



Sustainability Report

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Sustainability Statement

Building a sustainable business for the future

Considering market environments, opportunities and risks (environmental, societal) and the pace of technology trends, it is crucial for us to closely monitor developments in the industry and anticipate new requirements. To us, sustainability is more than just “going green”. It’s about building a sustainable business for the future.

The strategic objective is to create lasting value by managing operations, innovation and business practices to meet the changing demands and sustainability requirements of our markets, our shareholders and society. 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.

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 competent teams who proactively manage the challenges.

Increased awareness

In society, for our customers and the plastics industry, sustainability awareness is increasing. This means to us that:

- on the one hand we are continuing to explore plastics recycling and confirm the aim to support the circular economy, e.g. through polymer-recycling.
- on the other hand, we are aware of the importance to develop new technical solutions, putting an emphasis on sustainable products that increase the long-life value of the end-product.

Customer focus

The global SONGWON team is committed to using its expertise to the benefit of the customers. By creating sustainable value and achieving economic advantages through proprietary technology, economies of scale and backward integration, we want our customers to overcome challenges and gain competitive advantage. It is essential for both SONGWON’s Divisions – Industrial Chemicals and Performance Chemicals – to act from an agile, market-oriented perspective. We place great value on our customer-engagement:

- by strong channels of communication.
- by engaging actively / permanently with our customers; we implemented a process for tracking customer inquiries and requests.
- through a high performing, newly expanded distributors network.
- by a highly reliable supply.
- with 8 Customer Service Centers worldwide .
- by a market-oriented Technical Service (9 Centers worldwide).

Innovation drives sustainable solutions

Using our innovation drive, 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.

- We recently launched a coating on a water-based solution, to avoid the use of solvents. Polymer 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 they extend lifetime.
- PVC additives promote sustainable value in numerous applications, impart excellent heat stability, anti-weathering properties, flexibility and durability to PVC plastic end-products.
- Use of recycled PE for packaging (up to 50 %); new SPU products in inks and adhesives for more environmentally friendly, solvent-free adhesives for packaging.
- In the field of electronic materials, among the high value products developed, is the monomer, EAMA (Ethylhexyl Methacrylate), a raw material for ArF (Argon Fluoride) photoresist polymer needed in the semiconductor manufacturing industry. Developing and providing solutions for semiconductors, as they are a critical key material for many industries today, due to shortages and high demand.

We perform **LCAs** (life cycle assessments) as we know how important it is for all plastics value chain players to contribute to a circular economy and continue working on solutions that consider the entire lifecycle of plastics.

Circular economy

Circular economy remains an important issue, namely to us as a global company. Time is a critical factor. Measures and initiatives are already implemented (page 69). More needs to be done. SONGWON also engaged in new recycling projects with the aim to further increase the ability to recycle plastics multiple times and to contribute to a circular economy. SONGWON is an affiliate member of PCEP (Polyolefin Circular Economy Platform) and is actively contributing with its stabilization expertise to support polyolefin recycling initiatives.

Reliable supply

We have built a reliable global and local network of sustainably responsible partners by seeking long-term relationships. We select suppliers based on economic indicators, the proximity to SONGWON, but also on good sustainability performance and competitiveness.

We care for sustainable sourcing by:

- establishing a TFT (Task Force Team) to monitor the COVID-19 situation and delivery status in each region every day.
- maintaining the safety stocks of raw materials around the globe.
- maintaining close, daily communication with stakeholders (production planning etc.).

People make our success

SONGWON's people make our success. With their skills, entrepreneurship, and excellent teamwork, they are the drivers of SONGWON's leading industry position, the successful implemented operations and the long-term customer loyalty.

Our employees' health and well-being are 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. Only a dedicated, motivated, healthy and loyal workforce can secure SONGWON's long-term success.

Approach to ESG – Environment, Society and Governance

SONGWON wants to create long-term value for all stakeholders and deliver solid returns for shareholders by operating a sustainable business model that addresses the long-term goals of environment, society and governance (ESG).

How is SONGWON dealing with environmental/ climate issues?



E
Environment

G
Governance



How is SONGWON acting responsibly?



S
Society

How is SONGWON caring for Society?

The integration of ESG in its reporting allows SONGWON to make the difference. It is not only about the inclusion of a core set of global metrics for NFI (non-financial information) in the mainstream reports, or about considering stakeholders' concerns, as today these issues are material to business resilience, but **it's about the way SONGWON creates value by integrating environmental, societal and governance aspects.**

To SONGWON, **involving stakeholders** is a key part of sustainability management. Stakeholders are selected based on their relevance in terms of corporate strategy and sector, and whether they significantly influence SONGWON or are affected by the company's activities. Through close contact and regular exchange by each individual site and business operation, the communication process is actively fostered. The content within this report has been put together after taking into consideration the feedback and recommendations of our stakeholders in relation to the reported topics and their importance.



Each aspect of sustainability is evaluated with regards to its business relevance and its economic, environmental and social impacts. Strategic priorities are set. This report is created for our stakeholders, for transparency, but also as a tool to measure and review the company's operations and achievements,

as SONGWON – in accordance with the UN-Goals – has defined EHS objectives in its **corporate policies**. The material topics covered in this report are the most relevant in consideration of their potential impact on SONGWON's stakeholders and our ability to create long-term value.

