or loss	7,635	1,588	63	9,286
Benefits (paid) / received	-2,699	2,053	-31	-677
Re-measurement gains / (losses) in OCI				
Actuarial changes arising from changes in demographic assumptions	24	—	—	24
Actuarial changes arising from changes in financial assumptions	-15,424	-7,549	-1	-22,974
Experience adjustments	1,335	711	-1	2,045
Sub-total included in OCI	-14,065	-6,838	-2	-20,905
Employee contributions	—	780	—	780
Exchange differences	—	1,707	-21	1,686
Defined benefit obligation as of December 31, 2022	65,649	33,075	402	99,126
Pension cost charged to profit or loss				
Service costs	3,817	1,127	32	4,976
Interest costs	3,793	800	31	4,624
Sub-total included in profit or loss	7,610	1,927	63	9,600
Benefits (paid) / received	-4,873	326	-26	-4,573
Re-measurement gains / (losses) in OCI				
Actuarial changes arising from changes in demographic assumptions	-9	—	-3	-12
Actuarial changes arising from changes in financial assumptions	4,750	3,920	38	8,708
Experience adjustments	3,123	-305	4	2,822
Sub-total included in OCI	7,864	3,615	39	11,518
Employee contributions	—	878	—	878
Plan amendments	—	-963	—	-963
Exchange differences	—	4,093	9	4,102
Defined benefit obligation as of December 31, 2023	76,250	42,951	487	119,688
Weighted average duration 2022 (years)	10.00	12.36	6.52	
Weighted average duration 2023 (years)	10.31	12.28	6.01	

21.2. PLAN ASSETS

Changes in the fair value of plan assets:

	Korean plan Million KRW	Swiss plan Million KRW	Indian plan Million KRW	Total Million KRW
Plan assets as of January 1, 2022	80,795	27,878	355	109,028
Pension cost charged to profit or loss				
Interest income	2,845	103	23	2,971
Administration expenses	-194	-16	—	-210
Sub-total included in profit or loss	2,651	87	23	2,761
Benefits (paid) / received	-2,398	2,053	-31	-376
Re-measurement gains / (losses) in OCI				
Return on plan assets (excluding amounts included in interest expenses)	-2,441	-2,745	7	-5,179
Sub-total included in OCI	-2,441	-2,745	7	-5,179
Employer contributions	17,664	948	43	18,655
Employee contributions	—	780	—	780
Exchange differences	—	1,416	-19	1,397
Plan assets as of December 31, 2022	96,271	30,417	378	127,066
Pension cost charged to profit or loss				
Interest income	5,583	756	27	6,366
Administration expenses	-329	-16	—	-345
Sub-total included in profit or loss	5,254	740	27	6,021
Benefits (paid) / received	-5,203	326	-26	-4,903
Re-measurement gains / (losses) in OCI				
Return on plan assets (excluding amounts included in interest expenses)	1,990	1,518	1	3,509
Sub-total included in OCI	1,990	1,518	1	3,509
Employer contributions	—	1,063	31	1,094
Employee contributions	—	878	—	878
Exchange differences	—	3,808	8	3,816
Plan assets as of December 31, 2023	98,312	38,750	419	137,481

The Group expects to make a contribution in the following year at the amount comparable to the contribution made during the current reporting period, and the composition of plan assets as of December 31, 2023 and 2022 is as follows:

	Korean plan		Swiss plan		Indian plan	
Structure of plan assets:	2023	2022	2023	2022	2023	2022
Equity	—	—	31%	31%	—	—
Debt instruments	—	—	24%	23%	—	—
Real estate	—	—	28%	28%	—	—
Investment funds	87%	98%	—	—	100%	100%
Alternative investments	—	—	17%	17%	—	—
Cash and cash equivalents	13%	2%	—	1%	—	—
Total	100%	100%	100%	100%	100%	100%

The category equity, debt instruments, real estate and alternative investments are quoted or daily traded with the exception of cash and cash equivalents. With only a few exceptions, there is no active market for plan assets in investment funds.

21.3. NET PENSION LIABILITY / ASSET

Changes in the net defined benefit liability / asset are as follows:

	Korean plan Million KRW	Swiss plan Million KRW	Indian plan Million KRW	Total Million KRW
Net defined benefit asset as of January 1, 2022	6,017	—	—	6,017
Net defined benefit liability as of January 1, 2022	—	-5,907	-38	-5,945
Pension cost charged to profit or loss				
Service costs	-4,999	-1,465	-36	-6,500
Administration expenses	-194	-16	—	-210
Net interests	209	-20	-4	185
Sub-total included in profit or loss	-4,984	-1,501	-40	-6,525
Benefits received	301	—	—	301
Re-measurement gains / (losses) in OCI				
Actuarial changes arising from changes in demographic assumptions	-24	—	—	-24
Actuarial changes arising from changes in financial assumptions	15,424	7,549	1	22,974
Return on plan assets (excluding amounts included in interest expenses)	-2,441	-2,745	7	-5,179
Experience adjustments	-1,335	-711	1	-2,045
Sub-total included in OCI	11,624	4,093	9	15,726
Employer contributions	17,664	948	43	18,655
Employee contributions	—	—	—	—
Exchange differences	—	-291	2	-289
Net defined benefit asset as of December 31, 2022	30,622	—	—	30,622
Net defined benefit liability as of December 31, 2022	—	-2,658	-24	-2,682
Pension cost charged to profit or loss				
Service costs	-3,817	-1,127	-32	-4,976
Administration expenses	-329	-16	—	-345
Net interests	1,790	-44	-4	1,742
Sub-total included in profit or loss	-2,356	-1,187	-36	-3,579
Benefits paid	-330	—	—	-330
Re-measurement gains / (losses) in OCI				
Actuarial changes arising from changes in demographic assumptions	9	—	3	12
Actuarial changes arising from changes in financial assumptions	-4,750	-3,920	-38	-8,708
Return on plan assets (excluding amounts included in interest expenses)	1,990	1,518	1	3,509
Experience adjustments	-3,123	305	-4	-2,822
Sub-total included in OCI	-5,874	-2,097	-38	-8,009
Employer contributions	—	1,063	31	1,094
Employee contributions	—	—	—	—
Plan amendments	—	963	—	963
Exchange differences	—	-285	-1	-286
Net defined benefit asset as of December 31, 2023	22,062	—	—	22,062
Net defined benefit liability as of December 31, 2023	—	-4,201	-68	-4,269

The re-measurement losses recognized in the statements of other comprehensive income are losses of 6,381 Million KRW (2022: gains of 12,567 Million KRW), net of tax. The total amount as of December 31, 2023, of accumulated losses included in retained earnings is 10,749 Million KRW (2022: accumulated losses of 4,368 Million KRW), net of tax.

