

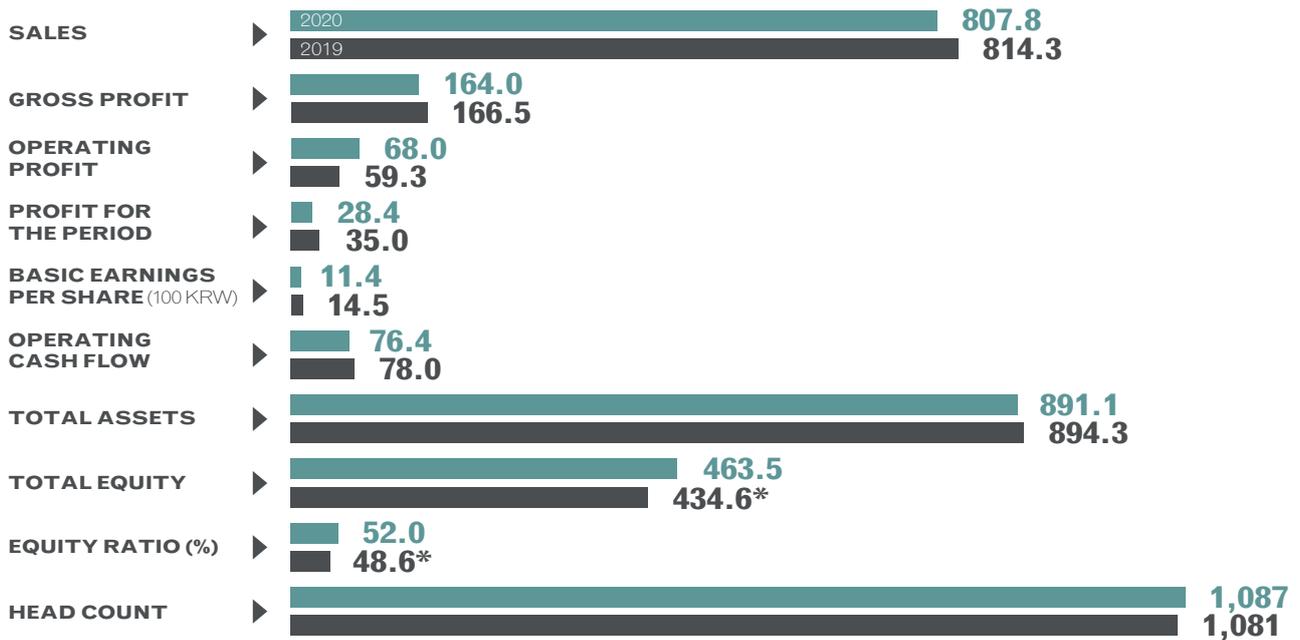
ANNUAL REPORT 2020



It's all about **the chemistry™**



Key Financial Data 2020

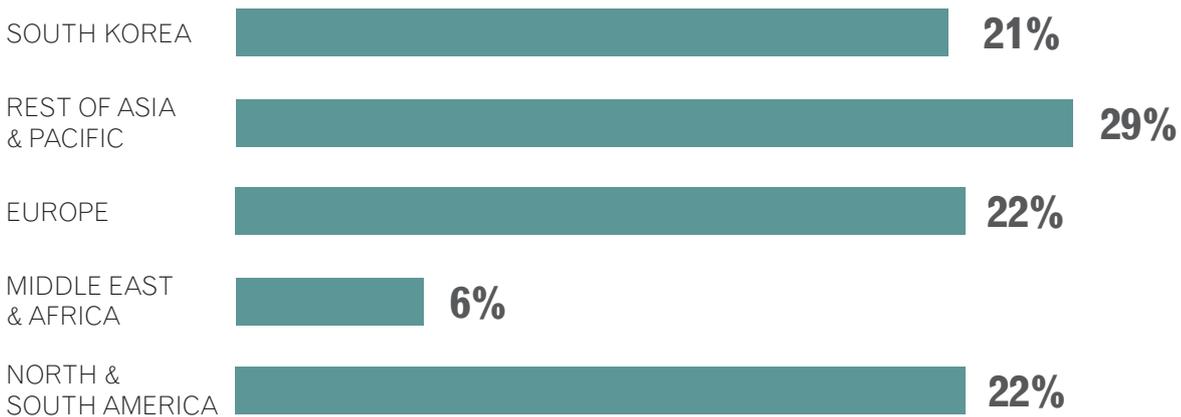


* refer to financial statements, note 2.22, for further details

Sales by reporting segment in 2020



Sales by region in 2020



SONGWON Industrial Group overview

33

Nationalities

68.0

*Billion KRW
Operating profit*

953

*Direct energy consumption
(1000 GJ)*

28.4

*Billion KRW
Profit for the year*

225

*Employees working
20+ years*

1,144

*KRW
Basis earnings per share*

1,087

Total head count

76.4

*Billion KRW
Operating cash flow*

0.36

*(%) Total recordable case
rate (TRCR)*

891.1

*Billion KRW
Total assets*

9

Manufacturing plants

463.5

*Billion KRW
Total equity*

128

*Total female employees
worldwide*

52.0

Equity ratio (%)

7

*Newly hired
nationalities*



Letter to the Shareholders

Dear Shareholders,

Although faced with an unprecedented and highly unpredictable environment, the stable revenue achieved in 2020 was a clear demonstration of SONGWON's effective strategy, solid business model, and our committed global team. As soon as the global health crises began, we acted swiftly to protect our employees and the interests of all of our stakeholders and made sure that SONGWON could continue reliably supplying customers.

In 2020, SONGWON Industrial Group achieved consolidated revenues of 807,768 Million KRW and a gross profit margin of 20.3%, which is slightly lower than in 2019 (814,340 Million KRW and 20.4%, respectively). The Group's operating profit reached 68.0 Billion KRW in comparison to 59.3 Billion KRW in 2019 due to operational excellence measures launched in early 2020, while EBITDA performance was around 12.7% of sales. In December 2020, due to the result of the annual goodwill impairment test, the management recognized an impairment loss on goodwill of -6,889 Million KRW which was recorded in the consolidated statements of comprehensive income within other expenses.

Impacted by the tax audit result in Songwon Industrial Co., Ltd., which was conducted by the Korean National Tax Service in 2019-2020 for the financial years 2015-2017, the net profit of 28,365 Million KRW (FY 2019: 35,008 Million KRW) was negatively impacted by income tax expense of -10.5 Billion KRW. This impact was recognized by the parent company based on the final notice of assessment received and was partly offset by the reversal of the available deferred tax provision for the taxed transaction leading to a net impact of -4.6 Billion KRW. In accordance with its contingency plan, Songwon Industrial Co., Ltd. initiated tax appeal filing procedures against the tax assessment made and has started a mutual agreement procedure between South Korea and Switzerland.

SONGWON generated consolidated revenues of 807,768 Million KRW

In our successful 55 years in the industry, we have not experienced anything like this pandemic before but SONGWON has seen and overcome many turbulent times. Over the years, we have built a highly resilient and diverse business with a strong foundation and the broadness of our portfolio allows us to serve a wide range of markets and application areas. As a leading global player, we have also developed the flexibility and agility needed to compete in today's demanding markets as well as the ability to respond swiftly and effectively to fluctuations in demand.

Supporting our stakeholders

Although the global turmoil caused by COVID-19 created short term challenges, it has also brought medium term opportunities. The actions we have taken to protect our employees, maintain good liquidity and a strong balance sheet throughout the year, have ensured that we are well-positioned to navigate the COVID-19 pandemic, take advantage of the opportunities that emerge. From the very outset, we concentrated our efforts on meeting customers' needs in a timely manner and adapted our strategy and operational processes to manage the uncertainty and disruption surrounding us. Leveraging our global experienced team, we provided as much support to our customers as possible to help them mitigate the negative impact of the adverse business environment while also minimizing the pandemic's impact on our business performance and our supply chain.

At SONGWON, we place great value on closely engaging with all of our stakeholders and maintaining strong channels of communication. This year, we intensified communication with our global customer base as well as with our partners along the value chain. Thanks to our investment in the most up-to-date communication technology years before this global crisis, it was easy for us to maintain this very important contact with our stakeholders and our business was less affected by the travel restrictions established in so many regions.

In line with our continuity plan, we also built up additional inventory in each region and this helped us to respond to the unpredictable surges in demand throughout the year and continue our reliable supply. SONGWON also benefited from having a multiple supply of key raw materials in various countries and was less impacted by national lockdowns. The positive feedback received across the business in 2020 is a clear indication that our plans were effective.

“ The fundamental pillars of SONGWON's business are steadfast and strong. Over the years, we have developed the flexibility and resilience needed to perform well and create superior value for all of our stakeholders in today's highly demanding and uncertain global environment. ”

Jongho Park
Chairman of the Board and CEO

Our businesses in 2020

Division Industrial Chemicals comprising the business units Polymer Stabilizers (PS) and Fuel and Lubricant Additives (F&L) was set for ambitious growth in 2020. Due to the impact of COVID-19, its targets had to be reset and the revised outlook was successfully fulfilled. With the Division's product portfolio already very well developed and complete, the plan going forward is to continue to build on the existing portfolio of products with selected product extensions which are synergic to the existing ones.

Continuing to progress with planned investments, Division Industrial Chemicals underlined its commitment to the market by making additional volumes of key antioxidants available, ramping up the utilization of the extended OPS capacity in the Abu Dhabi plant and continuing its planned market penetration of light stabilizers and our extended aminic antioxidant range. Despite the headwinds, the Division was able to successfully protect and moderately grow SONGWON's position.

Division Performance Chemicals, comprising the business units, Tin Intermediates, PVC Stabilizers and Polymers (TPP) and Specialty Chemicals (SC) saw revenues remain stable throughout the year and indications for economic improvements across its businesses. Apart from a few exceptions, the Division positively benefited from the signs of recovery, particularly in the automotive sector and was able

to capitalize on new business opportunities. Due to actions taken at the start of the pandemic, it was able to increase capacities to match the various increases in demand.

Although the travel restrictions hampered the Division's plan to promote new products to new customers, it was still successful in seeking opportunities outside of Korea. The sub business units Tin Intermediates and Coating Additives, in particular, were able to grow internationally and reach their targets for 2020. A clear positive trend was also observed in our laminating adhesives business where the rise in packaged food (due to increased food ordering) created by the pandemic clearly led to an increase of SONGWON's laminating adhesives business in Korea.

At SONGWON, we understand the power of collaboration and cooperating with other industry players has always been part of our strategy. In 2020, we expanded SONGWON's global reach by adding 12 new distributors to our global sales network. With strong reputations and extensive experience in their specific regions, we are confident that they will help us to expand SONGWON's foothold in these markets and provide our customers with the best-in-class service they expect.

12 new distributors were added to SONGWON's extensive sales network

Sustainability

Sustainability is placed at the core of all of our activities and it greatly influences the way we conduct our business. We understand that we have a responsibility to all of our stakeholders by successfully balancing environmental stewardship, social progress, ethical business conduct and economic success.

Each year, we place great importance on consistently carrying out a detailed analysis on the environmental and social impact of our operations by:

- continuing to improve our EH&S results & striving for better performances.
- integrating EH&S into all of our processes & business practices.
- investing in the necessary resources to improve the overall safety of our operations.
- continuing to review the environmental impact of our facilities & processes.

- further reducing wastes & emissions as well as our use of energy & natural resources.
- actively responding to concerns & identifying potential needs for innovation.
- responsibly sourcing raw materials & identifying potential renewable sources.
- upholding the highest levels of integrity & human rights.

Today, strategic business priorities cannot be separated from sustainability. However, at SONGWON, we know that it is possible to grow profitably while contributing to society by producing innovative, more resource-efficient and sustainably manufactured products. Worldwide, sustainability and the circular economy, are priority topics for customers, consumers, regulators and policymakers, who demand that manufacturers develop sustainable solutions.

SONGWON became an affiliate member of PCEP

This year, we increased our efforts for more sustainability. SONGWON became an affiliate member of the Polyolefin Circular Economy Platform (PCEP) and is actively contributing with our stabilization expertise to support polyolefin recycling initiatives. We have also engaged in new recycling projects with the aim of further reducing our packaging waste. By using recycled PE bags, we have already achieved a reduction of 115 tons of PE this year.

SONGWON saved 115 tons of PE this year

To strengthen our efforts, we launched an initiative to extend our sustainability management system and to further integrate SONGWON's sustainability strategies into the global strategy and its operations process.

Operational Excellence

At SONGWON, we strive for operational excellence by leveraging our global advantages, supporting innovation, optimizing production and becoming more resource efficient. This year, we had a number of improvement initiatives such as the installation of semi-auto packaging facilities for SONGNOX® 2450 & SONGNOX® 3114 in Korea and of an agro-waste fired boiler which reduced greenhouse gases in India.

Our aim is to establish more effective ways of working that incorporate digital manufacturing, smart automation, modularization, sustainability, and standardization. To achieve this we must minimize complexity, make our work practices simpler and deliver superior quality products and services with high supply reliability. Throughout the year, raw material levels remained stable with some exceptions. The multiple sources policy we have in place serves to protect SONGWON from any major impacts to supply which was crucial this year.

SONGWON's Suwon plant in Korea received ISO 14001

Every year we seek to control and reduce energy and water consumption, as well as increase the use of renewable raw materials whenever possible. In 2020, we successfully increased the amount of recycled waste by 912% and our total annual energy consumption decreased by 18% compared to 2019. Safety also remains a top priority for us. We are proud to report that for over 10 years across all of our sites, we have had "0" fatalities. Our Suwon plant was also certified with ISO 45001 (Occupational health and safety). Furthermore, after establishing a digital management system for PSM (Process Safety Management) at Maeam, KOSHA (Korea Occupational Safety and Health Agency) upgraded the plant with an "S" grade following its 2020 inspection.

Corporate Governance

Despite any challenges facing us, we will continue to live and operate by the highest standards of integrity and ethics. As the landscape in which we do business continues to change, we'll meet the future with the same steadfast commitment to honesty, fairness,

and transparency that has kept us strong for 55 years. Our steadfast commitment to creating sustainable long-term value for our shareholders depends on being recognized as a trusted and reliable business partner with consistently competitive and sustainable operations worldwide.

We fully understand that this is only achievable with strong, sound governance practices firmly in place and by conducting our business with the highest level of integrity. Establishing and engaging in open dialogue with our shareholders is also essential. In order to facilitate faster decisions, simplify processes and enable SONGWON to remain agile, changes were made to SONGWON's leadership structure in 2020. The Executive Committee now has 6 members as opposed to 8 members which brings us closer to SONGWON's traditionally lean organizational structure.

SONGWON is committed to conducting business with honesty and integrity, and we expect all our employees to maintain high standards. However, organizations face the risk of things going wrong from time to time, or of unknowingly harboring illegal or unethical conduct. To prevent this, we introduced a Whistleblower Policy this year as part of our commitment to a culture of good corporate practice. This policy provides guidance for reporting concerns about breaches of behavior or conduct in addition to our Code of Conduct.

Dedicated global team of 1,087 employees

Our team

Our people are SONGWON's true differentiator. This year more than ever, the impact of COVID-19 worldwide has tested the strength, dedication and adaptability of our teams. During this challenging time we continued hiring, developing and retaining a diverse pool of talent to ensure that we have a truly engaged and high performing workforce that delivers results for our business and our stakeholders.

We have learned many valuable lessons over the past few months, and together with the management, I am incredibly proud of the commitment, resilience and flexibility our employees have shown in meeting both SONGWON's and our customers' needs during these difficult times.

Looking ahead

SONGWON was built to be a strong and resilient global company. Over the years, with discipline and purpose, we have become more global and increasingly diverse, while maintaining our clear focus and mitigating risk. By continuing to strengthen our leadership position in our key businesses and leveraging our ability to innovate, we can deliver on our operational excellence, and make sustainability a key strategic driver. We look forward to facing new challenges together and making the next stage of our journey even more successful. On behalf of the Board of Directors, the Executive Committee and the entire SONGWON team worldwide, we thank you, our shareholders for your valuable trust, sustained confidence and continued support.



Jongho Park
Chairman of the Board and CEO



Board of Directors

SONGWON Industrial Group



Jongho Park

1973 - Korean
Chairman of the Board & CEO



Hans-Peter Wüest

1961 - Swiss
Executive Board Member



Choung-Sik Kim

1957 - Korean
Executive Board Member



Dieter Morath

1951 - German
Non-Executive Board Member



Markus Oppliger

1959 - Swiss
Non-Executive Board Member



Gerhard Schlosser

1948 - German
Non-Executive Board Member

Executive Committee

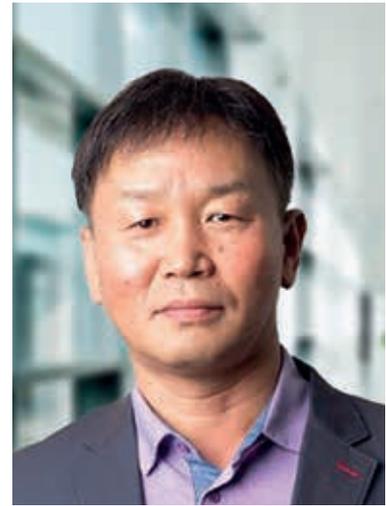
SONGWON Industrial Group



Jongho Park
Chairman of the Board & CEO



Hans-Peter Wüest
Chief Financial Officer/Services



Byungsoo Boo
Leader Operations



Giacomo Sasselli
Leader Strategic Investments



Elena Scaltritti
Leader Division Industrial Chemicals/
Quality Assurance



Philippe Schlaepfer
Leader Division Performance Chemicals/
Chief Sustainability Officer

Share Price Development

Challenging year ends on a solid note

SONGWON ended the year 2020 on December 31st with a market cap of 382.8 Billion KRW which marked a 2.6% increase in comparison to the market cap level achieved year-end 2019. During FY 2020, the Korea Composite Stock Price Index (KOSPI) gained 30.7%. In March, the COVID-19 pandemic created global economic volatility and a sense of deep uncertainty across financial markets and SONGWON's share price dropped to its lowest level of the year at 7,110 KRW per share. However, SONGWON's share price saw a continual increase throughout 2020 and peaked at 17,500 KRW per share in December.

In the 1st quarter of 2020, the emergence and spread of COVID-19 negatively impacted stock markets around the world which have seen unprecedented declines as a result of panic-selling caused by the uncertainty. In March, the KOSPI reached its annual low of 1,439 KRW which reflected a 34.5% decrease compared to its level at the beginning of the year. During this period, SONGWON's share price decreased significantly to its annual low due to selling pressure and dropped by 54.3% compared to the share price as of January 1st, 2020.

Going into the 2nd quarter of the year, most Korean industries struggled in terms of their business performance, but in general the stock market recovered. SONGWON's share price bounced back during this period and closed at 12,850 KRW per share as of June 30th, 2020, which reflects an increase of 40.6% compared to March 31st, 2020. This increase was mainly due to the combination of valuation improvements and strong liquidity inflow within the stock market. In addition to this, SONGWON's 1st quarter earnings positively surprised and exceeded the expectations of the market. However, it was not possible to break through the price-to-book ratio (PBR)

1x level due to the negative outlook for the chemical sector resulting from the significant effect the COVID-19 pandemic had on the industry's economic activities. In the 2nd quarter of 2020, the industries which managed to achieve growth were limited mainly to IT services, biotechnology and the pharmaceutical industry.

Just as many market investors had anticipated, SONGWON's sales declined in both the 2nd and 3rd quarters of 2020 compared to the respective quarters in 2019. During the 3 months ended September 30th, 2020, SONGWON's share price traded within the range of 11,300 KRW to 14,500 KRW per share.

As the year progressed, more industries started showing positive signs of recovery on the back of the government stimulus combined with changes in lifestyle caused by COVID-19 pandemic. The petrochemical industry was one the industries which began to recover as the demand for vehicles, construction goods and packaging started to increase. With both sales and the margin for large petrochemical companies showing improvements, their share prices rallied in 4th quarter of the year.

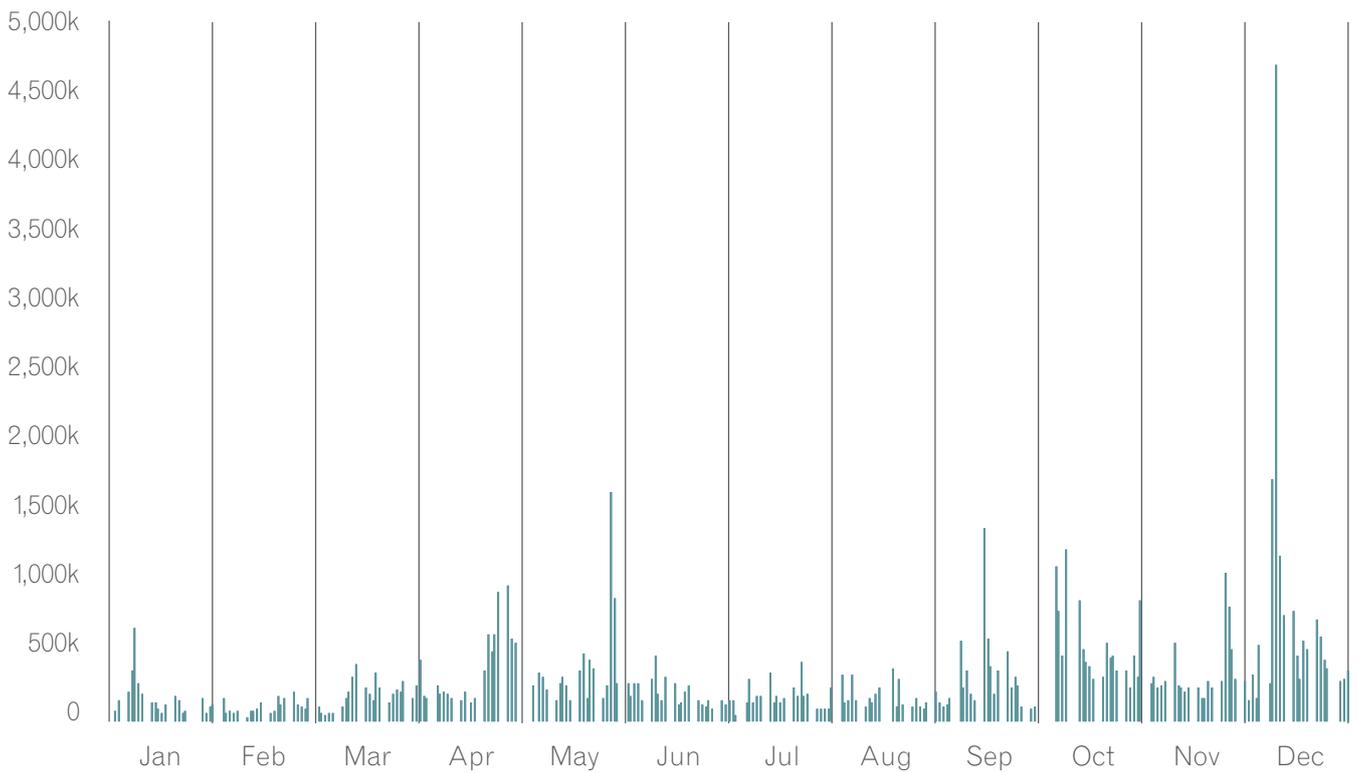
In line with this, SONGWON also followed the industry trend and broke through the previous trading range as investors showed confidence and anticipated that the demand for SONGWON's products would also begin increasing again.

SONGWON ended the year solidly with a stock price of 15,950 KRW per share on December 31st, 2020. Despite the existing uncertainty caused by the ongoing global COVID-19 pandemic, SONGWON expects its existing businesses to perform steadily and the organization is confident that it is well-placed to continue delivering solid performance for both its customers and investors going forward.

SONGWON share price 2020



SONGWON share volume 2020



Ticker:	KOSE: A004430	Share price (31.12.2020):	15,950 KRW
Stock exchange:	Korea	52-week high:	17,500 KRW
Listed since:	1977	52-week low:	7,110 KRW
Shares outstanding:	24 million	Free float:	64.36%
Market capitalization: (Million KRW)	382,800	Dividend per share (2020): (30% of nominal share value)	150 KRW

2020 Highlights

NEW INNOVATIONS

SONGSORB® CS 400 WB range for high-performance, durable, low-VOC water-based coatings

Halogen-free SONGFLAME® WB 201 added to the Flame Retardant product family

SONGNOX® L570 for automotive & industrial lubricant end uses as well as specialty applications

COMPLIANCE

Issued new SDSs and labels for 301 new products

Notified ca. 200 substances to the Russian inventory (Eurasia REACH)

Pre-registered 57 substances for Turkey REACH

EH&S

Total annual energy consumption decreased by 18%

33% average decrease in air emissions overall

Significantly increased recycled waste by 912%

“O” fatalities for the 10th consecutive year

KOSHA upgraded PSM (Process Safety Management) to “S”

R&D

5 new products launched

15 new products under scale-up testing

7 new patents filed

PARTNERSHIP

SONGWON added 12 distributors to its global network

HR

Increased the global team to 1,087 employees

Enhanced diversity with employees representing 33 different nationalities

Implemented a new Whistleblower policy

Conducted Ethics trainings across the company

SUSTAINABILITY

SONGWON became an affiliate member of PCEP (Polyolefin Circular Economy Platform)

Launched initiative to extend sustainability management system across SONGWON

Use of 50% recycled PE bags led to 115 ton PE reduction

Installed an agro-waste briquette fired boiler & reduced greenhouse gases

PRODUCTION

Installed semi-auto packaging facilities for SONGNOX® 2450 & SONGNOX® 3114

Suwon (Korea) received the ISO 14001 Environmental Management certification

ISO 45001 for managing Occupational Health and Safety implemented in Ulsan & Maeam (Korea)

Started up fully backward integrated Triazine production for coatings additives

Table of contents

Key Financial Data 2020	02
Letter to the Shareholders	04
SONGWON's Leadership	09
Share Price Development	11
2020 Highlights	13
<hr/>	
About SONGWON	
SONGWON's Profile	16
Group Structure	17
Global Locations	18
Product Groups & Brands	19
How we create value	22
SONGWON focuses on	23
<hr/>	
Business Report	
Market, Risks & Opportunities	25
Sales & Division Updates	28
Customer Service (CS)	33
Procurement & Supply Chain	35
Research & Development (R&D)	39
TAD & Technical Service	42
Manufacturing	44
Quality Assurance (QA)	47
Regulatory Affairs	49
Our People	52
<hr/>	
Sustainability	
Sustainability	59
Corporate Social Responsibility	64
EH&S	66
GRI Sustainability Reporting Standards	73
GRI Content Index	77
<hr/>	
Corporate Governance	
Corporate Governance at SONGWON	82
<hr/>	
Financial Statements	
Table of contents	89
Introduction to the consolidated financial statements	90
Independent auditor's report	91
Consolidated statements of financial position	95
Consolidated statements of comprehensive income	97
Consolidated statements of changes in equity	99
Consolidated statements of cash flows	101
<hr/>	
Memberships	181
About this report	182
Forward-looking statements	183
Contacts	184



About SONGWON

SONGWON's Profile	16
Group Structure	17
Global Locations	18
Product Groups & Brands	19
How we create value	22
SONGWON focuses on	23

SONGWON's Profile

SONGWON is a global leader in the development, manufacture and supply of specialty chemicals. Founded in 1965 and headquartered in Ulsan, South Korea, SONGWON is the 2nd largest producer of polymer stabilizers in the world. In addition to having group companies operating all over the world, SONGWON offers the added beneficial global advantage of its readily accessible local operations and valuable local insight. With a diverse team of dedicated industry experts, SONGWON closely collaborates with customers and industry experts to develop tailor-made, application-specific sustainable solutions.

Through proprietary technologies and excellent economics, SONGWON is successfully strengthening its global foothold particularly in emerging markets. The organization is well-positioned to continue its steady course of international expansion on the back of its combination of wholly or partly owned subsidiaries and 1 joint venture. The joint venture is facilitated by holding companies which enable SONGWON to manage risk and also provide further market access, shared risks and economies of scale, where appropriate.

Information on SONGWON's 55-year history can be found on the company website:
www.songwon.com/company/history.

What we stand for is

Passion

We are a committed team driven and dedicated to advancing our customers' interests and the industry as a whole.

Entrepreneurship

Each of us truly lives SONGWON's pioneering spirit. We transform innovative ideas, take risks, learn from them and continually move forward to set new trends.

Accessibility

We see ourselves as an extended team that is always within reach with our support, expertise and value-adding solutions wherever and whenever our customers need us.

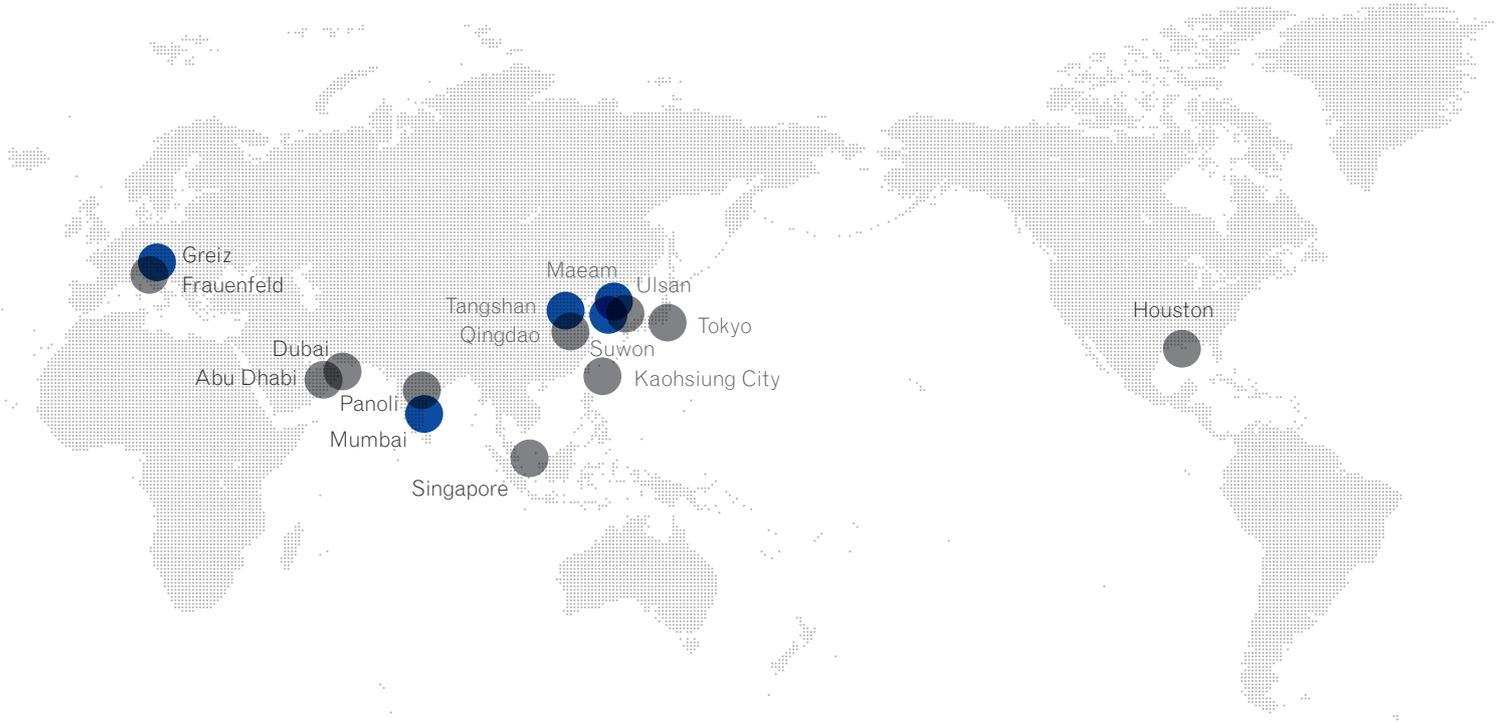
Credibility

All of our people, products, processes and past bear the hallmark of SONGWON's reliability, trust and confidence in the future.

Expertise

Our highly-qualified, talented global team, leverages its extensive experience and profound innovative strength to focus on industry needs and provide customers with long-term sustainable value.

Global Locations



-  **Headquarters in Ulsan, Korea.**
-  **Group companies, including 1 joint venture and 2 representative offices, located in 10 different countries on 3 continents.**
-  **9 manufacturing facilities, 3 of which are located in Korea, and the others in Germany, USA, India, UAE, China as well as an additional manufacturing JV plant in China.**
-  **A worldwide network of sales offices, distributors, customer service and logistic hubs and warehouses.**

	Headquarters & Affiliates	Manufacturing	Applications (GAC)	Technical Service	R&D
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	●	●		●	

SONGWON Product Groups

High-performance & maximum value

A leader in the industry for more than 5 decades, SONGWON is well-known for providing customer-focused, high-value solutions that maximize long-term market advantage. Aiming to be a preferred supplier to customers in over 60 countries, we use our substantial expertise and knowledge of the industries we serve to provide our widespread customer base with one of the broadest product portfolios on the market. We also place great emphasis on reducing SONGWON's ecological footprint and contributing to a circular economy by developing environmentally sound solutions that help our customers use resources more efficiently.

Ensuring that SONGWON is well-placed and equipped to provide the most suitable solutions for customers is one of the key elements in the management's global strategy. We recognize that every market has its own unique, ever-changing requirements and conditions, especially in relation to sustainability. In response, we regularly engage with our global customers in order to develop solutions that not only meet their highly diverse needs but exceed their expectations.

To match the needs of our customers, SONGWON's products have been organized into 4 main groups:

- Polymer Stabilizers
- Fuel & Lubricant Additives
- PVC Additives, Tin Intermediates & Polymers
- 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 to facilitate handling and application use. Specially designed stabilizers protect polymers from heat and light degradation. During processing, they ensure that plastic end products retain their mechanical and

physical properties while in use and also prolong their lifespan. These include antioxidants, hindered amine light stabilizers, UV absorbers and One Pack Systems.

FUEL & LUBRICANT ADDITIVES – extend product life cycles & enhance performance

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

Stricter regulations for vehicle emissions and drain intervals coupled with rising machinery operating costs have increased the demand for new fuel and lubricant additives that protect engine oils, reduce maintenance and running costs while improving environmental acceptability.

PVC ADDITIVES, TIN INTERMEDIATES & POLYMERS – promote sustainable value in numerous applications

PVC additives are stabilizers and plasticizers that impart excellent heat stability, anti-weathering properties, transparency, flexibility and durability to PVC plastic end products.

Tin intermediates are high-quality alkyl tin compositions that act as catalysts in electrodeposition coating and esterification reactions or are used as intermediates to make tin catalysts.

Polymers (Thermoplastic polyurethanes, Solution Polyurethane - PU ink binders, PU laminating adhesives and Polyester Diols) significantly enhance performance of demanding applications like wire & cables, films, injection molding, extrusion, printing inks, flexible packaging and synthetic leather.

SPECIALTY CHEMICALS – enable diverse materials for a wide variety of industries

By strongly focusing on research, SONGWON identifies new opportunities to develop fast-moving, industry-driven solutions. These include electronics, coating additives, functional monomers and flame retardants.

Electronic products from SONGWON are designed mainly for KrF and ArF photoresists used in the production of semiconductors. SONGWON constantly develops new products and technologies in cooperation with customers to meet the constant innovation that these markets demand.

Coating additives provide color and texture, enhance appearance and extend useful life. To meet increasingly stringent regulatory and environmental directives, we work continuously to optimize process efficiency, improve durability, reduce VOC emissions and develop eco-friendly waterborne technologies.

Functional monomers add extra effects to polymers and/or significantly improve processing performance. SONGWON's raw material expertise together with experience laboratory-scale to bulk volumes production experience enables the development of new products and opens up additional application fields.

Flame retardant (FR) technologies provide high performance and competitive advantages in a broad range of applications and fuel the growth of halogen-free solutions for a wide variety of materials, ranging from foams to various polymers such as polyolefins, acrylonitrile butadiene styrene (ABS) and polyurethane (TPU).

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

SONGFLAME®

Flame Retardant Synergists

SONGCIZER™

Plasticizers

SONGNOX®

Stabilizers & OPS Blends

SONGSTAB™

PVC Stabilizers

SONGSTAR™

Polyester Diols

SONGSTOMER™

TPU Grades

SONGXTEND®

Stabilizer Solutions

SONGSORB®

Light Stabilizers

HI-THANE™

Polyurethanes

SONGCURE®

Photoinitiators

SONGCAT™

Organo-Tin Intermediates

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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.