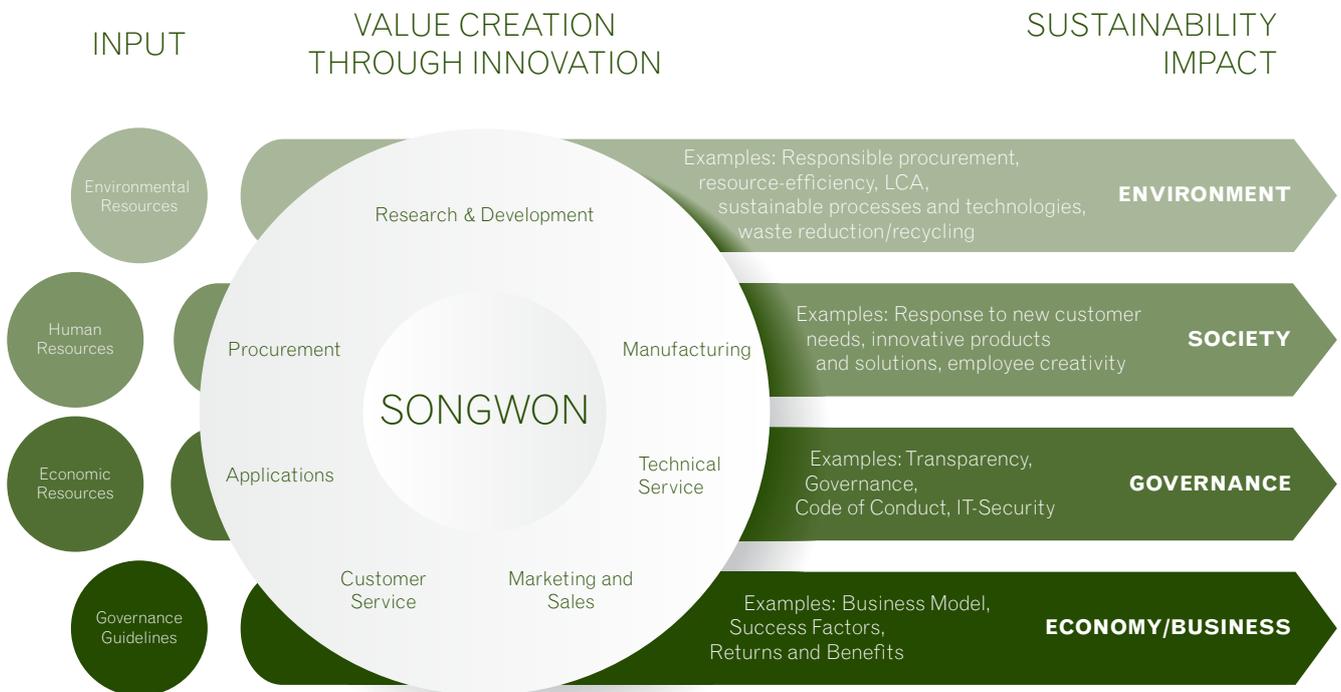
MATERIAL TOPICS (GRI)

ENVIRONMENT	SOCIETY	ECONOMY
Emissions	Employment	Economic Performance
Energy	Occupational Health and Safety	Anti-corruption
Water and Effluents	Diversity and Equal Opportunity	Anti-competitive Behavior
Materials	Non-discrimination	
Biodiversity	Human Rights Assessment	
Compliance	Local Communities	
	Socioeconomic Compliance	

Value Creation through Innovation

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

We are living in a connected world in which society – the Stake- and Shareholders – is increasingly committed to the values of responsible business, sustainable economic development and long-term value creation. SONGWON reports the environmental, societal and economic impacts associated with its business activities and how these are contributing to sustainable development and the United Nations’ SDGs.



Improvements in the process of value creation with Sustainability impact

Procurement

An interrupted supply chain marked the year 2021. Various worldwide incidents caused a challenging situation: blocked Suez Canal, less vessel space and ISO Containers, lack of truck drivers, electricity supply limitations, lower operation rates in regions due to COVID-19 etc., consequently also price and tariff issues (e.g. freight). At the same time, the demand for SONGWON products substantially increased.

Economy/Business

- Frequent market information collection and risk assessments, followed by actions, helped to ensure SONGWON's production.
- Selecting suppliers in the proximity of SONGWON's plants.
- Close cooperation, sharing market information with Business Managers and the Senior Management Team to make quick and right decisions to overcome procurement issues.
- Expanded knowledge-sharing or support, adapted working approaches to better manage current challenges.

Environment

- Implementation of procurement criteria: suppliers must be close to SONGWON's plant, – for higher reliability, shorter transportation.

Society

- Meeting specific customer needs, strengthen customer relations.
- Close internal cooperation with P&E and Production to test raw materials from new suppliers to expand sources.
- Building up long-term relationships with key strategic suppliers, developing criteria for supplier selection.
- Procurement of raw materials in compliance with K-REACH.

Product innovations

Focusing on meeting customers' needs, R&D contributes to providing innovative products, maintaining competitive pricing and continuously improving quality. For more than 55 years, SONGWON has invested in technology and innovation and has a proud record of bringing innovative solutions to the market. The company's highly-skilled and experienced chemists, engineers, analysts and technicians are involved in product development and work together to further expand SONGWON's product portfolio.

For highly durable coatings

New high performing triazine SONGSORB® CS 460 and a liquid benzotriazole SONGSORB® CS 171

Light stabilizer

Innovative, in the market established product BU PS SABOSTAB® UV 216, for agriculture/green houses

High-performance, durable and low-VOC water-based coatings

Newly introduced, the SONGSORB® CS WB product range. Low-VOC (volatile organic compounds)

Antioxidant, for color improvement

Newly presented SONGXTEND® 1106, stabilization of Cr-type high-density polyethylene

Manufacturing

Economy/Business

- **Increased sales and production,** by 11.9 respectively 17% compared to 2020. All plants were able to maintain full production by following the health and safety guidelines.
- Continuous product improvements, thanks to monthly feedback-checks and measures.
- High stability and reliability of supply to meet customers' needs and orders, despite the instability of raw materials supply and market-volatility, caused by COVID-19.

Environment

- Reduction of raw material consumption and utility usage through production improvements.
- Reduction in process waste generation: the cost of waste has been increased substantially, environment regulations on waste have become stricter. SONGWON analyzes accurate data on waste generation and works on recycling waste into raw materials in cooperation with external partners.
- The use of biomass raw materials is considered to reduce carbon emissions generated by using LNG (Liquefied Natural Gas).

- Greenhouse gas reduction using renewable sources of energy.
- Multiple-effect evaporator implemented, equipment for energy savings.
- Installation of odor removal equipment in wastewater treatment plant.

Society

- Further reduction of accidents and incidents. TCAR 2021 is 0.32%.
- Implementation of the Chemical Accident Prevention Management Plan, an integrated system of OCA (Off-site Consequence Analysis) and RMP (Risk Management Plan).
- Serious Accidents Act: The purpose of this Korean law is to prevent serious accidents involving citizens and workers.
- Acquiring ISO 14001 and ISO 45001 certifications for established management policies for safety, health and environment.
- To promote a safety culture, different measures are in place. Quarterly safety and health education for all employees; training for hazardous chemical handlers in accordance with the Chemicals Control Act; promoting safety and health of workplace through the Safety and Health Committee and the Supplier Council.

LCA – Life Cycle Assessment

In the reporting year 2021, LCA-data for SONGWON key products have been collected – materials, energy, emissions and others – with the aim of quantifying the global warming potential per product and to identify optimization opportunities. Results and implications are expected in 2022. At the same time, R&D is bringing low-impact products or products that extend durability of end-products to the market.