The principal assumptions used in determining pension benefit obligations for the Group's plans are shown below:

	Determining net benefit expense		Determining pension benefit obligation	
	2023	2022	2023	2022
			December 31	December 31
Discount rate				
Korean plan	5.88%	3.58%	5.13%	5.88%
Swiss plan	1.50%	2.30%	1.50%	2.30%
Indian plan	7.45%	7.45%	7.20%	7.45%
Future salary increases				
Korean plan	3.78%	3.75%	3.76%	3.78%
Swiss plan	2.50%	2.50%	2.50%	2.50%
Indian plan	8.00%	8.00%	10.00%	8.00%

A quantitative sensitivity analysis for material assumptions as of December 31, 2023, is as follows:

	Sensitivity level	Impact on defined benefit obligation
	Change	Million KRW
Discount rate		
Korean plan	+1.00%	6,261
	-1.00%	-7,370
Swiss plan	+0.25%	-1,229
	-0.25%	1,301
Indian plan	+1.00%	-18
	-1.00%	19
Salary increase		
Korean plan	+1.00%	-7,537
	-1.00%	6,498
Swiss plan	+0.25%	106
	-0.25%	-104
Indian plan	+1.00%	19
	-1.00%	-18

The sensitivity analysis above has been determined based on a method that extrapolates the impact on defined benefit obligation as a result of reasonable changes in key assumptions occurring at the end of the reporting period.

22. OTHER LONG-TERM EMPLOYEE-RELATED LIABILITIES

Other long-term employee-related liabilities consist of the following:

Description	2023	2022
	December 31	December 31
	Million KRW	Million KRW
Other long-term employee benefits – Korea	8,777	7,002
Other long-term employee benefits – Others	857	704
Share-based payment-related liability	1,146	1,355
Total other long-term employee-related liabilities	10,780	9,061

22.1. OTHER LONG-TERM EMPLOYEE BENEFITS – KOREA

The parent company implements a bonus plan designed to compensate employees with a prescribed quantity of gold and entitle compensated vacation to long-term service employees. Accounting policies of the bonus plan are mostly the same as those of the defined benefit plan, except that all the past service costs and actuarial variances are recognized immediately in profit or loss.

Description	Million KRW
As of January 1, 2022	4,911
Current service costs	474
Interest costs	164
Re-measurement losses	1,944
Total payment	-491
As of December 31, 2022	7,002
Current service costs	629
Interest costs	378
Re-measurement gains	1,552
Total payment	-784
As of December 31, 2023	8,777

Description	2023	2022
	December 31	December 31
Discount rate	4.98%	5.79%
Compensation increase	2.00%	2.00%
Compensation per day for vacation	KRW 106,623 – 230,417	KRW 101,760 – 222,480
Rate of increase in gold price	7.45%	6.90%
Gold price per 3.75 grams	KRW 368,800	KRW 320,000

22.2. OTHER LONG-TERM EMPLOYEE BENEFITS – OTHERS

The remaining other long-term employee benefits refer to legally established termination benefits of subsidiaries located in the United Arab Emirates of 745 Million KRW (as of December 31, 2022: 581 Million KRW) and expenses for the defined contribution plan of Songwon Specialty Chemicals India Pvt. Ltd. of 112 Million KRW (as of December 31, 2022: 123 Million KRW).

22.3. SHARE-BASED PAYMENT-RELATED LIABILITY

On March 31, 2013, the Group granted virtual stock options to eligible employees of subsidiaries according to the Virtual Stock Option and Long-term Incentive Plan ("LTIP"). The virtual stock options granted are an entitlement of cash compensation, and are neither a stock option, nor any other listed or unlisted security and do not grant any right to physically acquire stocks. Settlement of options exercised is in cash only. When the virtual stock option is exercised, the Group shall pay the holder the greater of the difference between the fair market value at the exercise date (the listed stock price of Songwon Industrial Co., Ltd.) minus the strike price or nil (zero). The virtual stock options, granted under the LTIP, are subject to a vesting period of two to four years during which the holder of the options must be continuously employed by the Group.

The fair value of options, granted as of December 31, 2023 and 2022, was estimated using the following assumptions:

Description	2023	2022
Dividend yield	0.73%	0.87%
Expected volatility	45.00%	45.00%
Risk-free interest rate	3.74%	2.26%
Weighted average expected life of share options (years)	2.05	2.84
Model used	Binomial tree	Binomial tree

The carrying amount of the liability relating to the LTIP on December 31, 2023 amounts to 1,146 Million KRW (December 31, 2022: 1,355 Million KRW) and the corresponding number of share options vested as of December 31, 2023 and 2022 is 164,329 and 125,001, respectively.

The decrease of the LTIP liability led to a negative expense (income) for employee services received during the year 2023, recognized in the statements of comprehensive income, which amounts to 60 Million KRW (2022: income of 452 Million KRW). There were no cancellations and modifications to the awards during the years 2023 and 2022.

Movements during the year

The following table illustrates the number and weighted average exercise prices (WAEP) of, and movements in, share options during the reporting period:

Description	Number	2023	Number	2022
		KRW		KRW
Outstanding as of January 1	407,064	18,879	471,089	17,552
Granted during the year	1,000	17,100	101,625	21,450
Forfeited during the year	-13,800	19,906	-40,800	20,256
Exercised during the year	-34,200	15,602	-124,850	15,516
Outstanding as of December 31	360,064	19,146	407,064	18,879
Exercisable as of December 31	164,329	19,932	125,001	20,605

The weighted average of remaining contractual life for the share options, outstanding as of December 31, 2023, was 2.0 years (December 31, 2022: 3.0 years). The weighted average fair value of options granted during the reporting period was 7,183 KRW (2022: 4,244 KRW).

The exercise price for options outstanding at the end of the reporting period ranges from 8,120 KRW – 27,000 KRW (2022: 8,120 KRW – 27,000 KRW).

23. COMMITMENTS AND CONTINGENCIES

23.1. CONTINGENT LIABILITIES

There are no current proceedings of lawsuits, claims, investigations and negotiations in relation to product liability, mercantile law, environmental protection, health and safety etc., which could have a significant impact on business operations and on the Group's consolidated financial position or income. Contingent liabilities in the Group are related to tax appeals of 909 Million KRW (December 31, 2022: 224 Million KRW). A new customer complaint concerning the quality of SONGWON products occurred as of December, 2023, referring to a product delivery in the amount of 285 Million KRW taken place in 2022. Currently it is not possible to assess probable economic resource outflow relating to this contingent liability. As of December 31, 2022, a customer complaint assessed damage was valued at 157 Million KRW. The latter case was closed as per June 30, 2023, with no financial impact on SONGWON.