How we create value

Our inputs

People



1,087 employees
33 nationalities
100% commitment

Manufacturing



9 world-class facilities
Fully back integrated
Leading-edge technologies

Innovation



Technology Innovation Center
Dedicated application labs
67 products reviewed & developed
55 years of industry experience

Financial



Total assets
891.1 Billion KRW

Our business

360° high performance solutions

2 main reporting segments

Comprehensive customer support

9 Technical Service Centers

Sustainable supply chain

Fully compliant & regulatory support

Reliable on-time supply

Strong global distributor network

Culture of innovation & responsibility

Customers in 60+ countries

Our 2020 outputs

People



Added 50 new talents to the global team
Introduced ethics training across the business
International employee assignments

Manufacturing



LCAs (Life Cycle Assessments) implemented
Reduced GHG emissions
Switched to renewable energy
Regular safety trainings & health inspections
Increased the amount of recycled waste by 912%

Innovation



23 new products launched in the past 5 years
5 new products launched this year

Financial



Total revenues
807.8 Billion KRW
Net incomes
28.4 Billion KRW

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 highest quality, high-performance and most sustainable 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 regulatory 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 the current pandemic 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 best and safest working conditions. Continually adding new key talents each year not only strengthens our organization but also improves our already outstanding EH&S performance.

Market, Risks & Opportunities

The global landscape

Operating as a global player, SONGWON is continually exposed to many risk-related forces such as political, economic and socio-economic, market environments and the fast pace of technology trends which are inherently connected to our business. The unpredictability of these things are often far beyond our scope of control and have the means to negatively affect SONGWON's operations. However, although our business activities are constantly surrounded by risks, we know that risks often go hand-in-hand with opportunities.

Over the years, we have seen companies who have either been ill-prepared or have failed to identify risks or negative challenges quickly enough badly affected. Although we have no power to prevent risks from happening, we place great importance on constantly keeping an eye out for and predicting or monitoring them as they develop. This enables us to assess their potential impact so that we can do our best to mitigate any serious damage or disruption to our business.

While working on minimizing any negative impacts and seizing short-term opportunities as they arise is important, a business cannot be managed successfully by only reacting to the uncertainties, instability or volatility that surround it. To secure long-term success, it is vital to constantly keep our sights on both medium and long-term success factors and to continue working towards them. For us to achieve growth and meet our investors' expectations, it is also absolutely vital to remain vigilant in relation to risk and to look beyond what our competitors are doing to what we can offer, or do, that they cannot. At SONGWON, we are also fully aware of how quickly risks pertaining to economic volatility and political instability can potentially hinder growth and subsequently impact demand dramatically. We have, of course, no power to prevent this from occurring but we want to make sure that SONGWON is well-prepared in advance and ready to defend our leading position in the industry.

This year, the sudden, unexpected appearance and rapid spread of COVID-19 forced governments to implement stringent measures and restrictions to contain it. Not only did this have major consequences for the world's economies, the lockdowns and border closures disrupted global business activities and caused supply chain disruptions. Against this backdrop, the World Bank announced in June 2020, that it expected the GDP to register its sharpest recession in advanced economies since World War II,

and forecasted the global economy shrinking by 5.2%. In relation to this, it had also registered the fastest and steepest global growth downgrades on record.

Worldwide, the COVID-19 pandemic led to a dramatic loss of life in 2020 and caused unprecedented challenges for public health, food systems and the working world. With countless businesses being lost and nearly half of the world's 3.3 billion workforce at risk of losing their livelihoods, the economic and social disruption caused by the pandemic has been devastating. In the 2nd half of the year, the global economy began to show some signs of recovery, but the virus continued to spread and in response, many countries slowed the reopening of their borders and again began reinstating partial lockdowns to protect their citizens. China's recovery has been faster than expected but the global economy's long climb back to levels of activity prior to the pandemic remained subject to setbacks.

According to the OECD (Organisation for Economic Co-operation and Development), the global economy will gain momentum over the next two years, with global GDP returning to pre-pandemic levels by the end of 2021. Following its sharp decline this year, global GDP is projected to rise by around 4.25% in 2021 and a further 3.75% in 2022. These forecasts are based on the assumption that any renewed COVID-19 outbreaks are contained and that an effective vaccine will be available which will boost confidence. However, with the outlook remaining exceptionally uncertain and confidence fragile, any additional setbacks would negatively impact GDP growth.

The chemical industry

Already facing a dynamic, turbulent and disruptive trade environment, the factor dominating and determining the global landscape as well as the industry in 2020 was the COVID-19 pandemic. In 2019, the general estimates for 2020 predicted a drop in manufacturing levels but the impact of the ongoing pandemic caused unpredictable surges in demand throughout the year. The chemical industry has always been subjected to a wide variety of issues and events ranging from geopolitical risks and economic volatility to fluctuating customer demand, stricter regional policies and rapidly changing regulations. The uncertain landscape combined with global volatility, which has been compounded by the pandemic this year have all led to an increased competitive environment.

As the year progressed, the strong demand for medical and food packaging applications contrasted sharply with severe decline in demand for the automotive sector. All of these trends are expected to continue into the new year while the recovery of various economies will contribute to strengthening the demand in weaker sectors. Increased shipping costs were just some of the key factors adding to the general uncertainty and volatility throughout the year. Instability was also caused by international trade relations such as the US-China trade war or Brexit.

In the next years, the key to building an advantage and establishing a strong market position will be through ensuring the best strategic choices are made. This will be critical to the future of each organization. In order for many of the industry's established players to stay ahead and defend their share of the market, they will have to set clearer priorities and become even more focused with their actions. Most importantly companies will also need to identify and develop new approaches to how they operate and innovate.

SONGWON noted various demand levels during the year over the 4 very different quarters:

Q1/2020 Strong demand

Customers were concerned with supply chain disruptions and inventory build-up while SONGWON focused on ensuring raw material availability and setting up inventory buffers.

Q2/2020 Reduced demand

There was a drop in demand across the whole supply holding inventory stocks. The impact on demand was more pronounced in some areas such as automotive (impacting PS and F&L) as well as building & construction, but less pronounced to countercyclical in other areas such as medical applications & packaging.

Q3/2020 Signs of demand recovery

There were signs of recovery with sporadic surges in demand which made it difficult to accurately forecast.

Q4/2020 Increased sustained demand

As markets gradually recovered, global logistics capability impacted with stronger demand than supply which led to shipping delays and freight rate increases.

Managing risks

The levels of risk which are always present like natural events, accidents, or acts carried out intentionally to cause harm are all threats which can seriously damage the reputation or image of a company. Regardless of the nature or source of a potential risk, it is the management's responsibility to make sure that processes are in place to limit or manage risks as far as possible.

At SONGWON, the management does all that it can to limit the exposure to risks. We know our markets and our customers well. This helps the management keep its hand on the pulse, assess the consequences of specific actions and either fine tune or avoid the risk altogether. Decisions regarding investments are made with caution and driven by ROIs. Part of SONGWON's risk management process is working close together with a heightened sense of responsibility to identify both external and internal areas which either need attention or were found to be inadequate in terms of risk.

In 2020, in response to the fluctuations in demand with regards to supply and logistics availability issues arising from the pandemic, the businesses took part in several required task force teams. By carefully analyzing particular issues, the teams were able to determine potential scenarios and implement the most optimal solution to meet both our customers' and business needs as well as to minimize risk and maximize on opportunities.

In addition, the health and safety of our employees is always a priority. This year, we added strict measures to our existing safety regulations and procedures to safeguard our employees' health, prevent the spread of the virus and abide by government and health authority guidelines. By reducing the risk of illness, we also ensured that our operations continued to run smoothly for our customers.

We are convinced that driving our strong strategy combined with stakeholder engagement, SONGWON's insight into the chemical industry and the diligent way we monitor world developments puts us in the best position to identify and minimize key risks, as well as capture opportunities. It is also how we ensure that SONGWON can continue reliably delivering optimal results to meet our shareholders' expectations.

SONGWON's response to the somewhat difficult to predict and volatile economic situation is to work on having the essential basics in place such as clear

strategic targets with a focus on high growth areas and continually improving both overall competitiveness and our product offering. By doing so, we are confident that we can reduce the impact of any negatives which may arise, while ensuring that SONGWON can really profit from the “positives” and capitalize on the opportunities.

AT SONGWON, WE IDENTIFY RISKS & OPPORTUNITIES BY:

- discussing emerging issues for each business at the global leadership team level.
- evaluating the relevance or priority of new ideas & projects with the solid stage & gate process within each Division.
- ensuring that every employee feels a sense of responsibility to identify and report risks.

Trends in 2020

Macroeconomic:

The impact of the COVID-19 pandemic was felt throughout 2020 and will persist into 2021 and perhaps even longer. Currently, the pace of the recovery of demand must still be understood and therefore, closely monitored. This will require a cautious approach to investments while maintaining the best level of flexibility to support volatile market demand and to be prepared for long term growth.

Environmental:

In the plastics industry, the sustainability awareness is increasing plastics recycling while the push towards reducing single use plastic (SUP) will have a negative impact on the growth of plastics. On the other hand, even when taking into account the reduction in SUP and the impact of COVID-19, the intrinsic quality of plastics will continue to determine important growth (CAGR) that is still estimated to be >3% between 2019-2025.

In addition, the drive towards battery electric & fuel cell vehicles will reduce the amount of engine oils in NEW vehicles, but hybrid, pure internal combustion engine vehicles will still be produced and sold and the number of vehicles overall will be increasing globally.

Technology:

The increase in the production of electric vehicles e.g. BEV (Battery Electric Vehicle), HBV (Hybrid Electric Vehicle) and FC (Fuel Cell) will advance the demand for specific finished fluids to be formulated to meet the evolving needs and new requirements.

Drive to battery electric & fuel cell vehicles will reduce the amount of engine oils in NEW vehicles, but these vehicles will still require transmission fluids, greases and new developments such as fast charging station fluids.

How SONGWON is responding to these trends

Macroeconomic:

SONGWON will continue to address market requirements with its innovation strength and reliably meet any surges in demand with its manufacturing expertise. Furthermore, SONGWON will take advantage of any opportunities to promote its broad portfolio of solutions.

Environmental:

SONGWON will continue to explore plastics recycling and confirm its aim to support the circular economy. It will also be capitalizing on the opportunities for new SPU products in inks and adhesives that the trend for more environmentally friendly packaging offers.

Technology:

SONGWON can respond to the increase in electric vehicles by extending current products and/or refining and/or adding AO additives to its product lines to meet the new industrial requirements for HEV, BEV, FC and lowers SAPS. Also, potential AOs can be promoted or other SONGWON additives for new developments such as direct coolants for BEV.

Sources:
www.cepal.org
www.worldbank.org
www.who.int
www.oecd-ilibrary.org
www.globenewswire.com

Sales & Division Updates

Sales strategy

Customer-focused & effective

Building solid, long-lasting relationships with our customers based on respect, reliability and trust is something SONGWON has always done. The personalized nature of our sales approach brings us close to our customers so that we can acquire the valuable insight into the challenges they face and can align SONGWON's offering with the demands of the market. Most importantly, we never forget that our customers always have a choice and this drives us to focus on where they see the greatest value.

Transparency is also a key principle at SONGWON. It is a common thread throughout all levels of our organization, and also an important part of our sales teams' interactions with both internal, as well as external stakeholders. Through transparency we are able to establish an open dialogue and this helps us to earn customers' confidence in our organization. The clear communication between our sales teams and both internal and external stakeholders contributes to improving our responsiveness and adaptability to change, as well as ensuring that SONGWON can remain agile, competitive, relevant and able react to market trends quickly.

In 2020, this was more essential than ever given the challenging business environment and global disruption caused by the COVID-19 pandemic. During the year and despite the challenging limitations confronting them, our sales experts around the world worked with the same level of commitment and professionalism to assure customers of SONGWON's support and supply reliability. They also emphasized SONGWON's ability to respond quickly and adjust the delivery of our products to meet individual demands.

SONGWON's sales organization is solutions-focused and strategically positioned across the globe to ensure that both local and international customers receive the very best sales support in the market. Speaking the language of our customers and fully-equipped with the in-depth industry knowledge and capability, they provide guidance to help our customers solve their distinctive challenges and differentiate their market space.

In today's competitive markets where multiple suppliers are pursuing the same customers and the challenges facing those customers are increasingly more demanding, compounded by the pandemic, having a sustainable sales strategy and a well-structured sales organization is more important than it has ever been. 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 real value.

In 2020

THE SALES ORGANIZATION CONTINUED TO:

- look at joint vs separate distribution channels to achieve cost savings & increased efficiency.
- obtain specialized & focused distribution channels for the various businesses & industries to maximize market impact.
- share SONGWON's customer base across the business & take advantage of existing relationships.
- capitalize on SONGWON's leading & long-standing polymer stabilizers reputation for landing new business.
- promote products together from the different businesses into the same applications.
- provide valuable information from successful leads to develop new businesses.
- share best practices with other functions & take advantage of collective expertise.

Our sales organization's activities are guided by the best global and local practices. We make a point of consistently benchmarking SONGWON's approach against key industry players. While staying focused on 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 with the aim of exceeding not just meeting their expectations.

Totally committed to SONGWON's goal of being the supplier of choice for our customers and a co-leader along the whole industry value chain, despite the limitations of the pandemic, we continued our efforts to optimize SONGWON's sales channels in 2020. This included further improving our service and partnering with new distributors. In addition, we also worked on the development of new, innovative solutions for specific applications in close cooperation with our strategic customers and partners in the industry.

Division updates & product strategy

Business activity overview in 2020

This year, Division Industrial Chemicals and Division Performance Chemicals were confronted with an operating environment defined by volatility, uncertainty, complexity, and ambiguity, making it difficult to project business trends and particularly market demand. Although SONGWON was preparing for ambitious growth targets in 2020, these were reset after COVID-19 emerged. Both Divisions managed to fulfill their revised plan successfully and make progress despite the sudden unpredictable upsurges in demand.

The positive outcomes confirm that SONGWON's product differentiation, as well as our flexibility and responsiveness to the ever-changing needs of today's industries are well-received by customers. Throughout the pandemic, both Divisions noted that customers were relying even more on SONGWON being ready to absorb any changes in their demands. Overall, the efforts of all the teams to communicate and align have strengthened SONGWON's image of top performance and supply reliability in the industry.

Customers' way of working has changed immensely due to COVID-19 with many placing orders with lower lead times. Most were forced to swiftly change both the way they do business and communicate especially those "confined" to home office. Since the very start of the pandemic, both Divisions intensified discussions with all key customers to better understand their expectations, challenges and their outlook in order to align with them and assure them of SONGWON's support. The organization has an effective stage & gate process in place where all innovation ideas, which are received from either inside SONGWON or come from external requests, are investigated, evaluated and discussed.



As the COVID-19 pandemic first emerged, it was clear that it would be critical for us to take an optimally measured but highly-responsive approach to the needs of our customers. Overall, SONGWON's success this year can be attributed to our ability to remain agile on the back of our efficient global processes, our broad portfolio of high-performance products as well as our strong highly-competent teams who proactively managed the challenges.



Elena Scaltritti,
Leader Division Industrial Chemicals

In 2020

- Progress continued with planned investments & new products were introduced.
- Volumes levels were adapted to meet demand.
- Internal processes were streamlined to effectively manage the challenging environment.
- Business was mostly conducted virtually which increased the flexibility of interaction with customers.
- Interaction across the company was increased to ensure alignment across the functions for responding to sudden changes.
- A business continuity plan was initiated (incl. additional inventories) to compensate for production impacts due to COVID-19 related issues.
- Market penetration was ongoing & the distributor network further expanded.



With the environment remaining opaque due to the global COVID-19 pandemic, it is crucial for us to closely monitor developments in the industry, identify market trends and anticipate customer requirements. To continue building an optimized pipeline of products that meet customer demands, it is essential for both SONGWON's Divisions to leverage new customer insights across the business and act with a more agile and flexible market-oriented perspective.



Philippe Schlaepfer,
Leader Division Performance Chemicals

Polymer Stabilizers (PS)

PS started the year with high ambitions. However, like so many others in the industry, when the markets began to feel the disruption caused by the COVID-19 pandemic in February, the restrictions impacted the businesses ability to supply. However, the continuity plan swiftly implemented by SONGWON's management enabled the business to continue its strategy and reassure customers of SONGWON's supply reliability. To support this, additional measures were set up in the existing supply chain to address the emerging needs. This enabled the PS team to successfully protect and slightly increased SONGWON's share of supply in the market in 2020 and saw important growth in OPS and HALS sales in a stagnant market.

One of the major challenges facing PS this year was the restrictions brought by COVID-19. Key trade shows and meetings were cancelled, postponed or impossible to attend which eliminated the usual valuable networking opportunities and provide opportunities for effective and important customer meetings. Instead, these were replaced by video or telephone conferences which PS specially organized with key customers to ensure that the team kept up-to-date on their needs. SONGWON's management also took part in some of these meetings to acquire first-hand information on the challenges facing customers.

The restrictions for face-to-face meetings limited the team's ability to work on new developments with customers so instead the emphasis was on market penetration of for example the polyol market with extended approvals for our SONGNOX® 5057 – an antioxidant suitable for applications such as flexible slabstock foams, elastomers and hot melt adhesives. Aligned with this, the PS team regularly collaborated with the Coatings sales team especially in relation to adhesives, where there is an overlap. The team also worked together with the PVC team to ensure that SONGWON's approach to the market for direct customers and with distributors was harmonized.

SONGWON expanded its global sales network with 12 new distributors.

Distributors are an important part of the global PS network and in 2020, the PS team continued to shape and fine tune the distributor network to best respond to market needs. SONGWON has a long-standing and strong reputation in the PS market. Despite all the challenges, the PS team was able to do what it has always done well – provide excellent, comprehensive support to customers with its expertise backed by the effective synergy and dedicated pool of people throughout the company. The achieved success this year is based on the great alignment between SONGWON's teams and functions combined with our drive to build strong relationships with customers and deliver innovative solutions. This is also why SONGWON has been able to effectively “walk the talk” and grow the organization in the past decade.

In 2020

Determination was also a key to success. Through the strong engagement with its key customer support in India, SONGWON obtained permission to continue operations during the lockdown, so that the Panoli plant could continue supplying products used to manufacture face masks and other medical equipment.

Fuel and Lubricant additives (F&L)

The demand of lubricants was extremely volatile with large drops and peaks throughout 2020. The unpredictability required the team to work even more closely with our customers and increase the intensity of its engagement with them to ensure SONGWON could meet their evolving requirements. To support these efforts, BU F&L also increased its collaboration internally across the whole supply chain to ensure continued supply. Very productive technical exchange meetings with key customers were arranged which enabled the team to manage the specific increasing technical requirements of these customers such as extended drain intervals requiring additional thermal stability.

Due to the effect of the COVID-19 pandemic on the automotive industry, BU F&L were unable to deliver against the ambitious growth targets set for 2020. However, the team continued to extend SONGWON's reach in automotive as well as industrial applications and were successful in maintaining and moderately growing the company's position. In addition, the team continued to enlarge the level of approvals in the customer base and successfully introduced SONGNOX® L570 – an aminic antioxidant especially designed for demanding automotive and industrial lubricant end uses as well as specialty applications such as grease.

BU F&L's successful progress this year can be attributed to the strong relationships each team member has cultivated across all levels and functions within SONGWON as well as with our customers' organizations combined with its truly global approach to meeting all aspects of our customers' global requirements through best-in-class working practices. Going forward, the F&L team will continue to ensure timely and cost-efficient investments to support industry growth and aim to

further strengthen SONGWON's logistic network to guarantee smooth supply to its customers. Furthermore, work will continue on developing solutions that meet the continuously increasing requirements for BEV (Battery Electric Vehicle), HBV (Hybrid Electric Vehicle) and FC (Fuel Cell).

Tin Intermediates, PVC Stabilizers and Polymers (TPP) highlights

In 2020, SONGWON's TPP business also felt the impact of the pandemic on the global landscape and the restrictions on travel which greatly hindered the plans to expand SONGWON's business by promoting our latest and existing products to new customers. Unable to meet and support new potential customers to adopt SONGWON's products slowed down BU TPP's growth ambitions for its PVC-A (Polyvinyl Chloride Additives), PUs (Polyurethanes) in South East Asia/South Asia and TPUs (Thermoplastic Polyurethanes) outside the Korean market. In light of this, SONGWON was not able to reach sales targets for PVC-A and PU's, but was still able to continue its business expansion and increase SONGWON's brand recognition outside of Korea.

The global markets for SONGWON's Tin Intermediates business overall remained strong despite some slowdown related to the automotive industry, allowing our team to reach its sales target. In 2020, the distribution network for our solution PU (ink binders and laminating adhesives) and PVC-A businesses was completed providing BUTPP with even closer contact to both customers and end users on an international level.



BU TPP increased its collaboration within the organization and in 2020, initiated a cooperation with the Coatings sales team to begin also offering tin catalyst products to adhesives customers. Going forward, this is expected to positively contribute to more opportunities for both BUs.

BU TPP made further advancements towards more sustainability in 2020.

- In PVC, the focus was promoting environmentally more friendly stabilizers to replace lead stabilizers in Asia.
- To support product stewardship SONGWON became a founding member of a new global Tin catalyst advocacy group.
- A new PU product pipeline was developed to replace long-term solvent based products with either solvent free or water soluble based products.

Specialty Chemicals (SC) highlights

In 2020, BU SC progressed with its strategy to differentiate SONGWON in the market by offering a range of solutions that reflect the specialty chemicals needs of customers. In spite of the challenging environment this year, the team was able to leverage SONGWON's 55 years of industry experience and strong focus on reliable supply and best-in-class service, to successfully progress with the expansion of SONGWON's foothold. In spite of the limitations imposed by COVID-19 and the ongoing US/China trade war, BU SC was able to fulfill most of its targets and saw continuing strong growth in the Americas and China.

By continuing to closely engage regularly with customers, the SC team was again able to identify new opportunities to help customers retain a competitive edge and grow their business. They were able to showcase SONGWON's strong research and development strength and solve the challenges faced by key coatings customers by providing specific blend solutions. In close collaboration with key customers (e.g. electronic customers in Korea) BU SC developed new products mainly for electronics, coatings and flame retardant applications in 2020.

This year, BU SC:

- expanded SONGWON's market share & its reputation in high end industries/markets.
- introduced liquid blends for coatings & achieved 1st industrial sales for FRs after their official launch in 2019.



Customer Service (CS)

Putting the customer first

SONGWON has earned its sound reputation in the industry for customer service excellence by building long-term partnerships with our global customers and placing their requirements at the center of our business. Working closely with them provides us with valuable information on the challenges they face. This knowledge not only guides our business activities and allows us to focus on greatest value areas for customers, but enables us to continue delivering the highest quality solutions and service. One of our main goals at SONGWON is to be the partner of choice in all of our business relationships.

Our CS team is committed to providing professional, responsive and accessible customer service that exemplifies SONGWON's values. Each CS professional sees every interaction with customers as an opportunity to exceed expectations and express the value we place on our relationships with them. The team knows that really listening to customers and investing time in building and maintaining relationships often leads to other business possibilities, expansion opportunities or reveals new ways of meeting current industry demands.

More than the “extra mile”

Throughout the year, CS has been closely monitoring the progress of the COVID-19 pandemic and working diligently to proactively address concerns and continue to offer the service and reliability that our customers have come to expect from SONGWON. CS has always been committed to providing customers with timely and industry-specific information. At SONGWON, we believe that by helping customers to remain up-to-date and to tap into our legacy of industry experience is one of the ways we can support them in their decision-making and equip them for success. In 2020, this approach was even more important. Customers appreciated being kept informed and reassured and the increased level of support they received from CS was also very welcomed by them. CS also increased its level of engaging with customers which enabled the team to react more quickly to changing conditions, address any business continuity issues and confirm their willingness to go more than the “extra mile”.

In the past, closing a sale usually marked the end of a transaction. Today, SONGWON's customers expect us to resolve any issues arising during the transaction

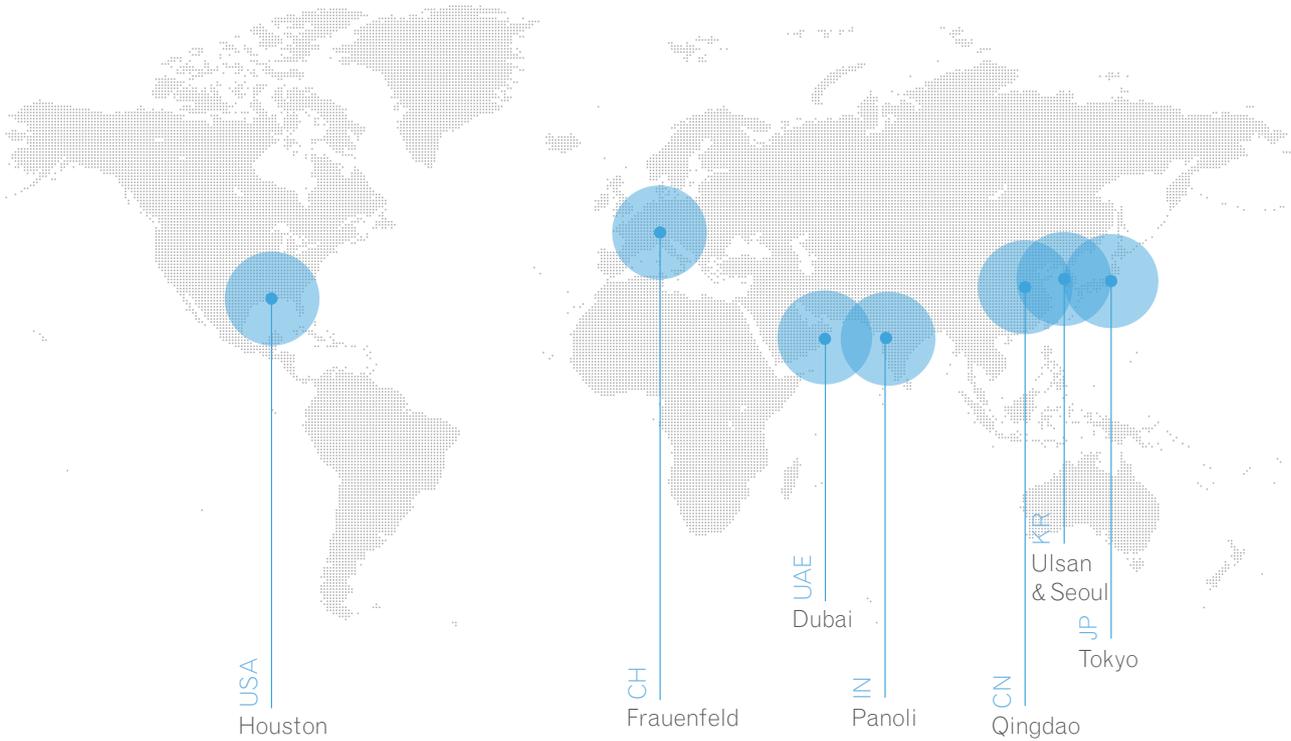
itself but also to accompany them throughout their business relationship with SONGWON. CS team members see each new challenge they face as a possibility to question the current status, to experience something new and to improve the service SONGWON provides overall.

Due to the pandemic, the customer demand situation was very uncertain throughout the whole year. Customers' orders became less predictable and were also frequently changed. This demanded a great deal of flexibility from the CS team but thanks to their experience and competence, they were able to satisfy all our customers' needs. CS' goal is always to achieve 100% customer satisfaction with “0” customer complaints.

Right where we're needed

We provide high-quality service to our customers in more than 60 countries from our 8 CS centers located across the globe. It is SONGWON's ability to deliver the most comprehensive service before, during and after customers purchase our products that is a key contributor to customers' ongoing market success and also what sets SONGWON apart. The fact that we provide our service offering from multiple global centers allows us to flexibly shift our support and services to alternative locations to match those of our customers when required while also supporting our resilience to any disruption.

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



Staying a step ahead

One of the most important aspects of CS is staying ahead of the “curve” with customers, anticipating problems and acting to resolve them as well in advance and as quickly as possible. To support this, SONGWON’s management has always endorsed clear and effective communication throughout the organization. The company structure facilitates the flow of information and helps each function take advantage of positive synergies between departments which ultimately benefits SONGWON’s customers. With strong channels of communication in place, CS is immediately informed about delays or any unforeseen issues so that they can keep the customer well-informed of progress. This also gives customers a timely chance to consider how they would like to proceed or whether they need to look for an alternative solution. This year again, harmonization, standardization and best practices within the local CS organization remains an ongoing process and will continue into 2021.

Furthermore, a CS team member was appointed to report to SONGWON’s Chief Sustainability Officer. Establishing this direct channel of exchange has

served to strengthen the support of customer-related sustainability aspects and interests. One of the projects that CS supported in 2020 was a project related to the “retraction of empty plastic packaging” involving a cooperation between SONGWON and a recycling company.

CS also makes a point of regularly collecting feedback from both its internal and external stakeholders in order to measure how it’s doing and to identify areas where both it and SONGWON can make improvements. The team shares this valuable information with SONGWON’s management and other relevant departments so that any necessary steps can be taken or processes optimized to ensure that SONGWON continues to deliver what customers want and need. CS team members are fully supported by the management to further develop their skills and knowledge e.g. to keep up-to-date on various regulations and changes in the external environment so that they can respond appropriately. This year, two CS team members successfully completed further education in foreign trade and can now add further value to the entire team to benefit customers.

Procurement & Supply Chain

Achieving key business goals

Today's modern business environment is always demanding but 2020 brought even more challenges. In addition to tariff wars and political uncertainty, the sudden and rapid spread of the COVID-19 pandemic heightened the pressure on global businesses' procurement departments and caused major disruption to supply chains worldwide. Very early on, it became clear that SONGWON's highly-experienced and dedicated Procurement and ISL (International Supply & Logistics) teams would be more essential to SONGWON's business success this year than ever before.

SONGWON's procurement and ISL experts are well-accustomed to facing challenges. Each of them is highly qualified and together they have years of hands-on experience across many industries and international perspectives. This enables them to bring crucial out-of-the-box thinking, offer alternative solutions and provide valuable foresight as well as practical knowledge to everything they do for SONGWON. Working side-by-side, Procurement and ISL are critical to ensuring our products and solutions are successfully delivered across the world to time, cost and quality standards. They also contribute greatly to SONGWON's sustainability goals.

The management closely monitors SONGWON's procurement and supply chain practices to ensure they reflect the company's vision, values and aims. Furthermore, they provide both teams with the clearest guidance and support they need to be able to deliver the best value to SONGWON and our stakeholders. Increasing employees' competence and skills is strongly supported by the management. So, to overcome the limitations caused by the pandemic, the usual face-to-face trainings for the Procurement and ISL teams were switched to webinars and online trainings.

SONGWON's management makes sure that Procurement and ISL are well-placed to respond to stakeholder concerns and expectations while fulfilling SONGWON's responsibility to remain compliant at all times. For us it is an absolute priority that SONGWON's products are always sourced with the utmost integrity. The management makes sure that the people who grow, manufacture, service and provide them are also treated fairly and that the environment is respected. For SONGWON, this is not just the right way for us to do things, it is the only way. And it is what our customers expect from us.

Procurement

Maintaining SONGWON's competitive edge

As SONGWON has grown over the years, Procurement's role has expanded as well. The team's focuses extends far beyond just procuring materials and securing the raw materials required by all our global production facilities. Aligned with the organization's global strategy, Procurement contributes significant value to the company's growth acceleration. Apart from its drive to make SONGWON's supply chain stronger and more efficient, it aims to deliver benefits to our customers while fostering sustainability. Most importantly, the team mitigates supply risks and maintains SONGWON's competitive edge, as well as profitability in relation to costs, quality and services by selecting and working together with innovative, reliable suppliers.

Successfully meeting challenges

In 2020, Procurement faced a year like no other with the COVID-19 pandemic bringing challenges with it on a scale not previously seen. In the short term, the team had to respond quickly to support the business, maintain operations, fulfill demands and help to alleviate supply chain disruptions while identifying new, more dependable solutions and creating long-term procurement plans going forward.

Always aiming to be well-prepared in advance to face unexpected challenges, SONGWON has a clear set of measures in place as well as a solid contingency plan. In accordance with this, the Procurement team closely collaborates with our businesses and suppliers to gain beneficial insight and achieves the best value by balancing the quality of supply and price with effective risk management.

This insight and local first-hand knowledge of the business environments, new regulations and trends related to fluctuating regional demand levels was invaluable and helped Procurement to manage all the volatility. With the information, Procurement also remained agile and in a position to overcome obstacles like the COVID-19 lockdowns as well as weather e.g. the heavy summer rains in Asia. The team was able to work through all these challenges and successfully implement solutions such as allocating purchase volumes to other suppliers in other regions or where possible switch to suppliers closer to SONGWON.

Working with the best

We work with multiple suppliers all over the world who ensure that SONGWON can offer customers optimal service and a competitive price/value ratio. We have built an exceptional global network of sustainably responsible partners by always seeking long-term relationships rather than just a view to opportunistic purchasing. We do not select new suppliers or continue our relationships with existing ones, solely on the basis of economic indicators but instead on good sustainability performance and competitiveness.

Identifying areas with potential risk is crucial to our operations and Procurement's supplier evaluations and assessments help to identify and provide us with a clear view of potential issues or where standards could be compromised. We regularly assess suppliers according to aspects such as flexibility, reliable on-time delivery and quality. We also evaluate our suppliers' sustainability performance based on key factors such as labor, EH&S, business ethics etc. which are high priorities for us. Procurement ensures that integrity is at the forefront of all of its business dealings and it communicates SONGWON's expectations clearly and transparently to all stakeholders.

As a rule, Procurement's specially designated team performs an audit on key suppliers every 2 years and strategic suppliers every 1-2 years. However, this year due to the constraints caused by the COVID-19 pandemic, the usual audits were not possible. Instead, supplier self-assessments were done and the team will reinstate the face-to-face audits and assessments to identify risks or improvements across SONGWON's supply chain as soon as it is possible. The team also checks supplier's "On Time Delivery performance every month and this continued in 2020.

In 2020

PROCUREMENT RESPONDED TO THE CHALLENGES BY:

- establishing a TFT (Task Force Team) to monitor the COVID-19 situation & delivery status in each region every day.
- trying to secure raw materials from the other suppliers & in regions suppliers less affected by COVID-19.
- continuing to build up the safe stocks of raw materials in internal/external warehouses in Korea.
- maintaining close, daily communication with stakeholders (Production, Production Planning Team, SOIP, etc.).

Supply Chain

Securing reliability & sustainable sourcing

As a globally operating organization, maintaining a strong supply chain is essential to our SONGWON's and to meeting the increasingly dynamic needs of our customers. Ensuring that SONGWON can provide reliable supply and on-time delivery of high-quality, value-adding solutions is crucial to both our customers' operations and ultimately to securing their success in the market.

Our markets are complex and industry standards are becoming more stringent as each year passes. This year, the COVID-19 pandemic greatly added to the complexity and customers' needs became even more dynamic and demanding. All SONGWON's customers rely on us to supply them with high-performance and sustainable solutions when and where they need them and this year was no different even with the global pandemic. In fact, it was even more so for customers whose manufacturing operations and success depend heavily on the reliability of supplies and on-time deliveries, regardless of any current demand volatility.

Having an efficient and highly effective supply chain organization means that we can meet our customers'

requirements but also make sure that SONGWON's products are close to our customers and readily available. With state-of-the-art IT systems, careful planning and optimized processes, SONGWON's integrated supply chain spans sales forecasting, raw material purchases, production planning, and finished product distribution.

In 2020, the rapid spread of the COVID-19 pandemic severely disrupted supply chains across the globe. As supply reliability is a top priority, SONGWON's business continuity plan includes safety stock and mitigation plans. However, the ISL team, like so many others in the industry was faced with a greater number of unprecedented challenges than ever before. For example the 4.1% plunge in global maritime trade, the shipping rate hikes towards the end of the year and the Korea Authority's Safety Fare System-minimum profit guarantee for cargo workers which caused a ca. 20-30% increase in trucking costs.

The ISL team consists of highly-competent and experienced individuals who fully understand the complexities of an end-to-end supply chain. They acted quickly, diligently monitoring the various supply situations worldwide and implemented proactive measures to minimize disruption and ensure SONGWON's customers received their products without delay. Despite all the volatility and additional challenges this year, ISL successfully improved SONGWON's On Time Delivery rate.