Technical Service

Economy/Business

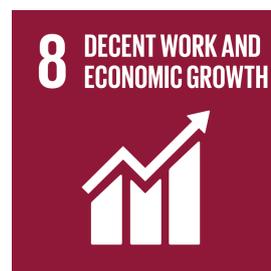
- SONGWON's 9 support centers are strategically placed across the globe and offer customers the best level of expert technical support wherever they are in the world (pages 37/38).
- In the strategy review, the Technical Service conducted a survey to better understand and respond even faster to client needs. As a result, an email address to channel all technical customer inquiries (techservice@songwon.com) was introduced.
- The development of new test methods to support testing or application will further improve our strategic position and expand our lab capabilities.

Environment

- Mechanical recycling is an important topic of the agenda 2022 (ongoing data analysis), this initiative supports the industry.
- Active Participation at Polyolefin Circular Economy Platform (PCEP), <https://pcep.eu>. The active participation in PCEP is an important step to show our commitment to sustainability.

Society

- The team focused on further improving the technical service processes to respond faster to customer needs and to strengthen SONGWON's position as a professional company, delivering quality.
- Internal training focused on improving knowledge and experience of our junior team members, and the communication skills.
- Ethical standards, values and attitudes – as being reliable, fast, creative and innovative to provide sustainable solutions - are basic aspects of SONGWON's understanding of Sustainability.



SONGWON's contribution to the UN Sustainable Development Goals (SDGs)

As a global specialty chemicals company, SONGWON will continue concentrating on the UN's Sustainable Development Goals (SDGs) and the defined material topics.

SDGs	Metrics and Disclosure	Report
Climate Action	Emissions reduction, Scope 1 and 2	Sustainability, Environment
	Energy efficiency	
	Renewable energies	
Clean Water and Sanitation	Sustainable management of water and sanitation	Sustainability, Environment
	Wastewater treatment	
	Water recycling and/or reuse system for reducing use of water	
	Water use reduction	
Responsible consumption and production	Development of circular economy	Sustainability, Environment
	Promotion of sustainable procurement	
	Preventive action for leakage of hazardous materials	
	Reduction of impact of consumption through innovative products (incl. LCA)	
	Development of sustainable technologies, processes, physicals/materials	
	Increasing resource and/or material efficiency	
Health and Well-Being	Safe working environment	Sustainability, Society
	TCAR (Total Case Accident Rate)	
	Illness rate	
	Leadership and role models	
Diversity and Equality	Ensure an environment of non-discrimination	Sustainability, Society
	Diversity by nationalities	
	Gender diversity	
Industry, Innovation and Infrastructure	Products life cycle assessment (LCA) and improvement (GHG-reduction etc.)	Sustainability, Value Creation through Innovation
	Pushing sustainable innovation, e.g. by extending the life cycle of products	
	Development of new products	
	Construction, replacements, improvements of infrastructure (plants, work environment)	
Decent Work and Economic Growth	Rate of employee turnover	Sustainability, Society, Share Price Development, Governance
	Share-and Stakeholders involvement	
	Share development / Dividend	
	Supply Chain	
	Governance	
Partnerships for the Goals	Partnerships, Memberships	Labels, Standards, Certifications, Partnerships, Memberships
	Sustainability Standards, Ratings	

Labels, Standards, Certifications and Partnerships



EcoVadis Sustainability Rating



Commitment to and reporting in accordance with UN-Goals (SDGs)



ISO 14001, Environmental Management certification, for the Suwon plant (Korea)
ISO 45001, Occupational Health and Safety certification, for plants in Ulsan and Maeam (Korea)

GRI Standards Core Option

This report has been prepared in accordance with the GRI Standards: Core option and has undergone Content Index Service



Member of the Green Business Network, Abu Dhabi (EAD) Platform for public and private sector organizations in Abu Dhabi to promote environmentally friendly practices (UAE)



Member of the Ulsan Environment Engineers Association (Korea)



Active Member of the Polyolefin Circular Economy Platform (recycling)



Member of the Korea Chemicals Management Association



Member of the Korean Environmental Preservation Association



Member of the Korean Metropolitan Area Process Safety Management Association

Other organizations

Annual Report, page 190 (Memberships)

Environment

SONGWON's business depends on and impacts the natural environment in myriad ways, through its operations and supply chains, products and services. The visibility of the business impacts grows; expectations of producer responsibility extend along the value chain. The ambition is to protect the environment by managing its natural resources (renewables, raw materials), through sustainable procurement and production, the reduction of energy and water consumption and the reduction of emissions, wastes and effluents.

An operational management system is implemented to reach the emissions reduction goal, to improve energy efficiency, to increase the recycling rate and the reduction of waste and wastewater.

In 2021, the production volume increased by 17%.

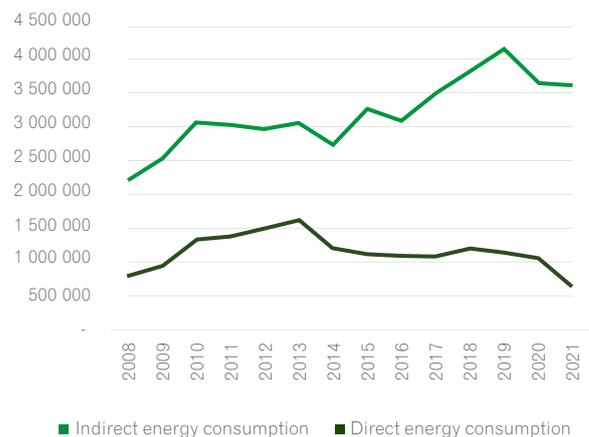
Energy

Energy consumption for infrastructure (heating, cooling, electricity, steam etc.) and for chemical processes:

The total energy consumption remained nearly the same as in the previous year (-0.5%), even though the production volume increased by 17 % in 2021. Direct energy consumption (combustion, incineration, processes, not renewable) could be reduced (-39.6%); it has been substituted by indirect energy (+15.2%; locally purchased electricity and steam).

Energy consumption

in GJ (gigajoules)



	Unit	2018	2019	2020	2021 (Share)	Change (%)
Direct Energy	GJ	1'191'882	1'142'496	1'049'102	633'750 (17.4%)	-39.6
Indirect Energy	GJ	2'658'662	3'005'230	2'608'411	3'005'609 (82.6%)	15.2
Total Energy	GJ	3'850'544	4'147'726	3'657'513	3'639'359 (100%)	-0.5

Examples of implemented measures

Panoli: The installation of solar power led to electricity savings of 4.68 million kWh.

Ulsan: The solar power generation facility installed on the roof of the warehouse produced 30'200 kWh in 2021.

Panoli: The share of renewable energy for the period 2020-2021 was 61.42 %, against 0% in 2019. Main reasons: solar energy, 90% reduction of use of natural gas (- 6.32 million m³), agro-waste steam boiler.

Maeam: Advanced Process Control system for process optimization.

Ulsan: Power and steam BOM improvements trough installations and process optimizations.