23.2. OTHER LEASE COMMITMENTS

The Group has entered into short-term and low-value leases on certain buildings, vehicles, furniture and fixtures. The lease periods for low-value leases are below 5 years. There are no restrictions placed upon the Group by entering into these leases. Future minimum short-term and low-value lease payments as of December 31, 2023 and 2022 are as follows:

Description	2023	2022
	December 31 Million KRW	December 31 Million KRW
Short-term lease commitments		
Within one year	-2	-2
Total short-term lease commitments	-2	-2
Low-value lease commitments		
Within one year	-59	-66
After one year but not more than five years	-25	-61
Total low-value lease commitments	-84	-127
Total	-86	-129

23.3. OTHER COMMITMENTS

As part of the ordinary business activities, the Group enters into various contractual commitments for the purchase of inventories, property, plant and equipment, intangible assets and investment properties. As of December 31, 2023, the Group entered into commitments to purchase property, plant and equipment, as well as raw materials amounting to 6,344 Million KRW (December 31, 2022: 11,444 Million KRW).

Details of the Group's available short-term credit line facilities (excluding general loans) as of December 31, 2023, are as follows:

Description	Currency	Credit limit	Used	Unused
USANCE and L/C for import	Thousand USD	20,000	3,601	16,399
D/A and D/P	Million KRW	12,000	5,269	6,731
	Thousand USD	103,000	33,045	69,955
Secured loan of credit sales	Million KRW	9,000	1,225	7,775
Other foreign currency guarantees	Thousand USD	8,750	2,619	6,131
Bond issuance payment guarantee	Million KRW	26,000	26,000	–
	Thousand USD	24,990	24,990	–
Total Million KRW		47,000	32,494	14,506
Total Thousand USD		156,740	64,255	92,485

24. ASSETS PLEDGED AS COLLATERAL AND GUARANTEES

Details of property, plant and equipment and investment property pledged by the Group as collateral for interest-bearing loans and borrowings as of December 31, 2023 and 2022, presented in the maximum pledge amount, are as follows:

Pledged to		Pledged assets		2023 December 31	2022 December 31
Property, plant and equipment (Joint collateral in connection with long-term loan)					
Busan Bank	Land, buildings and machinery	Million KRW	30,000	30,000	30,000
Kyongnam Bank	Land, buildings and machinery	Million KRW	18,000	18,000	18,000
Property, plant and equipment and investment property (Collateral for other than long-term loan)					
Woori Bank	Land, buildings and machinery	Million KRW	120,000	120,000	120,000
Hana Bank	Land, buildings and machinery	Million KRW	80,400	80,400	80,400
Korea Development Bank	Land, buildings, investment properties and machinery	Million KRW	96,600	96,600	96,600
Busan Bank	Land, buildings and machinery	Thousand USD	24,000	24,000	24,000
Total		Million KRW	345,000	345,000	345,000
		Thousand USD	24,000	24,000	24,000

No other items of property, plant and equipment are pledged as collateral for interest-bearing loans and borrowings as of December 31, 2023 and 2022.

Payment guarantee to Seoul Gurantee Insurance Company

In the financial year ended December 31, 2023, the Group held a deposit guarantee of 500 Million KRW for return payment of government subsidies concerning the greenhouse gas energy reduction project for companies participating in the emissions trading system from November 2021 till November 2023.

Additionally, as of December 31, 2023, the Group held a deposit guarantee of 1,100 Million KRW for return payment of government subsidies concerning the greenhouse gas energy reduction project for companies participating in the emissions trading system from July 2023 till February 2024.

Moreover, as of December 31, 2023, the Group held a deposit guarantee of 106.7 Million KRW for return payment of government subsidies concerning the greenhouse gas energy reduction project for companies participating in the emissions trading system from November 2023 till March 2025.

As of December 31, 2022, the Group held payment guarantees from Seoul Guarantee Insurance Company for a government subsidy return guarantee of 71.5 Million KRW. Additionally, the Group held a deposit guarantee for approval of development activity and urban planning facility business of 49.6 Million KRW.

25. OPERATING PROFIT AND OTHER INCOME / EXPENSES

25.1. RESEARCH AND DEVELOPMENT EXPENSE

Research and development expenses of 5,162 Million KRW (2022: 6,284 Million KRW) are recorded in the consolidated statements of comprehensive income. Development expenses are not capitalized because the conditions for capitalization have not been met.

25.2. SELLING AND ADMINISTRATION EXPENSES

Description	2023	2022
	Million KRW	Million KRW
Sales-related costs	-18,097	-45,559
Personnel expenses	-47,270	-49,270
Travelling and entertainment	-5,559	-4,416
Depreciation and amortization	-2,389	-2,356
Administration expenses	-11,829	-9,294
IT expenses	-4,630	-3,547
Others	-1,706	-2,062
Total	-91,480	-116,504

25.3. OTHER INCOME

Description	2023	2022
	Million KRW	Million KRW
Fee income	84	72
Income resulting from government grants received	2,021	1,454
Gains on disposal of property, plant and equipment	16	6
R&D sales income	855	860
Rental income	16	15
Miscellaneous income	1,119	1,426
Total	4,111	3,833

25.4. OTHER EXPENSES

	2023	2022
Description	Million KRW	Million KRW
Miscellaneous expenses	-1,005	-701
Losses on disposal of property, plant and equipment	-4,165	-1,437
Impairment of tangible assets	—	-918
Impairment of intangible assets	—	-391
Total	-5,170	-3,447

25.5. EXPENSES CLASSIFIED BY NATURE

	2023	2022
Description	Million KRW	Million KRW
Purchased material	-660,551	-818,604
Freight and logistic costs	-16,652	-43,186
Energy costs	-55,190	-53,741
Personnel expenses	-127,990	-130,702
Depreciation and amortization	-39,921	-33,524
Other expenses	-76,372	-68,083
Total	-976,676	-1,147,840
Thereof recorded in cost of sales	-880,026	-1,027,889
Thereof recorded in selling and administration costs	-91,480	-116,504
Thereof recorded in other expenses	-5,170	-3,447
Total	-976,676	-1,147,840

26. FINANCE INCOME / EXPENSE

26.1. FINANCE INCOME

	2023	2022
Description	Million KRW	Million KRW
Gains on foreign exchange transactions	25,126	33,915
Gains on foreign exchange translations	13,986	23,564
Gains on derivative transactions	1,440	1,688
Gains on valuation of derivatives	96	3,816
Gain on valuation of financial assets FVtPL	308	189
Interest on loans and receivables	1,836	635
Total finance income	42,792	63,807

26.2. FINANCE EXPENSES

	2023	2022
Description	Million KRW	Million KRW
Interest on borrowings	-9,297	-8,773
Total interest expenses	-9,297	-8,773
Losses on foreign exchange transactions	-28,295	-32,084
Losses on foreign exchange translations	-12,312	-28,649
Losses on derivative transactions	-1,280	-337
Losses on valuation of derivatives	-147	—
Loss on disposal of financial assets FVtPL	—	-67
Loss on valuation of financial assets FVtPL	—	-31
Bank charges	-224	-288
Total finance expenses	-51,555	-70,229

26.3. NET GAINS AND LOSSES OF FINANCIAL INSTRUMENT CLASSES

	2023	2022
Description	Million KRW	Million KRW
Financial assets at amortized cost	24,691	7,549
Financial assets at FVOCI	2	-63
Financial assets at FVtPL	564	5,258
Financial liabilities at amortized cost	-33,647	-18,941
Financial liabilities at FVtPL	-147	—
Total net losses of the classes of financial instruments	-8,537	-6,197