YTD On Time Delivery (OTD) vs SONGWON's requested date

Overseas Suppliers:

75.7% (target 75%)

Impacted by COVID-19 pandemic lockdowns & less vessel space

Domestic Suppliers:

98.6% (target 75%)

Producers and distributors with inventory in Korea

2020 Achievements

- Year-over-year, OTD performance improved by 7,4%
- Quick response - all customer orders responded to within 72 hours
- "0" delivery complaints

The pandemic made communicating and maintaining strong ties across the supply chain more essential than ever. During the year, ISL ensured that it efficiently exchanged information not only with Procurement but with all the supply chain stakeholders. Also, to foster transparency and build trust as well as a response to concerns, the team also constantly updated supply chain information in multiple reports that were sent to customers. The team's ability to manage SONGWON's supply chain with flexibility, agility and effectively in response to the pandemic greatly depended on the clarity and strength of the communication and the relationships across the supply chain.

Sustainable sourcing

Over the years, customers have come to know that they can rely on SONGWON to deliver quality and value. Today, they also look to us to support their sustainability goals and trust us to ensure that the products they purchase from SONGWON are sourced sustainably and ethically. To this end, actively managing a KPI driven, responsible supply chain is not only important to us; it is something we take very seriously. ISL seeks to support sustainability for SONGWON, for our customers, the local communities in which we operate and for the benefit of our planet by incorporating social, ethical and environmental considerations into all sourcing decisions. In 2020, the ISL team also continued to work closely with established, sustainably conscious couriers like DHL and FEDEX as part of the drive to reduce SONGWON's impact on the environment.

SONGWON's ability to reliably supply materials is a key contributor to customers' overall success in the same way our global suppliers' ability to deliver what we require is directly connected to our success. Therefore, ISL builds relationships with supply partners based on the principles of social responsibility. We expect all of SONGWON's supply partners to abide by the same level of social, ethical and environmental performance, and the highest safety standards as we do. ISL takes care to ensure that SONGWON's suppliers are all aware of our sustainability targets and share our principles for encouraging the establishment of sustainable standards for business. For us, only suppliers who can meet our high expectations can be a part of SONGWON's supply chain network.

In 2020

THE SUPPLY CHAIN TEAM SUCCESSFULLY:

- secured on-time delivery from the port to our warehouse via our digitalized system & with good communication between the relevant teams.
- received input on-time & information related to shipping documents & schedule on our system.
- initiated a multiple tracking system to follow up & report any possible delays to customers from vessel booking, transship ports to final destinations.
- managed sending samples requested to various requestors including potential customers smoothly.
- cleared customs & transferred samples to the colleagues without delays released vendor performance data (included in the shipment status) to the relevant colleagues.
- saved costs by optimizing & reducing the number of rented external shore tanks for nonene¹.
- continued to secure more sustainability across the supply chain.

¹ Nonene is a propylene oligomer, used as an intermediate when producing plasticizers, lube oil additives, antioxidants and other performance products.

Research & Development (R&D)

Customer-focused innovation

For 55 years, we have been committed to developing innovative products and solutions for our broad range of customers whose needs have become more highly specified and complex. SONGWON's management knows that focused innovation is the only way to keep the company a step ahead in the industry and competitive in the challenging global markets.

SONGWON's strength lies in the deep commitment and competence of every member of the R&D organization and its solution-oriented approach. Throughout 2020, R&D concentrated on expanding SONGWON's offering, adding value and supporting the sustainable growth of the organization by providing its comprehensive expertise across the business.

R&D ALSO CONTRIBUTED TO STRENGTHENING THE COMPETITIVENESS OF THE BUSINESSES BY:

- ensuring SONGWON can manage customer requests with agility.
- laying the foundation for SONGWON's future growth through process improvements.
- developing and launching new products and solutions.

For example, in 2020 R&D improved production stability by implementing process improvements for Division Industrial Chemicals. This led to increasing manufacturing effectiveness but also delivered better market competitiveness. For Division Performance Chemicals, R&D helped to expand and grow new markets through new product developments and sales.

R&D supported SONGWON's growth again this year with new product developments. The team achieved remarkable success in the field of electronic materials and launched 3 products into the market. Among the high value products developed, is the monomer, EAMA (Ethylhexyl Methacrylate), a raw material for ArF (Argon Fluoride) photoresist polymer needed

in semiconductor manufacturing industry. R&D already has 15 further products in the scale-up phase undergoing customer evaluations in preparation for regular production and commercial sales in the coming year and a further 50 new products are in the incubation stage.

Although bringing a product up to production usually takes more than a year, due to the specialized and skilled technology R&D has accumulated, this can often be shortened to 3 months. SONGWON's R&D technology platform significantly reduces both investment costs and the product development time e.g. of electronic materials etc. by effectively accelerating the time from idea creation to realization.

SONGWON's R&D specialized platform is already known in the industry for:

- its excellence in product development
- the swift realization of customers' ideas
- shortening prototype sample development time
- enabling customers to introduce new products faster than their competitors.

Building on this in 2020, R&D continued its commitment to increasing customer brand awareness in the market and creating better value for our SONGWON's customers overall.

In 2020

R&D Highlights

5 new products launched

15 new products are under scale-up testing

50 products are in the incubation stage

7 new patent applications were filed

92 patents in total have been filed to date

Reinforcing R&D value

Ensuring that SONGWON has strong R&D at its core, keeps the company on top of the constantly changing market environment. Knowing that swiftly and competently responding to the evolving needs of customers is vital to the company's success, SONGWON's management has made investing in R&D a top priority. It makes sure that R&D has the necessary resources and conditions to continue providing essential strategic support, innovation and technology across the organization. In 2020, for example, investments in equipment for the Technology Innovation Center such as the new bench scale reactors made it easier for R&D to respond to customer's needs while increasing its capability to provide high purity liquid products for the electronic chemical industry.

Strategic Support

SONGWON's R&D is structured to standardize the research process, attain the utmost flexibility and provide exactly the right competence and expertise where it is required. In addition to the performance evaluations and aligned with SONGWON's core value of continuous improvement, a training system is in place to support the development of the researchers' competency.

For SONGWON, continuous learning and a positive learning attitude are important to improving R&D resources. However, in today's world it's easy to become more dependent on external information than our own acquired experience. For this reason, we ensure that processes are established which increase technology expertise but also encourage constant enquiry rather than reliance on already available external information.

This is why SONGWON's management endeavors to ensure that R&D's researchers have an in-depth understanding of the strategic focus areas and are fully aligned with SONGWON's businesses. In 2020, R&D researchers worked flexibly across the business based on the project priority. To increase efficiency, a bi-weekly R&D activity status update report was also created to communicate and explain R&D's activities to each business.

Each business worked with its nominated R&D team member to ensure the most effective levels

of communication and knowledge-exchange. This optimized work process resulted in increasing the speed of feedback related to customers' needs and sample preparation. In 2020, a Task Force Team was also established comprising 7 key departments (R&D, Production, Procurement, P&E, EHS, QA and QC) to increase the support for launching new products and shorten decision times.

R&D & Sustainability

Sustainability and particularly the environmental aspects of the chemical business must always remain top priority. R&D's main aim is to reduce any adverse impact on the environment by reducing carbon dioxide emissions, improving process yields, minimizing the use of raw materials and supporting recycling. Committed to responsible growth, R&D's technology methods and processes are designed to offer more efficient and sustainable products that create value for customers and society.

Process improvement always plays an intrinsic role in R&D's ongoing efforts to lower manufacturing costs, reduce environmental impacts and prolong the life of end products. In 2020, R&D's researcher concentrated on designing to avoid the use of hazardous chemicals and reduce waste while developing processes aligned with the new ISO requirements.

R&D takes great care to ensure that it abides by all the relevant laws and regulations worldwide. In close collaboration with customers, R&D also develops safe products that fully comply with the latest standards and regulations in the countries or regions in which SONGWON operates.

Continual risk assessments from the lab to final production have contributed to establishing a safe working environment for the researchers and minimized risks. Safety trainings continue to be carried out regularly to keep the importance of safety at the forefront of all R&D's daily work. Also this year, the researchers in each laboratory carried out and monitored health and safety measures themselves, beyond their daily routine checks, to actively identify and improve any problems in their working environment.

Furthermore, the flexible working structure of alternating researchers in team units within R&D fully complies with SONGWON's research working hour

policy and actively reflects the social considerations and the needs of R&D team members. It also creates a good and productive working environment. Members of the team are encouraged to continue learning and enhancing their skills and their personal development is fully supported by SONGWON's management.

R&D is currently facing the era of the 4th industrial revolution driven by such things as AI, robotics, the IoT, big data, cloud computing, autonomous vehicles and

smart factories etc. With customers now demanding more accurate, precise processes and higher quality management systems than those existing for already developed products, R&D must be well-prepared before entering new markets. Therefore, R&D will be directing its efforts on ensuring that it remains well-positioned and well-equipped to develop materials for the 4th industrial revolution so that it can continue to successfully meet the requirements of SONGWON's very diverse customer base.



TAD & Technical Service

In-depth support & application expertise

The fast pace of global markets and the rapidly developing industry we serve means that our customers seek more than just high quality products. To meet today's demanding performance requirements, while adhering to the industry's regulations and safety rules, customers are looking beyond just innovative solutions to comprehensive application support and technical service.

At SONGWON, focusing on increasing our knowledge of customers' challenges and providing them with solutions is one of the keys to our ongoing success. Over the years, our long history of technical innovation and collaborative customer-centered approach has provided us with a strong competitive advantage.

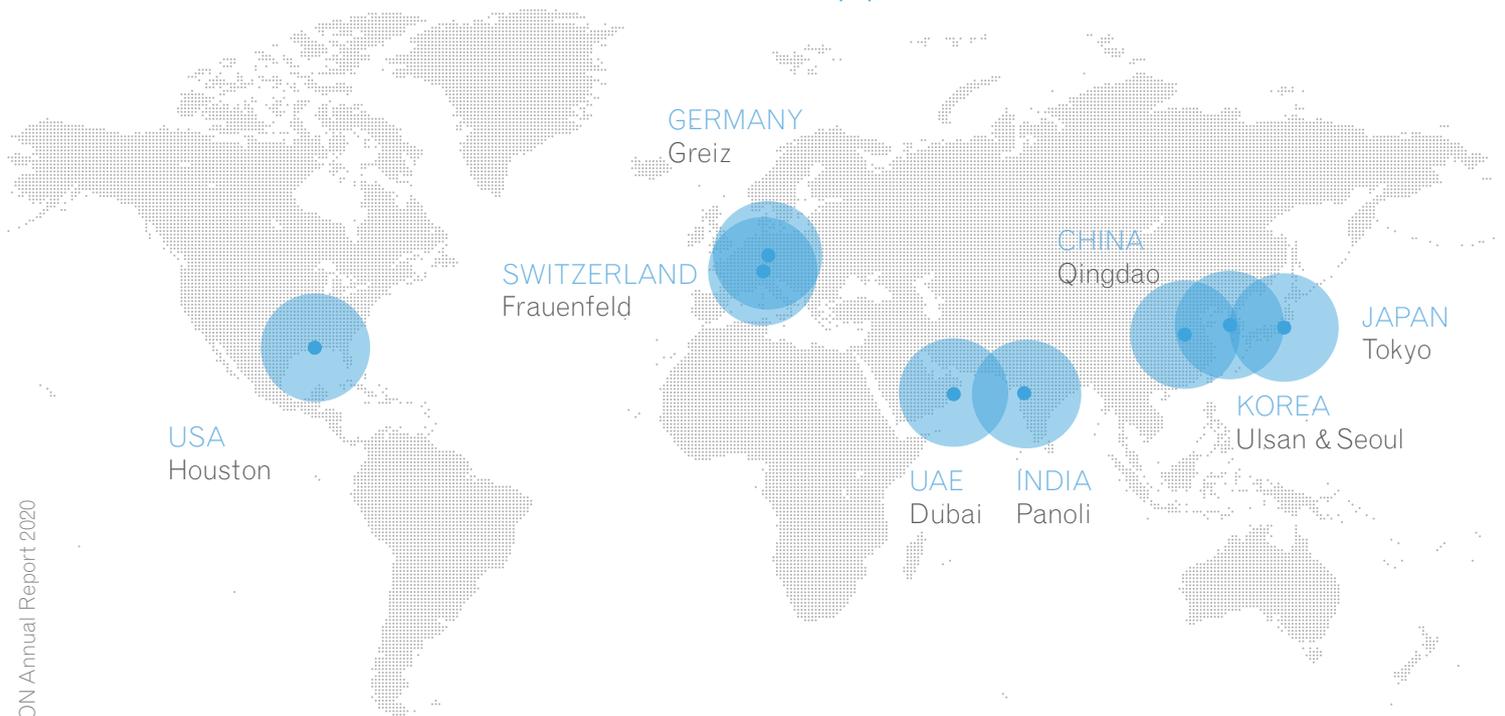
Behind this approach lies our industry experienced and highly competent experts from Global Testing & Application Development (TAD) and Technical Service. Based in SONGWON's Technical Innovation Center, they work closely together and across the global business to capture and follow-up on the most valuable

opportunities for the company while offering best-in-class support.

Building and creating lasting relationships with customers has always been one of our main aims. The management supports this and makes sure that we can maintain an outward focus on the market and provide high quality products and services that satisfy the needs of our customers and their sustainability goals. In accordance with this, it is a management priority to ensure that the TAD and Technical Service teams have all the required expertise and resources to help customers achieve premium levels of performance as well as the best value from SONGWON's products.

In July 2020, to strengthen synergy within SONGWON and better support customers' needs, the Global Application Community (GAC) became Global Testing & Application Development (TAD). Furthermore, TAD is now managed locally in Korea which has increased efficiency and improved overall communication. Within TAD, coordinators were appointed for each of the businesses. Their role is to act as the contact point for internal- and/or customer projects which has further reinforced the valuable link between TAD and the business.

SONGWON has 9 dedicated support centers worldwide



SONGWON's support centers are strategically placed across the globe and offer customers the best level of expert technical support wherever they are in the world.

Global Testing & Application Development (TAD) – added-value development

TAD benefits greatly from the synergy with Technical Service and R&D in the Technical Innovation Center. It helps the team to stay ahead of changes in the market and to the aspects of safety, sustainability and performance requirements demanded by customers.

Leveraging its extensive development expertise and industry experience, TAD unites SONGWON's technical application know-how with customers' demands. It plays a key role in supporting them with testing or application development to gain approvals for SONGWON's products and for specific applications. Although 2020, was a challenging year in every respect, TAD continued to increase the level of collaboration with customers and also its level of support.

By partnering with customers, the team also works to develop new solutions which include important aspects such as enhanced performance and features that contribute to technological advancements in a variety of applications. TAD selects the most interesting opportunities identified by Sales and Technical Service in relation to customers' requirements and the various market segments and develops them to match the demand. TAD also ensures that every innovation at SONGWON is purposefully planned and carefully executed with sustainability in mind.

Technical Service – comprehensive, close-at-hand support

Working closely with TAD and invaluable to our organization, SONGWON's Technical Service experts are business enablers and function as key facilitators between SONGWON's customers, our sales teams and our internal organization – Business Management, Manufacturing, R&D and TAD.

Technical Service works hand-in-hand with customers, helping them to identify new market segments, make product and process improvements and optimize their applications' performance by driving project efficiency. In 2020, the COVID-19 pandemic made promoting new products which require face-to-face meetings more challenging for Technical Service. However, customers were willing to participate in online video conferences, even those from countries which had not been so open for this in the past and the team took excellent advantage of these opportunities.

In 2020

TECHNICAL SERVICE SUPPORTED THE SUCCESSFUL LAUNCH OF SONGWON's NEW:

- SONGFLAME® WB 201 – a solvent-free, aqueous, flame-retardant dispersion
- SONGSORB® CS B & SONGNOX® CS B – stabilizer blends of UV absorbers, light stabilizers & antioxidants

In addition to this, Technical Service pinpoints potential areas where SONGWON's existing solutions can be improved and shares this information with the other functions. Apart from helping to develop and deliver tailor-made solutions, their main goal is to make sure that our customers get the most value out of the products they purchase by fulfilling their unique demands and offering them in-depth support.

The role Technical Service plays is becoming increasingly more important as the industry shifts towards a circular economy and customers demand more product sustainability. Driven by their commitment to finding and providing even better, more sustainable solutions to customers, our Technical Service experts continually work closely together with TAD and R&D as well as with other parts of the business. Going forward, both Technical Service and TAD will continue seeking ways to add more value and achieve more sustainability for the industry, our customers and for SONGWON.

Manufacturing

Production excellence & reliability

SONGWON's solid reputation has been built on proven excellence in manufacturing. Our production process expertise, proprietary technology and backward integration are the core strengths that have provided us with a solid foundation for continued success and supported our growth ambitions. From the very beginning, manufacturing excellence has gone hand-in-hand with SONGWON's commitment to continuous improvement and our dedication to implementing sustainable manufacturing practices in all our world-class facilities.

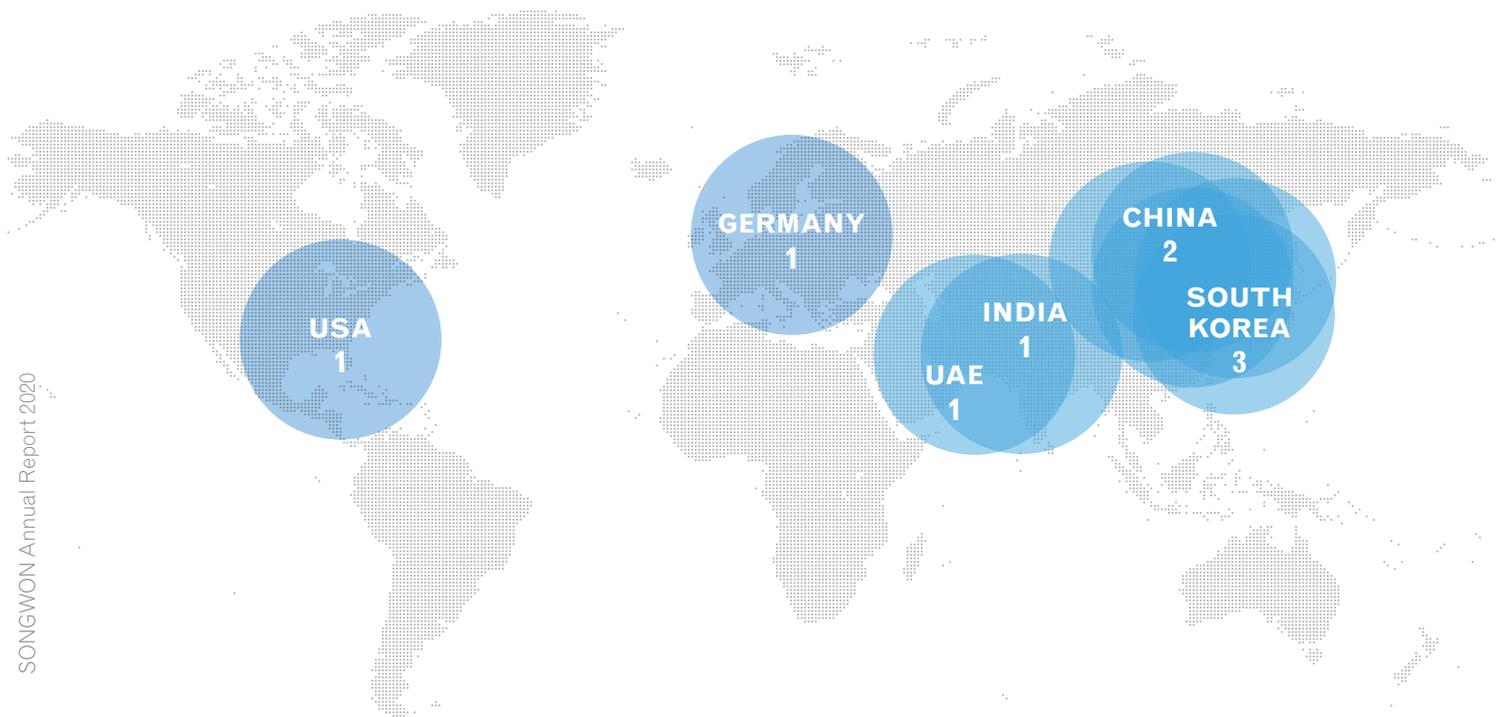
The management's approach to investing in and implementing initiatives and technologies that reinforce optimization wherever possible, strengthens SONGWON's ability to manufacture both efficiently and responsibly, while driving the highest levels of economic and environmental performance. Furthermore, supporting operational excellence, contributes to reducing complexity, shortening lead times and optimizing operational costs. It also keeps SONGWON capable of meeting customers' product and sustainability needs as well as the highest standards of environmental, health and safety performance.

High-quality, reliable supply

With the increasingly more demanding industry requirements and this year's global COVID-19 pandemic, customers have relied on us more than ever for our manufacturing quality and high standards of service. In order for us to be able to manufacture and reliably deliver consistently high-quality products to customers, we need to effectively use both our human and capital resources. And to satisfy customers' demands for more sustainability, it is essential for us to take advantage of the latest technologies to reduce costs and make use of renewable and sustainable energy resources that lower our environmental impact.

Constantly aiming to exceed environmental, health and safety standards as well as, optimizing operations and processes is an ongoing priority for us. For this reason, we are regularly implementing leading-edge manufacturing techniques and highly sustainable processes. At each stage of the manufacturing process, we have a quality check procedure in place on the one hand which is strictly followed and overseen by our in-house QA & QC experts. On the other hand, the R&D team closely monitors product quality consistency and ensures reliability. Both contribute to supporting a lower number of NCRs (non-conformance

SONGWON has 9 world-class manufacturing facilities:



reports). Furthermore, to maximize SONGWON's profitability, we apply measures for reducing our utilities' consumption wherever we can but also focus our efforts on cost reduction by improving our chemical yields.

Our world-class facilities strategically placed across the globe, all operate with the same leading-edge technology. This allows us to reliably supply the same levels of quality to our customers anywhere in the world. Regular investments in the latest technology secure not only our technological competitiveness in the growth markets we serve but also provides us with the flexibility of increasing our manufacturing capacities to match our customers' demand and delivery requirements.

Being this well-positioned proved to be invaluable for us in 2020 and helped us respond to the irregular and sometimes unexpected fluctuations in demand caused by the COVID-19 pandemic. Our ability to provide customers with global capacity assurance and operational flexibility are key elements to securing SONGWON's long-term success.

Continuing to increase our overall production capacity each year helps us to maintain our leading position in the industry. It also highlights SONGWON's ongoing commitment to supporting our broad customer base and our drive to create value for them through the latest developments in manufacturing.

Close contact with customers is something we value and is also essential because it helps us to swiftly identify trends in the market and in demand. Aligned with this, we direct all of our efforts towards ensuring that SONGWON's high-performance solutions are always available when and where our customers need them.

In 2020, SONGWON:

Installed

- semi-auto packaging facilities for SONGNOX® 2450 & SONGNOX® 3114 which brought economic & quality control benefits as well as improved EH&S.
- a low-NOx burner in the LNG (Liquefied Natural Gas) boiler to mitigate the environmental impact.
- 75 KLD of multi-effect evaporator plant capacity.
- solar power and saved energy (1MW /day).
- & commissioned of new plant for BTOD & FR products.
- & brought 8TPH capacity agro-waste briquette boiler onstream.

Improved

- DBTO capacity through process optimization.
- steam BOM by automating the process for SONGNOX® 1010 which also increased its competitiveness.

Implemented

- the use of the 50% recycled PE bag for all the main & Niche AOs.
- a cloud based online energy monitoring & recording system.
- closed loop powder handling technology to avoid product contaminations.

Started

- commercial production of BTOD (intermediate for coating additives).

Conducted

- successful pilot scale demonstration of 5 new products.

Safe & sustainable

Adhering to the highest safety standards is not only important for us, it is essential. Only when EH&S is at the center of everything we do, can we sustainably manufacture high performance products, while making sure that world-class operating standards, as well as our social and environmental responsibilities are met. Every member of our team is dedicated to doing their part every day to improve our safety performance and eliminate risks. In 2020, these improvement efforts were recognized by the Korea Occupational Safety & Health Agency (KOSHA) who granted SONGWON a higher PSM Grade (S) than in 2019.

Our aim is to ensure that all of our employees, contractors or any visitors at our manufacturing sites stay safe and every precaution is implemented to ensure accidents are avoided. SONGWON's rule is that anyone who enters one of our sites anywhere in the world is obliged to comply with the same stringent EH&S guidelines as we have in place for our employees. In accordance with this, we have created comprehensive safety videos for our plants in South Korea and India that are now included in the orientation people receive before actually entering a site. In 2020, our TRAR (Total Recordable Accident Rate) was <0.8, which was an increase over 2019 (<0.14).

Taking care of our people is also very important to us. First and foremost we do what we can to make sure that their working environment is safe and as risk-free as possible. By paying great attention to our employees' health, well-being and workplace ergonomics, we endeavor to reduce unwanted physical

and mental stress, support productivity reliability and eliminate risks. For example, we provide comprehensive training in new technologies or processes to make sure that employees stay safe and we also support them to expand their set of skills and knowledge. In addition to this, we have a Global EHS team leader who is responsible for conducting audits of each site. This supports us to maintain our high level of safety and measure real improvements so that we can identify areas where we still need to do more.

In terms of sustainability, the challenges such as meeting regulatory requirements like the CCA (Chemical Control Act) and IEC (Integrated Environment Control) are increasing every year. In response, we strive to improve and manufacture more sustainably with the aim of lowering our environmental impact. Once again in 2020, we have placed emphasis on increasing plant automation and making process improvements. In our drive to save energy and reduce waste while making more use of renewable and recycled materials, the installation of an agro-waste powered boiler and solar electrical power at our plant in Panoli are just a few examples of what we have done this year. Our regular LCAs also continue to contribute to us being better able to identify factors which have a negative impact on the environment.

Looking ahead, the Manufacturing team will continue to respond to the increasing demands from customers for faster production and more customization through further optimization and by making sure SONGWON has the technology and processes in place that support our drive to achieve more sustainability overall.



Quality Assurance (QA)

A collective commitment

For SONGWON, Quality Assurance (QA) means more than obtaining official certifications or just limited to the quality control of our products before shipping. QA is about effective systems, absolute attention to detail and a systematic approach to supporting customers' QA efforts—from their operations to their high quality products.

QA is embedded in SONGWON's company policy, reflected in the personal commitment of every QA member and supervised at the highest level of our organization. Trained in the latest methodologies, the team is highly skilled in QA tools and best practices. Each expert has a strong technical background and vast experience. Engaged in all aspects of the supply chain, QA proactively ensures that SONGWON's products meet the stringent specifications demanded and makes quick turnarounds and faster time-to-market possible for our products.

By supporting synergy throughout the company, SONGWON's management sustains the drive for continual improvement of our products, services and processes. Furthermore, the management have ensured that quality is not just a QA responsibility but that it is at the core of everything everyone at SONGWON does.

Certified quality

SONGWON first obtained ISO certification in 1995. Since then, we have a rigorous set of operating procedures in place and extensive, well-documented quality control measures. ISO certification not only highlights SONGWON's uncompromising focus on quality, it also underlines our efforts to constantly improve operations so that we can continue to consistently meet the expectations and ever-changing needs of our customers.

In 2020, SONGWON's plant in Suwon, Korea received the ISO 14001 Environmental Management certification. The ISO standard 45001 for managing Occupational Health and Safety was also implemented the other Korean plants (Ulsan and Maeam). Having the sites in both Korea and India ISO 14001 certified and ISO 45001 successfully implemented in our 3 Korean plants is important for further improving our sustainability targets. It is also testament to SONGWON's drive for optimization and improvement.

Steps are underway to achieve the ISO 45001 certification for our other sites. Not only will this help us to align and standardize all our current health and safety processes, checks and reports, it will further demonstrate our commitment to achieving more awareness of and attention to health and safety issues from our employees and visitors to our sites. Such certifications also highlight to customers that their requirements for quality and sustainability are a key priority for us.

System improved

To achieve even better transparency on SONGWON's data, processes and ISO requirements, QA upgraded its global QMS software in 2019. One of QA's major goals for 2020 was to continue the QMS improvements to optimize document handling, tracking, approvals and archiving. Accordingly, the team started implementing a state-of-the-art document handling system in one single platform for all local and global documents. While the migration of all these documents for all the entities is ongoing, QA has started evaluating and implementing other key processes on the online QMS platform, making each step transparent and easy to monitor.

Making it possible for QA to manage processes and any approvals online increases work efficiency and contributes to enhancing sustainability by reducing paper usage. In 2020, as the businesses launched new solutions, the QA team offered outstanding support by ensuring that all the relevant quality documents, standards or processes were ready and available on time and that the products met the expected quality specifications.

Quality levels maintained

SONGWON's main KPI's for the QA team support us to achieve our quality target and to do what we can to reduce customer complaints overall. The team strives to minimize the customer complaint processing time involved and endeavors to respond to customers with an accurate root cause analysis as well as share our effective corrective actions with them as swiftly as possible. Various actions and initiatives to increase the overall speed of handling complaints have been successfully implemented.

To achieve the best results, QA cooperates closely and effectively with teams from operations and the businesses. Through regular calls, meetings and reviews, progress and actions are carefully monitored to ensure that SONGWON can deliver on its quality commitment. By directly supporting the relevant departments, the team successfully achieved its 2020 target for reducing the process' duration.

QA will continue its efforts to further improve in the coming year. Compared to 2019, the team achieved 15% decrease in complaints from customers and proudly continues its positive trend of lowering complaint numbers since 2016.

QA achieved 15% reduction in customer complaints compared to 2019.

Base KPI for customer complaints = 0.64% complaints/100 sales orders.

In 2020

SONGWON's QMS WAS SUCCESSFULLY UPGRADED.

- The Suwon plant in Korea received ISO 14001 Environmental Management certification.
- ISO 45001 for managing Occupational Health and Safety was successfully implemented in Korea, Ulsan and Maeam.

High expectations

Our deep QA commitment within the business also extends to our business partners. By performing supplier audits, we confirm that our quality requirements are understood and executed according to the agreed standards. It also our way of making 100% sure that our suppliers can deliver to the agreed quality levels SONGWON has set.

Furthermore, to ensure that SONGWON's rigorous quality assurance requirements are met and helping suppliers improve quality levels, building collaborative relationships with them is as vital. SONGWON expects and requests that all suppliers practice legal compliance and promote social responsibility toward such issues as the environment, human rights, and occupational safety. We also support customer audits which provide the QA team with an opportunity to share quality aspects with customers and gain a better understanding of their expectations.

Fully dedicated to the highest levels of quality, optimal efficiency and continual improvement, our QA team proactively contributes to SONGWON's solid reputation for quality assurance and reliability that meets customers' needs and fulfills the requirements of our industry.

Regulatory Affairs

Our compliancy-based culture

At SONGWON, our commitment to compliance is reflected in all of our business activities and deeply embedded in our culture. We are all driven by our responsibility to ensure that we abide with global and regional standards, laws and regulations in everything we do. We understand that ensuring compliance is not only imperative to SONGWON's operations but also to those of our customers and our Regulatory Affairs team plays a fundamental role this.

SONGWON's management has systematically built product compliance and product stewardship activities into the company's core business processes. In doing so, they have made sure our regulatory professionals are involved in new product development right from the beginning – from R&D's stage and gate process, the budgeting and strategic planning stages, as well as the Stock Keeping Unit (SKU) set up process. This approach has also ensured that SONGWON's businesses are fully aware of how regulatory and stewardship issues impact revenue growth and profitability, product commercialization plans etc.

Strengthening our structure

This year, to achieve more efficiency, changes were made to the Regulatory Affairs organization. The team's reporting was shifted directly to the head of R&D in Korea. This strengthened Regulatory Affairs and linked product compliance more closely with internal business processes. The shift also opened up additional opportunities for Regulatory Affairs experts and gave them more chances to engage more frequently with the R&D teams. Not only did this provide the team with a greater understanding of the businesses' regulatory needs in the global marketplace, it also led to more comprehensive levels of service and support for both internal and external customers.

In 2020, the team was restructured and organized in relation to geography, function and business. Implemented in January, it aligned the team's roles to provide both the businesses and the regions with their own regulatory experts. The Regulatory Affairs experts and the business teams are now collaborating more frequently not only on daily matters, but also in leadership meetings and strategic discussions about the future of current and new products. Now each of the regions has an expert close-at-hand to

In 2020

TO IMPROVE SONGWON'S ABILITY TO PROVIDE ACCURATE & RAPID RESPONSES TO CUSTOMERS, THE REGULATORY TEAM:

- implemented a process for tracking customer inquiries & response times.
- introduced a major update to our RDS templates to better fit the business needs.
- added additional regulatory information on the RDS.
- piloted the use of workflow software to improve the RDS development & distribution process.
- improved our label change management process for the organotin business to assure the correct implementation of revised labels.

help with advice and support other functions such as Procurement, Finance and Logistics/SOIP which has proven immensely valuable to SONGWON.

Supporting customers & sharing expertise

Regulatory Affairs highest priority is making sure that all SONGWON products meet our global customers' environmental, health and safety goals. We want to assure customers that every SONGWON product fully complies with their industry's standards and expectations. Offering our expertise and support to all of our customers, including assisting them to manage the complex aspects of regulatory compliance, registration and certification is also something that we take very seriously. We make it a point to do more than just what is expected.

Regulatory Affairs Highlights

- Issued new SDSs for 301 new products
- Updated 591 SDSs for existing products
- Produced 2160 additional SDS translations
- Created 40 new RDSs
- Updated a total of 58 RDSs

Across the industry, it is standard practice to provide customers with 3 types of required essential product information such as the specification/CoA, a technical data sheet (TDS) and a safety data sheet (SDS). SONGWON supplies them with an additional 4th one, the SONGWON regulatory data sheet (RDS) which concisely outlines key global product regulatory approval information. Beyond this, we also see it as our duty to constantly share the most up-to-date information on industry standards and regulatory issues with customers, as well as the latest compliance requirements.

For this reason, we proactively anticipate future regulatory changes by participating in relevant industry associations where we can collaborate and work together with competitors and industry experts. Anticipating future regulatory changes and working closely with customers, allows us to quickly adapt and ensure constant compliance. Also, we inform customers as quickly as possible of any relevant changes on the horizon so that they can also prepare for them well in advance.

Keeping on top of challenges

Every year in our industry, the landscape of regulatory requirements is becoming more and more complex and with it also the task of remaining compliant. With their years of experience in the industry, our highly competent experts were able to continue to successfully meet our Regulatory Affairs commitments to customers and to SONGWON despite the many additional challenges in 2020.

Here are some of the current and future challenges facing Regulatory Affairs:

This year, the number of countries introducing and proposing to introduce stricter chemical control regulations has continued increasing.

- UK REACH rules were proposed which will come into effect in 2021 after the UK leaves the EU.
- Brazil, Colombia, Mexico, India, Israel & others currently have proposals for new chemical control regulations moving through drafting that will come into force within the next several years.

EU REACH & similar regulations are driving more testing of chemicals for their long term effects on health as well as their environmental impact.

- Testing costs are causing companies to look more closely at the viability of existing chemical substances in smaller markets.
- The development and commercialization of new substances is being discouraged by the cost and time hurdles of gaining the regulatory approvals.

Consumer oriented companies (major brand companies, major retailers) continue to wrestle with the concept of sustainability, social responsibility and making themselves “green” in the eyes of their customers.

- This has resulted in longer lists of prohibited substances (“black lists”), more questions for suppliers about content of the substances’ trace concentrations and a push for ISO Environmental Health or Safety certifications.
- The questions suppliers down the supply chain receive inevitably end up coming back to the suppliers of the basic chemicals used as ingredients for making the products.



Collaborating for the future

SONGWON's management has always supported collaboration within but also outside the company and sees working together as a key to preparing for the future. As pressure increases in the EU in relation to organotin catalysts, SONGWON is collaborating with other companies to communicate about the safe use and value of organotin catalysts. Together they submitted industry comments to ECHA regarding Sweden's proposal to classify DOTL (dioctyltin dilaurate) as 'Substance of Very High Concern' under REACH. As this issue moves through the decision-making process, the group will continue to engage on this topic. It will also closely engage with downstream users of organotin catalysts to make sure their voices are heard regarding the socio-economic value these compounds provide in terms of energy savings, technical performance and jobs for SMEs (small and medium enterprises) across the EU.