Suwon: Successful adjustments of the air condenser resulted in electricity consumption reduction in 2021 compared to 2020.

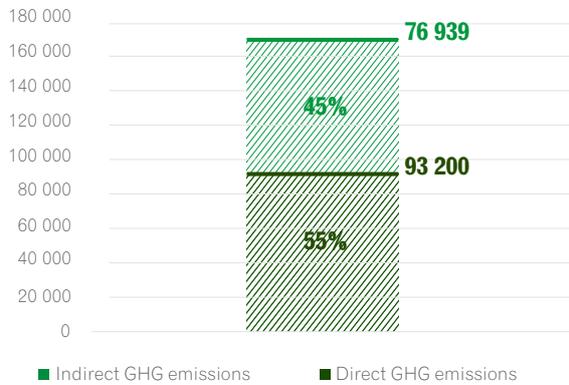
Emissions

Since 2008, SONGWON monitors emissions data and reports greenhouse gas and other air emissions on an annual basis according to internationally recognized standards.

Emissions data include the main up- and downstream activities.

Footprint 2021

(Tot. 170'139 tCO₂-eq)



Examples of implemented measures

SONGWON is participating in the Korean Government's target management system to reduce greenhouse gas emissions. The government defines quantified goals for each Korean plant.

Panoli: Greenhouse gas reduction in 2021 of 18'509 tCO₂-eq by the use of carbon neutral fuel (agro-waste briquette) for steam generation, solar power, multiple-effect evaporator, condensate recovery system.

Panoli: CO, NO_x, SO_x are controlled by using automated advanced technology reciprocating grate design of Steam Boiler.

Excl. SO_x, NO_x, TSP (s. below)

GHG	Unit	2018	2019	2020	2021	Change (%)
Scope 1: Direct	tCO ₂ -eq	82'638	78'733	87'215	93'200	6.9
Scope 2: Indirect	tCO ₂ -eq	69'842	71'991	71'447	76'939	7.7
Total	tCO₂-eq	152'480	150'724	158'662	170'139	7.2

Absolute direct and indirect emissions increased compared to the previous year. Considering the increased production volume of 17%, they could be reduced. Emissions calculation is based on ETS, the South Korean cap and-trade program (KETS, Korea Emission Trading System). Participation for SONGWON is mandatory (threshold: company > 125,000 tCO₂/year, installation > 25,000 tCO₂/year).

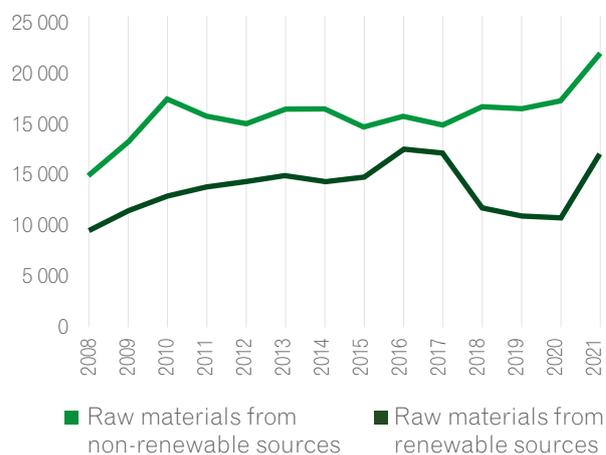
Other air emissions	Unit	2018	2019	2020	2021	Change (%)
NO _x	tCO ₂ -eq	32'775	33'546	40'094	39'467	-1.6
SO _x	tCO ₂ -eq	53	31	25	33	32
TSP	tCO ₂ -eq	4'231	2'746	1'518	1'390	-8.4
Total	tCO₂-eq	37'059	36'323	41'637	40'890	-1.8

Raw Materials

SONGWON seeks to find opportunities to use raw materials from renewable sources. Most of the required raw materials are still non-renewables. Nonetheless, the share could be increased (+54%) up to 13'820 MT in 2021 (share of raw materials from renewable sources: 5.9%).

Used Raw Materials

(in mt)



Raw Materials	Unit	2018	2019	2020	2021 (Share)	Change (%)
Raw materials from renewable sources	MT	9'613	9'110	8'976	13'820 (5.9%)	54.0
Raw materials from non-renewable sources	MT	179'893	178'694	185'122	221'669 (94.1%)	19.7
Total	MT	189'506	187'804	194'098	235'489 (100%)	21.3

Water

According to the onsite measurements, SONGWON's total water consumption increased by 8.8 % compared to 2020, mainly due to the increased production of intermediates.

Water consumption	Unit	2018	2019	2020	2021	Change (%)
Surface water	Liters	–	–	–	–	0
Ground water	Liters	66'213	65'844	58'467	53'238	-8.9
Rainwater	Liters	–	–	–	–	0
Municipal water	Liters	1'092'615	1'103'300	1'138'750	1'248'747	9.7
Total	Liters	1'158'828	1'169'144	1'197'217	1'301'985	8.8

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 withdrawal and water discharge have increased by 8.8 % resp. 5.6 % compared to 2020. COD concentration could be reduced by 31.8%.

Water discharge	Unit	2018	2019	2020	2021	Change (%)
Water withdrawal	MT	1,158,828	1,169,144	1,197,217	1,301,985	8.8
Water discharge	MT	700,529	716,202	694,885	734,060	5.6
Average COD	ppm	42	54	66	45	-31.8

Examples of implemented measures

The amount of wastewater sludge is reduced by lowering the moisture content. A treatment of wastewater sludge allowed the switch from landfill to recycling.

In **Panoli**, a traditional multiple-effect evaporator is used to treat/transform liquid effluent to solid waste. Waste disposal is then carried out through a government approved disposal agency.

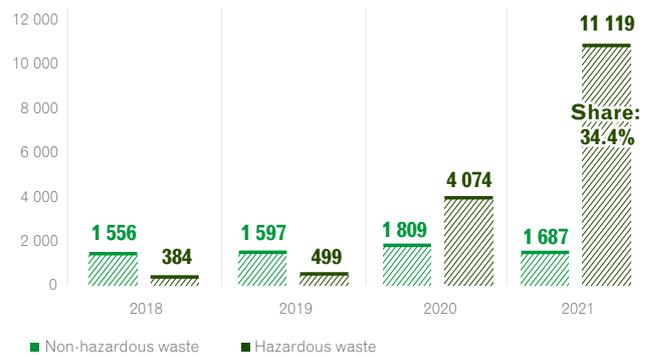
Panoli: In 2021, 66-million-liters of water was recycled by using the Zero Liquid Discharge System.

Suwon: Water consumption was reduced by 7.8% in 2021 compared to 2020 (measures implemented).