Net losses of financial instruments recognized in the consolidated statement of comprehensive income

Finance expense*	-51,331	-69,941
Finance income	42,792	63,807
Total	-8,539	-6,134

Net gains / (losses) of financial instruments recognized in the consolidated statement of other comprehensive income

Financial assets at FVOCI	2	-63
Total	2	-63
Total	-8,537	-6,197

* Excluding bank charges

27. INCOME TAX EXPENSES

The major components of income tax expense in the statements of comprehensive income are as follows:

27.1. CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Description	2023	2022
	Million KRW	Million KRW
Current income tax charge	-13,648	-53,921
Adjustments in respect of current income tax of previous year	1,677	963
Deferred income taxes related to changes of temporary differences, net	-178	5,605
Deferred income taxes related to tax loss carryforwards	–	-195
Deferred income taxes related to changes in tax rate	-868	-4,773
Deferred income taxes recognized directly in other comprehensive income	-1,630	3,153
Income tax expenses	-14,647	-49,168

Description	2023	2022
	Million KRW	Million KRW
Accounting profit before income taxes	49,494	181,100
At parent company's statutory income tax rate of 21.15% (2022: 23.93%)	-10,468	-43,330

Increase in income tax expens resulting from:

Adjustments in respect of current income tax of previous years	1,677	963
Non-temporary differences	-606	-576
Tax credits	2,186	603
Non-taxable income	-56	-46
Effect of different tax rates in tax jurisdiction	-7,829	-6,890
Others	449	108
At the effective income tax rate of 29.59% (2022: 27.15%)	-14,647	-49,168

27.2. DEFERRED TAX

Deferred tax relates to the following:

Description	Consolidated statements of financial position		Consolidated statements of comprehensive income	
	2023	2022	2023	2022
	December 31 Million KRW	December 31 Million KRW	December 31 Million KRW	December 31 Million KRW
Net pension obligation	-1,729	-2,585	-772	-290
Other long-term employment benefits	2,058	1,666	392	266
Trade receivables	118	145	-27	-31
Inventories	2,508	4,113	-1,605	1,876
Fixed assets	-7,863	-8,853	990	635
Gain on revaluation of land	-26,446	-26,159	-287	1,237
Other non-current financial assets	-279	-267	-12	12
Other current financial assets	-533	361	-896	120
Other current assets	595	826	-231	-360
Other non-current financial liabilities	-6	-39	33	62
Current lease liabilities	295	282	13	-12
Other current financial liabilities	712	1,194	-482	648
Other current liabilities	101	74	27	-136
Intangible assets	-3	3	-6	-57
Loss available for offsetting against future taxable income	–	–	–	-195
Investments in subsidiaries	-533	-337	-196	-63
Translation difference	–	–	383	78
Deferred tax income			-2,676	3,790
Net deferred tax liabilities	-31,005	-29,576		

Reflected in the statements of financial positions as follows:

Deferred tax assets	6,055	8,585
Deferred tax liabilities	-37,060	-38,161

The Group offsets tax assets and liabilities if, and only if, it has a legally enforceable right to do so, and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same tax authority.

Reconciliation of deferred tax liabilities, net:

Description	2023	2022
	Million KRW	Million KRW
Opening balance as of January 1	-29,576	-30,135
Deferred tax recognized in statements of comprehensive income	-2,676	3,790
Deferred tax recognized in other comprehensive income (note 15.4)	1,630	-3,153
Translation differences	-383	-78
Closing balance as of December 31	-31,005	-29,576

Expecting sufficient taxable income, the Group recognized deferred income tax assets to the extent of future taxable income. For the following deductible temporary differences, no deferred tax assets as of December 31, 2023 and 2022, were recognized.

Description	2023	2022
	Million KRW	Million KRW
Temporary differences related to investments in subsidiaries	10,186	8,655
Total	10,186	8,655

In the financial years 2023 and 2022, the Group did not recognize any tax loss carryforwards and tax credit carryforwards.

28. EARNINGS PER SHARE

Basic earnings per share are calculated by dividing net profit for the year attributable to ordinary equity holders of the parent company by the average number of ordinary shares outstanding during the year. There is no difference between basic and diluted earnings per share in 2023 and 2022, as no securities with dilutive features have been issued as of the end of the reporting periods.

The following reflects the income and share data used in the basic per-share computations:

Description	2023	2022
	KRW	KRW
Net profit attributable to ordinary equity holders of the parent	34,846,592,809	131,931,556,030
Weighted average number of ordinary shares	24,000,000	24,000,000
Earnings per share (basic / diluted)	1,452	5,497

29. CASH FLOW STATEMENT

Cash and cash equivalents in the consolidated statements of cash flows are equal to those in the consolidated statements of financial position.

The Group's consolidated statement of cash flows is prepared using the indirect method. The adjustments to the net profit for the period of the non-cash and non-operating items and changes in operating assets and liabilities for the years ended December 31, 2023 and 2022, are as follows:

Adjustments	Notes	2023	2022
		Million KRW	Million KRW
Depreciation of property, plant and equipment	5	32,365	29,211
Depreciation of right-of-use assets	5.1	2,796	2,714
Depreciation of investment properties	6	7	10
Amortization of intangible assets	7	922	800
Impairment of tangible assets	5	–	918
Impairment of intangible assets	7	–	391
Impairment of inventories	9	2,638	1,777
Losses on disposals of property, plant and equipment, net	5	4,149	1,431
Share of result from investments accounted using the equity method	8	-847	-2,020
Share-based compensation (income) / expenses	22.3	-60	-452
Pension costs	21.3	3,579	6,525
Other long-term employee benefits expenses	22.1, 22.2	2,712	2,521
Finance income		-1,647	-11,645
Finance expenses		12,921	21,122
Income tax expenses	27	14,647	49,168
Total		74,182	102,471

Changes in operating assets and liabilities	2023	2022
	Million KRW	Million KRW
Trade receivables	30,905	-5,306
Other receivables	-2,190	-573
Other current assets	-502	445
Other current financial assets	-1,707	-1,815
Inventories	90,089	-40,728
Trade payables	-3,835	-35,853
Other payables	-7,650	147
Other current financial liabilities	37	3,566
Other current liabilities	-363	1,711
Pension liabilities	-1,500	-18,751
Other long-term employee benefits	-1,073	-1,625
Total	102,211	-98,782

Changes in liabilities arising from financing activities for the years ended December 31, 2023 and 2022, are as follows:

	Current interest-bearing loans and borrowings	Non-current interest-bearing loans and borrowings	Other financial liabilities
	Million KRW	Million KRW	Million KRW
As of January 1, 2022	235,311	60,502	690
Cash flows	-21,309	–	94
Foreign exchange movement	-689	–	-229
Reclassifications	-5,243	5,243	–
As of December 31, 2022	208,070	65,745	555
Cash flows	-104,189	–	3,575
Foreign exchange movement	242	–	–
Net losses on valuation of financial liabilities	20	58	89
Reclassifications	60,553	-60,553	–
As of December 31, 2023	164,696	5,250	4,219

30. RELATED PARTY DISCLOSURES

The companies listed below have been identified as related parties:

Company name	Location	Relation with the Group	Remarks
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	China	Joint Venture	Jointly controlled by Songwon Group Holding AG
Songwon Moolsan Co., Ltd.	Korea	Other (refer to note 30.5)	A company that has significant influence on the Group
Kyungshin Industrial Co., Ltd.	Korea	Other (refer to note 30.5)	A subsidiary of Songwon Moolsan Co., Ltd.