At SONGWON, we want to continue to be known as a responsible producer that is highly committed to people's health and safety and for taking care of the environment by minimizing all risks associated with our manufacturing activities. We also seek ways to improve the safety and environmental performance of all the products we produce. For our organization, compliance is at the top of our list of priorities. We have always fully support, the development of new regulations when appropriate voluntary actions cannot accomplish the necessary level of protection of human health or our environment. Each year, we are getting better and better at ensuring compliance is truly integrated into the very core of our operations. Going forward, the Regulatory Affairs team will continue seeking newer and even better ways to manage and ensure compliance for SONGWON and our stakeholders across all the regions.

Our People

A committed global team

SONGWON's people define our success. With their skills, entrepreneurship and excellent teamwork, they are the drivers of SONGWON's leading industry position, sustainable operations and our long-term customer loyalty. We are very fortunate to have a global team of 1,087 talented and dedicated people working for us. Representing over 33 different nationalities, their diverse backgrounds mirror SONGWON's global customer base and with their many perspectives they play an invaluable role in helping us succeed in our very competitive international environment.

HR Highlights

- Implemented a new Whistleblower Policy
- 1,087 talented people of 33 different nationalities
- Introduced an Ethics training

Working across the business and borders, our global team is united in their determination to exceed our customers' expectations by collaborating and sharing their expertise. Every individual one is driven to succeed, not just for our business but for our customers' success. In addition, to the exceptional way they perform their daily tasks, they are always willing to improve and challenge both themselves and their colleagues to go the "extra mile". It is this entrepreneurial team spirit and sense of pride that creates the inclusive, collaborative culture that has always existed within SONGWON.

The perfect mix of long-standing employees with years of experience and young, innovative new talents makes the atmosphere at SONGWON unique and family-like. Whether they are new to the organization or long-serving members, each person is 100% committed to playing their part and contributing to one united SONGWON team. This is what makes it possible for us to provide the global reach with a personal approach that our customers appreciate.

Taking care of our team

Our employees' health and well-being is of the utmost importance to us. Accordingly, we endeavor to maintain an ideal and safe working environment at SONGWON that enables our employees to master the challenges of today's working world. We want our team to concentrate on their tasks at hand and feel well taken care of at the same time. We know that only a dedicated, healthy and loyal workforce can secure long-term success for SONGWON.

The COVID-19 pandemic has impacted the whole the world and every aspect of our daily lives: our social interactions, our family life, our communities, and of course, how all of us work. Right from the outset, to safeguard our employees, customers and business operations, SONGWON's management and HR acted swiftly and communicated a safety and contingency plan that was immediately implemented at all locations.

Throughout the year, we did our part at SONGWON to stay safe by strictly adhering to local government rules and by closely following the guidelines set out by the World Health Organization to stem the spread of the virus. Communication throughout this time of uncertainty has been paramount. The CEO informed the global team on a weekly basis about the latest COVID-19 developments and reminded everyone of the importance of sticking to the government safety and hygiene rules in their regions.

Effective communication within the company was continual with the various team leaders providing frequent updates and the usual face-to-face team meetings all successfully switched to virtual. Our teams remained in direct and regular contact with our customers to learn about the challenges they faced and to ensure they were receiving the support they needed and identifying areas where we could do more.

Fostering a positive environment

SONGWON's management fosters an engaging, proactive culture where individuals and teams can deliver better business outcomes. Ensuring that all company activities are sustainable, while providing a secure, safe place to work, protecting employees' well-being and listening to their views and ideas are fundamental to SONGWON's leaders. For us, being a successful organization is not just about our performance and achievements; it's also about acting in a responsible, ethical and law-abiding way.

SONGWON's Global Team

Irish Dutch
British German
Belgian Luxembourgish
French Swiss Polish
Austrian
Portuguese Italian
American Chinese
Jordanian
Egyptian Pakistani Nepalese
Salvadorans Arab Japanese
Mexican Indian
Columbian Sri Lankan Taiwanese
Nigerian Filipino
Chilean Ugandan Malaysian Singaporean
South Korean

33 different nationalities work at SONGWON

HR's key areas of focus in 2020

- Continued to improve & harmonize group-wide HR practices
- Implemented a Learning Management System (LMS) in the Group
- Conducted ethics trainings based on SONGWON's Code of Conduct
- Established a Whistleblower Policy across the company
- Effectively leveraged multi-national expertise worldwide within SONGWON
- Recruited, developed & retained highly talented people with functional expertise
- Supported SONGWON's business continuity in the face of the pandemic
- Supported business leaders in people management
- Encouraged skill-building & employee development

It is SONGWON's culture of responsibility towards each other and all our stakeholders that demonstrates our commitment to really living our core values on a daily basis. SONGWON's Code of Conduct is a summary of essential information on company values, ethical principles, compliance with laws, rules and regulations, as well as important guidelines and procedures for our organization. SONGWON's Core Values, Code of Conduct as well as the newly introduced Whistleblower Policy established by the management, all serve to emphasize the great importance placed on issues such as equality, diversity, human rights, CSR and sustainability at SONGWON. We make sure that every SONGWON employee understands that they are personally responsible for complying with all applicable laws, directives, policies and regulations.

As part of onboarding, new employees receive a copy of the Code and HR organizes trainings to make them fully aware of SONGWON's values and rules from the moment they join our team. At SONGWON, we seek to maintain our inclusive culture where our people feel like part of a large global family. In complete accordance with this, HR ensures that the focus of our policies and practices (such as maternity or sick leave) foster diversity, respect

for human rights, offer equal opportunities and support non-discrimination. Once again in 2020, there were no incidents to report that go against the company's principles, such as corruption. SONGWON also received no significant fines (of either monetary or non-monetary value) for non-compliance with laws and regulations.

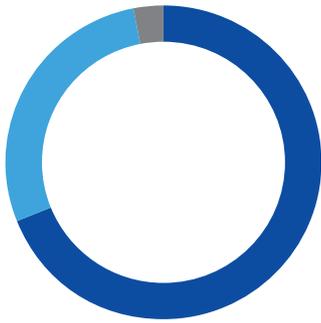
At SONGWON, we are all deeply committed to acting with integrity, fairness and in good faith with customers, suppliers, competitors, the public, as well as with colleagues. Over the years, SONGWON's management has built a corporate environment which enables and encourages people of all backgrounds and beliefs to work well together with tolerance in the pursuit of excellence. As an equal opportunities employer, treating all of our employees fairly and respectfully in line with labor and human rights policies is an absolute must.

In some locations, a few SONGWON employees are represented by works councils or unions or subject to collective bargaining agreements which are managed and monitored locally. In 2020, 4% of employees were covered by such agreements.

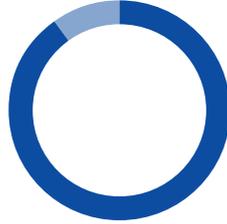
SONGWON is committed to ensuring that our global team members can realize their maximum potential by creating a platform for positive synergy, idea generation and self-expression. To support this, we promote a culture of open communication and flat hierarchies. Our employees' opinions are particularly important to us. By frequently engaging in dialogue with our people holding regular Town Hall meetings and conducting employee surveys, the management gain important insight into employee concerns and can build on the constructive ideas received to continue improving as an organization.

Also, to keep everyone connected and maintain a sense of pride throughout the company, our quarterly employee newsletter, SONGINSIDE provides a valuable overview of what's happening across the organization and helps us to celebrate our successes. We also know that no matter how exciting our employees' work is, they would find it unfulfilling without the support of our united, collaborative team.

Successes at SONGWON are shared and celebrated, and we tackle our collective challenges together. Each member of our global team is linked together by a common thread: passion, a commitment to doing their best, respect for one another, dedication to fulfilling the needs of our customers and to shaping the future of SONGWON.

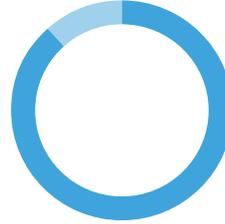


1,087
Employees



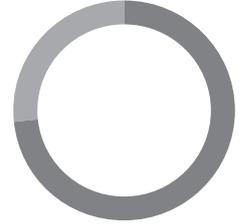
709
Asia

■ Women (75)
■ Men (634)



330
EMEA

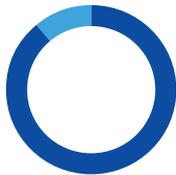
■ Women (39)
■ Men (291)



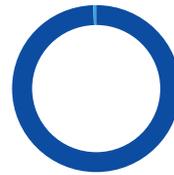
48
Americas

■ Women (14)
■ Men (34)

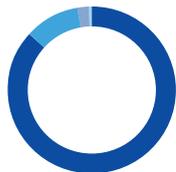
In 2020, 10 women took parental leave and 11 women returned to work.



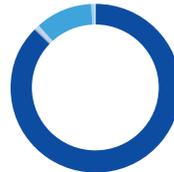
■ Women (128)
■ Men (959)



■ Permanent (1086)
■ Temporary (1)

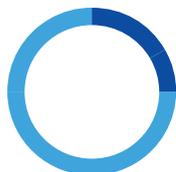


■ Men, salaried (941)
■ Women, salaried (123)
■ Men, hourly (18)
■ Women, hourly (5)



■ Men, full-time (957)
■ Men, part-time (2)
■ Men, temporary (0)
■ Women, full-time (119)
■ Women, part-time (8)
■ Women, temporary (1)

BOD & Executive Committee



■ 30-50 years old (2)
■ over 50 years old (8)



Executive Committee
■ Men (5)
■ Women (1)

BOD
■ Men (6)
■ Women (0)

Employees by gender

	Left	Hired
Total	44	50
Men	38	35
Women	6	15

Employees by age

	Left	Hired
Total	44	50
> 50 years	15	2
From 30 to 50 years	18	28
< 30 years	11	20

Investing in our people

Across the company, we cultivate an attitude that embraces constant learning, growing, and striving to do even better than yesterday. Excellent on-the-job training provides all of our people with the hands-on experience they require to advance their skills, as well as the knowledge they need to perform at the highest level possible. Our people can also gain on-the-job experience through targeted trainings which are especially tailored to the needs of their specific job function and determined according to their individual role.

Professional development and sharing experience are two important aspects which are embedded in SONGWON's HR strategy. Employee exchanges strengthen our global SONGWON team by supporting our people to gain global experience through working at another SONGWON location and to help them further expand their skill set. This year, two Korean employees relocated to Switzerland and acquired international experience in their product management roles.

Apart from offering people a dynamic international environment and the opportunity to work with colleagues and customers from many different cultures, SONGWON embraces employee self-development initiatives and entrepreneurial behavior is encouraged and rewarded. For example, in 2020, SONGWON supported members of the Customer Service team to acquire further education in foreign trade.

Seeking the best

In addition to investing in and developing the talent already within SONGWON, HR continued to seek and hire exceptional people in 2020. Creating such a family-like, supportive environment founded on personal commitment and responsibility, as well as encouraging professional growth and helping people develop their full potential is a valuable key to seeking, engaging and retaining the most talented and diverse talent in the industry.

Our HR strategy aims to attract and hire the best talents and provide them with an environment to grow and fulfill their potential. We achieve this by delivering excellent development opportunities, where people are supported by experienced, motivating managers in a global organization that cares deeply about the success of its people. It is this approach that has positioned SONGWON as one of the industry's attractive employers.

For HR, seeking out the "best", means finding people with the right qualifications and experience, but also those who possess SONGWON's key values, can contribute to maintaining the rich diversity of our people and add value to our multi-cultural environment. Growing a global organization calls for hard work and requires more than just doing a job. The members of our global team must be highly versatile to meet the many challenges and enjoy the chance to develop positive, mutually beneficial relationships with colleagues and customers in different parts of the world.

Doing by reading



An initiative introduced in R&D promotes the building of our culture and of our people and started from an idea that emerged during an annual R&D team improvement workshop in 2015. The team concluded that it is not only SONGWON's leaders who can add more value to R&D work but the researchers themselves by finding value in continual learning and a good work-life balance. To support this, the R&D team's learning development project provides researchers with access to over 120 books on topics such as management, philosophy, finance, culture, history, and science. Since it started, it has successfully broadened perspectives, positively supported ongoing learning and provided an alternative, meaningful way for researchers to spend their free time at work or at home.

The 2019 Workshop was held in the Ulsan Library.

One of the ways we continue to build our workforce is by offering challenging opportunities in all areas of the organization to the self-motivated, customer-focused and talented individuals. Generally, and in line with SONGWON's global HR policies, we do our best to 'hire from within wherever possible.' For mid- to lower-level positions, we look locally to find a qualified candidate first. If we are unable to find someone from within our organization or local, then we widen our search until we find the "right" person for the job.

We have a similar 'looking locally' approach for senior management roles because we understand the value of leveraging a local managers' insight and their cultural understanding of customers and employees in their particular region. However, our top priority is always to fill management positions with the most suitable person and this person may or may not come from one of the communities where we have a local presence. This year, HR found a perfect match from within SONGWON in Europe for a leadership position in UAE and the new manager will relocate with his family at the beginning of 2021.

Matching output to expectations

Our HR philosophy is built around acknowledging the essential role each individual plays within our organization, and the ways they add value to everything SONGWON does. Most importantly, we make sure that whatever their function, our employees feel valued themselves. With our valuable PRS system in place we ensure that our people are in line to realize SONGWON's strategy, targets and growth ambitions. Aligning the work to be done with SONGWON's organizational goals, and then assessing performance against a clear set of leadership expectations, targets and measures is how we motivate and develop our global team or highly-talented individuals.

SONGWON's PRS process is structured to assess, recognize and reward workers fairly. It provides both context and purpose for each employee's area of work, by enabling them to clearly understand what they contribute to the organization and where they can improve and develop. It also includes an individual development plan for employees on the responsibilities of their line manager. The overall aim of SONGWON's PRS is that the results and discussions deliver reciprocally beneficial feedback for managers and employees which is fair, accurate and motivating for both.

“ 2020 has been a year of unprecedented challenges and our regional and global HR teams have played an essential role in helping to secure business continuity for the organization. By swiftly implementing necessary new measures and driving key strategy, HR ensured that employees were well-supported and could continue positively contributing to SONGWON's success. ”

Beatrice Luorno,
Leader Global Human Resources

At SONGWON, we:

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



Sustainability

Sustainability	59
Corporate Social Responsibility	64
EH&S	66
GRI Sustainability Reporting Standards	73
GRI Content Index	77

Sustainability

Our approach

As a global specialty chemicals company, we understand the role that we play in leading and setting an example in our industry. To remain at the forefront, we know that we must live up to our responsibilities, manage our business with integrity, honor our commitments and most importantly be accountable to all of our stakeholders. SONGWON's management drives the overall strategic objective to create lasting value by managing innovation, operations and business practices to meet the changing demands and sustainability requirements of our markets, our shareholders and society. Our Group-wide strategy has been developed to enable us to meet the standards and requirements that are associated with sustainability and each year we systematically pursue the sustainability goals we have set for ourselves.

One key way for us to continue to demonstrate and maintain SONGWON's leadership position is through advancing our progress in sustainability. Over the years, we have learned that our commitment to becoming more sustainable is not just about acting responsibly, but also about identifying and acting on opportunities. As each year passes, our customers' sustainability challenges are increasing and with that, the requirements they set for their suppliers.

Our ability to develop innovative technologies to meet these challenges, conserve resources across our value chain and contribute to the circular economy enables us to maintain our reputation and prepare our business for a solid and sustainable future. Ensuring we can maintain profitability and gain social acceptance of our business activities is only achievable when we consider the impact our business processes have on the environment and society, and by aligning our business targets with environmental and social requirements.

As we push forward, our strategy will continue to focus on the most significant sustainability issues and opportunities facing SONGWON. To help us focus our attention on what matters most to our business and to our stakeholders, we will be specifically concentrating on the UN's Sustainable Development Goals (SDGs) and our material topics. SONGWON is committed to responsible operations, conserving resources and developing high performance products that address the sustainability challenges of our customers, our communities and our society.

Message from the CSO

At the very core of what we stand for is our long-term commitment to sustainability. For us, it is clear that success is only possible when we put health and safety first, ensure that SONGWON is environmentally responsible and give back to the communities in which we operate. Ultimately, sustainability is about maintaining a healthy balance between people and the environment. This year, the COVID-19 pandemic has shown us just how fragile this balance is.

As an industry leader, SONGWON has demonstrated its agility and strength in facing challenges at hand, even the unexpected ones because we have always been able to build on our sustainable values. Sustainability is inherent in the way we think about and approach nearly every aspect of our business, from operational efficiency to product development and from employee engagement to ethical leadership. We also see sustainability as journey with a strong commitment to, and belief in, our ability to drive positive change. There will always be more work to be done and SONGWON remains committed to making its contribution to building a more resilient future for our planet and for future generations.

Philippe Schlaepfer,
Chief Sustainability Officer

Strategy with integrity

SONGWON's management not only aligns the organization's resources but also makes business decisions and develops strategies while keeping in mind the short and long-term impact that these may have on SONGWON's stakeholders – from our employees, business partners and customers to our communities, the environment and society at large. The management also ensures that everyone at SONGWON clearly understands that how we conduct our business is as equally important as our results, and how we behave must always be based on legality and integrity.

SONGWON is fully committed to respecting human rights along the entire value chain and regards this as a central element of integrity and responsible corporate governance. SONGWON has a holistic approach to human rights which not only encompasses our own operations, but also takes into account our supply chain, customers' business activities and those of our partners. We also do our best to identify and assess adverse impacts as early as possible and mitigate them swiftly and responsibly.

Our global team is committed to sharing our expertise and working closely with our customers and partners to develop products, applications and solutions that meet both SONGWON's and our stakeholders' sustainability needs. SONGWON's product portfolio, combined with our technological expertise and innovation, give us the opportunity to develop sustainable products and solutions that can help our customers address a wide variety of environmental issues. By developing more applications that bring savings in energy and resources, SONGWON is adding value - value for our customers, our people, our investors as well as value for society and for future generations.

At SONGWON, we believe a balanced approach to people, the planet and our products is essential to our long-term success and to achieving our sustainability targets.

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.

OUR STAKEHOLDERS

At SONGWON, we are guided by the voices of our stakeholders. By regularly engaging in transparent and collaborative dialogue with them, we are able to 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 what they need.

OUR PLANET

Sustainability is more than just “going green”. It's about building a sustainable business for the future. We do this through long-term decision-making designed to have positive economic, environmental and social outcomes. Key to this is our responsibility to keep challenging ourselves to reduce our impact on the planet - both in our daily operations and in how we develop as an organization.

OUR SOLUTIONS

Working proactively, we develop sustainable high performance products and solutions that benefit both society and the environment. By optimizing our manufacturing processes to reduce the consumption of energy and resources, conducting LCAs and seeking better solutions, SONGWON is adding value - value for our customers, our people, our investors as well as value for society and for future generations.

Sustainable development

Our global team is committed to sharing the expertise it has, and working closely with customers to develop products, applications and solutions. Using our innovation drive and technical expertise, we can deliver sustainable products and solutions to help our customers address a wide variety of issues relating to the design, performance, recycling and lifecycle of plastics.

Our drive for more sustainability

In 2020, SONGWON:

- engaged in new recycling projects with the aim to further reduce our packaging waste & continue to contribute to a circular economy.
- became an affiliate member of PCEP (Polyolefin Circular Economy Platform) & is actively contributing our stabilization expertise to support polyolefin recycling initiatives.
- launched a company-wide initiative to extend SONGWON's sustainability management system across the global organization.
- further integrated the company's sustainability strategies as well as all the various initiatives into SONGWON's global strategy & operations process.
- began a global initiative to evaluate and audit SONGWON's key raw materials suppliers according to a multi-dimensional list of criteria (environmental & CSR aspects) to have them all audited in environmental & CSR compliance by 2023.
- conducted an employee survey to collect opinions on SONGWON's overall sustainability management as the basis for our continuous improvement programs and action plans.

For example, our Stabilizers extend product lifetimes (durability), reduce the amount of plastic required and hence decrease the emission of CO₂ and the consumption of fossil resources. Our Coatings solutions also come in a variety of physical forms. They can be either water- or solvent-based and our efforts to replace solvent- with waterborne coating technologies and reduce the generation of volatile organic compounds (VOCs) are ongoing.

We know how important it is for all plastics value chain players to contribute to a circular economy and find sustainable solutions that consider the entire lifecycle of plastics. In line with this, we perform LCAs (lifecycle assessments) which help us to understand where negative impacts occur upstream.

It also improves our ability to support customers by providing the transparency they need to secure sustainability in their supply chains. This is just one of the many ways that SONGWON helps customers to measure and reduce their environmental impacts.

We have been working for many years to become a more sustainable business and focused particularly on the specific challenges that we face in our industry and aligning our business targets with environmental and social requirements. Enabling change means seeking alternatives and to progress. Therefore, we include SONGWON's business partners in this process and make a point of actively engaging in dialogue with our stakeholders on sustainability issues.



Our approach towards a circular economy

We recognize and embrace our responsibility towards the environment and society. At SONGWON, we want to lead by example. Through our commitment to supporting the United Nations' Sustainable Development Goals (SDGs), we want to encourage other players in the plastics value chain to shift from a linear to a circular economy and to seek sustainable solutions that consider the entire lifecycle of plastics.

Contributing to a sustainable tomorrow, today

In SONGWON's 55 years of history, we have learned to constantly prepare for the future and the many changes it brings. And as our business expands around the world, so do our sustainability priorities and they drive our efforts to create value for future generations. We consider it our duty to contribute something that will last, to act with environmental responsibility and to respect and preserve our world for the future. We are deeply committed to reducing our impact on our surroundings, addressing local and global environmental challenges and striving to advance environmental sustainability.

We know that finding sustainable solutions is only possible if all of us work hard within SONGWON as well as engage and collaborate across the entire value chain. Therefore, in order to do our part to drive the industry's transition towards a more sustainable circular economy, we seek every opportunity to join

forces and cooperate with other businesses, trade partners, regulators and organizations. For us, strong collaboration is the key to a more sustainable future.

Green Business Network

An initiative to shift from thought to action

In 2019, the Environment Agency – Abu Dhabi (EAD) launched the Green Business Network - a platform for public and private sector organizations in Abu Dhabi to learn, promote and share environmentally-friendly practices. The main aim of the initiative is to empower large corporations and small to medium size enterprises to make a greater collective contribution to the Emirate's sustainable development plans.

The platform also fosters dialogue and action to encourage responsible business activities in the UAE, in response to trends in consumption, government policy and costs that point to greater green business opportunities in the years ahead. With 72 members, the Network's key priority areas are marine water quality, air quality, biodiversity and waste. SONGWON has been a contributing member for 2 years.



Corporate Social Responsibility

Committed to “giving back”

At SONGWON, Corporate Social Responsibility (CSR) is at the heart of our business and an integral part of who we are. We have always believed that performance and responsibility are inseparable. For us they belong side by side, and this belief is a key part of our culture. Therefore, from the beginning, CSR has always been a fundamental part of how we do business. Overseen by the CEO, SONGWON's approach to CSR is founded on the values of passion, integrity, excellence, credibility and teamwork, and focused on understanding the needs of our customers and our communities.

For us, CSR is not just an afterthought or a question of compliance at SONGWON. It is as important to us as delivering innovative solutions and top service to our customers. Central to our business, CSR also guides us in managing our impact on society. It ensures that we always consciously consider the direct and indirect impacts of our operations on all SONGWON's stakeholders including our employees, partners, customers, suppliers and most importantly, the local community.

SONGWON's goal has always been to strive to achieve meaningful economic, social and environmental value in everything we do. We have a long history of embracing CSR initiatives to help promote positive change in the wider community and of adhering to ethical business while operating our business sustainably. At the very center of our approach lies our commitment to collaboration which means working alongside local, regional and national partners to achieve mutually beneficial outcomes – not just for us but for society as a whole.

Central to this, our management seeks to ensure not only the health and safety of our employees and having the utmost respect for their human rights, but also for those of the people residing in our local communities. Supporting the communities where we live and work to thrive is also important for the well-being of our business and contributing to their success is what builds our success.

SONGWON's management makes every effort to maximize the benefits to local communities, for example through employment opportunities while reducing any negative impacts our business could have whenever possible. In every respect, CSR is an integral part of how we operate and make business decisions.

We have selected 3 areas to offer our support which align with our sense of “giving back” and supporting our local communities.

SONGWON supports

Healthy lives

Although health is a basic human right, the UN estimates that more than half the global population* has no access to proper healthcare. For this reason, SONGWON supports a number of healthcare initiatives and human service efforts dedicated to helping people lead better, healthier lives.

Raising awareness

We know that even the smallest actions can have great outcomes for our communities. Focusing our CSR efforts on supporting projects dedicated to ensuring people's general well-being and providing information on relevant issues is also important to us. Positive change is possible on all levels and by offering support to initiatives which are not always highly profiled, we hope to play a part in making a difference to people's lives.

Local communities

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 responsibility, we see it also as a business imperative. For this reason, we are continually looking out for ways to offer SONGWON's support to local community projects.

* www.weforum.org

Doing the right thing

Across SONGWON, we believe that CSR is about doing the right things and fostering a culture of responsibility that allows our outstanding people to work together across our global organization to support CSR initiatives and live the commitment to “giving back”. Over the years, our sense of CSR has taught us many valuable things. The most valuable perhaps, is that people are at the center of all of our efforts. It is their passion and commitment that drives all progress and ensures that we are able to achieve the most positive impacts. People help shape the future. They make a difference and they make things happen.

Give something back to our local communities and addressing some of the wider issues that affect us as global citizens is deeply important to us at SONGWON. In line with this, it is more than fitting that the ways we seek to do this are all centered on people. We reach beyond the positive contribution that SONGWON's products make to support various programs and initiatives around the world that focus on improving lives in our local communities.

Here are some of the initiatives that SONGWON supported in 2020:

DR. JANG GI-RYEO MEDICAL CLINIC

Supports ill people that live in the local communities in South Korea. Volunteer doctors, nurses and members of the Blue Cross Medical Corps provide free medical support to poor patients who cannot afford hospital care. In 2020 when the pandemic started, various programs were initiated to support mental health e.g. people with depression or help the elderly to cope with isolation and other challenges that came with COVID-19.

BLUE CROSS MEDICAL CAMP IN LAOS*

Serves the rural villages in Laos, one of Southeast Asia's poorest countries, the medical camp run by the Korean Blue Cross Medical Corps, treated and medically supported people who would otherwise have no access to medical treatment. The Korean Blue Cross Medical Corps also runs a CPR training program for children in Laos.

KOREAN BLUE CROSS MEDICAL & VOLUNTEER CORPS PROGRAM

Provides a service dedicated to providing free medical treatment, first aid training, health awareness and hygiene trainings, CPR education as well as improving the lives of people with disabilities. In 2020, this was key to helping people understand the importance of hygiene, social distancing and wearing masks.

SHOES OF HOPE FOR LAOS

Charitable initiative that gives underprivileged children in Laos soccer shoes and educates them in hygiene. In 2020, the shoes were delivered directly to the children with a personal letter containing tips and disinfectant.

Many of the initiatives that SONGWON supported (some already for many years) were prevented from continuing or taking place after February 2020, due to government restrictions and/or guidelines related to COVID-19. Up until then, SONGWON offered its full support and is ready to do so again when the initiatives can safely restart their activities.

To support the battle against COVID-19, SONGWON also made contributions to charitable organizations in India.

JAYABEN MODI HOSPITAL

A specially designated COVID-19 Hospital for treating patients with COVID-19.

PRIME MINISTER'S CITIZEN ASSISTANCE AND RELIEF IN EMERGENCY SITUATIONS FUND

This fund was established to support the fight to contain the spread of COVID-19 and offer help to relief work.

PRIME MINISTER'S NATIONAL RELIEF FUND

Established entirely with public contributions, the fund provides support for people affected by natural and man-made disasters.

DISTRICT HUNGER, POVERTY AND MALNUTRITION FUND

Run by the District Magistrate office and supported by the state government, this initiative was set up to prevent hunger among poorer citizens during the COVID-19 lockdown period.

* Songwon has supported this initiative since 2001.

EH&S

Total commitment to EH&S

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. Health and safety is, and always will be, our top priority. Fundamental to our core values and at the forefront of all aspects of our global business operations, the management makes sure that our commitment to health and safety remains uncompromised.

Over the past decade, we have made tremendous improvements in EH&S by increasing the awareness of its importance across the company. In each of SONGWON's plants, we have well-established EH&S safety policies, clear procedures and performance standards in place that encompass much more than the minimum required to comply with laws and regulations.

Providing safe and healthy work environments for all of our stakeholders (employees, contractors, neighbors), is an obligation we take very seriously. We want SONGWON to be seen in our industry as a trustworthy organization with a heightened level of safety awareness and a solid safety record. Our ongoing commitment to the long-term health and safety of our people and protecting the environment, in which we operate, has enabled extensive EH&S improvements across our entire global organization.

Full compliance with all social and environmental regulations is firmly anchored in SONGWON's corporate philosophy. Protecting our stakeholders, our facilities and the environment, as well as strongly advocating the sustainable use of natural resources and raising environmental awareness are major components of SONGWON's mission statement.

SONGWON's safety culture is not cultivated by a top down approach but based on everyone working together in an environment where the protection of each individual is non-negotiable. Every member of the global team actively participates in identifying and managing risks, and together we seek ways to protect the environment and improve the health and safety of our operations. This collective dedication highlights SONGWON's commitment to sustainability leadership to all our stakeholders.

Aiming for zero incidents

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. Inherently believing that all accidents are preventable and that by applying safe working practices, hazards can be safeguarded against or removed, the management does everything in its power to create the safest working environment possible and keep EH&S as a top priority.

In addition to safe, healthy facilities, making accident-free manufacturing possible requires committed, safety-aware employees who are constantly alert and focused on identifying any possible threat to general safety and well-being. We are convinced that zero accident safety is achievable if our people have the right attitude and the will to eliminate risks, make the right decisions and follow up with the most appropriate actions.

Each year, we continue our efforts to raise EH&S awareness and best practices among our workforce with comprehensive information and trainings. We use chemical accident videos and EH&S materials created both by SONGWON and by official external authorities. This approach helps us to instill higher awareness of critical issues while fostering a sense of responsible care among all company levels and cultivating a proactive safety attitude throughout SONGWON. We are proud to report that in 2020 at all of our manufacturing sites, among all the SONGWON personnel and our contractors, we had no fatalities during the year. At our Panoli plant in India, there were also no recordable accidents this year.

Should any accidents occur, they must be reported. We compile the accident report data in our global database and carefully classify any injuries according to the local laws and record-keeping criteria. Accident report data involves all SONGWON Industrial Co., Ltd. employees, as well as any contractors operating in our plants. In keeping with SONGWON's continuous improvement strategy, preventative measures were also installed this year. To strengthen our process areas, we carry out continual investigations and assessments of all the possible risks within the organization. In order to enhance these efforts, we cooperate with the Korean Ministry of Labor.

Regular safety walk inspections are carried out as well as emergency drill training with the local fire station and relevant government agencies. In addition, we continue to apply OCA (Offsite Consequence Analysis) and the RMP (Risk Management Plan) in accordance with the Korean regulation (Chemical Control Act) and SONGWON undergoes regular safety inspections and assessments. After the establishment of a digital management system for PSM (Process Safety Management) at Maeam, KOSHA (Korea Occupational Safety and Health Agency) upgraded the plant with an "S" grade after its 2020 inspection.

In 2020, the EH&S team responded swiftly to the outbreak of the COVID-19 pandemic by creating a COVID-19 safety manual containing a range of safety measures aligned with the government and the World Health Association's guidelines and recommendations. Not only did it include guidance on social distancing and hygiene but also on external visitor access control and advice for home office working employees.

In 2020

EH&S ACTIVITIES:

- Prepared IEC (Integrated Environment Control) – ongoing until 2022.
- Self-inspection for PSM & risk management plans in the 3 Korean plants.
- PSM implementation status check by MAPC (Major industrial Accident Prevention Center) in Ulsan & Maeam.
- Risk management plans implementation status checked by NICS (National institute of chemical safety) in Maeam.
- Established a digital management system for PSM in Maeam & created explosion-proof documents for the plant.
- Installed the gas and leakage detectors & CCTV to prevent hazardous chemicals leaking in Maeam.
- Began implementing the process risk re-assessments (HAZOP, K-PSR) in Ulsan & Maeam – ongoing.
- Trench capacity expansion for loading and unloading toxic substances in Ulsan & Maeam.
- Chemical resistant coating for the spill prevention wall of the outdoor storage tank farm at Maeam.
- Conducted regular safety walks and yearly health inspections in the plants.
- Installed safe loading and unloading facilities for hazardous materials.
- Carried out LCAs (lifecycle assessments) on products manufactured in Ulsan.
- ISO 45001 certification (Occupational Health & Safety Management) for SONGWON's Head Office, Ulsan & Maeam.
- Continued work on initiatives for circular economy & to reduce SONGWON's environmental impact.
- Further reduced GHG emissions and saved costs by replacing of metal-halide lights with LEDs.
- Replaced natural gas fired steam boiler with a agro-waste fired steam boiler at the Panoli plant.

TRCR: Total Recordable Case Rate

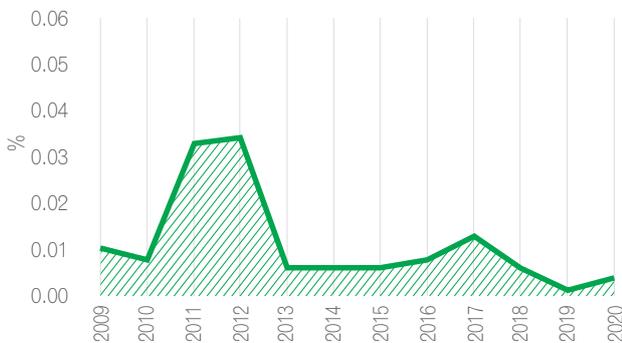
Recordable accidents *200.000 / total working hours



The Total Recordable Case Rate (TRCR) in 2020 reached 0.36 and SONGWON registered a 0.004% Total Lost Day Rate (LDR). For the 10th continuous year, there were no fatalities. The organization achieved a "0" Occupational Diseases Rate (ODR) and 0,0097% Absentee Rate (AR).

LDR: Lost Day Rate

total lost days/total worked hours



Environmental awareness

SONGWON's management team fully backs the development of processes that save energy, lower emissions and reduce the company's overall carbon footprint to ensure that SONGWON is able to meet its long-standing commitment to contributing to a better world.

We have a well-established and rigorous program for optimizing processes and increasing general competitiveness by lowering costs, as well as significantly reducing energy consumption, waste production and CO2 emissions. Throughout 2020, to

reduce SONGWON's overall environmental impact we directed our efforts to reduce in-direct energy consumption by improving the process for our antioxidant SONGNOX® 2450 which reduced the steam and power consumption required.

Within the framework of our ongoing EH&S performance improvement strategy, we continued to implement the necessary technical advancements in order to fully comply with all EH&S rules. One is the Chemical Control Act in Korea which concerns the handling and management of chemicals to protect public health and prevent environmental harm.

One of SONGWON's most significant efforts this year was receiving the ISO 45001 certification which enhances systematic Health and Safety management by enabling us to better predict and prevent risk. In addition, this also increased the awareness of customers, investors and the local communities of SONGWON's commitment to EH&S.

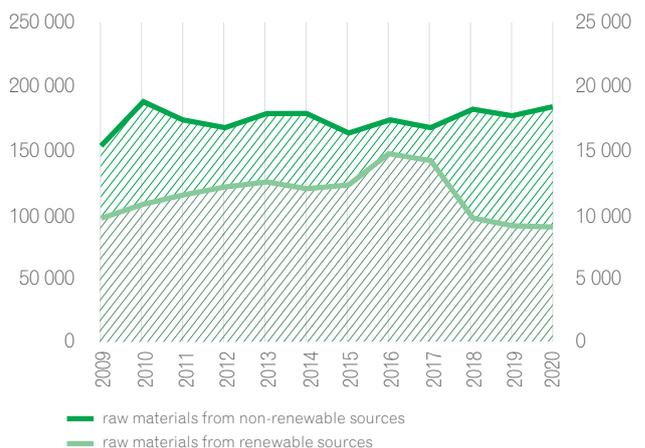
Materials

Raw materials

SONGWON always seeks to find opportunities to use raw materials from renewable sources wherever possible. However, the majority of the raw materials we require are metals or oil derivatives which mean that there are very few key raw materials that we can renewably obtain. Stearyl alcohol derived from palm kernel oil is the only raw material available from a renewable source and roughly represents just 5% of SONGWON's total raw materials requirements.

Raw materials used

in tons



Recycled materials

In 2020, by using recycled PE (polyethylene) bags which contain 50% recycled PE, we reduced 115 tons of PE use in its Ulsan and Maeam plants, thereby also reducing SONGWON's environmental impact.