Waste

This year, SONGWON's operations generated 32'568 tons of hazardous waste. Compared to 2020, the total of disposed hazardous waste increased by 1.4 %. The share of recycled waste could be increased significantly (+172.9 %).

Recycling (in tons)



Hazardous Waste	Unit	2018	2019	2020	2021	Change (%)
Wastes incinerated off-site	Tons	18,831	15'223	15'595	520	-96.7
Wastes landfilled	Tons	1'646	5'097	6'434	3'641	-43.4
Recycling	Tons	384	499	4'074	11'119	172.9
Others	Tons	6'229	6'310	6'006	17'287	187.8
Total	Tons	27'090	27'129	32'109	32'568	1.4

Non-hazardous Waste	Unit	2018	2019	2020	2021	Change (%)
Recycling	Tons	1'556	1'597	1'809	1'687	-6.7
Landfill	Tons	2'879	605	275	418	52
Incineration off-site	Tons	646	694	601	603	0.3
Others	Tons	5	2	—	28	2'800
Total	Tons	5'086	2'898	2'685	2'736	1.9

Significant spills

SONGWON has not had any spills (oil, fuel, waste, and chemicals) to record or report since 2008. The company also has none to record or required to report in 2021.

Biodiversity

SONGWON takes into consideration preservation of biodiversity in the management of its sites. The Korean pine tree is a characteristic element of the SONGWON-logo. At the same time, the company 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.

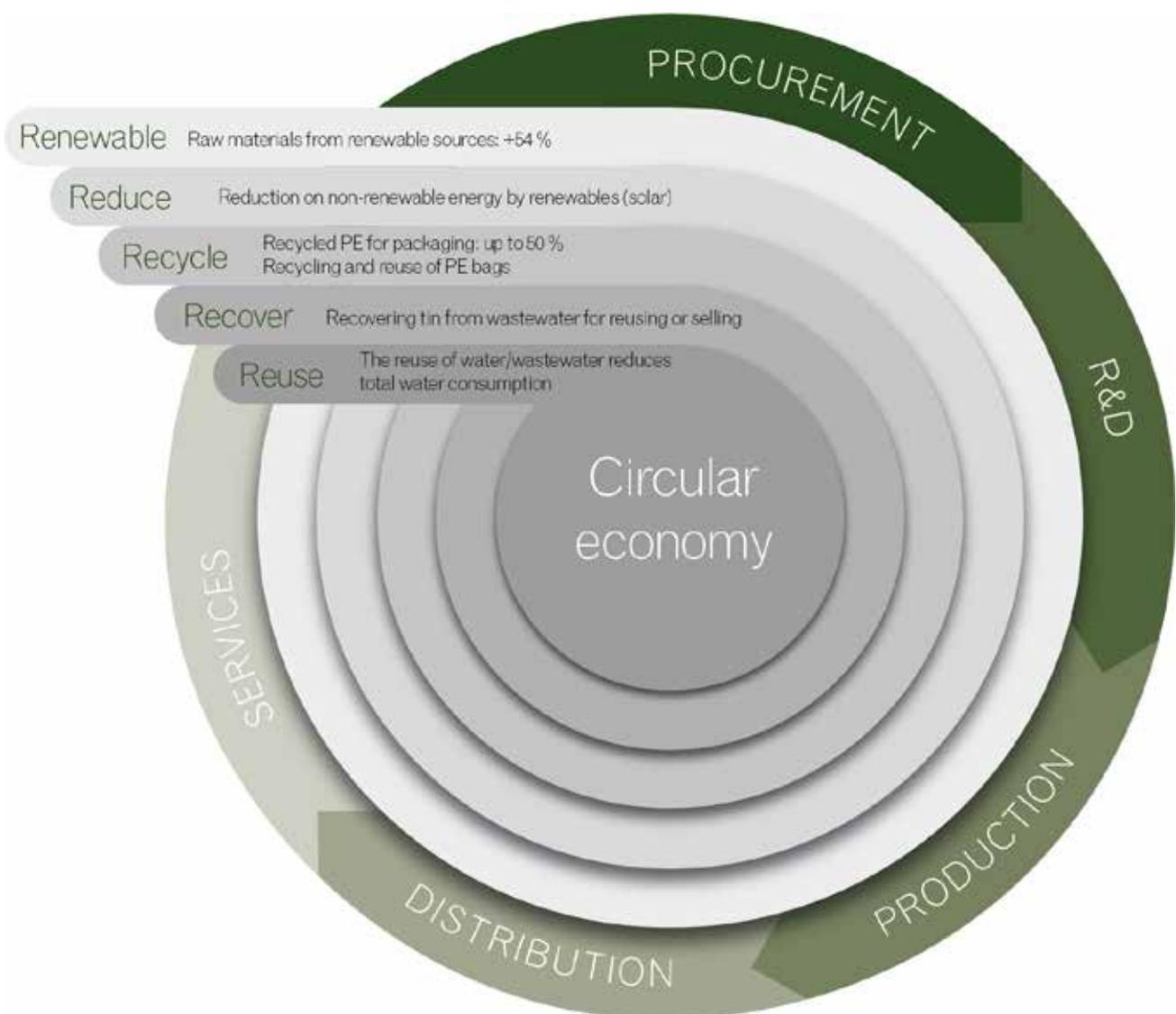
Examples of implemented measures

Panoli: The implemented Zero Liquid Discharge System technology completely prevents wastewater from leaking into lakes, rivers or the sea. This helps to protect and enhance the biodiversity of water living species.

Panoli: Within the last two years, 1200 trees were planted at our plant premises to protect and enhance the biodiversity of birds, flying species. This measure also helps to reduce CO2 and increases oxygen in the atmosphere.

Circular economy

SONGWON wants to assume its responsibility and role towards the environment and society by fostering a circular economy where sustainable solutions are at the forefront. Employees are encouraged to go beyond minimum standards when it comes to protecting the environment, including using recyclables and conserving energy resources. For example, the reuse of water or improved wastewater disposal led to a continuous decrease in water consumption per metric ton produced in the production processes.



Compliance

Throughout 2021, SONGWON was in full compliance with all environmental rules and regulations and did not receive any fines.

Society

Customer Focus

In 2021, SONGWON placed great value on customer engagement and satisfaction. A high market volatility, unpredictable customer requests, short-term needs or demands marked this year. Important hurdles had to be taken (supply chains, raw materials), by fast decisions, a high level of agility and solution-oriented approaches. Customer relations have improved,

thanks to permanently and actively engaging through communication, service and distribution networks. At the same time, SONGWON continued building an optimized pipeline of products, services and solutions that meet new customer requirements, putting an emphasis on sustainable production, usage or properties. SONGWON wants to keep the company a step ahead in the industry through high quality, constant improvement in cost position, and in product and process innovation.