The following table provides the total amount of transactions that have been entered into with related parties for the relevant financial years and balances as per year-end:

Related party	Description	2023	2022
		Million KRW	Million KRW
Songwon Moolsan Co., Ltd.	Selling and administration costs	-80	-80
	Sales	523	64
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	Cost of sales	-18,881	-28,826
	Sales	523	64
Total	Cost of sales	-18,881	-28,826
	Selling and administration costs	-80	-80

Related party	Description	2023	2022
		December 31 Million KRW	December 31 Million KRW
Songwon Moolsan Co., Ltd.	Other non-current financial assets	33	33
	Trade and other payables	7	7
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	Trade and other receivables	65	63
	Trade and other payables	1,062	1,361
Total	Other non-current financial assets	33	33
	Trade and other receivables	65	63
	Trade and other payables	1,069	1,368

30.1. THE ULTIMATE PARENT

Songwon Industrial Co., Ltd. is the ultimate parent based and listed in Korea.

30.2. TERMS AND CONDITIONS OF TRANSACTIONS WITH RELATED PARTIES

Outstanding balances of related parties at the year-end are unsecured, interest-free and settlement occurs in cash. There have been no guarantees provided or received for any related party receivables or payables. For the year ended December 31, 2023, the Group has not recorded any impairment of receivables relating to amounts owed by related parties (December 31, 2022: none). This assessment is undertaken periodically by examining the financial position of the related party and the market in which the related party operates.

30.3. TRANSACTIONS WITH KEY MANAGEMENT PERSONNEL

During the financial year 2023, no other transactions with key management personnel than those disclosed in note 30.4 took place.

30.4. COMPENSATION OF KEY MANAGEMENT PERSONNEL OF THE GROUP

Description	2023	2022
	Million KRW	Million KRW
Short-term employee benefits	11,059	13,930
Post-employment benefits	122	534
Other long-term benefits	812	1,218
Share-based payments	-18	-100
Total compensation paid to key management personnel	11,975	15,582

The amounts disclosed in the table are the amounts recognized as an expense during the reporting period related to key management personnel. Key management personnel are those persons with authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of that entity. The compensation amount of key management personnel of the Group decreased in 2023, compared to the prior year due to the resignation of three key management persons in the second quarter of 2022 in the course of the internal restructuring procedures.

30.5. OTHER RELATED PARTIES

Other related parties are Songwon Moolsan Co., Ltd. (Korea) which has significant influence on the Group due to the interest held in the share capital of the parent company of 23.88%. Further, the subsidiary of Songwon Moolsan Co., Ltd., Kyungshin Industrial Co., Ltd., which holds interest in the share capital of the parent company of 9.15%, is identified as a related party of the Group.

31. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial liabilities comprise loans and borrowings, trade and other payables, and other financial liabilities. The main purpose of these financial liabilities is to finance the Group's operations. The Group has trade accounts and other accounts receivables, cash and cash equivalents and other financial assets that arrive directly from its operations. The Group also holds financial instruments at FVOCI and financial instruments at FVtPL and enters into derivative transactions and applies hedge accounting for cash flow hedges if applicable.

The Group is exposed to market, credit and liquidity risks. The Group's management oversees the management of these risks through appropriate risk assessment and monitoring activities to minimize their effects.

31.1. MARKET RISK

Market risk refers to the risk that a financial instrument's fair value of future cash flows will fluctuate because of changes in market prices. Market prices comprise two types of risk:

- interest rate risk; and,
- foreign currency risk.

Financial instruments affected by market risk include loans and borrowings, deposits, financial instruments at FVOCI, financial instruments at FVtPL and derivative financial instruments. The sensitivity analyses in the following sections relate to the position as of December 31, 2023 and 2022.

Interest rate risk

Interest rate risk refers to the risk that a financial instrument's fair value or future cash flows will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's interest-bearing loans and borrowings as well as bank deposits with floating interest rates.

The Group's exposure to the risk of changes in market interest rates relates substantially to the Group's interest-bearing loans and borrowings with floating interest rates, which exposes the Group to cash flow risk. In response, the Group is minimizing the risk partially through a currency and interest rate swap contract or choosing the most favorable financing instruments by switching to loans with more favorable conditions or improving the Group's credit rating.

Interest rate sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's interest-bearing loans and borrowings as well as bank deposits with floating interest rates. With all other variables held constant, the Group's profit before tax is affected through the impact on floating rate borrowings as follows:

	Increase / (decrease) in %	Effect on profit before tax Million KRW
December 31, 2023	1.00	-477
	-1.00	477
December 31, 2022	1.00	-1,067
	-1.00	1,067

Foreign currency risk

The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's operating activities. The risk of foreign exchange primarily relates to the US Dollar (USD), Euro (EUR), Japanese Yen (JPY), Swiss Franc (CHF), United Arab Emirates Dirham (AED) and to the Indian Rupee (INR).

Foreign exchange risks arise when commercial transactions, recognized assets or liabilities are denominated in a currency that is not the entity's functional currency.

The objective of the management of foreign currency risk is to maximize the value of the firm by minimizing the fluctuation of net profit and uncertainty arising from the fluctuation in foreign currency. To accomplish this, the Group uses a strategy to accord the collection terms of receivables and payment terms of payables denominated in USD considering the similar volume of exports and imports. In regard to EUR and JPY, the Group manages the risk through currency forward contracts.

Foreign currency sensitivity

The Group carries out a sensitivity analysis for the dominant foreign currencies: US Dollar (USD), Euro (EUR), Japanese Yen (JPY), Swiss Franc (CHF), United Arab Emirates Dirham (AED) and the Indian Rupee (INR). The assumed possible currency fluctuations are based on historical observations and future prognoses. The financial instruments are incorporated into calculations. The following table demonstrates the sensitivity of consolidated net profit before tax to a reasonably possible shift in exchange rates related to financial instruments held in the balance sheet. Assuming that all the other variables are constant and only the foreign exchange rate changes by 10%, the impacts on net profit for the years ended on December 31, 2023 and 2022, are as follows:

	2023 December 31		2022 December 31	
Currency	10% increase Million KRW	10% decrease Million KRW	10% increase Million KRW	10% decrease Million KRW
USD	6,981	-6,981	6,566	-6,566
EUR	1,015	-1,015	1,007	-1,007
JPY	2,248	-2,248	4,451	-4,451
CHF	224	-224	278	-278
AED	-153	153	-202	202
INR	24	-24	131	-131
Total	10,339	-10,339	12,231	-12,231

The Group's exposure to foreign currency changes for all other currencies is not material.