Energy

In January of 2015, South Korea launched its national ETS (KETS, Korea Emission Trading System) – a cap-and-trade program. This type of ETS is mandatory (threshold: company > 125,000 tCO₂/year, installation > 25,000 tCO₂/year) for operating companies with voluntary opt in. Participation for SONGWON is mandatory.

SONGWON's initiatives

SONGWON has a range of ongoing initiatives which are contributing to the organization reducing its energy needs and have led to providing energy-efficient or renewable energy-based products and services.

We have a program in place that involves the incineration of all the volatile organic compounds (VOC) produced in the plants, making it possible for us to generate all the steam we require for SONGWON's manufacturing process. In the Maeam plant, 3 incinerators have been in operation for 9 years, and an efficient steam generator based on the LNG (liquefied natural gas) has been used for the past 8 years.

At the Ulsan plant, SONGWON has been replacing the metal-halide lights with more energy efficient LEDs which has led to noticeable benefits. Due to the fact that LED lights use only approx. 25% of the energy needed by a metal-halide light and have a much longer service-life, the plant is succeeding in reducing energy consumption as well as overall costs. Furthermore, LEDs emit less heat making them much safer for our operators and saves considerable energy every year.

In addition to these, we have also implemented several energy consumption reduction initiatives in our Panoli plant in India such as successfully establishing an in-house Energy Management System, which has contributed to a saving of 375,000 KWH. This was achieved by replacing CFL lamps with LED. Furthermore, motion sensors and timers have been installed to reduce electricity wastage and air

conditioners with energy efficient scroll compressors. SONGWON's total annual energy consumption in 2020 decreased by 18% compared to 2019. This was the result e.g. of the solvent-free reaction of SONGNOX[®] 2450 in Ulsan, the automation of the SONGNOX[®] 1010 plant in Maeam and the use of the Agro-waste briquette fired boiler in Panoli.

Direct energy consumption

Approximately 100% of SONGWON's direct energy consumption is in the form of natural gas and most of it is used for generating steam and heating oil. In 2020, SONGWON consumed 952,826 GJ, which marks an 8% drop in consumption over 2019.

Direct energy consumption

In GJ (gigajoules)

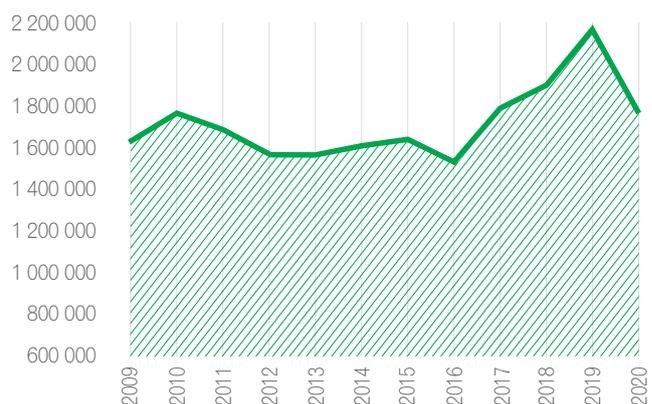


Indirect energy consumption

SONGWON purchases almost 66% of the electricity and steam for its plants from the local utility companies who are using renewable energy sources.

Indirect energy consumption

In GJ (gigajoules)



Emissions

In South Korea, individual energy reduction measuring activities are not calculated singly and separate from each other but as follows:

$$\frac{\text{Emission allowance} - \text{Actual Emissions}}{\text{Emission allowance}} = \text{Emission reduction} \quad (\text{Unit: tCO}_2\text{eq/year})$$

Under South Korean law, actual emissions are measured according to the "Guideline for the Greenhouse Gas Target Management System" and "The Allocation and Trade of Emission Allowance of Greenhouse Gas Act".

This is applied as follows:

- NCV = Net Calorific Value
- EF = Emission Factor
- GWP = Global Warming Potential

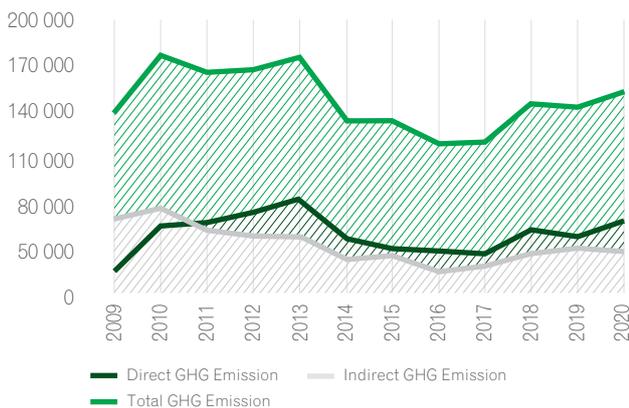
Direct & indirect greenhouse gas (GHG) emissions

Working to progressively lower carbon emissions is SONGWON's main objective. We already fulfilled our goal to reduce general GHG emissions by 11% by 2020 compared to 2013 (GIR, Greenhouse Gas Inventory and Research Center) last year. In 2019, SONGWON was already 15% above its committed target and remained at the same level in 2020. This year, our direct GHG emissions were 87,215 and our indirect GHG emissions amounted to 71,447.

The data reported here includes the direct and the indirect emissions from our electricity and steam purchases. SONGWON has no other indirect emissions to be recorded in 2020.

GHG emissions

in tons CO₂e



Significant air emissions

Nitrogen oxide (NO_x), sulfur oxide (SO_x) and particulate matter (PM) emissions are automatically measured in SONGWON's manufacturing facilities by in-line analyzers. These values are sent in real-time to the relevant government agencies.

NO_x

in kg



This year, SONGWON recorded a 20% reduction in SO_x, a 45% reduction of PM and a 32% decrease in NO_x air emissions compared to 2019.

SO_x & Particulate matter

in kg



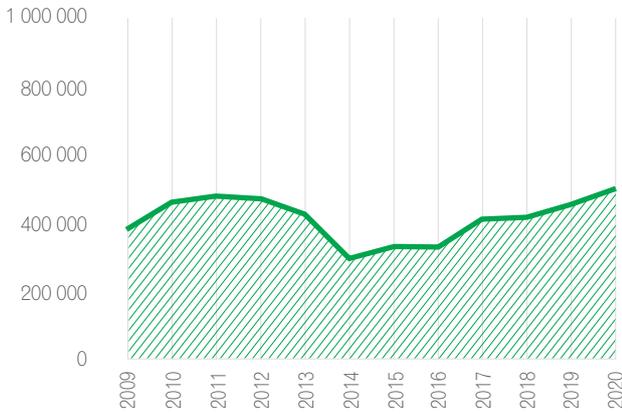
The overall 33% average decrease in air emissions compared to 2019 was related to the TMS (Tele Monitoring System) calibration and process optimization of SONGNOX[®] 2450 and SONGNOX[®] 1010.

Water

Total withdrawal of water by source

According to the direct onsite measurements made, SONGWON's total water consumption increased by 2% compared to 2019. This can be attributed to the increased volume of Tin intermediates.

Water withdrawal



For its Ulsan, Maeam and Panoli plants, SONGWON purchases water from the local municipality and suppliers. The water required by SONGWON's Suwon plant is directly sourced from underground.

Effluents & wastes

Total water discharged

All the water discharged by SONGWON's manufacturing facilities is internally treated and then conveyed to the central water treatment plants in the local municipalities. It is there that the organic content is reduced further and then released into the sea or discharged to a regional water treatment facility (e.g. as in Panoli, India).

Water discharged



Due to the trial production of new product, COD concentration increased in Ulsan and it will take time to recover the previous conditions.

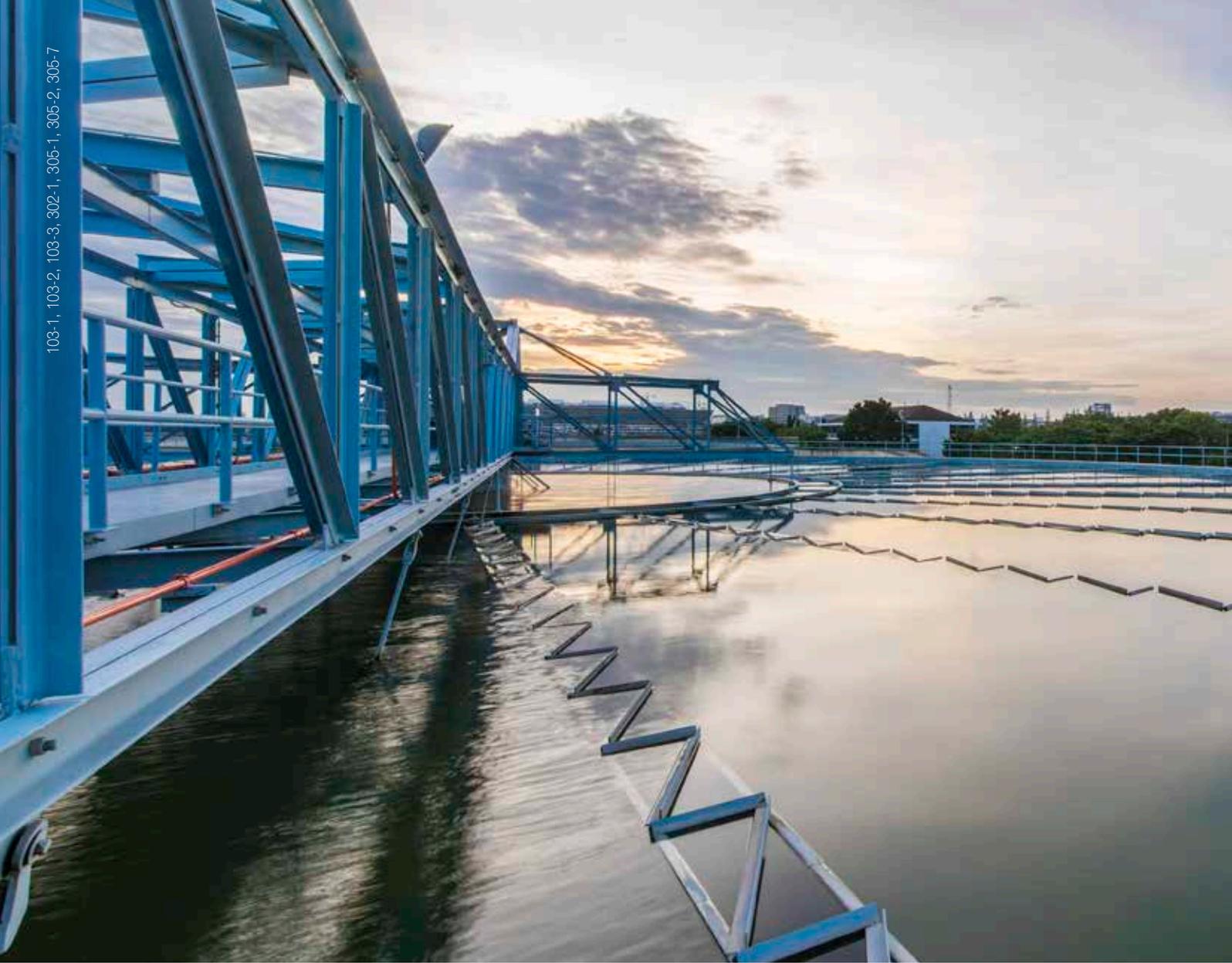
Discharged water quality

COD (ppm)



Other wastes

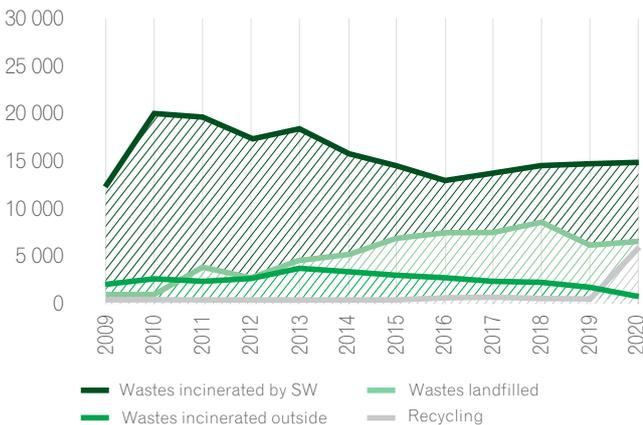
This year, SONGWON's operations generated 32,110 tons of hazardous wastes. When compared to 2019, the total hazardous waste disposed by SONGWON in 2020 increased by 18%. This was due to the SONGNOX® 1680 production volume increasing by 10% in 2020. However, when compared to the production volume between 2019 and 2020, the increase was only 2%.



In addition, comparing the production volumes of 2019 and 2020, the waste incinerated by SONGWON was reduced by 4%. Waste incinerated externally also decreased by 48% but the organization significantly increased the amount of recycled waste by 912% over the previous year after changing the treatment method of waste water sludge from landfill to recycling.

Wastes disposed outside of SONGWON

in tons



Significant spills

SONGWON has not had any spills to record or report since 2008. The company also has none to record or required to report in 2020.

Biodiversity

SONGWON does not own, lease or manage anything that is in, or near protected areas or areas of high biodiversity. Also, to the best of our knowledge, none of SONGWON's activities, products or services significantly impact biodiversity.

Non-compliance

Throughout 2020, SONGWON was in full compliance of all environmental rules and regulations and did not receive any fines.

GRI Sustainability Reporting Standards

Our approach to GRI

This report has been prepared in accordance with the GRI Standards: Core option.

It is aligned with the four GRI reporting principles:

- stakeholder inclusiveness
- sustainability context
- materiality
- completeness

These have been taken from the guidance in GRI 101: Foundation 2016.

We have consistently applied these GRI principles to varying degrees throughout this report.

Category: Content

Stakeholder inclusiveness

We make a point every year to identify and engage with SONGWON's key stakeholder groups. Apart from the day-to-day interactions with our stakeholders through the various communication channels, we also conducted a specific employee survey this year to better understand their needs. Through various stakeholder exchanges and internal discussions amongst SONGWON's Management, we ascertained our stakeholders' areas of interest and concerns and applied the Stakeholder Inclusiveness principle to the context of this report to match these aspects. Throughout the report, we also provide clear explanations on how we engage with stakeholder groups, including our understanding of their interests and expectations as well as how SONGWON responds to these.

Sustainability context

By examining global trends related to sustainability across the regional and local contexts in which SONGWON operates, we identified various priorities. This report outlines the wider context in which we operate and presents our sustainability performance related to both our corporate performance and global sustainable development goals. We are committed to monitoring SONGWON's performance relating to material sustainability issues and direct our efforts towards continuous improvement.

Materiality

This report is created for our stakeholders, but also as a tool for us to measure and review SONGWON's operations. The material topics covered in this report have been determined by the Board and Executive Committee to be priorities and are integrated into our strategy. They reflect the most relevant economic, environmental and social impacts and contributions which have the biggest potential impact on SONGWON's stakeholders and our ability to create long-term sustainable value.

Completeness

This principle was implemented after the examination of specific and material topics to ensure all information relevant to assessing SONGWON's economic, environmental, and social performance has been reported. Furthermore, it facilitates determining the boundaries of topics and enables stakeholders to assess SONGWON's performance during the reporting period.

Category: Quality

Accuracy

All the information presented in this report is aligned and in accordance with GRI Standards. We have aimed to achieve maximum accuracy and to make the information traceable, accurate and reliable while clearly identifying where estimates or limitations in our published information exist. In order to confirm accuracy, our financial results are also audited by the Group's auditor.

Balance

We have aimed to achieve balance throughout the report by providing and evaluating SONGWON's performance in terms of challenges and opportunities based on material issues and future targets, and making references to those occurring in the reporting year. In addition, we report on our positive performance as well as areas that require us to improve and re-evaluate. Each year, we also fully report on the same KPIs as in the previous year, independent of whether SONGWON's performance has improved or declined.

Clarity

We have designed the content of this report to be easily navigated and read. The straightforward language style is presented in such a way as to clearly communicate the information with visuals to highlight and support key data. For this reason, we have aimed to avoid the use of complex technical references, industry jargon and excessive detail. Keeping sustainability in mind and to cater to personal preferences, SONGWON's report can be downloaded or printed as required.

Comparability

Applying the GRI Standards makes SONGWON's annual report more comprehensive and transparent. The GRI Standards also make it possible for SONGWON to be easily compared with other companies around the world due to the fact that the GRI Standards are used internationally. Furthermore, our previous Annual Reports are all available for comparison on the SONGWON website (www.songwon.com) and we have provided year-on-year data following GRI Standards wherever appropriate.

Reliability

The information in this report has been reviewed by SONGWON's senior management, business leaders and the Group's auditor, Ernst & Young Han Young. Throughout the report, sources of all third party / external information provided in the text have been included.

Timeliness

SONGWON is committed to reporting sustainability information at least once a year. The information presented in this report relates to FY 2020. In addition to this report, SONGWON's financial performance information is published in quarterly reports. All this information is available throughout the year on the company's website and aligned with the organization's annual financial reporting schedule.

SONGWON's Stakeholders

Investors

**Governments
Local/Regional/National**

Employees

Consumers

Shareholders

Suppliers

**Industry /
Trade Associations**

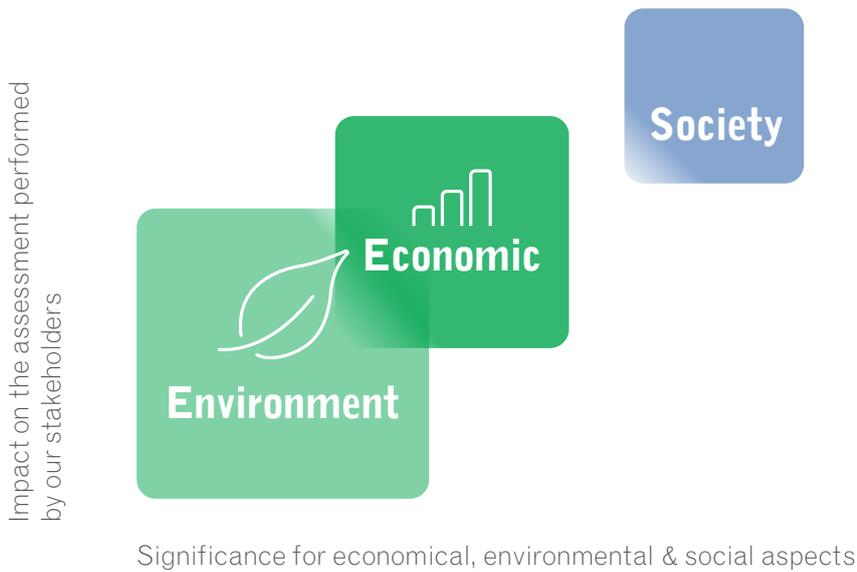
Customers

Unions

**Civil
Organizations**



SONGWON's categories:



GRI Topic Specific Standards

SONGWON has selected Environmental, Economic and Social as the relevant GRI topic-specific standards based on our material topics. As outlined in the GRI content index, we have provided information on the specific indicators relevant to our business for each topic-specific standard, as well as our management approach that best communicates the most material aspects of our sustainability performance at the level (global or local) that is most meaningful to report, including whether there were impacts within the organization or outside of it.

GRI 200: Economic

Through all of SONGWON's operations, we aim to secure the organization's financial success and thus long-term value creation for our stakeholders. We know this can be achieved through implementing our long-term strategy, recognizing and managing risks and opportunities, as well as providing transparent information to our stakeholders.

Our strategy has four key focus areas: business focus, growth, geographical focus, and innovation.

SONGWON provides expertise and high-quality products to different industries, for a myriad of important applications. We are dedicated to creating long-term value, providing sustainable solutions, and strengthening the competitive position of our customers.

At SONGWON, we are focused on building a balanced product portfolio in order to support targeted growth and we are continuing with our expansion strategy to strengthen our presence in emerging markets and consolidating our position in existing ones.

GRI 300: Environmental

Our sustainability strategy supports SONGWON's business goals and enables us to continuously reduce our environmental footprint. At the same time, we are working to ensure that we give something back to both our employees and society as a whole. Our global sustainability commitment is directly managed by our Executive Committee. The Committee is also responsible for overseeing the execution of all activities relating to achieving our sustainability goals.

All of SONGWON's initiatives are designed to ensure that we focus on those areas where we, as a company, have the greatest impact. They also provide us with a clear direction that enables us to strive for a better performance.

GRI 400: Social

At SONGWON, we emphasize the importance of our people for the company's long-term success: they manage strong brands, develop innovative products and support our customers around the world. Building and sustaining long-term, trustful relationships with our employees and all those who work for or with SONGWON is essential to our organizational success.

SONGWON's GRI Content Index

This report has been prepared in accordance with the GRI Standards: Core option



"For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate sections in the body of the report."

GRI Content Index

GRI Standard	Disclosure	Description	Omissions / Direct Answers
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GRI 101: Foundation 2016 [GRI 101 does not include any disclosures]

GRI 102: General Disclosures 2016

Organizational Profile

	102-1	Name of the organization	16
	102-2	Activities, brands, products, and services	19–21
	102-3	Location of headquarters	16, 18
	102-4	Location of operations	17–18
	102-5	Ownership and legal form	17
	102-6	Markets served	18, 20
	102-7	Scale of the organization	2–3
	102-8	Information on employees and other workers	52, 55
	102-9	Supply chain	36–38
	102-10	Significant changes to the organization and its supply chain	38, 103
	102-11	Precautionary Principle or approach	27
	102-12	External initiatives	63–65
	102-13	Membership of associations	181

Strategy

	102-14	Statement from senior decision-maker	4–8, 19–20, 27, 29–30, 59–63
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Ethics and integrity

	102-16	Values, principles, standards, and norms of behavior	16, 57, 82–83, 85–87
--	--------	--	----------------------

Governance

	102-18	Governance structure	9–10, 84–85
--	--------	----------------------	-------------

Stakeholder engagement

	102-40	List of stakeholder groups	75
	102-41	Collective bargaining agreements	52
	102-42	Identifying and selecting stakeholders	73, 87
	102-43	Approach to stakeholder engagement	50, 87, 73
	102-44	Key topics and concerns raised	50, 85–86

Reporting practice

	102-45	Entities included in the consolidated financial statements	103
	102-46	Defining report content and topic Boundaries	73–74, 182
	102-47	List of material topics	76
	102-48	Restatement of information	182
	102-49	Changes in reporting	182
	102-50	Reporting period	182
	102-51	Date of most recent report	182
	102-52	Reporting cycle	182
	102-53	Contact point for questions regarding the report	185
	102-54	Claims of reporting in accordance with the GRI Standards	73, 77, 182
	102-55	GRI content index	77–80
	102-56	External assurance	182

Material Topics

GRI Standard	Disclosure	Description	Omissions / Direct Answers
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Economic Standards: 200 Series

Economic Performance

GRI 103: Management Approach 2016	103-1		73–74
	103-2		76
	103-3		76
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	97–98, 129–130, 147, 154–155, 169–171, 174
	201-3	Defined benefit plan obligations and other retirement plans	151–152

Environmental Standards: 300 Series

Energy

GRI 103: Management Approach 2016	103-1		66–72
	103-2		66–72
	103-3		66–72
GRI 302: Energy 2016	302-1	Energy consumption within the organization	66–72

Emissions

GRI 103: Management Approach 2016	103-1		66–72
	103-2		66–72
	103-3		66–72
GRI 305: Emissions 2016	305-1	Direct GHG emissions	66–72
	305-2	Indirect GHG emissions	66–72
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	66–72

Social Standards: 400 Series

Employment

GRI 103: Management Approach 2016	103-1		52, 54, 56–57
	103-2		52, 54, 56–57
	103-3		52, 54, 56–57
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	55
	401-3	Parental leave	55





Corporate Governance

Corporate Governance at SONGWON

82

Corporate Governance at SONGWON

Dedicated to transparency & accountability

Ensuring good and transparent corporate governance establishes an essential basis for responsible management and secures lasting business success. SONGWON's commitment to applying the highest levels of transparency and accountability has always gone beyond just complying with statutory obligations.

Over the years, we have built a solid reputation as a globally operating company with the highest ethical principles that conducts its business in full compliance with legal requirements. We are proud to be known as a market leader driven to make valuable contributions to both the industry and to the communities in which we operate.

Our priority to provide clear visibility on the Group's financial and business performance enables us to gain as well as maintain the confidence of SONGWON's investors, customers, employees and other stakeholders and to meet our targets. Exercising responsible corporate governance in all of our day-to-day activities is how we ensure that SONGWON remains a strong and accountable organization. Also, that it is well-placed to effectively serve the needs of our stakeholders and create long-term competitive returns for our shareholders.

SONGWON's core values: passion, credibility, entrepreneurship, expertise and accessibility lie at the heart of our approach to corporate governance. These form the core of how we operate our business, interact with our stakeholders, create value for them and plan for the future. SONGWON's leadership is guided by these values and applies them to daily decision-making as well as to setting long-term objectives and developing strategic vision for the organization. In this way, and by using their sound, well-grounded judgement, the Executive Committee and Board of Directors are able to effectively manage opportunities and risks.

For SONGWON to continue to thrive in the today's challenging world, we know how essential it is for our leadership to be in tune with, and sensitive to changing global demands, industry requirements and stakeholders' expectations, especially in relation to sustainability. Furthermore, they also have to consider the often conflicting interests and demands of SONGWON's broad and very diverse spectrum of stakeholders.

In order for SONGWON's Board and management to respond as adequately as possible to all the very different requirements, absolute internal alignment and clarity on the company's values, mission, and strategy is a must. Furthermore, it is also crucial that these are communicated successfully to SONGWON's internal and external stakeholders. The management ensures that this is done on a regular basis e.g. via the company's website or direct updates. However, we do not see governance at SONGWON as an issue resting only in the hands of the CEO, our Board of Directors or the Executive Committee.

The principles of good corporate governance are embedded throughout the company and practiced by every member of our dedicated global team. Across our business, the management have set out a clear framework for decision making and accountability that provides guidance on the standards of behavior and integrity we should expect of ourselves, each other and of our partners. The members of SONGWON's global team do not just measure their contributions to the Group's overall success by the business' growth but on how well each of us can continue attaining the highest levels of accountability and creating value for all of stakeholders.

For SONGWON, it is also crucial to ensure that the company always remains compliant with all the relevant external standards and regulations. SONGWON's already existing policies and procedures for monitoring potential risks, together with the implementation of the ICFR* process, which began in 2019 and is on track across the regions, has already further strengthened the Group's ability to identify potential risks. The management's goal is to mitigate risk, by maintaining consistent standards and responsible business practices across the SONGWON Industrial Group.

In order to meet the ICFR requirements, SONGWON's senior leadership introduced a whistleblower policy for the entire Group which is a part of the CFA (Controlling, Finance & Administration) manual. Global HR is responsible for maintaining this corporate policy at SONGWON.

The Executive Committee continues to implement policies approved by the Board which are aimed at reinforcing the principles of an 'open, fair and clean' corporate culture throughout the organization. One example is SONGWON's Code of Conduct which, over the years, has been actively introduced, updated and promoted across the whole organization through

* Internal Control Over Financial Reporting



SONGWON's Board of Directors

internal communication and trainings. It is also available to download from SONGWON's website. The Code contains guidance on behavior expected at SONGWON and reflects our business ethics, operations, core values and overall culture.

Acting according to the principles set out by our Code ensures that we maintain fair, transparent, and lawful business operations. Our Code of Conduct also governs the handling of information, confidentiality and data security, the prevention of money laundering, bribery and corruption as well as issues relating to the separation of personal and business interests. The company has a strong monitoring process in place to make sure that if the Code is breached in any way, it can be easily detected and dealt with quickly. In 2020, there were no reported breaches of the Code of Conduct.

Annual Shareholders' Meeting

Each year, all of SONGWON's shareholders are invited to attend the Annual Shareholders' Meeting where decisions are made on matters concerning SONGWON

Industrial Co., Ltd. and the Group. Traditionally, the meeting focuses on the annual report and financial accounts and shareholders are always given the opportunity to put forth any questions they may have relating to the agenda. Mechanisms provided by Korean law for shareholders make it 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 took place on March 20th, 2020 at SONGWON's Headquarters in Ulsan, Korea. The Annual Report for the financial year 2020 and the proposal for the distribution of profits were adopted during the meeting.

The Board of Directors & Executive Committee

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

- As per Korean regulations, the Board of Directors consists of 3 executive members and 3 non-executive members, which is equivalent to 4 inside directors and 2 outside directors.

During the course of the year, the members of the Board usually attend 4 face-to-face meetings but due to the emergence of the COVID-19 pandemic, 3 meetings took place via video call. In addition, whenever it was required, virtual ad hoc meetings were also organized.

- SONGWON's Executive Committee comprises 6 members, all of whom hold key managerial positions in the Group. Under normal circumstances, the Executive Committee would meet personally once a quarter, arrange regular tele- and video conferences as well as communicate via email. In 2020, the committee conducted all of its meetings virtually.

The Executive Committee manages all SONGWON's day-to-day business while maintaining and ensuring good company-wide governance practices. As well as developing and implementing policies, the Committee makes all the core decisions related to the Group's overall strategy, the allocation of resources, investments and HR issues, with the exception of specific decisions reserved for the Board under the Korean Company Act. The Executive Committee is responsible for handling any instances related to the Korean Company Act and should any arise, it prepares the required proposals for submission to the Board for final approval.

- At SONGWON, the responsibilities of Chairman of Board and CEO have been separate since 2016. This separation also involved passing the responsibilities related to decisions on business operations to the Executive Committee with the Board remaining involved in any decision-making process concerning SONGWON's strategy and investment. This clear division of responsibilities ensures greater transparency, controls and accountability and serves to strengthen the Group's corporate governance. SONGWON's leadership has also sought to further implement e.g. Board activities with a clearly defined scope of responsibility which differ from the Executive Committee activities.

SONGWON's Board of Directors oversees the strategic direction of the Group and makes certain that sound governance procedures are in place.

The Board also supervises decisions made by the Executive Committee, the governing body responsible for decisions related to economic, environmental and social impacts as well as the identification and management of risks and opportunities. In order to support the overseeing of the activities within these important areas, the Board established an Audit Committee* and an HR Committee.

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

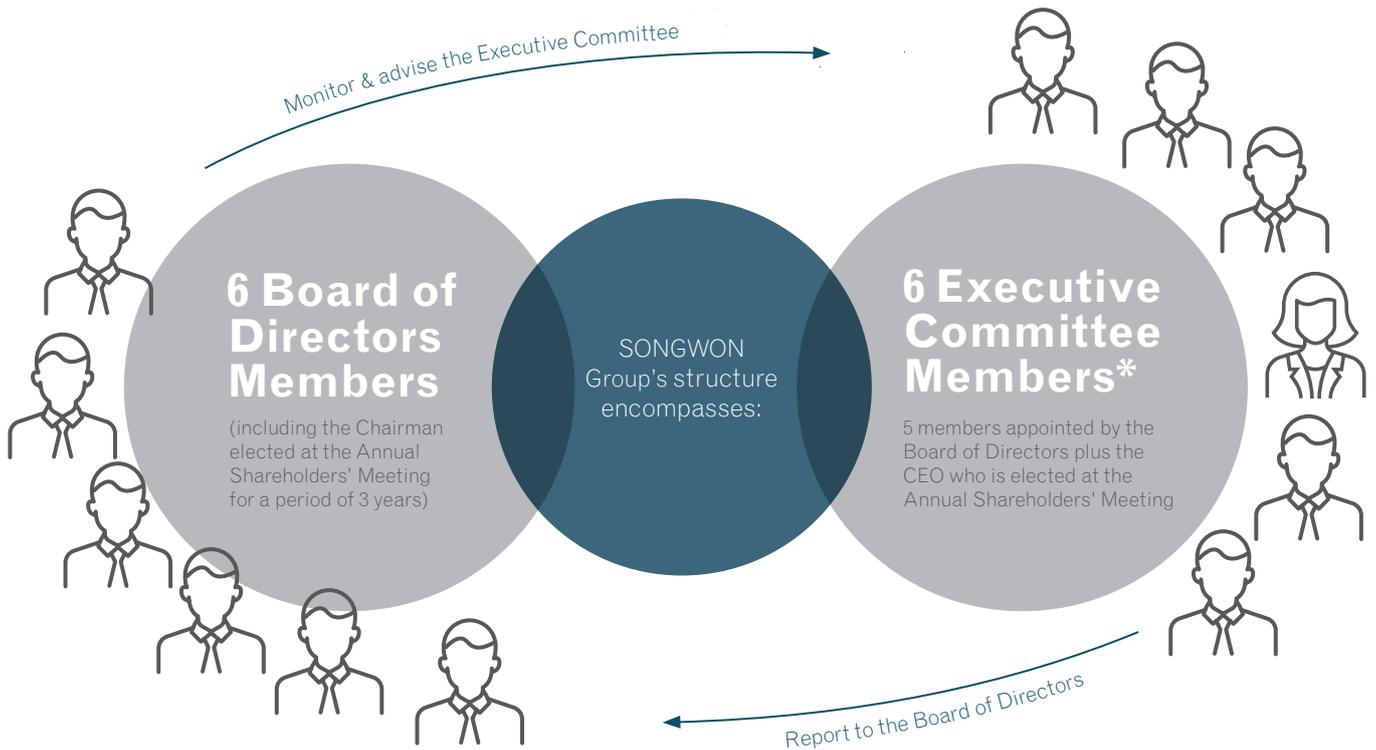
- performance history
- ethical behavior
- leadership & expertise
- attitude towards rules & regulations
- expertise for the area of responsibility
- independence & impartiality

This selection criteria ensures that each director has a different background and brings different perspectives. In 2020, the Board of Directors comprised individuals representing 3 different nationalities with experience from many industries. Each year, the Board of Directors carries out a self-evaluation process involving supervisory multi-step approval for evaluating performance via a specifically implemented system.

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

The Chairman of the Board is a non-executive Director who is elected at SONGWON's Annual Shareholders' Meeting. The CEO is the Chair of the Executive Committee and 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.

* as per the IAA standard



* from April 2020

Remuneration

Remuneration for SONGWON's highest governance body members, senior managers, and executives (incl. departure arrangements) is in line with the company's overall performance including social, economic and environmental results.

External auditors

Auditors for SONGWON are elected each year at the Annual Shareholders' Meeting for a period of 3 years. SONGWON's current auditors are Ernst & Young. The Board and the Executive Committee work closely with them to make sure that they remain 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.

We know that the key to building a healthy, high-performing organization is by establishing an open, fair and clean corporate culture and encouraging open and fair communication at all levels. People's behavior

within an organization is determined by their corporate culture, which in turn is derived from the approach to corporate governance. This is why ensuring that our employees are constantly kept up-to-date and well-informed is very important to us.

We make sure that all SONGWON employees are informed about the organization's operations, activities and strategic aims but more specifically that each individual clearly understands the guiding principles of ethical business conduct. SONGWON's Board and upper management make it a priority to regularly communicate the importance of responsible behavior and also to ensuring that ethical business conduct is always at the forefront of our day-to-day activities.

To support this, SONGWON's Vision and Mission statements are clearly communicated to all employees and publicly available to all of our stakeholders worldwide. A complete set of policies related to all aspects of SONGWON's business activities is readily available to employees. These policies outline our dedication to the highest ethical standards and compliance with the applicable laws in the areas and regions we operate. The policies outlined in the Code of Conduct are applied and strictly enforced across the organization in all the regions.

Every employee receives SONGWON's Code of Conduct when they are hired and it is also available on the company's website. The code provides employees with essential guidance on how to apply

basic principles in line with the organization's core values and our 'safe, honest, trustworthy, professional, customer focused' culture. In addition, it offers practical advice on how to best comply with laws and regulations, including how to interact with colleagues as well as SONGWON's customers and communities.

We invest a lot of effort into ensuring that the Code of Conduct is constantly aligned with internationally agreed standards. SONGWON's Board and the Executive Committee regularly collect and analyze information from various sources and appropriately implement this information into both the Code and subsequent business activities.

The organization is run non-hierarchically. SONGWON's leaders endeavor to foster a collaborative approach to management where each individual, including top management is easily approachable, willing to engage in dialogue and always ready to advise or offer guidance. Within SONGWON, questions and even discussions are always welcomed and encouraged. With openness and transparency, the management seeks to create a positive working environment where people are treated fairly and encouraged to contribute. Even no punishment culture exists at SONGWON, every employee is very aware of the zero tolerance 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 provides all SONGWON stakeholders with a method of reporting (also anonymously) any actual or suspected misconduct within the organization. The policy also protects whistleblowers from any repercussion 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 appropriate changes within the organization are implemented.