An exceptional situation in 2021 required extraordinary measures. Successfully, each department made significant efforts to ensure customer satisfaction.

Customer-focused performances in 2021

Commercial and Sales – The first and most important customer-interface

In 2021, SONGWON's sales increased by 11.9% thanks to:

- the functioning interface with the customers.
- the most important anticipation of customer expectations or requirements (given the special circumstances this year).
- an open, customer-focused communication to address gaps in the supply or possible help outs.
- managing allocation in times of shortage to ensure that customers have been supplied according to existing agreements.
- a successful collaboration for planning through the entire value chain.

The Business management procured an overview of the global supply- and demand situation, to ensure SONGWON's proper level of supply to the regions to meet all commitments.

Procurement – Reliability and agility

The Procurement Team considers 2021 as a “memorable year”, as availability (COVID-19, national lockdowns) and sourcing of raw materials (disrupted supply chains) represented important challenges. Thanks to proactive planning and agility, SONGWON met customers' needs.

- SONGWON helped out customers who had a shortage of raw materials.
- To improve Sustainability and reliability – for a fast response, new criteria for suppliers have been implemented (in the geographic area of respective plants).

Manufacturing

- SONGWON's operations were able to run production seamlessly and with no unplanned shutdowns, thus meeting the important increase in customers' demand.
- Despite COVID-19, all plants were in full operation throughout the year.
- Due to increased customer demand, installation of additional OPS capacities (One Pack Systems).

Customer Service – Solution-oriented

- Despite the challenging environment and the less predictable demand situation, the main aim was to guarantee a high level of Customer Service, with a maximum adherence to customer delivery deadlines.
- Moreover, it was also a concern to prevent shutdowns of customers' plants.
- Successful transfer of the Service for customers in India from Switzerland to UAE.
- Ongoing optimization and standardization of customer processes.
- No complaints related to service or delivery received from customers.

Our People

Safe environment is a priority

Providing safe and healthy work environments for all stakeholders is a priority. To SONGWON, a fundamental part of sustainable development and long-term planning consists in sharing knowledge and instruments across the organization to identify and withstand any potential health and safety risks. Regular assessments of the facilities and workplaces allow measures to be taken with the aim to continually optimize the safety standards. Monitoring systems, including physical installations as detectors, ensure a safe handling of chemical elements, products, processes, or technologies. Our employees actively engage in identifying and managing risks, as well as in finding ways to improve environment, health, and safety.

Aiming for zero incident

SONGWON collates injury and illness rates annually. By sustained focus and continuous improvement since 2014, SONGWON reached a TCAR of 0.32% in 2021 (Total Case Accident Rate). This represents 5 cases of occupational incidents. The causes of the injuries were investigated, and measures implemented, as SONGWON sticks to the target of zero incidents.

TCAR

(Total Case Accident Rate, in %)



Despite COVID-19, the lost day rate remained at the very low level of 0.004%, as in the previous year.

This performance is due to the measures that have been continuously adjusted, according to/beyond the governmental requirements by the different states.

In addition to all initiatives to prevent the inflow and spread of COVID-19 – such as hygiene rules, masks, health-checks for all visitors, social distancing at any time, regular disinfection of all spaces, the measurement of body temperature and pulse, or by carrying out PCR-tests – SONGWON's managers cared for the employees' motivation by staying in close contact with the team-members, especially the ones in home-office.

Health and Safety	2020	2021
TCAR (Total Case Accident Rate), (%)	0.36	0.32
Lost day rate (%)	0.004	0.004
Fatalities	0	0
Plants/HQ undergoing regular health & safety assessments (%)	100	100
Total cases of non-compliance from health & safety assessments with governmental laws or regulations	0	0

In Korea for example, the Ulsan plant was upgraded in the PSM new rating inspection, done by Korea Occupational Safety & Health Agency (KOSHA).

Other measures implemented in the 3 Korean plants:

- ongoing IEC (Integrated Environment Control).
- continuous self-inspection based on PSM & risk management plan in the 3 Korean plants.
- rating inspection from KOSHA in the Ulsan plant (based on PSM).
- installation of additional gas and leakage detectors & CCTV to prevent hazardous chemicals leakage in Maeam.
- construction of hazardous chemical storage warehouse at the Maeam plant.
- inspection and replacement of old equipment: e.g. the Suwon plant changed from normal insulation to non-combustible insulation; in Ulsan, roof renovation and lighting replacement.
- conducted regular safety walks and yearly health inspection in all plants.
- regular inspection of Chemical Control Act in all Korean plants, Ulsan, Maeam and Suwon.



Diversity

Diversity counts, inclusion matters.

At SONGWON, diversity is a feature of corporate culture. The 1,015 employees represent 36 nationalities. The functioning of the global company is ensured thanks to SONGWON's culture of respect and responsibility towards each other, and all stakeholders.

Policies and practices foster diversity, respect for human rights, offer equal opportunities and support non-discrimination. SONGWON's Core Values, Code of Conduct as well as the Whistleblower Policy serve to emphasize the importance placed on these attributes of the Corporate Culture:

- ethics trainings based on SONGWON's Code of Conduct.
- established Whistleblower Policy across the company.
- compliance and Code of Conduct training for new employees at their introduction, with a final exam on the LMS (Learning Management System); annual renewal of exam of the ethical standards on LMS.
- monitoring process in place to detect, – and if necessary – sanction any non-compliance.

1,015 employees from 36 nationalities

3 newly hired nationalities in 2021

*25.4% of the new hires are women; Total women: 11.4%**

65.3% of the employees are located in South-Korea, Japan, China

*SONGWON operates in an industry (mainly manufacturing) that is generally very male-oriented.

Emphasis on human rights

The international community - including the UN and OECD - call for extended corporate responsibility to encompass not only the human rights of individuals but also of the supply chains. Companies are asked to establish systems and policies that ensure prevention of human rights violations.

SONGWON publicly pledged the Code of Conduct to the protection of dignity and values of all stakeholders and has strengthened its human rights protection system to create a safe and healthy organizational culture for its employees, free from discrimination.

SONGWON supports international standards including Universal Declaration of Human Rights, Human Rights and Labour Principles of UN Global Compact (UNGC), UN Guiding Principles on Business and Human Rights (UNGPR), International Labour Organization (ILO), and follows the laws of the countries we operate in.

As a global leader in the development, manufacture, and supply of specialty chemicals, SONGWON is committed and dedicated to advancing customers' interests and the industry. Driven by a pioneering spirit, we transform innovative ideas and continually move forward.