31.2. CREDIT RISK

Credit risk is the risk that the counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily for trade and other receivables) and investing activities.

The Group maintains a policy to keep trade relationships only with customers with high credit rating assessed by credit assessment, considering their financial position, past instances of defaults and other indicators of default. If the credit rating of a customer worsens, the Group sets an individual credit limit on that customer and intensively manages its credit risk. In addition, the Group minimizes the credit risk by maintaining the exposure to the credit risk at an immaterial level through ongoing management including periodical reviews of all the customers. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in note 32.

The Group is also exposed to credit risk with regard to bank deposits, as well as cash and cash equivalents in which the maximum exposure to credit risk at the reporting date is the carrying value. The exposure to the related credit risk, however, is relatively restricted because the Group maintains relationships with the financial institutions with high credit ratings.

31.3. LIQUIDITY RISK

Liquidity risk is the risk that the Group will encounter difficulty in meeting obligations associated with financial liabilities due to the unfavorable economy of the industry or financial markets.

The Group manages its liquidity risk through its strategy and plans which consider the maturity of financial instruments and expected operating cash flows. It also includes the policy to map out the maturity of financial assets and liabilities.

In addition, the Group maintains credit facilities with the banks including overdraft to respond to an unexpected shortage in liquidity. In response to the expansion of the business, the Group manages funding schedules and ongoing review procedures, considering the appropriate mix of long-term and short-term loans and borrowings, to maintain consistency and flexibility in obtaining liquidity and stable financing.

The details of the maturity profile of the Group's financial liabilities and lease liabilities, excluding financial derivative instruments, based on contractual undiscounted payments as of December 31, 2023 and 2022, are as follows:

	Less than a month	1 to 3 months	3 to 12 months	1 to 5 years	> 5 years	Total
2023	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
As of December 31						
Interest-bearing loans and borrowings	67,912	35,072	61,712	5,250	—	169,946
Trade and other payables	97,457	20,565	1,223	—	—	119,245
Lease liabilities	240	517	1,954	8,442	10,100	21,253
Other financial liabilities	184	1,339	28	2,579	—	4,130
Total	165,793	57,493	64,917	16,271	10,100	314,574

	Less than a month	1 to 3 months	3 to 12 months	1 to 5 years	> 5 years	Total
2022	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
As of December 31						
Interest-bearing loans and borrowings	19,327	124,209	64,534	65,745	—	273,815
Trade and other payables	109,868	22,072	7,335	—	—	139,275
Lease liabilities	278	563	2,022	7,655	9,311	19,829
Other financial liabilities	486	42	26	1	—	555
Total	129,959	146,886	73,917	73,401	9,311	433,474

31.3.1. CAPITAL MANAGEMENT

The capital managed by the Group is identical to the total amount of equity presented in the consolidated statements of financial position. The primary objective of the Group's capital management is to ensure its continued ability to provide consistency for its equity shareholders through a combination of capital growth and distribution. In order to achieve this objective, the Group monitors its gearing to balance risk and returns at an acceptable level, and also maintains a sufficient funding base to enable the Company to meet its working capital and strategic investment needs. To maintain or adjust the capital structure, the Company may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares considering not only the short-term position, but also its long-term operational and strategic objectives. At the Group level the debt ratio is reviewed regularly. The debt-equity ratio as of December 31, 2023 and 2022, is 54% and 78%, respectively.

All subsidiaries must report key performance indicators, including capital management information on a monthly basis.

32. FAIR VALUES

Below is a comparison by class of the carrying amounts and fair value of the Group's financial instruments that are included in the financial statements.

2023		Carrying amount		Fair value	
As of December 31					
Financial assets		Non-current	Current	Non-current	Current
		Million KRW	Million KRW	Million KRW	Million KRW
	Financial assets at amortized cost				
	Other financial assets	1,895	3,031	1,895	3,031
	Trade and other receivables	–	150,975	–	150,975
	Cash and cash equivalents	–	98,584	–	98,584
	Total financial assets at amortized cost	1,895	252,590	1,895	252,590
	Financial assets at FVtPL				
	Forward exchange contracts	–	96	–	96
	Currency and interest rate swaps	–	3,460	–	3,460
Financial liabilities		Non-current	Current	Non-current	Current
		Million KRW	Million KRW	Million KRW	Million KRW
	Financial liabilities at amortized cost				
	Other financial liabilities	2,579	1,551	2,579	1,551
	Lease liabilities	16,087	2,357	16,087	2,357
	Trade and other payables	–	119,245	–	119,245
	Interest-bearing loans and borrowings	5,250	164,696	5,250	164,696
	Total financial liabilities at amortized cost	23,916	287,849	23,916	287,849
	Financial liabilities at FVtPL				
	Forward exchange contracts	–	89	–	89
Total financial assets		11,345	261,969	11,345	261,969
Total financial liabilities		23,916	287,938	23,916	287,938

2022		Carrying amount		Fair value	
As of December 31					
Financial assets		Non-current	Current	Non-current	Current
		Million KRW	Million KRW	Million KRW	Million KRW
	Financial assets at amortized cost				
	Other financial assets	1,890	2,237	1,890	2,237
	Trade and other receivables	–	177,174	–	177,174
	Cash and cash equivalents	–	104,760	–	104,760
	Total financial assets at amortized cost	1,890	284,171	1,890	284,171
	Financial assets at FVtPL				
	Forward exchange contracts	–	624	–	624
	Currency and interest rate swaps	2,293	1,225	2,293	1,225
Financial liabilities		Non-current	Current	Non-current	Current
		Million KRW	Million KRW	Million KRW	Million KRW
	Financial liabilities at amortized cost				
	Other financial liabilities	1	554	1	554
	Lease liabilities	14,564	2,334	14,564	2,334
	Trade and other payables	–	139,275	–	139,275
	Interest-bearing loans and borrowings	65,745	208,070	65,745	208,070
	Total financial liabilities at amortized cost	80,310	350,233	80,310	350,233
	Total financial liabilities	80,310	350,233	80,310	350,233

The fair value of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

The following methods and assumptions were used to estimate the fair values:

- cash and cash equivalents, trade and other receivables, trade payables and other current liabilities approximate their carrying amounts largely due to the short-term maturities of these instruments;
- fair value of financial assets at FVOCI and financial assets at FVtPL are derived from quoted market prices in active markets, if available;
- fair value of unquoted financial assets at FVOCI and financial assets at FVtPL are estimated using appropriate valuation techniques (refer to note 32.1).