There were no whistleblower claims reported in 2020 and no incidents occurred which breached SONGWON's principles (e.g. corruption, anti-trust or discrimination). However, had an incidence happened then based on the nature of the issue at hand the most appropriate form of communication and/or consultation method would be applied. In 2020, SONGWON had no significant monetary or non-monetary fines to report for non-compliance with laws and regulations.

Internal control

Internal control is fundamental to SONGWON's corporate culture. The company continues to strengthen and improve its Internal Control Systems (ICS) that monitor all of the Group's activities. In this way, we can make sure that SONGWON's rules of business engagement are diligently adhered to with regards to external legislation and regulations, as well as our internal guidelines and control documentation. Another important aspect of internal control is identifying risks and then ensuring that they are managed effectively. Our main goal is always to minimize SONGWON's exposure to risk as far as possible, while making sure that we can capitalize on desired opportunities at the same time.

The Group is organized in such a way as to meet the requirements for effective internal control. To enable us to achieve true and fair consolidated financial reporting, the Group also has the necessary financial and business reporting systems in place which are important instruments of control.

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

Should a conflict of interest 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 maintained. SONGWON is not aware of any conflicts of interest in 2020, or of any which could have arisen during the year.

At SONGWON, we recognize that corruption can severely impact sustainable economic and social development. In particular, that it can have a detrimental effect on poorer communities. We are also very aware that SONGWON's ongoing expansion means that it is very likely for SONGWON to be more exposed to regions and environments where corruption is known to exist. For this reason, SONGWON is always optimizing its policies and processes while remaining open and responsive to improvements that stakeholders and authorities may propose and consider necessary.

Identifying stakeholders

SONGWON stakeholders are identified by each individual site and business operation as part of the communication process. There are also clear channels of communication in place for consulting or engaging with SONGWON's stakeholders. Engaging with stakeholders may take place as face-to-face meetings,

group meetings, team briefings, union representatives meetings, announcements, emails, letters, memos, notices and telephone calls.

The content contained within this report has been put together after taking into consideration the feedback and recommendations of all our stakeholders in relation to the reported topics and their importance.

SONGWON optimizes corporate governance by:



Using efficient communication to further strengthen the interaction between the Board and middle management.



Increasing the Board's knowledge and understanding of the relevant economic, environmental and social impacts of SONGWON's activities. For example, every year on a rotational basis, each business and function presents and discusses their strategies and actions with the Board.



Organizing Town Hall meetings to support and improve engagement between employees at all levels and top management. The CEO shares information on SONGWON's financial results, business activities and strategy while also emphasizing SONGWON's expectations concerning ethical business conduct, sustainability and EH&S etc. All employees are invited to attend and they are encouraged to ask questions and voice concerns.



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



Focusing on improving and reinforcing the Internal Control Systems at all levels and at each entity of the Group.



Increasing the emphasis on sustainability. This year, the governing body appointed SONGWON's 2nd Chief Sustainability Officer to ensure sustainability is firmly integrated into every part of SONGWON's global business.



Supporting an active shift to a circular economy through collaborative partnerships and memberships with relevant associations.



Enhancing its ability to monitor issues from an environmental, economic and social point of view through active involvement in various associations.



Using information acquired externally to identify possible risks and opportunities and making sure that SONGWON is well-positioned to act accordingly at an early stage.



Financial Statements

Table of contents	89
Introduction to the consolidated financial statements	90
Independent auditor's report	91
Consolidated statements of financial position	95
Consolidated statements of comprehensive income	97
Consolidated statements of changes in equity	99
Consolidated statements of cash flows	101

Table of contents

Introduction to the consolidated financial statements	90
Independent auditor's report	91
Consolidated statements of financial position	95
Consolidated statements of comprehensive income	97
Consolidated statements of changes in equity	99
Consolidated statements of cash flows	101
1. Corporate information	103
2. Summary of significant accounting policies	107
3. Significant accounting judgments, estimates and assumptions	125
4. Standards issued but not yet effective	127
5. Segment information	129
6. Property, plant and equipment	131
7. Right-of-use assets and leases	133
8. Investment properties	135
9. Intangible assets	136
10. Impairment testing of goodwill and intangibles with indefinite useful life	138
11. Investment accounted for using the equity method	141
12. Other financial assets	142
13. Inventories	142
14. Trade and other receivables	143
15. Other current assets	144
16. Cash and cash equivalents	144
17. Issued capital and reserves	145
18. Interest-bearing loans and borrowings	147
19. Emission rights and emission liabilities	148
20. Pension liability	149
21. Other long-term employee-related liabilities	154
22. Other financial liabilities	156
23. Trade and other payables	156
24. Additional information on financial instruments	157
25. Commitments and contingencies	166
26. Assets pledged as collateral and guarantees	168
27. Operating profit and other income / expenses	169
28. Income tax expenses	172
29. Earnings per share	175
30. Cash flow statement	175
31. Related party disclosures	177
32. Impact of global economic situation on consolidated financial statements	179
33. Events after the reporting period	179

INTRODUCTION TO THE CONSOLIDATED FINANCIAL STATEMENTS

On the following pages (95–179), consolidated financial statements for the year 2020 are presented. The financial statements disclosed are prepared according to the Korean International Financial Reporting Standards (“K-IFRS”) and represent the statements submitted for approval to the Annual General Shareholders’ Meeting on March 19, 2021 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 91–94.

INDEPENDENT AUDITOR'S REPORT



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Independent auditor's report

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, 2020 and 2019, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

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, 2020 and 2019, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("KIFRS").

Basis for opinion

We conducted our audits in accordance with Korean Auditing Standards ("KGAAS"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audits 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 audits 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.

(1) Completeness and accuracy of eliminating intragroup sales and purchases

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. Because the completeness and accuracy of the elimination of intragroup sales and purchases as well as related receivables and payables have a significant impact on the preparation of the consolidated financial statements, we have selected this area as a key audit matter.

The main audit procedures we have performed in relation to this key audit matter are as follows:

- We performed an analytical procedure by comparing the Group's significant intragroup sales and purchases as well as related receivables and payables of the current reporting period to prior reporting period.
- We assessed the consistency of the intragroup sales and purchases and related balances subject to elimination by comparing the major sales, purchases and balance information to the information used in the consolidation system.
- We reviewed whether all intragroup sales and purchases aggregated during the consolidation closing process were eliminated.



(2) Goodwill impairment test

As described in note 10 to the consolidated financial statements, we selected the appropriateness of goodwill impairment loss as a key audit matter because goodwill impairment testing is complex and requires significant assumptions and estimates by management. In addition, the Group holds significant amount of goodwill of ₩9,939 million before recognition of impairment loss. As a result of the impairment testing, the Group recognized an impairment loss on goodwill of ₩6,889 million, and the carrying amount of goodwill net of impairment loss is ₩3,050 million as of December 31, 2020.

The main audit procedures we have performed in relation to this key audit matter are as follows:

- We reviewed the appropriateness of the determination of cash-generating unit group subject to goodwill allocation and the appropriateness of allocation of goodwill.
- We reconciled the carrying amounts of the cash-generating unit group against the carrying amount recognized on the consolidated statements of financial position.
- We reviewed the arithmetic accuracy of the impairment test calculation.
- We assessed whether methodologies (discounted cash flow method) and assumptions, such as annual average growth rate, weighted average cost of capital, and permanent growth rate, used in the impairment test are reasonable.

Other matters

As explained in the note 2.22 to the consolidated financial statements, the accompanying consolidated statement of financial position as of December 31, 2019, presented for comparative purpose, was restated to reflect the adjustments described in note 2.22.

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 KGAAS 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 KGAAS, 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 audits and significant audit findings, including any significant deficiencies in internal control that we identify during our audits.

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 *Kim, Doo-Bong*.

February 26, 2021

This audit report is effective as of February 26, 2021, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the 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.

A member firm of Ernst & Young Global Limited

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

as of December 31, 2020 and 2019

Assets	Notes	2020	2019
		Million KRW	(restated*) Million KRW
Non-current assets		478,975	495,555
Property, plant and equipment	5.3, 6, 25, 26	426,212	439,452
Right-of-use assets	5.3, 7	19,757	20,800
Investment properties	5.3, 8, 25, 26	3,483	3,502
Intangible assets	5.3, 9, 10, 25	7,757	14,630
Investments accounted for using the equity method	1.2.3, 11	5,912	5,347
Other non-current assets		245	95
Other non-current financial assets	12, 24, 31	9,889	7,937
Deferred tax assets	28	5,720	3,792
Current assets		412,167	398,769
Inventories	13, 25	192,057	196,996
Trade and other receivables	14, 24.2, 31	133,691	128,166
Income tax receivables		446	1,516
Other current assets	15	9,172	7,556
Other current financial assets	12, 24	4,017	1,403
Cash and cash equivalents	16, 24.2	72,784	63,132
Total assets		891,142	894,324
Equity and liabilities			
Equity		463,497	434,641
<i>Non-controlling interests</i>		<i>4,788</i>	<i>3,986</i>
<i>Equity attributable to owners of the parent</i>		<i>458,709</i>	<i>430,655</i>
Issued capital	17.1	12,000	12,000
Capital surplus	17.2	22,359	22,359
Reserves	17.3	28,335	27,975
Retained earnings*	2.22, 17.3	405,105	371,805
Other components of equity	17.4	-9,090	-3,484
Non-current liabilities		134,523	166,309
Interest-bearing loans and borrowings	18, 24, 26	59,647	73,094
Pension liability	20	13,865	30,252
Other long-term employee-related liabilities	21	7,431	5,688
Non-current lease liabilities	7, 24	16,143	17,214
Other non-current financial liabilities	22, 24	940	2,485
Other non-current liabilities		446	458
Deferred tax liabilities*	2.22, 28	36,051	37,118
Current liabilities		293,122	293,374
Interest-bearing loans and borrowings	18, 24, 25, 26	158,940	171,200
Trade and other payables	23, 24, 31	114,614	98,910
Current lease liabilities	7, 24	2,429	2,309
Other current financial liabilities	22, 24	2,521	2,385
Other current liabilities	19	3,064	2,439
Income tax payable		11,554	16,131
Total liabilities		427,645	459,683
Total equity and liabilities		891,142	894,324

* refer to note 2.22 for further details

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

as of December 31, 2020 and 2019 (see note 2.3)

	2020	2019 (restated*)
	Thousand USD	Thousand USD
Assets		
Non-current assets	440,374	455,617
Property, plant and equipment	391,863	404,036
Right-of-use assets	18,165	19,124
Investment properties	3,202	3,220
Intangible assets	7,132	13,451
Investments accounted for using the equity method	5,436	4,916
Other non-current assets	225	87
Other non-current financial assets	9,092	7,297
Deferred tax assets	5,259	3,486
Current assets	378,951	366,632
Inventories	176,579	181,120
Trade and other receivables	122,917	117,837
Income tax receivables	410	1,394
Other current assets	8,433	6,947
Other current financial assets	3,693	1,290
Cash and cash equivalents	66,919	58,044
Total assets	819,325	822,249
Equity and liabilities		
Equity	426,144	399,613
<i>Non-controlling interests</i>	<i>4,403</i>	<i>3,665</i>
<i>Equity attributable to owners of the parent</i>	<i>421,741</i>	<i>395,948</i>
Issued capital	11,033	11,033
Capital surplus	20,557	20,557
Reserves	26,051	25,720
Retained earnings*	372,457	341,840
Other components of equity	-8,357	-3,202
Non-current liabilities	123,682	152,906
Interest-bearing loans and borrowings	54,840	67,203
Pension liability	12,748	27,814
Other long-term employee-related liabilities	6,832	5,230
Non-current lease liabilities	14,842	15,827
Other non-current financial liabilities	864	2,285
Other non-current liabilities	410	420
Deferred tax liabilities*	33,146	34,127
Current liabilities	269,499	269,730
Interest-bearing loans and borrowings	146,131	157,403
Trade and other payables	105,377	90,939
Current lease liabilities	2,233	2,123
Other current financial liabilities	2,318	2,193
Other current liabilities	2,817	2,241
Income tax payable	10,623	14,831
Total liabilities	393,181	422,636
Total equity and liabilities	819,325	822,249

* refer to note 2.22 for further details

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

for the years ended December 31, 2020 and 2019

	Notes	2020 Million KRW	2019 Million KRW
Sales	5.1, 5.2, 31	807,768	814,340
Cost of sales	27.5, 31	-643,795	-647,867
Gross profit		163,973	166,473
Selling and administration costs	27.2, 27.5, 31	-95,963	-107,181
Operating profit		68,010	59,292
Other income	27.3	3,712	2,198
Other expenses	27.4	-9,897	-2,734
Share of result from investments accounted for using the equity method	11, 30	1,064	1,010
Finance income	27.6, 31	23,002	18,780
Finance expenses	27.7	-34,734	-30,224
Profit before tax		51,157	48,322
Income tax expenses	28	-22,792	-13,314
Profit for the period		28,365	35,008
Other comprehensive income, net of taxes			
<i>Net other comprehensive income to be reclassified to profit or loss in subsequent periods</i>		-5,398	1,824
Losses on valuation of interest rate swaps	17.4	-210	-1,051
Exchange differences on translation of foreign operations	17.4	-5,188	2,875
<i>Net other comprehensive income not to be reclassified to profit or loss</i>		9,489	-11,085
Losses on valuation of financial assets at FVOCI	17.4	-318	-394
Re-measurement gain / (losses) on defined benefit plans	17.4, 20	9,807	-10,691
Total other comprehensive income, net of taxes		4,091	-9,261
Total comprehensive income		32,456	25,747
Profit for the period attributable to:			
Owners of the parent	29	27,453	34,754
Non-controlling interests		912	254
Profit for the period		28,365	35,008
Total comprehensive income attributable to:			
Owners of the parent		31,654	25,525
Non-controlling interests		802	222
Total comprehensive income		32,456	25,747
Earnings per share			
Basic / diluted, profit for the period attributable to ordinary equity holders of the parent	29	KRW 1,144	KRW 1,448

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

for the years ended December 31, 2020 and 2019 (see note 2.3)

	2020	2019
	Thousand USD	Thousand USD
Sales	742,669	748,711
Cost of sales	-591,911	-595,654
Gross profit	150,758	153,057
Selling and administration costs	-88,229	-98,543
Operating profit	62,529	54,514
Other income	3,413	2,021
Other expenses	-9,099	-2,514
Share of result from investments accounted for using the equity method	978	929
Finance income	21,148	17,266
Finance expenses	-31,935	-27,788
Profit before tax	47,034	44,428
Income tax expenses	-20,954	-12,241
Profit for the period	26,080	32,187
Other comprehensive income, net of taxes		
<i>Net other comprehensive income to be reclassified to profit or loss in subsequent periods</i>	-4,964	1,677
Losses on valuation of interest rate swaps	-194	-966
Exchange differences on translation of foreign operations	-4,770	2,643
<i>Net other comprehensive income not to be reclassified to profit or loss</i>	8,725	-10,191
Losses on valuation of financial assets at FVOCI	-292	-362
Re-measurement gain / (losses) on defined benefit plans	9,017	-9,829
Total other comprehensive income, net of taxes	3,761	-8,514
Total comprehensive income	29,841	23,673
Profit for the period attributable to:		
Owners of the parent	25,241	31,953
Non-controlling interests	839	234
Profit for the period	26,080	32,187
Total comprehensive income attributable to:		
Owners of the parent	29,103	23,468
Non-controlling interests	738	205
Total comprehensive income	29,841	23,673
Earnings per share		
Basic / diluted, profit for the period attributable to ordinary equity holders of the parent	USD 1.05	USD 1.33

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

for the years ended December 31, 2019 and 2020

Attributable to owners of the parent

	Attributable to owners of the parent								Non-controlling interests	Total equity
	Issued capital	Capital surplus	Reserves	Retained earnings (restated*)	Other components of equity			Total		
	Million KRW	Million KRW	Million KRW	Million KRW	Cash flow hedge reserve Million KRW	Fair value reserve of financial assets at FVOCI Million KRW	Foreign currency translation reserve Million KRW	Total Million KRW	Million KRW	Million KRW
As of January 1, 2019	12,000	24,361	27,591	352,906	54	350	-5,350	411,912	-714	411,198
Restatement of temporary taxable differences*	-	-	-	-940	-	-	-	-940	-	-940
As of January 1, 2019*	12,000	24,361	27,591	351,966	54	350	-5,350	410,972	-714	410,258
Profit for the period	-	-	-	34,754	-	-	-	34,754	254	35,008
Other comprehensive income	-	-	-	-10,691	-1,051	-394	2,907	-9,229	-32	-9,261
Total comprehensive income	-	-	-	24,063	-1,051	-394	2,907	25,525	222	25,747
Dividends	-	-	-	-3,840	-	-	-	-3,840	-	-3,840
Appropriation to reserves	-	-	384	-384	-	-	-	-	-	-
Change in non-controlling interest due to interest increase	-	-2,002	-	-	-	-	-	-2,002	2,002	-
Change in non-controlling interest due to capital contribution	-	-	-	-	-	-	-	-	2,476	2,476
As of December 31, 2019*	12,000	22,359	27,975	371,805	-997	-44	-2,443	430,655	3,986	434,641
As of January 1, 2020*	12,000	22,359	27,975	371,805	-997	-44	-2,443	430,655	3,986	434,641
Profit for the period	-	-	-	27,453	-	-	-	27,453	912	28,365
Other comprehensive income	-	-	-	9,807	-210	-318	-5,078	4,201	-110	4,091
Total comprehensive income	-	-	-	37,260	-210	-318	-5,078	31,654	802	32,456
Dividends	-	-	-	-3,600	-	-	-	-3,600	-	-3,600
Appropriation to reserves	-	-	360	-360	-	-	-	-	-	-
As of December 31, 2020	12,000	22,359	28,335	405,105	-1,207	-362	-7,521	458,709	4,788	463,497

* refer to note 2.22 for further details

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

for the years ended December 31, 2019 and 2020 (see note 2.3)

	Attributable to owners of the parent									Non-controlling interests	Total equity
	Issued capital	Capital surplus	Reserves	Retained earnings (restated*)	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	Thous. USD	
As of January 1, 2019	11,033	22,398	25,367	324,465	49	322	-4,917	378,717	-657	378,060	
Restatement of temporary taxable differences*	-	-	-	-864	-	-	-	-864	-	-864	
As of January 1, 2019*	11,033	22,398	25,367	323,601	49	322	-4,917	377,853	-657	377,196	
Profit for the period	-	-	-	31,953	-	-	-	31,953	234	32,187	
Other comprehensive income	-	-	-	-9,829	-966	-362	2,672	-8,485	-29	-8,514	
Total comprehensive income	-	-	-	22,124	-966	-362	2,672	23,468	205	23,673	
Dividends	-	-	-	-3,532	-	-	-	-3,532	-	-3,532	
Appropriation to reserves	-	-	353	-353	-	-	-	-	-	-	
Change in non-controlling interest due to interest increase	-	-1,841	-	-	-	-	-	-1,841	1,841	-	
Change in non-controlling interest due to capital contribution	-	-	-	-	-	-	-	-	2,276	2,276	
As of December 31, 2019*	11,033	20,557	25,720	341,840	-917	-40	-2,245	395,948	3,665	399,613	
As of January 1, 2020*	11,033	20,557	25,720	341,840	-917	-40	-2,245	395,948	3,665	399,613	
Profit for the period	-	-	-	25,241	-	-	-	25,241	839	26,080	
Other comprehensive income	-	-	-	9,017	-194	-292	-4,669	3,862	-101	3,761	
Total comprehensive income	-	-	-	34,258	-194	-292	-4,669	29,103	738	29,841	
Dividends	-	-	-	-3,310	-	-	-	-3,310	-	-3,310	
Appropriation to reserves	-	-	331	-331	-	-	-	-	-	-	
As of December 31, 2020	11,033	20,557	26,051	372,457	-1,111	-332	-6,914	421,741	4,403	426,144	

* refer to note 2.22 for further details

CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended December 31, 2020 and 2019

	Notes	2020 Million KRW	2019 Million KRW
Profit for the period		28,365	35,008
Total adjustments	30	72,411	57,918
Changes in operating assets and liabilities	30	7,801	-8,607
Interest received		229	580
Payments of income tax		-32,387	-6,917
Net cash flow from operating activities		76,419	77,982
Proceeds from sale of property, plant and equipment	6, 30	107	151
Purchases of property, plant and equipment	6	-21,227	-30,322
Purchases of intangible assets	9	-874	-643
Dividends received from investments using equity method	11	519	511
(Increase) / decrease in other financial assets, net		-5,078	5,830
Net cash flow from investing activities		-26,553	-24,473
Proceeds from borrowings	30	344,396	601,376
Repayments of borrowings	30	-369,239	-639,138
Payment of lease liabilities		-3,554	-3,246
Decrease in other financial liabilities, net	30	-1,589	-1,853
Interest paid		-5,851	-8,232
Dividends paid	17	-3,600	-3,840
Net cash flow from financing activities		-39,437	-54,933
Increase / (decrease) in cash and cash equivalents		10,429	-1,424
Net foreign exchange differences		-777	1,250
Cash and cash equivalents as of January 1	16	63,132	63,306
Cash and cash equivalents as of December 31	16	72,784	63,132

CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended December 31, 2020 and 2019 (see note 2.3)

	2020	2019
	Thousand USD	Thousand USD
Profit for the period	26,080	32,187
Total adjustments	66,575	53,250
Changes in operating assets and liabilities	7,172	-7,913
Interest received	211	533
Payments of income tax	-29,777	-6,360
Net cash flow from operating activities	70,261	71,697
Proceeds from sale of property, plant and equipment	98	139
Purchases of property, plant and equipment	-19,516	-27,878
Purchases of intangible assets	-804	-591
Dividends received from investments using equity method	477	470
(Increase) / decrease in other financial assets, net	-4,669	5,360
Net cash flow from investing activities	-24,414	-22,500
Proceeds from borrowings	316,641	552,910
Repayments of borrowings	-339,481	-587,629
Payment of lease liabilities	-3,268	-2,984
Decrease in other financial liabilities, net	-1,461	-1,704
Interest paid	-5,379	-7,569
Dividends paid	-3,310	-3,531
Net cash flow from financing activities	-36,258	-50,507
Increase / (decrease) in cash and cash equivalents	9,589	-1,310
Net foreign exchange differences	-714	1,150
Cash and cash equivalents as of January 1	58,044	58,204
Cash and cash equivalents as of December 31	66,919	58,044

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, 2020, the scope of consolidation for the consolidated financial statements encompasses 14 entities (2019: 14 entities). Additionally, one entity is classified as a joint venture (2019: one entity) and accounted for using the equity method.

During the twelve months of 2020, no changes in the legal structure of the Group and scope of consolidation took place.

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	2020		2019	
		Status	Interest	Status	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%
Qingdao Long Fortune Songwon Chemical Co., Ltd.	China	Subsidiary	72%	Subsidiary	72%
Songwon International – Middle East FZE	UAE	Subsidiary	100%	Subsidiary	100%
Songwon Polysys Additives LLC	UAE	Subsidiary	81.5%	Subsidiary	81.5%

Entities accounted for using the equity method (joint venture)

Songwon Baifu Chemicals (Tangshan) Co., Ltd.	China	Joint venture	30%	Joint venture	30%
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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
2020 as of December 31	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Songwon International – Japan K.K.	30,884	19,843	11,041	76,840	1,305	1,305
Songwon Specialty Chemicals-India Pvt. Ltd.	42,405	10,351	32,054	24,786	5,461	5,447
Songwon International – Americas Inc.	71,271	43,810	27,461	178,366	3,734	3,734
Songwon International AG	67,826	52,026	15,800	223,502	6,622	6,525
Songwon Group Holding AG	125,665	2,628	123,037	–	10,803	10,803
Songwon Management AG	22,289	23,248	-959	–	280	-665
Songwon-ATG GmbH	8,186	3,810	4,376	7,969	-4,656	-4,656
Songwon Europe GmbH	130	16	114	1,386	37	37
Songwon Chemicals GmbH	142	34	108	1,415	38	38
Songwon Trading GmbH	274	183	91	956	21	21
Qingdao Long Fortune Songwon Chemical Co., Ltd.	20,423	7,441	12,982	30,091	2,226	2,226
Songwon International – Middle East FZE	5,153	3,546	1,607	19,208	430	430
Songwon Polysys Additives LLC	26,919	18,172	8,747	25,897	1,441	1,441

2019

as of December 31

Songwon International – Japan K.K.	33,157	23,267	9,890	86,200	828	828
Songwon Specialty Chemicals-India Pvt. Ltd.	39,517	15,266	24,251	21,130	3,340	3,335
Songwon International – Americas Inc.	65,500	37,600	27,900	171,512	15	15
Songwon International AG	73,521	57,881	15,640	230,929	-1,360	-1,470
Songwon Group Holding AG	119,782	2,576	117,206	–	11,248	11,248
Songwon Management AG	25,685	23,632	2,053	–	3,474	1,731
Songwon-ATG GmbH	13,230	3,931	9,299	7,548	234	234
Songwon Europe GmbH	171	97	74	1,022	22	22
Songwon Chemicals GmbH	150	81	69	1,337	34	34
Songwon Trading GmbH	86	18	68	1,136	26	26
Qingdao Long Fortune Songwon Chemical Co., Ltd.	20,064	9,320	10,744	28,032	530	530
Songwon International – Middle East FZE	8,828	7,020	1,808	19,547	506	506
Songwon Polysys Additives LLC	32,351	24,433	7,918	19,744	571	571

1.2.3 INTEREST IN JOINT VENTURES

The Group has a 30% interest in Songwon Baifu Chemicals (Tangshan) Co., Ltd., classified as a jointly controlled entity which 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.	2,437	11,524	8,587	1,784	2,132	147	155	17,824	5,347
December 31, 2019	2,437	11,524	8,587	1,784	2,132	147	155	17,824	5,347
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	2,987	12,062	9,003	908	1,264	76	94	19,707	5,912
December 31, 2020	2,987	12,062	9,003	908	1,264	76	94	19,707	5,912

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.	25,231	-144	3	-11	4,503	-1,135	3,368	293	3,661
December 31, 2019	25,231	-144	3	-11	4,503	-1,135	3,368	293	3,661
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	24,239	-141	5	-9	4,783	-1,238	3,545	67	3,612
December 31, 2020	24,239	-141	5	-9	4,783	-1,238	3,545	67	3,612

The investment in the joint venture is accounted for as using the equity method. The joint venture is continuing its operations as of December 31, 2020, and its reporting period is the same as that of the Group. In 2020, dividends of 519 Million KRW were received from Songwon Baifu Chemicals (Tangshan) Co., Ltd. (2019: 511 Million KRW), refer to note 11.

1.2.4 NON-CONTROLLING INTERESTS

The Group has two subsidiaries with non-controlling interests of 18.5% and 28% in: Songwon Polysys Additives LLC, United Arab Emirates and Qingdao Long Fortune Songwon Chemical Co., Ltd., China as of December 31, 2020. The net gain attributable to the non-controlling interests for the year 2020 amounted to 912 Million KRW (2019: 254 Million KRW). Summarized cash flow information of the partly owned subsidiaries is as follows:

	2020	2019
	Million KRW	Million KRW
Operating cash flow	5,069	9,077
Investing cash flow	-113	-2,012
Financing cash flow	-4,662	-8,412
Net cash flow	294	-1,347



2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

2.1 BASIS OF PREPARATION

The Group prepares statutory financial statements in the Korean language in accordance with Korean International Financial Reporting Standards (K-IFRS) 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. In the event of any differences in the interpretation of the consolidated financial statements or the independent auditor's report thereon, the 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, 2020. 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 1,087.66 KRW to 1 USD, the exchange rate in effect on December 31, 2020. 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 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 re-assessment 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 significant 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 significant 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 significant 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
Useful lives of items recognized in business combinations	
Customer relationships	5-9 years
Non-compete contracts	6 years
Process technologies	5-6 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 7).

- *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 24.3.3).

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.

- *Significant judgement 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 judgement 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 significant 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 2020, 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 are 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 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 service in combination with the sales of goods. The services can be provided by others and are not significantly 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 accounting policies of financial assets in the 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 significant 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 in order 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 market place (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 in 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 to hold 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 K-IFRS 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 to 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 significantly 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 significantly 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 impairment of financial assets are also provided in the sections:

- significant 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 significant 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 significant 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 regional 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 significant 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 K-IFRS 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 K-IFRS 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 24.

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 remeasured 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 actually 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 expense. 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 had forward exchange contracts in order to hedge the risk of foreign exchange rate fluctuation of assets and liabilities denominated in foreign currencies. The Group applies fair value hedge accounting for forward exchange contracts (note 24.1.1).

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. The Group applies cash flow hedge accounting for interest rate swap contracts (note 24.1.2).

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.

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 instalments.

2.21 CHANGES IN DISCLOSURE AND PRESENTATION

The Group reassessed its disclosure of equity balances and movements within the “consolidated statements of financial position”, “consolidated statements of changes in equity” and in note “17.4 Accumulated other comprehensive income” in order to be more appropriate in presentation. The Group has been recording components of “other comprehensive income” (OCI) in both, retained earnings and other components of equity. Therefore, renaming of OCI into “Other components of equity” was performed within the statement of financial position and the respective OCI note (refer to note 17.4). Other comprehensive income as a separate line item within the “consolidated statements of changes in equity” refers to OCI positions within retained earnings and other components of equity. The change in presentation has no impact on the actual and comparative figures disclosed.

The disclosure of impairment in the intangible asset table (refer to note 9 for further details) was changed in 2020 from direct method to indirect method of disclosure with the respective adjustment of the prior year numbers.

2.22 RESTATEMENT OF PRIOR YEAR FIGURES IN CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

During the current period end, Songwon Specialty Chemicals-India Pvt. Ltd. (SWDM-IN) retrospectively adjusted the K-IFRS opening balance for deferred tax liabilities due to a restatement of temporary taxable differences in property, plant and equipment (land), other non-current financial liabilities (intercompany loan) and intangible assets (goodwill). As a result of the reclassification adjustment, the impact on the opening balance as of January 1, 2019 in the consolidated statements of financial position was an increase in deferred tax liabilities and a decrease in retained earnings of 940 Million KRW, respectively. As the adjustment had no material impact on the consolidated statements of comprehensive income for the financial year 2019 and 2020, the consolidated statements of comprehensive income have not been restated.

2.23 NEW AND AMENDED STANDARDS AND INTERPRETATIONS

Amendments to K-IFRS 1103: Definition of a Business

The amendment to K-IFRS 1103 clarifies that to be considered a business, an integrated set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. Furthermore, it clarified that a business can exist without including all of the inputs and processes needed to create outputs. These amendments had no impact on the consolidated financial statements of the Group, but may impact future periods should the Group enter into any business combinations.

Amendments to K-IFRS 1107, K-IFRS 1109 and K-IFRS 1039: Interest Rate Benchmark Reform

The amendments to K-IFRS 1109 and K-IFRS 1039 *Financial Instruments: Recognition and Measurement* provide a number of reliefs, which apply to all hedging relationships that are directly affected by interest rate benchmark reform. A hedging relationship is affected if the reform gives rise to uncertainties about the timing and or amount of benchmark-based cash flows of the hedged item or the hedging instrument. The Group applies these amendments to the interest rate swap designated as cash flow hedge (see note 24.1.2). The impact on the consolidated financial statements of the Group is immaterial.

Amendments to K-IFRS 1001 and K-IFRS 1008: Definition of Materiality

The amendments provide a new definition of materiality that states "information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity."

The amendments clarify that materiality will depend on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. These amendments had no impact on the consolidated financial statements of, nor is there expected to be any future impact to the Group.

Conceptual Framework for Financial Reporting issued on 29 March 2018

The Conceptual Framework is not a standard, and none of the concepts contained therein override the concepts or requirements in any standard. The purpose of the Conceptual Framework is to assist the IASB in developing standards, to help preparers develop consistent accounting policies where there is no applicable standard in place and to assist all parties to understand and interpret the standards.

The revised Conceptual Framework includes some new concepts, provides updated definitions and recognition criteria for assets and liabilities and clarifies some important concepts.

These amendments had no impact on the consolidated financial statements of the Group.

Amendment to K-IFRS 1116: COVID-19 related Rent Concessions

The amendment to K-IFRS 1116 provide lessees with a practical expedient to elect not to assess whether rent concessions arising as a direct consequence of the COVID-19 pandemic constitutes a lease modification. For such rent concessions, conditions of the practical expedient are required to be met and lessees that elect to apply the practical expedient, accounts for such changes that are not lease modifications the same way it would account for the change under K-IFRS 1116. The amendment may be retrospectively applied to annual reporting periods beginning on or after June 1, 2020 and earlier application is permitted. These amendments had no impact on the consolidated financial statements of the Group as the practical expedient has not been applied during the twelve months ended December 31, 2020.

3. SIGNIFICANT 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 significant 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
6, 7, 8, 9, 10	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 significant future investments that will enhance the asset's 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.
20, 21	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.
28.1, 28.2	Income tax / deferred tax assets	The Group applies significant 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. Significant 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.
24.2	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.

24.3.3 **Leases – determination of lease term and incremental borrowing rate**

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 judgement 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 significant 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 significant leasehold improvements or significant customization to the leased asset). 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.



4. 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 K-IFRS 1001: Classification of Liabilities as Current or Non-current

Amendments to paragraphs 69 to 76 of K-IFRS 1001 have been issued to 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;
- 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.

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 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.

Reference to the Conceptual Framework – Amendments to K-IFRS 1103

Amendments to K-IFRS 1103 *Business Combinations – Reference to the Conceptual Framework* have been issued. The amendments are intended to replace a reference to the Framework for the Preparation and Presentation of Financial Statements with a reference to the Conceptual Framework for Financial Reporting without significantly changing its requirements.

An exception has been added to the recognition principle of K-IFRS 1103 to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of K-IFRS 1037 or IFRIC 21 Levies, if incurred separately.

It was decided to clarify existing guidance in K-IFRS 1103 for contingent assets that would not be affected by replacing the reference to the Framework for the Preparation and Presentation of Financial Statements. The amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively.

The amendments are not expected to have a material impact on the Group.

Property, Plant and Equipment: Proceeds before Intended Use – Amendments to K-IFRS 1016

Property, Plant and Equipment – Proceeds before Intended Use has been issued, which prohibits entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the costs of producing those items, in profit or loss.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 and must be applied retrospectively to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment.

The amendments are not expected to have a material impact on the Group.

Onerous Contracts – Costs of Fulfilling a Contract – Amendments to K-IFRS 1037

Amendments to K-IFRS 1037 have been issued to specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making.

The amendments apply a “directly related cost approach”. The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.

The amendments are effective for annual reporting periods beginning on or after January 1, 2022. The Group will apply these amendments to contracts for which it has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments.

K-IFRS 1101 *First-time Adoption of International Financial Reporting Standards* – Subsidiary as a first-time adopter

An amendment to K-IFRS 1101 *First-time Adoption of International Financial Reporting Standards* has been issued. The amendment permits a subsidiary that elects to apply paragraph D16(1) of K-IFRS 1101 to measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to K-IFRS. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of K-IFRS 1101.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted.

The amendment is not expected to have a material impact on the Group.

K-IFRS 1109 *Financial Instruments* – Fees in the '10 per cent' test for derecognition of financial liabilities

An amendment to K-IFRS 1109 has been issued. The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The Group will apply the amendments to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

The amendments are not expected to have a material impact on the Group.

K-IFRS 1041 *Agriculture* – Taxation in fair value measurements

An amendment to K-IFRS 1041 *Agriculture* has been issued. The amendment removes the requirement in paragraph 22 of K-IFRS 1041 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of K-IFRS 1041.

An entity applies the amendment prospectively to fair value measurements on or after the beginning of the first annual reporting period beginning on or after January 1, 2022 with earlier adoption permitted.

The amendments are not expected to have a material impact on the Group.

5. 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" and "Fuel and Lubricant Additives".
- **Performance Chemicals**
Performance Chemicals operating segment mainly includes the product lines "Tin Intermediates", "PVC Stabilizers and Polymers" 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.

5.1 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.