		2020	2021
Diversity, region	Tot. number of male/female employees (Head Count)	959/128	899/116
	Employees, male/female Asia	634/75	593/70
	Employees, male/female EMEA	291/39	272/35
	Employees, male /female Americas	34/14	34/11
	Number of nationalities	33	36
Diversity, level	Members, male/female, Group Board level	6/0	6/0
	Members, male/female, Group Executive level (ECM)	5/1	3/1
Full/part time	Full time, male/female	957/119	889/104
	Part time, male/female	2/8	1/10
	Temporary, male/female	0/1	9/2
Bargaining agreements	Total employees covered by collective bargaining agreements (%)	4	4
Compliance	Cases of non-compliance	0	0

As in the past, also in 2021 there were no cases of discrimination, bribery, corruption, whistleblowing, child labor, nor of forced labor, or breaches of the Code of Conduct. SONGWON complies with governmental laws on working conditions (i. e. regular working hours, overtime hours, holidays, working environment).

Recruitment, training and development

A year of proven expertise and flexibility

High level of competences, skills, fit with SONGWON's Corporate Culture, loyalty, flexibility, and reliability are the most important criteria for recruitment. Furthermore, SONGWON is involved in promoting training or education for employees at all levels. In 2021, due to Covid, most educational programs had to be interrupted, except for health and safety trainings. – So, this was the year to face and overcome challenges, namely the supply disruption (Covid, heavy snowstorm in the US, electricity interruption in China, blocked Suez Canal).

The teams have demonstrated and delivered the proof, thanks to expertise and flexibility.

Management and HR have set priorities on improvements and the relaunch of companywide management systems:

- The new Performance Management System (PMS) will be launched in 2022
- Implementation of internal trainings on Learning Management System (LMS), including ethics training, HR policies, IT policies, payment security etc. The LMS-platform enables employees to access learning content from anywhere, at any time. Employees can also download the content and read it offline, take assessments and get certified.
- Some entity specific trainings took place: coaching training for motivation, internal functional trainings such as goal setting, ethics, HR policy, payment security, etc.
- In the reporting year, the TAD Department made specific trainings on safety aspects, testing equipment in their lab (TAD, Testing & Application Development).

The new performance review system allows for greater integration of corporate values. It has been completed and fully integrated into the global HR tool in 2021 and will be implemented in 2022. The aim is the harmonization of HR standards and procedures in the Group and adaptations of the entire performance management cycle.

Local communities mean Responsibility

SONGWON's local communities consist of groups of interacting people (partners, suppliers, neighbours, employees, schools, universities etc.) sharing the local business environment. Intents, resources, needs, risks and a number of conditions – social values of safety, security e.g. – are existent and affect the identity and the degree of cohesiveness of a community.

SONGWON lives this responsibility and understands 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 (e.g. Ulsan Library). Offering our support to 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.

Supply Chain

Reliable Supply, a competitive advantage

As proved many times in 2021, a strong supply chain is essential to SONGWON meeting the increasingly dynamic needs of the 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.

We have built an exceptional global and local network of responsible partners by seeking long-term relationships. We select suppliers on the basis of economic indicators, but also on good sustainability

performance and competitiveness and the respective geographic area. The high reliability in 2021 could be ensured:

- by establishing a TFT (Task Force Team) to monitor the COVID-19 situation and delivery status in each region on a daily basis.
- by continuing to build up the safety stocks around the globe.
- maintaining close, daily communication with stakeholders (Sales, Business Management, Planning and Production etc.).

SONGWON's supply was able to constantly meet customer requests as well as the increased orders and production volumes in this challenging year.



Sustainability Governance

At SONGWON, the purpose of the company is shifting to focus on long-term value creation, grounded in its commercial and societal values, including environmental responsibility. This shift creates important implications for the role and meaning of good governance.

Board of Directors and Executive Committee

SONGWON's Board of Directors (6 Members) 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.

SONGWON's Executive Committee comprises 4 members, holding key managerial positions in the Group: CEO, CFO, Leader Operations, Leader Group Commercial. 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 is involved in the core decisions related to the Group's analysis of risks and opportunities, the overall strategy, including sustainability goals, implementation and reporting.

Sustainability Governance Structure

Board of Directors (6 Members)	Meetings, presentations, content related to NFI and Sustainability (1)	Risks and Opportunities NFI*, Sustainability Strategy, Targets and Policies Ethics, Compliance Reporting
Executive Committee, incl. CSO (4 Members)	Meetings, presentations, content related to NFI and Sustainability (4)	Risks and Opportunities NFI, Sustainability Strategy, Targets and Policies Ethics, Compliance, Reporting
Business Units and Departments	Continuous Sustainability development, supervision, close cooperation with Business Units and Departments	Sustainability approach, Implementation, Sustainability reporting from the Divisions (incl. external consultants and experts)
	Continuous Sustainability development (targets, policies, implementation)	LCA (Life Cycle Assessment), Innovation, Sustainable procurement, Etc.

Communication, Standards and Ratings

Optimization of Sustainability Governance

- Increasing the Board's knowledge and understanding of the relevant economic, environmental and social impacts of SONGWON's activities. For example, every year the business departments present and discuss their strategies and actions with the Board.
- Keeping updated about trends, new developments, or insights (Ratings, Standards, Benchmarking) through cooperation with Sustainability consultants in Korea and Europe.
- Enhancing the ability to monitor issues from an environmental, economic and social point-of-view through active involvement in associations or through certifications and labels.
- Supporting an active shift to a circular economy through collaborative partnerships and memberships with relevant associations (e.g. PCEP).
- Raising the emphasis on sustainability by appointing a Chief Sustainability Officer to ensure sustainability is firmly integrated into every part of SONGWON's global business.

* Non Financial Information

Risks and Opportunities

SONGWON's response to the volatile economic situation is to work on having the essential instruments in place such as the process for identifying, assessing and managing risks and opportunities (Board of Directors and Executive Committee).

In particular, evaluating exposure to climate-related risks and opportunities over a range of time horizons is fundamental for the transition to the low carbon economy intended by the Paris Agreement and UN SDGs.

REGULATION (current or emerging)

- Carbon pricing mechanisms
- Enhanced emissions-reporting obligations
- Mandates on and regulation of existing products and services
- Waste pricing

MARKET

- Changing customer behavior
- Sector/industry changes (e.g. automotive), new markets require new applications
- Uncertainty in market signals
- Increased cost of raw materials, supply chain
- Rise in risk-based pricing of insurance policies

TECHNOLOGY

- Substitution of existing products and services with lower emissions options
- Necessary investments in new technologies
- Technologies to improve term duration of end products
- Technologies to extract products from waste/transform waste into products
- Circular economy

REPUTATION

- Shifts in consumer preferences
- Stigmatization of sector
- Increased stakeholder concern or feedback
- Company footprint

Ethics and the Code of Conduct

We want our people to be proud of working for SONGWON, a company that has high standards of integrity and passionately protects its staff, assets and reputation.