32.1. FAIR VALUE HIERARCHY

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Description	Valuation technique
Level 1	Quoted (unadjusted) prices in active markets for identical assets or liabilities
Level 2	Other techniques for which all inputs which have a material effect on the recorded fair value are observable either directly or indirectly
Level 3	Techniques which use inputs that have a material effect on the recorded fair value that are not based on observable market data

As of December 31, 2023 and 2022, the Group held the following financial instruments carried at fair value on the statements of financial position:

		2023 December 31 Million KRW	Level 1 Million KRW	Level 2 Million KRW	Level 3 Million KRW
Financial assets	Derivatives				
	Forward exchange contracts	96	—	96	—
	Currency and interest rate swaps	3,460	—	3,460	—
	Total derivatives	3,556	—	3,556	—
	Debt instruments				
	Exchange-traded fund at FVtPL	15,273	—	15,273	—
	Total debt instruments	15,273	—	15,273	—
Total financial assets		18,829	—	18,829	—
Financial liabilities	Derivatives				
	Forward exchange contracts	89	—	89	—
	Total derivatives	89	—	89	—
	Total financial liabilities	89	—	89	—

		2022 December 31 Million KRW	Level 1 Million KRW	Level 2 Million KRW	Level 3 Million KRW
Financial assets	Derivatives				
	Forward exchange contracts	624	—	624	—
	Currency and interest rate swaps	3,518	—	3,518	—
	Total derivatives	4,142	—	4,142	—
	Debt instruments				
	Exchange-traded fund at FVtPL	14,438	—	14,438	—
	Total debt instruments	14,438	—	14,438	—
Total financial assets		18,580	—	18,580	—

During the reporting periods ended December 31, 2023 and 2022, there were no transfers between Level 1 and Level 2 fair value measurements. For the financial assets and financial liabilities for which the fair values are disclosed (refer to note 32) the carrying amounts are reasonable approximations of fair values and are measured using Level 3 measurement methods, except for cash and cash equivalents.

33. IMPACT OF GLOBAL ECONOMIC SITUATION ON CONSOLIDATED FINANCIAL STATEMENTS

The Group closely monitors the global situation and assesses the future impact of the Russian-Ukrainian war as well as conflicts in various other regions on the consolidated financial statements on a regular basis. For the financial year 2023, the following assessments were performed, amongst others:

Indication of impairment on property, plant and equipment and intangible assets

The Group assessed whether there were any internal and external indicators of impairment of property, plant and equipment and intangible assets. For the year ended December 31, 2023 no impairment of property, plant and equipment and intangible assets has been recognized (2022: no impairment) due to the Russian-Ukrainian war and other conflicts.

Expected credit loss (ECL) of trade receivables and financial assets

In order to determine the impact of the global economic situation on the ECL model in accordance with KIFRS 1109, the Group reassessed past events, current conditions and forecasts of future economic conditions. As of December 31, 2023, the Group identified the changes in risk indicators considering the nature of risk such as the geographical location of debtors which has been reflected in the ECL model for the recognition of allowance on expected credit risks. Such parameter adjustments resulted in an increase in the allowance on ECL by 226 Million KRW in the consolidated financial statements as of December 31, 2023.

Government grants received

For the year ended December 31, 2023, the Company did not receive any government grants for overcoming challenges arising from the current economic situation. Governmental grants disclosed in note 25.3 refer to sustainability projects related to greenhouse gas emission reduction as well as to subsidies received for R&D activities.

For the year ended December 31, 2022, the Company received government grants of 1,454 Million KRW to assist the entity in response to the COVID-19 pandemic, impacting the current economic situation.

34. EVENTS AFTER THE REPORTING PERIOD

The consolidated financial statements for the year ended December 31, 2023, were approved by the Board of Directors of the parent company on January 26, 2024.

There have been no material events between December 31, 2023 and the date of authorization for the issue of these financial statements that would require adjustments of the consolidated financial statements or disclosures.

35. EXPOSURE TO PILLAR TWO INCOME TAXES

The Organization for Economic Co-operation and Development (OECD)/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) published the Pillar Two Model Rules designed to address the tax challenges arising from the digitalization of the global economy. As a result, there exist uncertainties arising from the Pillar Two Model Rules such as those related to additional temporary differences, remeasurement of deferred taxes and determination of tax rates to be used in the remeasurement.

The amendments to KIFRS 1012 Income tax have been introduced to address these uncertainties, requiring a temporary exception to KIFRS 1012 requirements under which an entity shall recognize and disclose deferred tax assets and liabilities arising from the jurisdictional implementation of the OECD/G20 BEPS Pillar Two Model Rules.

The Group has applied the temporary exception as of December 31, 2023.

Pillar Two Model Rules have been enacted or substantively enacted in certain jurisdictions in which the Group operates. Pillar Two Model Rules will be effective for the Group's financial year beginning on January 1, 2024. As the Group is in the scope of the enacted or substantively enacted Pillar Two Model Rules, the Group has performed an assessment of potential exposure to Pillar Two income taxes.

The assessment of the potential exposure to Pillar Two income taxes is based on the most recent tax filing, country-by-country reporting, and financial statements of the constituent entities in the Group. Since the Group's effective tax rate is above 15% in most of the jurisdictions in which it operates, it has determined that it is not subject to Pillar Two "top-up" taxes. However, there is a limited number of jurisdictions in which effective tax rates are below 15% and transitional safe harbor is not applied. After considering top-up taxes, the Group believes only a few jurisdictions are impacted by the Pillar Two income taxes and does not expect a material exposure to Pillar Two income taxes in those jurisdictions.

SONGWON'S MEMBERSHIPS

ALIA
Asian Lubricants Industry Association
www.asianlubricants.org

ATC
Additive Technical Committee
www.atc-europe.org

CEFIC
European Chemical Industry Council
www.cefic.org

CEPAD
The European Alkylphenols and Derivatives Association
<http://cepad.cefic.org>

ELiSANA
European Light Stabilisers and Antioxidants Association
<https://elisana.cefic.org>

EPCA
European Petrochemical Association
www.epca.eu

FCA
CEFIC Food Contact Additives Group
<http://fca.cefic.org>

GOSC, Global Organotin Stewardship Council
Consortia Management GmbH
Herrnsheimer Hauptstr. 1b
67550 Worms, Germany

GPCA
Gulf Petrochemicals and Chemicals Association
www.gpca.org.ae

ILMA
Independent Lubricant Manufacturers Association
www.ilma.org

JHOSPA
Japan Hygienic Olefin and Styrene Plastics Association
www.jhospa.gr.jp

JHPA
Japan Hygienic PVC Association
www.jhpa.jp

KCMA
Korea Chemicals Management Association
www.kcma.or.kr

KEEA
Korean Electric Engineers Association
www.keea.or.kr

KEEF
Korea Environmental Engineers Association
www.keef.or.kr

KFSI
Korea Fire Safety Institute
www.kfsi.or.kr

KISA
Korea Industrial Safety Association
www.safety.or.kr

KITA
Korea International Trade Association
www.kita.net

KLCA
Korea Listed Companies Association
www.klca.or.kr

KOEAA
Korea Energy Engineers Association
www.koeaa.or.kr

KSCIA
Korea Specialty Chemical Industry Association
www.kscia.or.kr

LiSAO – REACH Consortium
www.reachcentrum.eu

NLGI
National Lubricating Grease Institute
www.nlgi.org

OrganoTin REACH Consortium
www.reachcentrum.eu

PCEP
Polyolefin Circular Economy Platform
<https://pcep.eu>

SPE
Society of Plastics Engineers
www.4spe.org

STLE
Society of Tribologists and Lubrication Engineers
www.stle.org

UEA
Ulsan Environment Association
www.ulsanenv.or.kr

ABOUT THIS REPORT

Publishing this comprehensive report each year and disclosing our operational, social, environmental and financial performance, reaffirms our commitment to providing our stakeholders with a transparent account of the challenges and opportunities facing SONGWON, our industry and the regions and communities across the world where we operate and do business.