Description	2020		2019		2020		2019	
	Industrial Chemicals		Performance Chemicals		Total			
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Sales	584,479	604,295	223,289	210,045	807,768	814,340		
Operating profit	70,468	69,755	-2,458	-10,463	68,010	59,292		

5.2 REVENUE FROM CONTRACTS WITH CUSTOMERS

Description	2020		2019		2020		2019	
	Industrial Chemicals		Performance Chemicals		Total			
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Sales of goods	575,896	595,905	220,629	207,962	796,525	803,867		
Sales of services	8,583	8,390	2,660	2,083	11,243	10,473		
Total sales	584,479	604,295	223,289	210,045	807,768	814,340		

5.3 GEOGRAPHIC INFORMATION

5.3.1 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 to regions. Therefore, no country revenues are disclosed separately.

	2020	2019
	Million KRW	Million KRW
Korea	164,250	176,757
Rest of Asia	232,039	224,640
Europe	180,259	188,521
North and South America	176,936	170,699
Australia	2,198	2,533
Middle East and Africa	52,086	51,190
Total sales	807,768	814,340

The Group has no customer who accounts for more than 10% of the Group's total sales during the reporting periods.

5.3.2 NON-CURRENT ASSETS

Non-current assets information presented below consist of property, plant and equipment, right-of-use assets, investment properties and intangible assets.

	2020	2019
	Million KRW	Million KRW
Korea	389,584	398,389
Rest of Asia	28,988	29,916
Europe	8,869	16,537
North and South America	11,193	13,389
Middle East and Africa	18,575	20,153
Total	457,209	478,384

6. 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, 2019	149,508	86,882	66,486	489,601	47,190	3,498	843,165
Additions	–	23	115	1,898	1,756	27,776	31,568
Disposals	–	-728	-3,307	-12,339	-2,337	–	-18,711
Reclassifications	42	1,664	511	14,108	501	-16,826	–
Net exchange differences	–	521	–	781	290	-197	1,395
As of December 31, 2019	149,550	88,362	63,805	494,049	47,400	14,251	857,417
As of January 1, 2020	149,550	88,362	63,805	494,049	47,400	14,251	857,417
Additions	–	100	111	1,002	688	21,011	22,912
Disposals	–	-27	-549	-20,775	-2,084	–	-23,435
Reclassifications	–	4,330	2,622	17,104	526	-24,582	–
Net exchange differences	–	-1,485	–	-2,091	-252	-40	-3,868
As of December 31, 2020	149,550	91,280	65,989	489,289	46,278	10,640	853,026

Accumulated depreciation and impairment

As of January 1, 2019	–	-23,404	-40,020	-303,792	-36,627	–	-403,843
Depreciation charge	–	-2,380	-3,039	-22,648	-2,435	–	-30,502
Disposals	–	248	2,846	11,768	2,168	–	17,030
Net exchange differences	–	-49	–	-361	-240	–	-650
As of December 31, 2019	–	-25,585	-40,213	-315,033	-37,134	–	-417,965
As of January 1, 2020	–	-25,585	-40,213	-315,033	-37,134	–	-417,965
Depreciation charge	–	-2,533	-2,993	-23,088	-2,432	–	-31,046
Disposals	–	12	543	19,087	1,870	–	21,512
Impairment	–	-1	–	-49	-5	–	-55
Net exchange differences	–	203	–	413	124	–	740
As of December 31, 2020	–	-27,904	-42,663	-318,670	-37,577	–	-426,814

Net book value

As of December 31, 2020	149,550	63,376	23,326	170,619	8,701	10,640	426,212
As of December 31, 2019	149,550	62,777	23,592	179,016	10,266	14,251	439,452

There was an impairment of property, plant and equipment of 55 Million KRW within SWDM-IN during the year ending 2020, in course of ordinary business (not related to COVID-19 pandemic). Non-cash transactions in 2020 increased by 1,685 Million KRW (2019: -1,246 Million KRW decrease) and amounted to 5,078 Million KRW (2019: 3,393 Million KRW) are included in the additions for the year ending 2020.

Capitalized borrowing costs

Borrowing costs, which are directly attributable to the acquisition or production of a qualified asset, are capitalized as part of the cost of that asset. No borrowing costs have been capitalized during the 2020 and 2019 financial years.

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 26). For contractual commitments to purchase property, plant and equipment (refer to note 25.3).

7. 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	Right-of-use assets – structures	Right-of-use assets – machinery	Right-of-use assets – other	Total
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
Acquisition cost					
As of January 1, 2019	20,612	803	241	681	22,337
Additions	10	340	–	348	698
Disposals	–	–	–	-74	-74
Modification of contract	4	–	-169	–	-165
Net exchange differences	647	1	12	22	682
As of December 31, 2019	21,273	1,144	84	977	23,478
As of January 1, 2020	21,273	1,144	84	977	23,478
Additions	117	–	1,067	347	1,531
Disposals	-28	-144	–	-310	-482
Modification of contract	349	526	81	2	958
Net exchange differences	-537	-1	-129	-2	-669
As of December 31, 2020	21,174	1,525	1,103	1,014	24,816
Accumulated depreciation					
As of January 1, 2019	–	–	–	–	–
Depreciation charge	-1,618	-658	-58	-371	-2,705
Disposals	–	–	–	26	26
Net exchange differences	2	–	–	-1	1
As of December 31, 2019	-1,616	-658	-58	-346	-2,678
As of January 1, 2020	-1,616	-658	-58	-346	-2,678
Depreciation charge	-1,751	-638	-151	-399	-2,939
Disposals	28	144	–	247	419
Net exchange differences	123	–	14	2	139
As of December 31, 2020	-3,216	-1,152	-195	-496	-5,059
Net book value					
As of December 31, 2020	17,958	373	908	518	19,757
As of December 31, 2019	19,657	486	26	631	20,800

In 2020, no impairment of right-of-use assets has been recognized. Further, the Group recorded rent expenses from short-term leases of 282 Million KRW (2019: 168 Million KRW), leases of low-value assets of 71 Million KRW (2019: 69 Million KRW) and variable lease payments of 620 Million KRW (2019: 384 Million KRW) in the consolidated statements of comprehensive income.

Set out below are the carrying amounts of lease liabilities and the movements during the period:

Description	2020	2019
	Million KRW	Million KRW
As of January 1	19,523	20,910
Additions	1,531	698
Modifications	958	-165
Net exchange differences	-628	641
Accretion of interest	742	685
Payments	-3,554	-3,246
As of December 31	18,572	19,523

The maturity analysis of lease liabilities is disclosed in note 24.3.3.

8. INVESTMENT PROPERTIES

Acquisition cost	Land Million KRW	Buildings Million KRW	Structures Million KRW	Total Million KRW
As of January 1, 2019	3,279	504	32	3,815
Disposals	–	–	-3	-3
Net exchange differences	1	5	–	6
As of December 31, 2019	3,280	509	29	3,818
As of January 1, 2020	3,280	509	29	3,818
Disposals	–	–	-29	-29
Net exchange differences	–	-2	–	-2
As of December 31, 2020	3,280	507	–	3,787

Accumulated depreciation				
As of January 1, 2019	–	-273	-26	-299
Depreciation charge	–	-17	-1	-18
Disposals	–	–	3	3
Net exchange differences	–	-2	–	-2
As of December 31, 2019	–	-292	-24	-316
As of January 1, 2020	–	-292	-24	-316
Depreciation charge	–	-14	-1	-15
Disposals	–	–	25	25
Net exchange differences	–	2	–	2
As of December 31, 2020	–	-304	–	-304

Net book value				
As of December 31, 2020	3,280	203	–	3,483
As of December 31, 2019	3,280	217	5	3,502

Investment properties are stated at cost less any accumulated depreciation and impairment losses, if any. The same useful lives have been applied for property, plant and equipment.

	2020 Million KRW	2019 Million KRW
Rental income	17	14
Operational expenses	-53	-80

The Company owns an office building in Busan which is subleased. The fair value of the office building amounts to 7,176 Million KRW as of December 31, 2020. In addition, Songwon International – Japan K.K. owns an object which is subleased. The fair value of the building and land is 29 Million KRW.

During the current year, the Company disposed investment properties comprising structures which led to a book loss of 4 Million KRW (2019: disposal of fully depreciated investment properties comprising structures in October 2019).

Disclosure of pledged assets can be found in note 26.

9. INTANGIBLE ASSETS

	Industrial rights	Software	Memberships	Customer relationships	Capitalization process technology	Goodwill	Construction in progress	Total
Acquisition cost	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
As of January 1, 2019	5,539	2,709	831	28,685	3,294	41,929	196	83,183
Additions	2	183	–	–	–	–	458	643
Disposals	-28	-82	–	–	–	–	–	-110
Reclassifications	523	–	–	–	–	–	-523	–
Net exchange differences	–	36	–	1,136	163	1,146	–	2,481
As of December 31, 2019*	6,036	2,846	831	29,821	3,457	43,075	131	86,197
As of January 1, 2020*	6,036	2,846	831	29,821	3,457	43,075	131	86,197
Additions	–	124	–	–	–	–	750	874
Disposals	-181	-172	–	–	–	–	–	-353
Reclassifications	177	–	–	–	–	–	-177	–
Net exchange differences	–	-27	–	–	–	-1,959	–	-1,986
As of December 31, 2020	6,032	2,771	831	29,821	3,457	41,116	704	84,732

Accumulated amortization and impairment

As of January 1, 2019	-2,103	-2,546	–	-25,882	-2,892	-31,934	–	-65,357
Amortization charge	-557	-94	–	-2,821	-405	–	–	-3,877
Disposals	28	82	–	–	–	–	–	110
Impairment*	-55	–	–	–	–	–	-33	-88
Net exchange differences	–	-28	–	-1,118	-160	-1,049	–	-2,355
As of December 31, 2019*	-2,687	-2,586	–	-29,821	-3,457	-32,983	-33	-71,567
As of January 1, 2020*	-2,687	-2,586	–	-29,821	-3,457	-32,983	-33	-71,567
Amortization charge	-575	-115	–	–	–	–	–	-690
Disposals	181	172	–	–	–	–	–	353
Impairment	-22	–	–	–	–	-6,889	-1	-6,912
Net exchange differences	–	35	–	–	–	1,806	–	1,841
As of December 31, 2020	-3,103	-2,494	–	-29,821	-3,457	-38,066	-34	-76,975

Net book value

As of December 31, 2020	2,929	277	831	–	–	3,050	670	7,757
As of December 31, 2019	3,349	260	831	–	–	10,092	98	14,630

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. In the financial year 2020, the Group recognized an impairment loss on industrial rights of 23 Million KRW (financial year 2019: Impairment loss on industrial rights of 88 Million KRW).

The intangible assets with an indefinite useful life are tested for impairment on an annual basis. The goodwill impairment test performed in the fourth quarter 2020 led to an impairment loss of 6,889 Million KRW in the financial year 2020. For further details of the impairment test, refer to note 10.

*refer to note 2.21 for further details

9.1 DETAILS OF INDIVIDUALLY SIGNIFICANT INTANGIBLE ASSETS

Description	Remark	2020	2019	Remaining life
		December 31 Million KRW	December 31 Million KRW	
Industrial rights	REACH	2,508	2,845	6.6
Industrial rights	1330 Technology	388	466	5.0
Memberships	New Seoul Country Club	778	778	indefinite
Goodwill	Acquisition of Songwon Group Holding AG (former: Songwon International AG)	–	1,836	indefinite
Goodwill	Acquisition of ATG Additive Technology Greiz GmbH	–	4,798	indefinite
Goodwill	Acquisition of Songwon Polysys Additives LLC	–	127	indefinite
Goodwill	Acquisition of Business SeQuent Scientific Limited	3,050	3,331	indefinite
Construction-in-progress	REACH	670	98	n/a
Significant intangible assets total		7,394	14,279	

10. IMPAIRMENT TESTING OF GOODWILL AND INTANGIBLES WITH INDEFINITE USEFUL LIFE

10.1 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 acquired from the acquisition of Songwon Group Holding AG (former: Songwon International AG), Songwon-ATG GmbH, Songwon Polysys Additives LLC, as well as memberships are allocated to the Group's CGU comprising the acquired entities and the parent company, which correspond almost to the entire Group. 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 is as follows (before goodwill impairment):

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Goodwill of Songwon Specialty Chemicals-India Pvt. Ltd., India (SWDM-IN)	3,050	3,331
Goodwill of the rest of the Group (main CGU)	6,889	6,761
Memberships with indefinite useful lives of the rest of the Group (main CGU)	831	831
Total tested goodwill and intangible assets with indefinite useful lives	10,770	10,923

The Group performed its annual impairment test in December 2020 and 2019. The recoverable amount of the CGUs – 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.

Main CGU

The value in use of the main CGU of 695,835 Million KRW was calculated on the basis of projected future free cash flows which refer to budgeted numbers approved by management. The projected free cash flows decreased due to more reserved assumptions considering uncertainties related to the COVID-19 pandemic and the more pessimistic global economic outlook leading to a decrease in the sales growth rate assumption. Although the cost of equity of 13.5% increased and the cost of debt of 3.0% remained on the same level in 2020 compared to 2019 (cost of equity: 12.6% / cost of debt: 3.0%), the weighted average cost of capital (WACC) decreased to 9.4% (2019: 10.1%) due to the higher debt-equity ratio in the peer group. The decrease in WACC was not sufficient to compensate for the decrease in the projected free cash flows. As a result, management has recognized an impairment loss of 6,889 Million KRW in the current year, recorded in "Other expenses" in the consolidated statements of comprehensive income.

Memberships with indefinite useful lives of the rest of the Group

There was no impairment loss recognized in the financial year 2020 and 2019, according to the impairment test on memberships with indefinite useful lives.

CGU of SWDM-IN

As of December 31, 2020, the recoverable amount of the CGU of Songwon Specialty Chemicals – India Pvt. Ltd., India amounts to 73,794 Million KRW or 4,967 Million INR (2019: 78,949 Million KRW or 4,867 Million INR) and exceeded the carrying amount of the respective CGU.

After goodwill impairment recognition, allocation details of goodwill and intangible assets with indefinite useful lives to the CGU are as follows:

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Goodwill of Songwon Specialty Chemicals-India Pvt. Ltd., India (SWDM-IN)	3,050	3,331
Goodwill of the rest of the Group (main CGU)	–	6,761
Memberships with indefinite useful lives of the rest of the Group (main CGU)	831	831
Total tested goodwill and intangible assets with indefinite useful lives	3,881	10,923

10.2 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 three years for the main CGU and 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 the main and SWDM-IN's CGUs are estimated on the basis of the Budget 2021 and the Business Plan 2021 – 2025, respectively, 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 6.50% (2019: 6.50%) and a small cap premium of 3.16% (2019: 3.39%) 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	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 yield 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 amount of the main CGU	2020	2019
Average annual growth	3.61%	4.14%
Pre-tax WACC	11.72%	12.44%
Post-tax WACC	9.40%	10.10%
Long-term growth rate	1.77%	2.20%

Parameters for the determination of the recoverable CGU amount of SWDM-IN	2020	2019
Average annual growth	6.97%	15.17%
Pre-tax WACC	15.17%	16.34%
Post-tax WACC	11.88%	12.55%
Long-term growth rate	3.06%	2.98%

The following changes in key assumptions 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	0.00%
Pre-tax WACC	34.44%
Post-tax WACC	26.88%
Long-term growth rate	0.00%

11. INVESTMENT ACCOUNTED FOR USING THE EQUITY METHOD

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
2019					
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	4,760	-511	1,010	88	5,347
Total	4,760	-511	1,010	88	5,347
2020					
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	5,347	-519	1,064	20	5,912
Total	5,347	-519	1,064	20	5,912

12. OTHER FINANCIAL ASSETS

Description	2020		2019	
	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)	420	1,913	740	1
Financial instrument at FVtPL	8,210	1,570	6,000	794
Derivative assets at FVtPL (note 24)	–	33	–	61
Equity instrument at FVOCI	429	–	842	–
Guarantee and other deposits at amortized cost	830	501	355	547
Total	9,889	4,017	7,937	1,403

As of December 31, 2020 and 2019, financial instruments at amortized cost (bank deposit) include restricted cash of 7 Million KRW.

12.1 EQUITY INSTRUMENTS AT FVOCI

Details of equity instruments at FVOCI as of December 31, 2020 and 2019 are as follows:

Description	2020				2019			
	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	429	180,000	3.00%	900	842
Total			900	429			900	842

Investments in equity instruments that do not have a quoted market price in an active market are measured using an appropriate valuation technique.

13. INVENTORIES

Description	2020	2019
	December 31	December 31
	Million KRW	Million KRW
Raw materials and supplies	34,532	39,219
Work in progress	1,171	494
Finished and semi-finished goods	114,625	123,283
Goods in transit	39,758	32,981
Consignment stocks	1,971	1,019
Total inventories at the lower of cost and net realizable value	192,057	196,996

As of December 31, 2020, inventory write-off amounted to 3,991 Million KRW for raw materials, work in progress, finished and semi-finished goods (December 31, 2019: 4,489 Million KRW). The Group recognized inventory allowance expenses of -475 Million KRW in the financial year 2020 (financial year 2019: -2,892 Million KRW).

14. TRADE AND OTHER RECEIVABLES

Description	2020	2019
	December 31	December 31
	Million KRW	Million KRW
Trade and notes receivables	133,057	124,229
Allowances for trade and notes receivables	-1,249	-1,482
Trade and notes receivables (related parties)	49	106
Other accounts receivables	1,827	4,960
Allowances for other accounts receivables	-34	-9
Accrued income	41	362
Total	133,691	128,166

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, 2019	-2,188
Charge for the period	-509
Utilized	589
Unused amounts reversed	617
December 31, 2019	-1,491
January 1, 2020	-1,491
Charge for the period	-815
Utilized	-
Unused amounts reversed	1,023
December 31, 2020	-1,283

The ageing analysis of trade and other receivables is as follows:

	Total	Current	Days past due			
			≤ 90 days	91-120 days	121-180 days	> 180 days
	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
December 31, 2020	134,974	126,727	7,058	167	8	1,014
December 31, 2019	129,657	120,545	7,992	22	62	1,036

Refer to note 24.3.2 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.

15. OTHER CURRENT ASSETS

Other current assets as of December 31, 2020 and 2019, consist of the following:

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Advance payments	1,157	688
Prepaid expenses	3,775	5,327
VAT refundable	4,240	1,541
Total	9,172	7,556

16. CASH AND CASH EQUIVALENTS

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Cash on hand	53	76
Bank accounts	69,627	59,067
Time deposits (< 3 months)	3,104	3,989
Total	72,784	63,132

Cash at banks earns interest at floating rates based on daily bank deposit rates. Time deposits are made for various periods from one day and three months, depending on the Group's immediate cash requirements, and earn interest at the respective short-term deposit rates.

17. ISSUED CAPITAL AND RESERVES

17.1 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, 2020 and 2019, the Company issued 24,000,000 shares of common stocks outstanding with a carrying value of 12,000 Million KRW.

17.2 CAPITAL SURPLUS

As of December 31, 2020 and 2019, the Group's capital surplus is composed of the following:

Description	2020	2019
	December 31 Million KRW	December 31 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	-2,002	-2,002
Total	22,359	22,359

17.3 RESERVES

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Legal reserve	2,520	2,160
Asset revaluation surplus	25,815	25,815
Total	28,335	27,975

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 20, 2020 amounted to 360 Million KRW (2019: 384 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, 2020 and 2019, 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 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	2020	2019
	December 31	December 31
Subject to the year	2019	2018
Dividends on ordinary shares in KRW	3,600,000,000	3,840,000,000
Number of shares	24,000,000	24,000,000
Dividends per share in KRW	150	160

17.4 ACCUMULATED OTHER COMPREHENSIVE INCOME

Accumulated other comprehensive income, net of tax, as of December 31, 2020 and 2019, is composed of the following:

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Re-measurement of defined benefit plans	-26,457	-36,264
OCI recognized within retained earnings	-26,457	-36,264
Cash flow hedge reserve	-1,207	-997
Fair value reserve of financial assets at FVOCI	-362	-44
Foreign currency translation reserve	-7,662	-2,474
Share of foreign currency translation reserve associated with non-controlling interests	141	31
OCI recognized within other components of equity	-9,090	-3,484

Details of other comprehensive income for the year ended December 31, 2020 and 2019, are as follows:

Description	2020	2019
	Million KRW	Million KRW
Pre-tax amounts		
Losses on valuation of interest rate swaps	-275	-1,362
Losses on valuation of financial assets at FVOCI	-413	-512
Exchange differences on translation of foreign operations	-5,188	2,875
Re-measurement gains / (losses) on defined benefit plans	13,101	-13,664
Pre-tax amounts total	7,225	-12,663
Tax effects		
Gains on valuation of interest rate swaps	65	311
Gains on valuation of financial assets at FVOCI	95	118
Re-measurement (losses) / gains on defined benefit plans	-3,294	2,973
Tax effects total	-3,134	3,402
Net amounts		
Losses on valuation of interest rate swaps	-210	-1,051
Losses on valuation of financial assets at FVOCI	-318	-394
Exchange differences on translation of foreign operations	-5,188	2,875
Re-measurement gains / (losses) on defined benefit plans	9,807	-10,691
Net amounts total	4,091	-9,261

18. INTEREST-BEARING LOANS AND BORROWINGS

Interest-bearing loans and borrowings as of December 31, 2020 and 2019, are as follows:

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Long-term borrowings	59,647	73,094
Non-current interest-bearing loans and borrowings	59,647	73,094
Current portion of long-term borrowings	8,780	11,280
Short-term borrowings	150,160	159,920
Current interest-bearing loans and borrowings	158,940	171,200
Total	218,587	244,294

Details of long-term borrowings as of December 31, 2020 and 2019, are as follows:

Banks	Description	Maturity date	Annual interest rate (%)	2020	2019
				December 31 Million KRW	December 31 Million KRW
Woori Bank	General Loan	08.05.2024	3MCD+1.43	29,700	35,800
Busan Bank	General Loan	08.05.2024	6M Base rate +1.39	4,130	5,310
Hana Bank	General Loan	08.05.2024	3MCD+1.70	28,050	31,450
Kyongnam Bank	General Loan	08.05.2024	12MBBR+1.32	5,100	5,700
KEB Abu Dhabi	General Loan			–	4,629
Pan Gulf Holding Company W.L.L.	General Loan	31.12.2022	2.25	1,447	1,485
Subtotal				68,427	84,374
Less current portion				-8,780	-11,280
Non-current portion				59,647	73,094

Details of short-term borrowings as of December 31, 2020 and 2019, are as follows:

Banks	Description	Annual interest rate (%)	2020	2019
			December 31 Million KRW	December 31 Million KRW
Woori Bank	Trade loan	0.76~2.18	16,203	24,181
Hana Bank	General & trade loan	0.87~1.55	6,729	8,663
Korea Development Bank	General & trade loan	0.40~2.53	79,800	92,822
Busan Bank	General & trade loan	1.50~1.99	11,295	14,260
Kyongnam Bank	General & trade loan	1.15~2.37	15,589	9,994
NH Bank	General loan	1.93~2.62	20,000	10,000
KEB Abu Dhabi	General loan	1.62	544	–
Subtotal			150,160	159,920

19. EMISSION RIGHTS AND EMISSION LIABILITIES

Details of annual quantity of allocated emission allowances as of December 31, 2020, are as follows (Unit: Korean Allowance Unit – KAU):

	2018	2019	2020	Total
Allocated emission allowance	122,199	122,199	122,199	366,597

Changes in emission allowances during each planned period are as follows (Units: KAU and Million KRW):

	2018		2019		2020	
	Quantity	Book value	Quantity	Book value	Quantity	Book value
Beginning	27,182	-	5,444	-	12,996	-
Allocation	122,199	-	122,199	-	122,199	-
Allocation cancel	-706	-	-320	-	-	-
Additional allocation	5,834	-	12,536	-	-	-
Purchase	-	-	21,690	-	-	-
Delivery to government	-149,065	-	-148,553	-	-	-
Carryforward	-5,444	-	-12,996	-	-	-
Ending	-	-	-	-	135,195	-

There are no emission rights provided as collateral as of December 31, 2020.

Changes in emission liabilities included in other current liabilities during the current and prior reporting period are as follows (in Million KRW):

	2020	2019
As of January 1	512	-
Increase	668	512
Decrease	-455	-
As of December 31	725	512

Allocated greenhouse gas emissions free of charge in 2020 were 122,199 KAU.

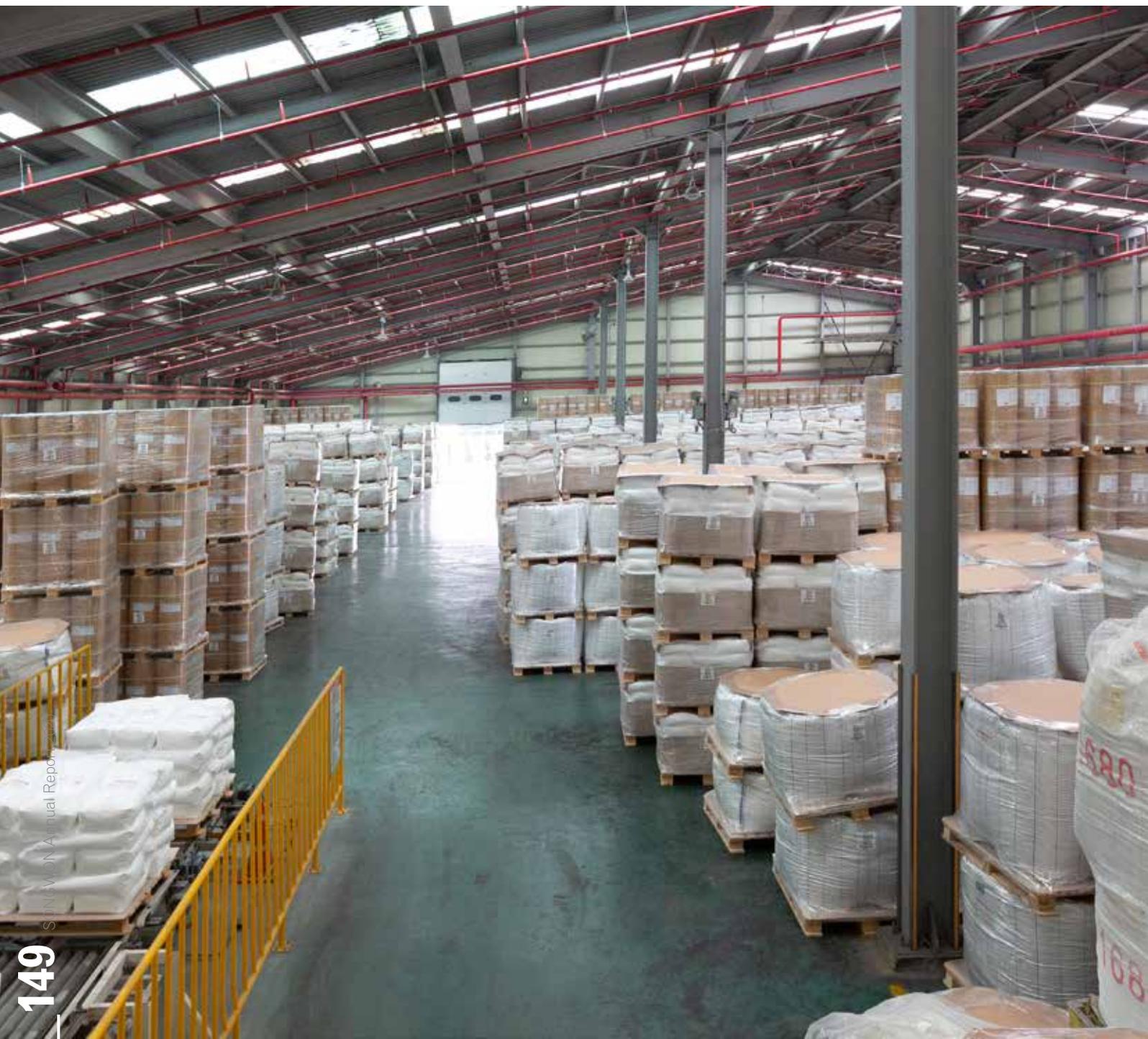
Estimated greenhouse gas emissions in 2020 were 150,051 KAU (2019: 148,553 KAU).

20. PENSION LIABILITY

Pension plan	2020	2019
	Million KRW	Million KRW
Net defined benefit liability	13,865	30,252
Korean	2,290	18,855
Swiss	11,568	11,397
Indian	7	–

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 income statement and the funded status and amounts recognized in the statement of financial position for the respective plans.



20.1 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, 2019	68,635	39,499	197	108,331
Pension cost charged to profit or loss				
Service costs	5,468	1,775	21	7,264
Interest	2,139	352	15	2,506
<i>Sub-total included in profit or loss</i>	<i>7,607</i>	<i>2,127</i>	<i>36</i>	<i>9,770</i>
Benefits paid	-1,624	-4,660	-18	-6,302
Re-measurement gains / (losses) in OCI				
Actuarial changes arising from changes in demographic assumptions	8	-	3	11
Actuarial changes arising from changes in financial assumptions	7,554	3,938	7	11,499
Experience adjustments	3,498	-585	1	2,914
<i>Sub-total included in OCI</i>	<i>11,060</i>	<i>3,353</i>	<i>11</i>	<i>14,424</i>
Employee contributions	-	904	-	904
Exchange differences	-	1,917	2	1,919
Defined benefit obligation as of December 31, 2019	85,678	43,140	228	129,046
Pension cost charged to profit or loss				
Service costs	6,900	1,906	24	8,830
Interest	2,421	111	16	2,548
<i>Sub-total included in profit or loss</i>	<i>9,321</i>	<i>2,017</i>	<i>40</i>	<i>11,378</i>
Benefits paid	-2,016	-2,730	-5	-4,751
Re-measurement gains / (losses) in OCI				
Actuarial changes arising from changes in demographic assumptions	4,287	-	-2	4,285
Actuarial changes arising from changes in financial assumptions	-19,590	331	7	-19,252
Experience adjustments	302	-426	3	-121
<i>Sub-total included in OCI</i>	<i>-15,001</i>	<i>-95</i>	<i>8</i>	<i>-15,088</i>
Employee contributions	-	981	-	981
Plan amendment	-	-2,043	-	-2,043
Exchange differences	-	1,494	-20	1,474
Defined benefit obligation as of December 31, 2020	77,982	42,764	251	120,997
Weighted average duration 2019 (years)	10.77	17.66	6.79	
Weighted average duration 2020 (years)	11.10	16.91	8.88	

20.2 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, 2019	60,680	31,417	207	92,304
Pension cost charged to profit or loss				
Interest	1,729	282	15	2,026
Administration expenses	–	-16	–	-16
<i>Sub-total included in profit or loss</i>	<i>1,729</i>	<i>266</i>	<i>15</i>	<i>2,010</i>
Benefits paid	-2,198	-4,660	-18	-6,876
Re-measurement gains / (losses) in OCI				
Return on plan assets (excluding amounts included in interest expenses)	-388	1,142	6	760
<i>Sub-total included in OCI</i>	<i>-388</i>	<i>1,142</i>	<i>6</i>	<i>760</i>
Employer contributions	7,000	1,167	16	8,183
Employee contributions	–	904	–	904
Exchange differences	–	1,507	2	1,509
Plan assets as of December 31, 2019	66,823	31,743	228	98,794
Pension cost charged to profit or loss				
Interest	1,874	86	14	1,974
Administration expenses	-131	-18	–	-149
<i>Sub-total included in profit or loss</i>	<i>1,743</i>	<i>68</i>	<i>14</i>	<i>1,825</i>
Benefits paid	-1,982	-2,730	-5	-4,717
Re-measurement gains / (losses) in OCI				
Return on plan assets (excluding amounts included in interest expenses)	-892	-1,091	-4	-1,987
<i>Sub-total included in OCI</i>	<i>-892</i>	<i>-1,091</i>	<i>-4</i>	<i>-1,987</i>
Employer contributions	10,000	1,142	34	11,176
Employee contributions	–	981	–	981
Exchange differences	–	1,083	-23	1,060
Plan assets as of December 31, 2020	75,692	31,196	244	107,132

The Group expects to contribute comparable amounts (as in 2020) to its defined benefit pension plan in 2021.

20.3 NET PENSION LIABILITY

Changes in the net defined benefit liability 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, 2019	–	–	10	10
Net defined benefit liability as of January 1, 2019	-7,955	-8,082	–	-16,037
Pension cost charged to profit or loss				
Service costs	-5,468	-1,775	-21	-7,264
Administration expenses	–	-16	–	-16
Net interests	-410	-70	–	-480
<i>Sub-total included in profit or loss</i>	<i>-5,878</i>	<i>-1,861</i>	<i>-21</i>	<i>-7,760</i>
Benefits paid	-574	–	–	-574
Re-measurement gains / (losses) in OCI				
Actuarial changes arising from changes in demographic assumptions	-8	–	-3	-11
Actuarial changes arising from changes in financial assumptions	-7,554	-3,938	-7	-11,499
Return on plan assets (excluding amounts included in interest expenses)	-388	1,142	6	760
Experience adjustments	-3,498	585	-1	-2,914
<i>Sub-total included in OCI</i>	<i>-11,448</i>	<i>-2,211</i>	<i>-5</i>	<i>-13,664</i>
Employer contributions	7,000	1,167	16	8,183
Employee contributions	–	–	–	–
Exchange differences	–	-410	–	-410
Net defined benefit liability as of December 31, 2019	-18,855	-11,397	–	-30,252
Pension cost charged to profit or loss				
Service costs	-6,900	-1,906	-24	-8,830
Administration expenses	-131	-18	–	-149
Net interests	-547	-25	-2	-574
<i>Sub-total included in profit or loss</i>	<i>-7,578</i>	<i>-1,949</i>	<i>-26</i>	<i>-9,553</i>
Benefits received	34	–	–	34
Re-measurement gains / (losses) in OCI				
Actuarial changes arising from changes in demographic assumptions	-4,287	–	2	-4,285
Actuarial changes arising from changes in financial assumptions	19,590	-331	-7	19,252
Return on plan assets (excluding amounts included in interest expenses)	-892	-1,091	-4	-1,987
Experience adjustments	-302	426	-3	121
<i>Sub-total included in OCI</i>	<i>14,109</i>	<i>-996</i>	<i>-12</i>	<i>13,101</i>
Employer contributions	10,000	1,142	34	11,176
Employee contributions	–	–	–	–
Plan amendment	–	2,043	–	2,043
Exchange differences	–	-411	-3	-414
Net defined benefit liability as of December 31, 2020	-2,290	-11,568	-7	-13,865

The re-measurement gains recognized in the statements of comprehensive income were gains of 9,807 Million KRW (2019: losses of -10,691 Million KRW), net of tax. The total amount as of December 31, 2020, of accumulated loss included in retained earnings is -26,457 Million KRW (2019: accumulated losses of -36,264 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	
	2020	2019	2020 December 31	2019 December 31
Discount rate				
Korean plan	2.90%	3.20%	3.05%	2.90%
Swiss plan	0.15%	0.25%	0.15%	0.25%
Indian plan	6.80%	7.50%	6.20%	6.80%
Future salary increases				
Korean plan	5.60%	5.00%	3.80%	5.60%
Swiss plan	1.50%	2.00%	1.50%	2.00%
Indian plan	5.00%	5.00%	5.00%	5.00%

A quantitative sensitivity analysis for significant assumptions as of December 31, 2020, is as follows:

Discount rate	Sensitivity level		Impact on defined benefit obligation
	Change		Million KRW
Korean plan	+1.00%		-7,889
	-1.00%		9,425
Swiss plan	+0.25%		-1,641
	-0.25%		1,757
Indian plan	+1.00%		-237
	-1.00%		265
Salary increase			
Korean plan	+1.00%		9,253
	-1.00%		-7,906
Swiss plan	+0.25%		171
	-0.25%		-168
Indian plan	+1.00%		265
	-1.00%		-237

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.

21. OTHER LONG-TERM EMPLOYEE-RELATED LIABILITIES

Other long-term employee-related liabilities consist of the following:

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Other long-term employee benefits – Korea	4,630	3,334
Other long-term employee benefits – Others	671	521
Share-based payment-related liability	2,130	1,833
Total other long-term employee-related liabilities	7,431	5,688

21.1 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 that 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, 2019	2,450
Current service costs	283
Interest costs	73
Re-measurement losses	701
Total payment	-173
As of December 31, 2019	3,334
Current service costs	364
Interest costs	86
Re-measurement losses	1,149
Total payment	-303
As of December 31, 2020	4,630

Description	2020	2019
	December 31	December 31
Discount rate	3.01%	2.70%
Compensation increase	3.80%	5.60%
Compensation per day for vacation	KRW 101,760 - 222,480	KRW 96,960 - 200,400
Rate of increase in gold price	5.68%	5.40%
Gold price per 3.75 grams	261,000	KRW 223,000

21.2 OTHER LONG-TERM EMPLOYEE BENEFITS – OTHERS

The remaining other long-term employee benefits refer to legally established termination benefits of subsidiaries located in United Arab Emirates of 527 Million KRW (as of December 31, 2019: 416 Million KRW) and expenses for the defined contribution plan of Songwon Specialty Chemicals India Pvt. Ltd. of 144 Million KRW (as of December 31, 2019: 105 Million KRW).