It's about acting in a responsible, ethical and law-abiding way to preserve the culture of responsibility to each other.

The **Code of Conduct** sets out business principles and how every SONGWON employee should apply them, in line with the company's core values and the professional, customer-focused culture. The Code is regularly updated.

The following areas are covered:

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

The year before, in 2020, SONGWON introduced a Whistle-blower Policy as part of the commitment to a culture of good corporate practice.

IT-Security

A policy for IT-Security is in place to ensure a security standard for all entities. IT security is governed via both, Group IT (Group level) and local IT (entity level). Today's most important measures consist in increasing end-users' awareness regarding IT security, a clear, implemented Guidance and professional support from IT security experts (external data center are providing infrastructure services).

Compliance

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

No enquiries, reports or complaints were received in the period under review. There were also no cases of human rights violations, bribery, discrimination or other violations of personal rights. There were no lawsuits or fines as a result of anti-competitive practice, in relation to products and services or due to non-compliance with environmental laws and regulations.

SUSTAINABILITY REPORTING STANDARD

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



SONGWON'S Sustainability Reporting 2021 consists of the Report (pages 53 to 79) and the following GRI Content Index. It takes into account the reporting principles (GRI 101):

Reporting principles for defining report content

- Stakeholder engagement
- Sustainability context
- Materiality
- Completeness

Principles for defining report quality

- Accuracy
- Balance
- Clarity
- Comparability
- Reliability
- Timeliness

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	Pages, Direct Answers, Omissions
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GRI 101: Foundation 2016 [GRI 101 does not include any disclosures]

Organizational Profile

GRI 102: General Disclosures 2016	102-1	Name of the organization	14
	102-2	Activities, brands, products, and services	17-19
	102-3	Location of headquarters	14, 16
	102-4	Location of operations	15-16
	102-5	Ownership and legal form	15
	102-6	Markets served	16-18
	102-7	Scale of the organization	2-3
	102-8	Information on employees and other workers	47-51, 71-75
	102-9	Supply chain	33-34, 76
	102-10	Significant changes to the organization and its supply chain	33-34, 76
	102-11	Precautionary Principle or approach	23-25, 78
	102-12	External initiatives	53-62
	102-13	Membership of associations	62, 190

Strategy

GRI 102: General Disclosures 2016	102-14	Statement from senior decision-maker	4-6, 53-62
	102-15	Key impacts, risks and opportunities	Materiality, risks and opp., UN SDG's; 23-25, 56, 60-61, 78

Ethics and integrity

GRI 102: General Disclosures 2016	102-16	Values, principles, standards, and norms of behavior	14, 51, 79, 86-91
	102-17	Mechanisms for advice and concerns about ethics	Code of Conduct, Whistleblower, Governance/Compliance; 73-74, 77, 79, 88-89

Governance

GRI 102: General Disclosures 2016	102-18	Governance structure	7-8, 77, 87-88
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Stakeholder engagement

GRI 102: General Disclosures 2016	102-40	List of stakeholder groups	56
	102-41	Collective bargaining agreements	74
	102-42	Identifying and selecting stakeholders	55-56
	102-43	Approach to stakeholder engagement	55-56
	102-44	Key topics and concerns raised	55-56, 60-61, 79, 88-89, 91

Reporting practice

GRI 102: General Disclosures 2016	102-45	Entities included in the consolidated financial statements	106-107
	102-46	Defining report content and topic Boundaries	80, 191
	102-47	List of material topics	56
	102-48	Restatement of information	191
	102-49	Changes in reporting	191
	102-50	Reporting period	191
	102-51	Date of most recent report	191
	102-52	Reporting cycle	191
	102-53	Contact point for questions regarding the report	194
	102-54	Claims of reporting in accordance with the GRI Standards	80, 191
	102-55	GRI content index	80-84
	102-56	External assurance	191

Material Topics

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

Economic Performance

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	53-55, 61, 80
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	2-4, 100-101, 138-139, 155-156, 163, 177-179, 181-182
	201-3	Defined benefit plan obligations and other retirement plans	158-162

Anti-corruption

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	79, 89
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Code of Conduct, Governance Ethics and Compliance; 51, 79, 88-89
	205-2	Communication and training about anticorruption policies and procedures...	Employee, Governance; 51, 77, 79, 88-89

Anti-competitive Behavior

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	79, 88-89
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Code of Conduct, Governance; 79, 88-89

Environmental Standards: 300 Series

Materials

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	61, 63, 65
GRI 301: Materials 2016	301-1	Materials used by weight or volume	Renewable non-renewable raw materials; 65

Energy

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	61, 63
GRI 302: Energy 2016	302-1	Energy consumption within the organization	63

Water and Effluents

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	61, 63, 66
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Water use; 66
	303-2	Management of water discharge-related impacts	Water discharge, withdrawal; 66

Biodiversity

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	68
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas	None; 68
	304-2	Significant impacts of activities, products and services on biodiversity	68
	304-3	Habitats protected or restored	68
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	None; 68

Emissions

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	61, 63-64
GRI 305: Emissions 2016	305-1	Direct GHG emissions	64
	305-2	Indirect GHG emissions	64
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	64

Environmental Compliance

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	91
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	None; Governance; 79

Social Standards: 400 Series

Employment

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	47-51, 61
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	49
	401-3	Parental leave	49

Occupational Health and Safety

GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	61, 71-72
	103-2	The management approach and its components	71-72
	103-3	Evaluation of the management approach	62, 71-72
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	71-72
	403-2	Hazard identification, risk assessment and incident investigation	71-72
	403-3	Occupational health services	71
	403-4	Worker participation, consultation, and communication on occupational health and safety	71-72
	403-5	Worker training on occupational health and safety	100%; 71-72
	403-6	Promotion of worker health	71
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	71-72
	403-8	Workers covered by an occupational health and safety management system	100 %; 71-72
	403-9	Work-related injuries	71
	403-10	Work-related ill health	71

Diversity and Equal Opportunity

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	73, 88
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	49-50, 73, 88

Non-discrimination

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	79
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	None; Governance; 79

Human Rights Assessment

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	73, 79, 89
GRI 412: Human Rights Assessment 2016	412-2	Employee training on human rights policies or procedures	Code of Conduct; Governance; 79, 89

Local Communities

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	75
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments and development programmes	75

Socioeconomic Compliance

GRI 103: Management Approach 2016	103-1, 103-2, 103-3	Management Approach	79
GRI 419: Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	None; 79