This is SONGWON Industrial Group's 13th Annual Report. Published on March 15th, it contains a detailed overview of our economic, environmental and social performance in FY 2023 (January 1st to December 31st) and replaces the SONGWON Annual Report 2022, which was published in March 2023. Unless otherwise specified, the latest report includes updates to the previous report that reflect data through end-of-year 2023.

Reporting scope

In this Annual Report, we share information on SONGWON management's approach, strategy, performance and the progress made in 2023 related to the Group's material topics. The material topics covered in the report focus on the key areas of corporate governance, economics, environment, labor practices, human rights, society and product responsibility. The topics featured in this Annual Report were identified using a broad review and consultation process and reflect the concerns and views gathered throughout the year via direct and indirect engagement with all of SONGWON Industrial Group's stakeholders (among them, employees, customers, suppliers, partners and SONGWON's Senior Management, etc.). Further information on the Group's materiality topics, the review and stakeholder engagement processes can be found on pages 75 and 76 of this year's report.

All the data that has been compiled for this report has been carefully measured according to industry standard measurement methods unless stated otherwise. In 2023, there were no significant changes in the reporting period, boundary, or measurement methods that have been applied or included in the report. However, the KPIs were expanded to 61 and the scope of data in 2023 included 50 KPIs collected globally and 11 collected at the Korean sites..

The boundary for this report is defined by the structure of the SONGWON Industrial Group and the countries in which it operates, unless otherwise specifically stated. Any restatements regarding the content of previous reports have been disclosed separately.

Reporting standards

This report has been prepared in accordance with GRI Standards. The GRI Standards are the world's most widely used sustainability reporting standards and represent global reporting best practices for a range of economic, environmental, social and corporate governance topics.

For more information on the indicators that are relevant to SONGWON's business operations, see the GRI Content Index on pages 102-108.

FORWARD-LOOKING STATEMENTS

SONGWON's Annual Report 2023 contains forward-looking statements concerning the future plans, strategies and performance of the SONGWON Group. Some of the statements contained in this report that are not historical facts are statements of future expectations and other forward-looking statements reflecting SONGWON Group management's views, assumptions and expectations available at the date of publication. Please be advised that these involve known and unknown risks and uncertainties that are difficult to predict and generally beyond our control and could cause the actual results, financial situation, performance, or events to differ materially from those expressed in, implied, or projected by the forward-looking information and statements contained within this report. Accordingly, the reader is cautioned not to place undue reliance on any forward-looking statements provided in the report.

These statements may be identified by words such as 'anticipate', 'potentially', 'may', 'assume', 'believe', 'could', 'expect', 'foresee', 'intend', 'plan', 'shall', 'should' and other similar words or expressions used to identify forward-looking statements. Furthermore, any statement that refers to expectations, projections, or other indications of future events or circumstances, including any underlying assumptions should also be considered forward-looking statements. SONGWON does not intend and does not assume any obligation to update or amend any industry information or forward-looking statements or forecasts presented in this report to reflect new information, subsequent events and developments, or otherwise except as required by applicable law or stock exchange regulation. This report is prepared solely for use as general information and should not be construed as investment advice nor is it intended for solicitation.

SONGWON CONTACTS

Songwon Industrial Co., Ltd.
83, Yeocheon-dong, Jangsaengpo-ro
Nam-Gu, Ulsan
44781, South Korea

**Songwon Industrial Co., Ltd.
Singapore Branch**
TradeHub 21, No. 18
Boon Lay Way #02-106 (A),
609966 Singapore

**Songwon Industrial Co., Ltd.
Taiwan Branch**
A2 19F No.6 Siwei 3rd Road Linya District
Kaohsiung City, 802
Taiwan

Songwon Group Holding AG
Walzmühlestrasse 48
CH-8500 Frauenfeld
Switzerland

Songwon Management AG
Walzmühlestrasse 48
CH-8500 Frauenfeld
Switzerland

Songwon International AG
Walzmühlestrasse 48
CH-8500 Frauenfeld
Switzerland

Songwon International – Americas Inc.
1 Parkside Dr. #101
Friendswood, TX 77546
USA

Songwon International – Japan K.K.
Nishi-Shinbashi 1 chome
Kawate building 8F
room 801 Nishi-Shinbashi 1-5-8
Minato-ku 105-0003 Tokyo
Japan

Songwon Specialty Chemicals – India Pvt. Ltd.
Plot No. 26 & 26-B
GIDC Industrial Estate Panoli
Ankleshwar Bharuch
Gujarat – 394116
India

Songwon International – Qingdao Co., Ltd.
Unit 4402, 44 / F, HNA IMC Center,
2 Hong Kong Middle Road, Shinan District,
Qingdao City,
Shandong Province, China

Songwon Baifu Chemicals (Tangshan) Co., Ltd.
Tangshan Nanpu Development Zone
South to Ronghua Road Tangshan
China

Songwon – ATG GmbH
Liebigstrasse 7
DE-07973 Greiz
Germany

Songwon – ATG GmbH
Nideggener Strasse 213
DE-52349 Düren
Germany

Songwon Europe GmbH
Nideggener Strasse 213
DE-52349 Düren
Germany

Songwon Trading GmbH
Nideggener Strasse 213
DE-52349 Düren
Germany

Songwon Chemicals GmbH
Nideggener Strasse 213
DE-52349 Düren
Germany

Songwon International – Middle East FZE
Dubai Airport Free Zone
Building 6EB, Office No. 250
P.O. Box 371467 Dubai
UAE

**Songwon Polysys Additives – Sole
Proprietorship LLC**
KHIA8-32B
Kizad (Khalifa Industrial Zone Abu Dhabi)
P.O. Box 137134 Abu Dhabi
UAE

For more information about
the SONGWON Annual Report 2023,
please contact:

Songwon Management AG

Phone: **+41 52 635 00 00**

Fax: **+41 52 635 00 01**

E-mail: **marketing@songwon.com**



For further information, please go to:

www.songwon.com