21.3 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 to 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, 2020 and 2019, was estimated using the following assumptions:

Description	2020	2019
Dividend yield	0.88%	0.70%
Expected volatility	45.00%	45.00%
Risk-free interest rate	1.67%	1.96%
Weighted average expected life of share options (years)	4.1	4.7
Model used	Binomial tree	Binomial tree

The carrying amount of the liability relating to the LTIP on December 31, 2020 amounts to 2,130 Million KRW (December 31, 2019: 1,833 Million KRW) and the corresponding number of share options vested as of December 31, 2020 and 2019 is 207,714 and 144,463, respectively.

The expenses for employee services received during the year 2020, recognized in the statements of comprehensive income, amounted to 355 Million KRW (2019: income of 289 Million KRW). There were no cancellations and modifications to the awards during the years 2020 and 2019.

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	2020		2019	
	Number	KRW	Number	KRW
Outstanding as of January 1	449,451	17,780	388,401	17,275
Granted during the year	126,850	15,508	115,050	19,050
Forfeited during the year	-11,625	16,776	-39,500	18,743
Exercised during the year	-13,000	9,739	-14,500	11,690
Outstanding as of December 31	551,676	17,468	449,451	17,780
Exercisable as of December 31	207,714	14,640	144,463	11,854

The weighted average of remaining contractual life for the share options, outstanding as of December 31, 2020, was 5.0 years (December 31, 2019: 5.9 years). The weighted average fair value of options granted during the reporting period was 6,114 KRW (2019: 4,956 KRW).

The exercise price for options outstanding at the end of the reporting period ranges from 8,120 KRW – 27,000 KRW (2019: 8,120 KRW – 27,000 KRW).

22. OTHER FINANCIAL LIABILITIES

Other financial liabilities as of December 31, 2020 and 2019, are as follows:

Description	Non-current Million KRW	2020 December 31		2019 December 31	
		Current Million KRW	Non-current Million KRW	Current Million KRW	Non-current Million KRW
Derivative liabilities (note 24)	901	741	979	425	
Deposits	39	1,360	1,506	1,447	
Accrued interest expenses	–	420	–	510	
Unpaid dividends	–	–	–	3	
Total	940	2,521	2,485	2,385	

23. TRADE AND OTHER PAYABLES

Description	2020 December 31		2019 December 31	
	Million KRW	Million KRW	Million KRW	Million KRW
Trade payables	71,279		50,641	
Trade payables (related parties)	917		1,535	
Other accounts payables	19,542		23,437	
Other accounts payables (related parties)	6		6	
Withholdings	1,857		1,761	
Accrued expenses	20,996		21,509	
Guarantee deposits	17		21	
Total	114,614		98,910	

Trade and other payables do not bear interest and usually become due within 30-60 days.

24. ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS

24.1 DERIVATIVES FINANCIAL INSTRUMENTS

Description	2020		2019	
	December 31		December 31	
	Assets	Liabilities	Assets	Liabilities
	Million KRW		Million KRW	
Forward exchange contracts (current portion)	33	75	61	113
Interest rate swaps (current portion)	–	666	–	312
Interest rate swaps (non-current portion)	–	901	–	979
Total	33	1,642	61	1,404

24.1.1 FORWARD EXCHANGE CONTRACTS

Details of forward exchange contracts which 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, 2020 and 2019 are as follows:

2020

December 31

Contractual party	Position	Contract amount	Maturity dates	Contractual exchange rate (KRW)
Citibank Korea	sell	EUR 5,490,000	19.01.2021~28.06.2021	1,330.00~1,343.00
Woori Bank	sell	EUR 3,570,000	29.01.2021~26.02.2021	1,331.10~1,334.00
Woori Bank	sell	JPY 720,000,000	19.01.2021~21.06.2021	10.9950~11.0230

2019

December 31

Contractual party	Position	Contract amount	Maturity dates	Contractual exchange rate (KRW)
Citibank Korea	sell	EUR 8,850,000	31.01.2020~30.06.2020	1,318.00~1,321.00
Woori Bank	sell	EUR 10,200,000	28.01.2020~29.06.2020	1,326.10
Citibank Korea	sell	JPY 282,300,000	31.01.2020~31.03.2020	10.4900~10.6000
Woori Bank	sell	JPY 283,000,000	23.01.2020~31.03.2020	10.4938~10.5979
Hana Bank	sell	JPY 330,000,000	31.01.2020~30.06.2020	10.8320~10.8701

24.1.2 INTEREST RATE SWAPS

As of December 31, 2020 and 2019, the Group has entered into the following interest rate swap contracts to hedge the risk in floating interest rate:

2020

December 31

Description	Bonds contract	Interest rate swap contract
Contract date	08.05.2019	08.05.2019
Maturity date	08.05.2024	08.05.2024
Contract amount	36,000 Million KRW	36,000 Million KRW
Fixed interest rate	n/a	3.47%
Floating interest rate	3MCD+1.43%	3MCD+1.43%
Contract date	08.05.2019	08.05.2019
Maturity date	08.05.2024	08.05.2024
Contract amount	34,000 Million KRW	34,000 Million KRW
Fixed interest rate	n/a	3.52%
Floating interest rate	3MCD+1.70%	3MCD+1.70%

2019

December 31

Description	Bonds contract	Interest rate swap contract
Contract date	03.07.2017	03.07.2017
Maturity date	03.07.2020	03.07.2020
Contract amount	10,000 Million KRW	10,000 Million KRW
Fixed interest rate	n/a	2.73%
Floating interest rate	3MCD+1.02%	3MCD+1.02%
Contract date	08.05.2019	08.05.2019
Maturity date	08.05.2024	08.05.2024
Contract amount	36,000 Million KRW	36,000 Million KRW
Fixed interest rate	n/a	3.47%
Floating interest rate	3MCD+1.43%	3MCD+1.43%
Contract date	08.05.2019	08.05.2019
Maturity date	08.05.2024	08.05.2024
Contract amount	34,000 Million KRW	34,000 Million KRW
Fixed interest rate	n/a	3.52%
Floating interest rate	3MCD+1.70%	3MCD+1.70%

The Group applies cash flow hedge accounting on interest rate swaps in the current reporting period and in 2019. The balances included in accumulated other comprehensive income are -1,207 Million KRW (expenses) as of December 31, 2020 and -997 Million KRW (expenses) as of December 31, 2019, respectively (refer to note 17.4), net of income tax.

24.2 FAIR VALUES

Set out below is a comparison by class of the carrying amounts and fair value of the Group's financial instruments that are carried in the financial statements.

2020 December 31		Carrying amount		Fair value	
		Non-current Million KRW	Current Million KRW	Non-current Million KRW	Current Million KRW
Financial assets	Description				
	Financial assets at amortized cost				
	Other financial assets	1,250	2,414	1,250	2,414
	Trade and other receivables	–	133,691	–	133,691
	Cash and cash equivalents	–	72,784	–	72,784
	<i>Total financial assets at amortized cost</i>	<i>1,250</i>	<i>208,889</i>	<i>1,250</i>	<i>208,889</i>
	Financial assets at FVOCI				
	Other financial assets	429	–	429	–
	<i>Total financial assets at FVOCI</i>	<i>429</i>	<i>–</i>	<i>429</i>	<i>–</i>
	Financial assets at FVtPL				
	Forward exchange contracts	–	33	–	33
	Other financial assets	8,210	1,570	8,210	1,570
	<i>Total financial assets at FVtPL</i>	<i>8,210</i>	<i>1,603</i>	<i>8,210</i>	<i>1,603</i>
	Total financial assets	9,889	210,492	9,889	210,492
	Financial liabilities	Financial liabilities at amortized cost			
Other financial liabilities		39	1,780	39	1,780
Lease liabilities		16,143	2,429	16,143	2,429
Trade and other payables		–	114,614	–	114,614
Interest-bearing loans and borrowings		59,647	158,940	59,647	158,940
<i>Total financial liabilities at amortized cost</i>		<i>75,829</i>	<i>277,763</i>	<i>75,829</i>	<i>277,763</i>
Financial liabilities at FVOCI					
Interest rate swaps		901	666	901	666
<i>Total financial liabilities at FVOCI</i>		<i>901</i>	<i>666</i>	<i>901</i>	<i>666</i>
Financial liabilities at FVtPL					
Forward exchange contracts		–	75	–	75
<i>Total financial liabilities at FVtPL</i>		<i>–</i>	<i>75</i>	<i>–</i>	<i>75</i>
Total financial liabilities		76,730	278,504	76,730	278,504

2019
December 31

	Carrying amount		Fair value	
	Non-current Million KRW	Current Million KRW	Non-current Million KRW	Current Million KRW
Description				
Financial assets at amortized cost				
Other financial assets	1,095	548	1,095	548
Trade and other receivables	–	128,166	–	128,166
Cash and cash equivalents	–	63,132	–	63,132
Total financial assets at amortized cost	1,095	191,846	1,095	191,846
Financial assets at FVOCI				
Other financial assets	842	–	842	–
Total financial assets at FVOCI	842	–	842	–
Financial assets at FVtPL				
Forward exchange contracts	–	61	–	61
Other financial assets	6,000	794	6,000	794
Total financial assets at FVtPL	6,000	855	6,000	855
Total financial assets	7,937	192,701	7,937	192,701
Financial liabilities at amortized cost				
Other financial liabilities	1,506	1,960	1,506	1,960
Lease liabilities	17,214	2,309	17,214	2,309
Trade and other payables	–	98,910	–	98,910
Interest-bearing loans and borrowings	73,094	171,200	73,094	171,200
Total financial liabilities at amortized cost	91,814	274,379	91,814	274,379
Financial liabilities at FVOCI				
Interest rate swaps	979	312	979	312
Total financial liabilities at FVOCI	979	312	979	312
Financial liabilities at FVtPL				
Forward exchange contracts	–	113	–	113
Total financial liabilities at FVtPL	–	113	–	113
Total financial liabilities	92,793	274,804	92,793	274,804

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 24.2.1).

24.2.1 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 significant effect on the recorded fair value are observable either directly or indirectly
Level 3	Techniques which use inputs that have a significant effect on the recorded fair value that are not based on observable market data

As of December 31, 2020 and 2019, the Group held the following financial instruments carried at fair value on the statements of financial position:

	December 31, 2020	Level 1	Level 2	Level 3
	Million KRW	Million KRW	Million KRW	Million KRW
Financial assets				
Derivatives				
Forward exchange contracts	33	–	33	–
<i>Total derivatives</i>	33	–	33	–
Debt instruments				
Other debt instruments at FVtPL	9,780	–	9,780	–
<i>Total debt instruments</i>	9,780	–	9,780	–
Equity instruments				
Equity instruments at FVOCI	429	–	–	429
<i>Total equity instruments</i>	429	–	–	429
Total financial assets	10,242	–	9,813	429
Financial liabilities				
Derivatives				
Forward exchange contracts	75	–	75	–
Interest Rate Swaps	1,567	–	1,567	–
<i>Total derivatives</i>	1,642	–	1,642	–
Total financial liabilities	1,642	–	1,642	–

	December 31, 2019	Level 1	Level 2	Level 3
Financial assets	Million KRW	Million KRW	Million KRW	Million KRW
Derivatives				
Forward exchange contracts	61	–	61	–
<i>Total derivatives</i>	<i>61</i>	<i>–</i>	<i>61</i>	<i>–</i>
Debt instruments				
Exchange traded fund at FVtPL	794	794	–	–
<i>Total debt instruments</i>	<i>794</i>	<i>794</i>	<i>–</i>	<i>–</i>
Equity instruments				
Equity instruments at FVOCI	842	–	–	842
<i>Total equity instruments</i>	<i>842</i>	<i>–</i>	<i>–</i>	<i>842</i>
Total financial assets	1,697	794	61	842

Financial liabilities

Derivatives				
Forward exchange contracts	113	–	113	–
Interest Rate Swaps	1,291	–	1,291	–
<i>Total derivatives</i>	<i>1,404</i>	<i>–</i>	<i>1,404</i>	<i>–</i>
Total financial liabilities	1,404	–	1,404	–

During the reporting periods ended December 31, 2020 and 2019, 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 24.2) the carrying amounts are reasonable approximations of fair values and are measured using Level 3 measurement methods, except for cash and cash equivalents.

24.3 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 risk. The Group's management oversees the management of these risks through appropriate risk assessment and monitoring activities to minimize their effects.

24.3.1 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, 2020 and 2019.

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 flows risk. In response, the Group is minimizing the risk partially through an interest rate swap contract or choosing the most favorable financing instruments by switching to the 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, 2020	1.00	-984
	-1.00	984
December 31, 2019	1.00	-1,091
	-1.00	1,091

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 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 through 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 to 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, 2020 and 2019, are as follows:

Currency	2020 December 31		2019 December 31	
	10% increase Million KRW	10% decrease Million KRW	10% increase Million KRW	10% decrease Million KRW
USD	4,365	-4,365	1,903	-1,903
EUR	198	-198	728	-728
JPY	762	-762	240	-240
CHF	174	-174	206	-206
AED	-221	221	-186	186
INR	261	-261	973	-973
Total	5,539	-5,539	3,864	-3,864

The Group's exposure to foreign currency changes for all other currencies is not material.

24.3.2 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 relationship only with the customers with high credit rating assessed by credit assessment, considering their financial position, past experience 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 insignificant 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 24.2.

The Group is also exposed to the 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.

24.3.3 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 own strategy and plans which consider the maturity of financial instruments and expected operating cash flows and include 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 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 the consistency and flexibility in obtaining liquidity and stable financing.

The details of maturity profile of the Group's financial liabilities and lease liabilities, excluding financial derivative instruments, based on contractual undiscounted payments as of December 31, 2020 and 2019, are as follows:

	Less than a month	1 to 3 months	3 to 12 months	1 to 5 years	> 5 years	Total
2020	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
December 31						
Interest-bearing loans and borrowings	5,963	92,503	60,474	59,647	–	218,587
Trade and other payables	92,967	20,598	1,049	–	–	114,614
Lease liabilities	509	1,170	1,264	7,823	12,850	23,616
Other financial liabilities	317	1,452	11	39	–	1,819
Total	99,756	115,723	62,798	67,509	12,850	358,636

	Less than a month	1 to 3 months	3 to 12 months	1 to 5 years	> 5 years	Total
2019	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW	Million KRW
December 31						
Interest-bearing loans and borrowings	26,309	49,165	95,726	73,094	–	244,294
Trade and other payables	76,100	20,634	2,176	–	–	98,910
Lease liabilities	274	541	2,128	7,937	14,097	24,977
Other financial liabilities	376	1,560	24	1,506	–	3,466
Total	103,059	71,900	100,054	82,537	14,097	371,647

24.3.4 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 Group level the debt ratio is reviewed regularly. The debt-equity ratio as of December 31, 2020 and 2019, is 92% and 105%, respectively.

On a monthly basis, all subsidiaries have to report key performance indicators, which also include capital management information.

25. COMMITMENTS AND CONTINGENCIES

25.1 CONTINGENT LIABILITY

There are no current proceedings of lawsuits, claims, investigations and negotiations in relation to the product liability, mercantile law, environmental protection, health and safety etc., which could have a significant impact on the business operations and on the Group's consolidated financial position or income. Contingent liabilities in the Group are related to tax appeals of 439 Million KRW (2019: 405 Million KRW).

25.2 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, 2020 and 2019, are as follows:

Description	2020	2019
	December 31 Million KRW	December 31 Million KRW
Short-term lease commitments		
Within one year	-80	-68
<i>Total short-term lease commitments</i>	<i>-80</i>	<i>-68</i>
Low-value lease commitments		
Within one year	-63	-33
After one year but not more than five years	-141	-11
<i>Total low-value lease commitments</i>	<i>-204</i>	<i>-44</i>
Total	-284	-112

25.3 OTHER COMMITMENTS

As part of the ordinary business activities, the Group enters into various contractual commitments for the purchase of fixed assets and intangible assets as well as investment properties. As of December 31, 2020, the Group entered into commitments to purchase property, plant and equipment, as well as raw materials amounting to 1,624 Million KRW (December 31, 2019: 2,635 Million KRW).

The Group has provided one blank promissory note to Hanwha Chemical Co., Ltd. as security on the supply contracts.

One check and one promissory note which the Group received from Hana Bank and provided to its customer are outstanding as of December 31, 2020, due to bankruptcy declared by the customer.

Details of the Group's available short-term credit line facilities (excluding general loans) as of December 31, 2020, are as follows:

Description	Currency	Credit limit	Used	Unused
USANCE and L/C for import	Thousand USD	20,400	7,842	12,558
D/A and D/P	Thousand USD	110,900	38,628	72,272
	Million KRW	22,000	5,589	16,411
Trade loans	Million KRW	15,000	–	15,000
Secured loan of credit sales	Million KRW	9,000	3,084	5,916
Other foreign currency guarantees	Thousand USD	17,020	6,664	10,356
	Total Million KRW	46,000	8,673	37,327
	Total Thousand USD	148,320	53,134	95,186



26. 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, 2020 and 2019, presented in the maximum pledge amount, are as follows:

Pledged to	Pledged assets		2020	2019
			December 31	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
Kyongnam Bank	Land, buildings and machinery	Million KRW	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
Hana Bank	Land, buildings and machinery	Million KRW	60,000	60,000
Korea Development Bank	Land, buildings, investment properties and machinery	Million KRW	57,000	57,000
Busan Bank	Land, buildings and machinery	Thousand USD	24,000	24,000
Total		Million KRW	285,000	285,000
		Thousand USD	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, 2020 and 2019.

The Group has received payment guarantees amounting to 10,800 Million KRW (2019: 193,428 Million KRW and 32,076 Thousand USD) provided by Jongho Park, the Chairman of the Board of Directors of the Group, in connection with the Group's borrowings from banks as of December 31, 2020.

27. OPERATING PROFIT AND OTHER INCOME / EXPENSES

27.1 RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses of 7,618 Million KRW (2019: 6,199 Million KRW) are recorded in the income statement. Development expenses are not capitalized because the conditions for capitalization have not been met.

27.2 SELLING AND ADMINISTRATION EXPENSES

Description	2020	2019
	Million KRW	Million KRW
Sales-related costs	-26,109	-24,289
Personnel expenses	-49,490	-52,579
Travelling and entertainment	-2,964	-7,499
Depreciation and amortization	-2,670	-5,520
Administration expenses	-8,922	-10,638
Others	-5,808	-6,656
Total	-95,963	-107,181

27.3 OTHER INCOME

Description	2020	2019
	Million KRW	Million KRW
Fee income	132	153
Income resulting from government grants received	1,971	312
Miscellaneous income	1,292	1,549
Gains on disposal of property, plant and equipment	33	77
R&D sales income	267	93
Rental income	17	14
Total	3,712	2,198

27.4 OTHER EXPENSES

Description	2020	2019
	Million KRW	Million KRW
Miscellaneous expenses	-1,081	-1,039
Losses on disposal of property, plant and equipment	-1,849	-1,607
Impairment of tangible assets	-55	-
Impairment of goodwill	-6,889	-
Impairment of other intangible assets	-23	-88
Total	-9,897	-2,734

27.5 EXPENSES CLASSIFIED BY NATURE

Description	2020	2019
	Million KRW	Million KRW
Purchased material	-450,314	-459,833
Freight and logistic costs	-24,290	-22,536
Energy costs	-38,539	-40,485
Personnel expenses	-126,487	-126,063
Depreciation and amortization	-34,057	-36,449
Other expenses	-75,968	-72,416
Total	-749,655	-757,782
Thereof recorded in cost of sales	-643,795	-647,867
Thereof recorded in selling and administration costs	-95,963	-107,181
Thereof recorded in other expenses	-9,897	-2,734
Total	-749,655	-757,782

27.6 FINANCE INCOME

Description	2020	2019
	Million KRW	Million KRW
Gains on foreign exchange transactions	17,125	12,352
Gains on foreign exchange translations	4,670	4,735
Gains on derivative transactions	730	890
Gains on valuation of derivatives	33	61
Gain on disposal of financial assets FVtPL	228	-
Gains on valuation of financial assets at FVtPL	-	164
Interest on loans and receivables	216	576
Interest on loan and receivables (related parties)	-	2
Total finance income	23,002	18,780

27.7 FINANCE EXPENSES

Description	2020	2019
	Million KRW	Million KRW
Interest on borrowings	-6,668	-9,335
Total interest expenses	-6,668	-9,335
Losses on foreign exchange transactions	-21,161	-13,819
Losses on foreign exchange translations	-4,734	-5,676
Losses on derivative transactions	-1,755	-795
Losses on valuation of derivatives	-75	-113
Bank charges	-341	-486
Total finance expenses	-34,734	-30,224

27.8 NET GAINS AND LOSSES OF FINANCIAL INSTRUMENT CLASSES

Description	2020	2019
	Million KRW	Million KRW
Financial assets at amortized cost	-5,450	-506
Financial assets at FVOCI	-529	-1,443
Financial assets at FVtPL	-765	320
Financial liabilities at amortized cost	-5,101	-10,659
Financial liabilities at FVtPL	-75	-113
Total net gains and losses of the classes of financial instruments	-11,920	-12,401
Net gains / (losses) of financial instruments recognized in the consolidated statement of comprehensive income		
Finance expense*	-34,393	-29,738
Finance income	23,002	18,780
Total	-11,391	-10,958
Net gains / (losses) of financial instruments recognized in the consolidated statement of other comprehensive income		
Financial assets at FVOCI	-529	-1,443
Total	-529	-1,443
Total	-11,920	-12,401

* excluding bank charges

28. INCOME TAX EXPENSES

The major components of income tax expense in the statements of comprehensive income are as follows:

28.1 CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Description	2020	2019
	Million KRW	Million KRW
Current income tax charge	-20,688	-18,294
Adjustments in respect of current income tax of previous year	-8,128	678
Deferred income taxes related to changes of temporary differences, net	7,528	434
Deferred income taxes related to tax loss carry forwards	99	-
Deferred income taxes related to changes in tax rate	1,531	466
Deferred income taxes recognized directly in other comprehensive income	-3,134	3,402
Income tax expenses	-22,792	-13,314

Description	2020	2019
	Million KRW	Million KRW
Accounting profit before income taxes	51,157	48,322
At parent company's statutory income tax rate of 22.92% (2019: 23.22%)	-11,726	-11,219

(Increase) / decrease in income tax expenses resulting from:

Adjustments in respect of current income tax of previous years	-8,128	678
Non-temporary differences	-573	-525
Tax credits	2,879	432
Non-deductible expenses / (non-taxable income)	-32	23
Tax audit	-4,587	-1,350
Effect of different tax rates in tax jurisdiction	-533	-1,459
Others	-92	106
At the effective income tax rate 44.55% (2019: 27.55%)	-22,792	-13,314

In August 2019, the Korean National Tax Service started with the tax audit for FY 2015-2017 within the parent company Songwon Industrial Co., Ltd. As per year end 2019, 1,350 Million KRW were recognized for the known tax risks resulting from this tax audit. In October 2020, the tax authority issued the final invoices with the total amount of 10,499 Million KRW related to the investment valuation in course of the changes in the legal structure of the Group of 6,815 Million KRW, Group cost recharge of Global Business Unit services of 2,729 Million KRW and other minor issues of 955 Million KRW for the period inspected. After the tax assessment result recognition and reversal of the tax risk provision of 1,350 Million KRW as well as the deferred tax liability of 4,562 Million KRW recorded on timing difference resulting from the investment valuation, the net impact of the tax audit on the financial year 2020 was 4,587 Million KRW.

28.2 DEFERRED TAX

Deferred tax relates to the following:

Description	Consolidated statements of financial position		Consolidated statements of comprehensive income	
	2020	2019	2020	2019
	December 31	December 31 (restated*)	December 31	December 31
	Million KRW	Million KRW	Million KRW	Million KRW
Pension obligation	1,606	4,741	159	-116
Other long-term employment benefits	1,265	935	330	126
Trade receivables	152	135	17	83
Inventories	1,709	2,108	-399	1,482
Fixed assets*	-9,820	-10,648	828	801
Right-of-use assets	–	-244	244	-244
Gain on revaluation of land	-27,474	-27,307	-167	479
Other non-current financial assets	-225	13	-238	-1
Other current financial assets	55	-24	-16	-88
Other current assets	905	1	904	18
Accrued income	–	–	–	3
Other non-current financial liabilities*	-170	-263	93	–
Current lease liabilities	240	253	-13	253
Other current financial liabilities	716	1,605	-889	1,320
Other current liabilities	195	249	-54	6
Intangible assets*	150	-542	692	204
Gain on interest swaps	360	295	–	–
Loss available for offsetting against future taxable income	99	–	99	–
Investments in subsidiaries	-94	-4,633	4,539	16
Translation difference	–	–	-105	-40
Deferred tax income			6,024	4,302
Net deferred tax liabilities	-30,331	-33,326		

Reflected in the statements of financial positions as follows:

Deferred tax assets	5,720	3,792
Deferred tax liabilities*	-36,051	-37,118

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.

* refer to note 2.22 for further details

Reconciliation of deferred tax liabilities, net:

Description	2020	2019
	Million KRW	Million KRW
Opening balance as of January 1*	-33,326	-41,070
Deferred tax recognized in statements of comprehensive income	6,024	4,302
Deferred tax recognized in other comprehensive income (note 17.4)	-3,134	3,402
Translation differences	105	40
Closing balance as of December 31	-30,331	-33,326

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, 2020 and 2019, were recognized.

Description	2020	2019
	Million KRW	Million KRW
Temporary differences related to investments in subsidiaries	7,633	1,690
Total	7,633	1,690

Expected timing of expiration of recognized tax loss carry forwards and tax credit carry forwards, as of December 31, 2020, are as follows:

2020 December 31	Recognized deferred tax assets	
	Tax loss carry forwards Million KRW	Tax credit carry forwards Million KRW
less 1 year	-	-
1-5 years	-	-
5 years and later	-	971
Total	-	971

As of December 31, 2019, there are no unused recognized tax loss carry forwards and tax credit carry forwards available.

* refer to note 2.22 for further details

29. 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 2020 and 2019, 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	2020	2019
	KRW	KRW
Net profit attributable to ordinary equity holders of the parent	27,453,027,290	34,753,845,371
Weighted average number of ordinary shares	24,000,000	24,000,000
Earnings per share (basic / diluted)	1,144	1,448

30. 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 flow 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, 2020 and 2019, are as follows:

Description	Notes	2020	2019
		Million KRW	Million KRW
Adjustments			
Depreciation of property, plant and equipment	6	31,046	30,502
Depreciation of right-of-use assets	7	2,939	2,705
Depreciation of investment properties	8	15	18
Amortization of intangible assets	9	690	3,877
Impairment of tangible assets	6	55	–
Impairment of intangible assets	9	6,912	88
Impairment of non-current financial assets		5	3
Losses on disposals of property, plant and equipment, net	6	1,816	1,530
Share of result from investments accounted using the equity method	11	-1,064	-1,010
Finance income		-12,069	-8,292
Finance expenses		19,274	15,183
Income tax expenses	28	22,792	13,314
Total		72,411	57,918

Description	2020	2019
	Million KRW	Million KRW
Changes in operating assets and liabilities		
Trade receivables	-12,268	-9,582
Other receivables	3,493	-1,922
Other current assets	-2,023	-3,072
Other current financial assets	28	1,481
Inventories	3,546	6,539
Trade payables	21,787	-3,479
Other payables	-5,964	-1
Other current financial liabilities	275	328
Other current liabilities	946	918
Pension liabilities	-3,813	-257
Other long-term employment benefits	1,794	440
Total	7,801	-8,607

Changes in liabilities arising from financing activities for the years ended December 31, 2020 and 2019, 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, 2019	267,930	17,180	5,339
Cash flows	-30,771	-6,991	-1,853
Foreign exchange movement	-1,612	-1,442	53
Net losses on valuation of financial liabilities	-	-	1,331
Reclassification	-64,347	64,347	-
As of December 31, 2019	171,200	73,094	4,870
Cash flows	-20,710	-4,133	-1,589
Foreign exchange movement	-330	-534	-393
Net losses on valuation of financial liabilities	-	-	573
Reclassification	8,780	-8,780	-
As of December 31, 2020	158,940	59,647	3,461

31. 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 31.5)	A company that has significant influence on the Group
Kyungshin Industrial Co., Ltd.	Korea	Other (refer to note 31.5)	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	2020	2019
		Million KRW	Million KRW
Maurizio Butti (refer to note 31.3 for further details)	Finance income	-	2
Songwon Moolsan Co., Ltd.	Selling and administration costs	-66	-73
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	Sales	264	161
	Cost of sales	-13,045	-14,587
Total	Sales	264	161
	Cost of sales	-13,045	-14,587
	Selling and administration costs	-66	-73
	Finance income	-	2

Related party	Description	2020	2019
		December 31 Million KRW	December 31 Million KRW
Songwon Moolsan Co., Ltd.	Other non-current financial assets	24	24
	Trade and other payables	6	6
Songwon Baifu Chemicals (Tangshan) Co., Ltd.	Trade and other receivables	49	106
	Trade and other payables	917	1,535
Total	Other non-current financial assets	24	24
	Trade and other receivables	49	106
	Trade and other payables	923	1,541

31.1 THE ULTIMATE PARENT

Songwon Industrial Co., Ltd. is the ultimate parent based and listed in Korea.

31.2 TERMS AND CONDITIONS OF TRANSACTIONS WITH RELATED PARTIES

The sales to and purchases from related parties are made at terms equivalent to those that prevail in arm's length transactions. Outstanding balances 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, 2020, the Group has not recorded any impairment of receivables relating to amounts owed by related parties (December 31, 2019: none). This assessment is undertaken periodically by examining the financial position of the related party and the market in which the related party operates.

31.3 TRANSACTIONS WITH KEY MANAGEMENT PERSONNEL

During the financial year 2020, no other transactions with key management personnel than those disclosed in note 26 and 31.4 took place.

In the first quarter of 2019, the former Chief Executive Officer of the Group, Maurizio Butti fully repaid his loan of in total 1,346 Million KRW (1,185 Thousand CHF). During the second quarter of 2019, the Group granted a loan of 1,358 Million KRW (1,195 Thousand CHF) to the former Chief Executive Officer of the Group, Maurizio Butti under normal market conditions (accumulated interest 2019 of 2 Million KRW). In September 2019, SONGWON Industrial Group's Board of Directors announced the unexpected death of the former Chief Executive Officer of the Group, Maurizio Butti. The respective loan was set off against the accrued employment claim of Maurizio Butti in October 2019.

31.4 COMPENSATION OF KEY MANAGEMENT PERSONNEL OF THE GROUP

Description	2020	2019
	Million KRW	Million KRW
Short-term employee benefits	12,862	13,438
Post-employment benefits	692	720
Other long-term benefits	672	1,914
Share based payments	92	-198
Total compensation paid to key management personnel	14,318	15,874

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.

31.5 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.

32. IMPACT OF GLOBAL ECONOMIC SITUATION ON CONSOLIDATED FINANCIAL STATEMENTS

During the financial year 2020, the global economy was greatly impacted by the COVID-19 pandemic: the countries imposed travel bans, people have been placed with quarantine measures and global supply chains were disrupted due to factory shutdowns. The Group closely monitors the global situation and assesses the future impact of the COVID-19 pandemic on the consolidated financial statements on a regular basis. For the financial year 2020, the following assessments were performed, amongst others:

Indication of impairment on intangible assets

The Group has recognized a goodwill impairment loss of 6,889 Million KRW in the financial year 2020, recorded in "Other expenses" in the consolidated statements of comprehensive income (refer to note 10. for further details).

Government grants received

During the financial year 2020, the Group received government grants related to COVID-19 pandemic of 1,212 Million KRW. The income is recorded in "Other income" in the consolidated statements of comprehensive income (refer to note 27.3 for further details).

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 K-IFRS 1109, the Group reassessed past events, current conditions and forecasts of future economic conditions. For the financial year 2020, the Group identified the changes in risk indicators considering the nature of risk such as 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 242 Million KRW in the consolidated financial statements for the twelve months ended December 31, 2020.

33. EVENTS AFTER THE REPORTING PERIOD

The consolidated financial statements for the year ended December 31, 2020, were approved by the Board of Directors of the parent company on January 29, 2021.

Otherwise, no significant events occurred during the period from the statement of financial position date, up to the date upon which the annual consolidated financial statements were issued.



SONGWON's Memberships

- 1 AFPM**
American Fuel and Petrochemical
Manufacturers
www.afpm.org
- 2 ALMU**
Asian Lubricant Manufacturers Union
www.asianlubricantmanufacturers.org
- 3 ATC**
Additive Technical Council
www.atc-europe.org
- 4 CEFIC**
The European Chemical Industry Council
www.cefic.org
- 5 CEPAD**
The European Alkylphenols and
Derivatives Association
<http://cepad.cefic.org>
- 6 ELISANA**
European Light Stabilisers and Anti-
Oxydants
www.cefic.org
- 7 EPCA**
European Petrochemical Association
www.epca.eu
- 8 FCA**
CEFIC Food Contact Additives Group
<http://fca.cefic.org>
- 9 GPCA**
Gulf Petrochemicals and Chemicals
Association
www.gpca.org.ae
- 10 ILMA**
Independent Lubricant Manufacturers
Association
www.ilma.org
- 11 JHOSPA**
Japan Hygienic Olefin and
Styrene Plastics Association
www.jhospa.gr.jp
- 12 JHPA**
Japan Hygienic PVC Association
www.jhpa.jp
- 13 KCMA**
Korea Chemicals Management Association
www.kcma.or.kr
- 14 KEEA**
Korean Electric Engineers Association
www.keea.or.kr
- 15 KEEF**
Korea Environmental Engineers Association
www.keef.or.kr
- 16 KFSI**
Korea Fire Safety Institute
www.kfsi.or.kr
- 17 KISA**
Korea Industrial Safety Association
www.safety.or.kr
- 18 KITA**
Korea International Trade Association
www.kita.net
- 19 KLCA**
Korea Listed Companies Association
www.klca.or.kr
- 20 KMA**
Korea Management Association
www.kma.or.kr
- 21 KOEEA**
Korea Energy Engineers Association
www.koeea.or.kr
- 22 KSCIA**
Korea Specialty Chemical Industry
Association
www.kscia.or.kr
- 23 LiSAO – REACH Consortium**
Light Stabilisers and Antioxidants
www.reachcentrum.eu
- 24 NAPIM**
National Association of Printing Ink
Manufacturers
www.napim.org
- 25 OrganoTin REACH Consortium**
www.reachcentrum.eu
- 26 SPE**
Society of Plastics Engineers
www.4spe.org
- 27 STLE**
The Society of Tribology and Lubrication
Engineers
www.stle.org
- 28 UEA**
Ulsan Environment Association
www.ulsanenv.or.kr

About this report

Publishing this comprehensive report each year and disclosing our operational, social and 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 10th Annual Report. It contains a detailed overview of our economic, environmental and social performance in FY 2020 (January 1st to December 31st) and replaces the SONGWON Annual Report 2019, which was published in March 2020. Unless otherwise specified, the latest report includes updates to the previous report that reflect data through end-of-year 2020.

Reporting scope

In this Annual Report, we share information on SONGWON management's approach, strategy, performance and the progress made in 2020 related to the Group's material topics. The material topics covered in the report focus on the key areas of corporate governance, economic, 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 73-76 of this year's report.

Unless stated otherwise, all the data which has been compiled for this report has been carefully measured according to industry standard measurement methods. In 2020, there were no significant changes in the reporting period, scope, boundary or measurement methods which have been applied or included in the report.

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 the GRI Standards: Core option. The GRI Standards are the world's most widely used sustainability reporting standard and represent global reporting best practices for a range of economic, environmental, social and corporate governance topics.

SONGWON Industrial Group does not currently engage an external agency or organization to audit its GRI responses.

For more information on the disclosures that are relevant to SONGWON's business operations, see the GRI Content Index on pages 77-80.



Forward-looking statements

SONGWON's Annual Report 2020 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 which 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.

These statements may be identified by words such as 'anticipate', 'assume', 'believe', 'could', 'expect', 'foresee', '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.

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www.songwon.com

